

University of Wollongong



Calendar

Undergraduate



2003

2003 Key Dates

	First (Autumn) Session	Second (Spring) Session	Summer Session 2003 / 2004
Session Dates:			
Orientation Week	24 Feb - 28 Feb	14 - 18 July	
Induction – Research Students	18 March		
First Day of Session	3 March	21 July	1 December 2003
Mid-Session Recess	18 - 27 April	22 Sept - 5 Oct	22 Dec - 2 Jan 2004
End of Session	8 June	2 November	30 January 2004
Study Recess	9 - 13 June	3 - 7 November	2 - 6 February 2003
Enrolment:			
Last day for re-enrolment without late fee	26 January	20 July	
Enrolment of new undergraduates	28 - 31 January	15 - 16 July	
Enrolment for Research Students	24 February		
Last day for late re-enrolment	16 March	3 August	
Last day to add subject via the Web	16 March	3 August	7 December 2003
Last day to add subject with approval of Academic Adviser & Head of Department	28 March	15 August	14 December 2003
Withdrawal:			
Last day to withdraw from <u>single</u> session subjects without financial penalty (HECS refunded/International Student Fees credited if withdrawn by):	31 March	31 August	20 December 2003
Last day to withdraw from <u>double</u> session subjects without financial penalty (HECS refunded/International Student Fees credited if withdrawn by):	31 March (full refund)	31 August (spring session only)	
Last day to withdraw from <u>single</u> session subjects without academic penalty – subject deleted from record. (Fail grade recorded if subject withdrawn after this date).	11 May	21 September	13 January 2004
Last day to withdraw from <u>double</u> session subjects without academic penalty – subject deleted from record. (Fail grade recorded if subject withdrawn after this date).		3 August	
Examinations:			
Exam Period	14 - 29 June	8 - 23 November	7 - 13 Feb 2004
Release of Results	8 July	2 December	<i>tba</i>
Charges:			
Last day for payment of compulsory charges by re-enrolling students	2 March	20 July	30 November 2003
Late date to nominate full up-front payment of HECS	31 March	31 August	20 December 2003
Due Date for Up-front: HECS, Postgraduate Tuition Fees	2 March	20 July	30 November 2003
Due date for payment of International Student Tuition Fees	2 March	20 July	30 November 2003
Census Date:	31 March	31 August	20 December
Graduation Dates:	23 - 25 July	15 - 19 December	

Note: Some courses, particularly Graduate School of Business & Professional Development courses, have different session commencement and recess dates and withdrawal dates. Late commencement in these courses may not be permitted.

University of Wollongong



University of Wollongong

Library

NOT FOR LOAN

**UNDERGRADUATE CALENDAR
2003**

UNIVERSITY OF WOLLONGONG

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There are two volumes of the Calendar:

Undergraduate Calendar 2003

Postgraduate Calendar 2003

Information in this publication was prepared as at 30 November 2003 and is subject to amendment without notice by the University.

Students are advised to consult the University's On-Line Calendar at the time of application / enrolment to obtain any later information which may become available in respect of material contained in this Calendar. The Web address is: www.uow.edu.au/student/calendar/

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2003 Session Dates

Summer Session: 9 December 2002 - 21 February 2003

Lectures Commence.....9 December - 20 December
Mid-Session Recess21 December - 5 January
Lectures Recommence6 January - 7 February
Study Recess.....8 - 16 February
Examinations17 February - 21 February

Autumn Session: 3 March - 29 June 2003

Orientation Week24 February - 2 March
Lectures Commence.....3 March - 17 April
Mid-Session Recess18 - 27 April
Lectures Recommence28 April - 8 June
Study Recess.....9 - 13 June
Examinations14 - 29 June
Mid Year Recess.....30 June - 20 July

Spring Session: 21 July - 23 November 2003

Lectures Commence.....21 July - 21 September
Mid-Session Recess22 September - 5 October
Lectures Recommence6 October - 2 November
Study Recess.....3 - 7 November
Examinations8 - 23 November

Summer Session: 1 December 2003 - 13 February 2004

Lectures Commence.....1 - 19 December
Mid-Session Recess22 December - 2 January
Lectures Recommence5 - 30 January
Study Recess.....2 - 6 February
Examinations7 - 13 February

The University in Brief

The University of Wollongong had its foundation in 1951 when the New South Wales University of Technology established a Division at Wollongong. That Division later became a College of the University of New South Wales and, in 1975, the University of Wollongong was established as an autonomous institution. Since its independence, and later its amalgamation with the adjoining Wollongong Institute of Education in 1982, the University has grown to be an internationally recognised teaching and research institution. Its prominence in research, especially in developing research and industry partnerships, was acknowledged when the University jointly won the prestigious *Australian University of the Year Award for 1999-2000*. In an unprecedented achievement, the University was again proclaimed joint *Australian University of the Year for 2000-2001* for its success in preparing graduates for an e-world. Those significant awards enhance the career prospects of our 16,000 students from Australia and more than 70 overseas countries.

The University has three campuses: the main Wollongong Campus, the Shoalhaven Campus at Nowra and the Dubai Campus in the United Arab Emirates (UAE). In addition, there are Access Centres in Sydney, Batemans Bay, Bega, Moss Vale and in Southern Sydney.

The Dubai Campus

The Dubai Campus of the University of Wollongong was established in 1993 and is fully governed by the Council of the main campus in Wollongong. The University is the first Western university to gain a licence from the Ministry of Higher Education and Scientific Research in the UAE. All courses taught in Dubai are designed, approved and accredited by the main Campus, which also exercises full quality assurance over all assessment conducted in Dubai. These procedures ensure that graduates receive a quality Australian education which is recognised internationally.

The University Act & By-Law

The University of Wollongong is established under an Act of the New South Wales Parliament. The Act, the By-Law and the Rules (made under the Act) govern the management of the University and the conduct and obligations of its members. A copy of the Act and By-Law is available on the web at <http://www.uow.edu.au/admin/secretariat/contents.html>.

QUICK
REFERENCE
GUIDE

FACULTY OF ARTS →

FACULTY OF COMMERCE →

FACULTY OF CREATIVE ARTS →

FACULTY OF EDUCATION →

FACULTY OF ENGINEERING →

FACULTY OF HEALTH & BEHAVIOURAL SCIENCES →

FACULTY OF INFORMATICS →

FACULTY OF LAW →

FACULTY OF SCIENCE →

GENERAL SCHEDULE OF SUBJECTS →

GENERAL INFORMATION →

RULES →

POLICIES AND CODES OF PRACTICE →

Faculty of Arts

Member Units

School of English Literatures, Philosophy and Languages

- English Studies Program
- Modern Languages Program
- Philosophy Program

School of History and Politics

- History Program
- Politics Program

School of Social Sciences, Media and Communication

- Communication and Cultural Studies Program
- Science, Technology and Society Program
- Sociology Program

Note: The Aboriginal Education Centre, which administers the Aboriginal Studies Major, is an Associate Member Unit of the Faculty of Arts

Degrees Offered

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Bachelor of Arts (Community and Environment) Batemans Bay Education Centre (course code BB702)	2 & 7
Bachelor of Arts (Community and Environment) Bega Access Centre (course code BE702)	2 & 7
Bachelor of Arts (Community and Environment) Shoalhaven Campus (course code SH702)	2 & 7
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Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Arts

Degree requirements for Bachelor of Arts in the Faculty of Arts (Course Code 702) and related degrees.

General

The following requirements apply to the Bachelor of Arts offered by the Faculty of Arts. They have been extracted from the University Course Rules. They also apply to the Bachelor of Arts (Dean's Scholars Advanced Degree) and the Bachelor of Arts (Community and Environment) except where differences are noted. Students enrolled through the Faculty of Health and Behavioural Sciences in the Bachelor of Arts (Course code 708) should refer to the degree rules under that Faculty and should consult an adviser from that Faculty.

Bachelor of Arts (Dean's Scholars Advanced Degree)

- Students enrolled in the Bachelor of Arts (Dean's Scholars Advanced Degree) Course Code 702A must take majors taught by the Faculty of Arts (including Aboriginal Studies) and must maintain a Distinction average to remain enrolled in the course. If the student's average falls below Distinction level for more than one session, the student will be transferred into the Bachelor of Arts (702).

The Dean's Scholars Advanced Degree is not available as a double degree program.

Bachelor of Arts (Community and Environment)

- The Bachelor of Arts (Community and Environment) is only available at the Batemans Bay, Bega, Moss Vale and Shoalhaven campuses. All students enrolled in this degree must take the Community and Environment major.

Degree regulations

1. To qualify for the award of the degree of Bachelor of Arts a candidate shall accrue an aggregate of at least 144 credit points by satisfactory completion of subjects listed in:

(a) the Course Structures of the Bachelor of Arts offered by the Faculty of Arts (course code 702, 702A, 702BB, 702BE, 702SH or 702MV)

and

(b) the General Schedule

2. (a) The 144 credit points shall include:
 - i. for course code 702, 702A, 702BB, 702BE, 702SH or 702MV, the subjects prescribed for one of the majors or joint majors listed in the Course Structures for that degree and offered by member units of the Faculty of Arts;
 - ii. not more than 60 credit points in 100-level subjects (single degree).

- iii. for course codes 702, 702A, 702BB, 702BE, 702SH or 702MV, at least 12 credit points in subjects taught by member units of the Faculty of Arts, undertaken in the first two semesters of study.

(b) Arts Double degree programs:

- i. In the case of Arts double degrees (course codes 703, 704, 720, 747A, 771), the major study required for the Arts component of the double degree shall be selected from those majors approved for inclusion in the Course Structures of the Bachelor of Arts (702 or 708 for Faculty of Health and Behavioural Sciences students).

- ii. Students majoring in Psychology in Arts double degree programs complete the subjects prescribed for the Psychology major in the course structures of either the Faculty of Arts or the Faculty of Health and Behavioural Sciences.

- iii. Students enrolled in Arts double degree programs must complete at least 36 credit points in subjects taught by member units of the Faculty of Arts.

Exception: Students enrolled in Arts double degree programs and undertaking a major from the course structures of the Faculty of Health and Behavioural Sciences will be exempted from rule 2. (b)iii. This exception applies primarily to Psychology students.

The degree requires one major study to be completed; however, a student may undertake two major studies within the normal requirements of the degree. Major studies completed are noted on the student's testamur, awarded at Graduation.

A candidate who has registered for two major studies for which there are common subjects may count one subject in common towards these major studies, and may count the credit points for that subject, which may be at any level, once only in the credit point total required for the course.

An Honours Bachelor of Arts degree requires additional study (one year full-time, or two years part-time) and may be undertaken by students who meet the requirements for enrolment in Honours.

Major Study Areas from the Faculty of Arts

Note: Change in degree rules for the Bachelor of Arts:

As from 2003, commencing students in the Bachelor of Arts enrolled in a single degree in the Faculty of Arts must take one of these majors. (See course requirements above).

Aboriginal Studies

Asia Pacific Studies

Australian Studies

Communication Studies

Community and Environment*
 English Language Studies
 English Studies
 European Studies
 French
 Gender Studies
 History
 Information Studies
 Italian
 Japanese
 Philosophy
 Politics
 Resource and Environmental Studies
 Science, Technology and Society
 Sociology

*available at the Shoalhaven and Moss Vale Campuses and Bega and Batemans Bay Education access centres only.

Independent Subjects

Arts Internship (see subject description for ARTS301)
 Linguistics
 Spanish

Major Study areas offered by other Faculties

1. In the Bachelor of Arts (single degree) as from 2003, these may be taken as second majors only. BA students wishing to take one of these majors must combine it with a major from the Faculty of Arts.

2. Majors from other faculties are not available to students in the Bachelor of Arts (Dean's Scholars Advanced Degree). Dean's Scholars may take subjects from outside the Faculty, but must take Faculty of Arts majors.

Accountancy
 Economics
 Education
 Geography , Geology, Geosciences
 Industrial Relations
 Legal Studies
 Management
 Marketing
 Mathematics and Applied Statistics
 Population Health
 Psychology

Major Study Areas from the Faculty of Arts

Aboriginal Studies

Aboriginal Studies is an interdisciplinary major which links together subjects in a number of Programs in the Faculty of Arts as well as subjects offered by the Faculties of Creative Arts, Education, Law, Science and Health and Behavioural Sciences, to provide Aboriginal and non-Aboriginal students with a coherent program in the study of Aboriginal Australia.

Major Study

The major consists of four core subjects offered by the Aboriginal Education Centre together with a choice of subjects offered by participating Programs and Faculties. Because it is anticipated that the number of subjects available in the major will expand, students are advised to consult with the Aboriginal Education Centre about available subjects prior to enrolment.

A major in Aboriginal Studies requires the completion of a minimum of 52 credit points, consisting of at least 12 credit points at 100-level, 16 credit points at 200-level and 24 credit points at 300-level including the four core subjects ABST100, ABST200, ABST300 and ABST301. The core subjects are currently under review.

SOC231 and SOC306 are strongly recommended as preparatory subjects, for attempting ABST350 in the final year of the major.

Quotas may be applied to entry to the major in Aboriginal Studies, including entry to ABST100.

Double Major

Because Aboriginal Studies subjects are drawn largely from the offerings of a number of Programs and Faculties, it is possible for students to complete a second major. Students are encouraged to look closely at this option, particularly if they are contemplating postgraduate study.

Honours Program

Students who have completed a double major may be accepted into an Honours program. The program will be administered by the Program of the student's second major, subject to approval by the Convenor of the relevant Program and the Head of the Aboriginal Education Centre.

100-level

Core

ABST100	Introduction to Aboriginal Cultures	6
Plus at least 6 credit points chosen from:		
ABST150	Introduction to Aboriginal Australia	6
ENGL113	Contemporary Writing in Australia	6
LAW344	Indigenous Peoples and Legal Systems	6
NURS140	Introductory Communication Studies	6
STS120	Technology in Society: East and West	6
VIS123	Introduction to Aboriginal Arts and Society	6

200-level

Core

ABST200	Aboriginal History Since Invasion	8
Plus at least 8 credit points chosen from:		
AUST246	A Sociology of Australia's Indigenous Peoples: Contemporary Issues and Debates	8
GEOS234	Environmental Prehistory of Australia	6
HIST218	Consensus, Conflict and Culture: Australia 1888-1988	8
LAW344	Indigenous Peoples and Legal Systems	6
NURS240	Current Services in Aboriginal Health	6
NURS242	Functional Community Structures	6
PHIL232	Political Philosophy	8
SOC231	Social Analysis	8

Course Structures

STS220	Technology in Society: East and West	6
STS221	Technology in Society: East and West	8
VIS223	Aboriginal Art and Land	6

300-level

Core

ABST300	Indigenous Theories of Decolonisation	8
ABST301	Research Methods and Issues in Aboriginal Studies	8

(ABST301 is not available in 2003; please see coordinator for a substitute)

Plus at least 8 credit points chosen from:

ABST350	Special Topic in Aboriginal Studies	8
ABST361	Issues in Aboriginal Education	8
ABST362	Aboriginal Pedagogy	8
AUST300	Twentieth Century Australian Literary Culture	8
EDUE301	Issues in Aboriginal Education	6
EDUE302	Aboriginal Pedagogy	6
ENGL371	Twentieth Century Australian Literary Culture	8
GEOS334	Environmental Prehistory of Australia	8
GEOS348	Cultural Landscapes	8
HIST380	Twentieth Century Australian Literary Culture	8
LAW344	Indigenous Peoples and Legal Systems	6
NURS345	Health and Human Ecology	6
PHIL390	Contemporary Political Philosophy	8
SOC305	Race and Ethnic Studies	8
SOC306	Researching Everyday Life	8

Asia Pacific Studies

Since the 1980s awareness of the importance of Australia's role in the Asia-Pacific has led to the University of Wollongong giving priority to the study of the region and our place in it. Trade, culture, history, politics, economics and language have all received attention, with particular focus on Southeast Asia and Japan.

The teaching staff have long-standing research expertise in the region, and have published extensively. The University has a specialised Asia-Pacific Research Network, which brings together scholars from many Faculties. In particular the University of Wollongong has noted experts in Vietnam, Indonesia, Malaysia, Singapore, Papua New Guinea, China, Korea, Japan, India, Bangladesh, Sri Lanka, the Philippines and a number of other parts of the Asia-Pacific.

The following subjects have been approved for inclusion in the Major in Asia-Pacific Studies because they reflect the particular areas of expertise at the University of Wollongong: the understanding of development in the Asia-Pacific, the interaction of culture, language and politics in the region and intensive study of the Japanese language.

Studying Southeast Asia in Southeast Asia

Through existing exchange programs with Thailand, Indonesia and Vietnam students from the University of Wollongong can study for a semester or more in these countries as part of their degree.

Through these exchanges the languages of these countries can be studied in their context.

Major Study

A major study in Asia-Pacific Studies for the Bachelor of Arts degree requires the completion of a minimum of 52 credit points from the subjects listed below, including all core subjects. At least 24 credit points must be at 300-level. This interdisciplinary major may be taken as a single major study, but its flexibility makes it a useful component in a double-major.

Students should plan their degree programs carefully, bearing in mind the need to satisfy subject prerequisites particularly at 200- and 300-levels.

Core Subjects

HIST107	Empires, Colonies and the Clash of Civilisations	6
and		
SOC243	Contesting Asia: Culture, Diversity, Difference	8

Optional Subjects

100-level

STS120	Technology in Society: East and West (Also available as STS220 or STS221)	6
HIST124	The Cold War and After	6
JAPA101	An Introduction to Japanese	6
JAPA110	Japan and the Japanese	6
JAPA141	Beginners' Japanese I	6
JAPA142	Beginners' Japanese II	6
JAPA143	Beginners' Japanese III	8

Note: the following 100-level subjects are not on offer in 2003, but have been offered in Summer Session in previous years.

INDO101	Introductory Indonesian/Malaysian - Level 1	6
INDO103	Introductory Indonesian/Malaysian	6
INDO104	Introductory Indonesian/Malaysian 1A Language	6
INDO105	Introductory Indonesian/Malaysian 1B Language	6
INDO106	Introductory Indonesian/Malaysian - Level 1	6
LANG196	Chinese (Mandarin) Level I	6
LANG197	Chinese (Mandarin) Level II	6
LANG198	Chinese (Mandarin) Intermediate Level for Other Dialect Speakers	6

200-level

ASIA299	Special Topics in Southeast Asian Studies	8
ECON251	Industry and Trade in East Asia	8
GEOS246	A Hungry World: Food Resources and the World Economy	6
HIST286	From Ancient Kingdoms to Colonial Southeast Asia, 1500-1900	8
HIST288	Religion and Military Rule in Southeast Asia	8
LING210	Communicating in a Foreign Language	8
POL225	International Relations, An Introduction	8
STS220	see STS120	

300-level

ASIA399	Southeast Asian Language and Culture Exchange Subject	8
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ECON303	Economic Development Issues	8
ENGL373	Literatures of Colonising Cultures	8
GEOS347	Northern Neighbours: Economic and Social Change in the Asia-Pacific Rim	8
GEOS349	Population, Health and Environment	8
HIST379	Culture and Identity in Indonesian History, 1870-2002	8
HIST388	Vietnam in War and Revolution: Indo-Chinese Societies 1860-1980	8
HIST394	Commodification History	8
POL317	Politics in the South Pacific	8
POL318	The Asian Tigers - Newly Industrialising Countries in Transition	8
POL323	North and South: Approaches to Relations Between Advanced, Industrialising and Developing Countries	8
SOC318	Modernity, Development and Social Change	8

Australian Studies

Australian Studies is an interdisciplinary course of study. It includes Aboriginal studies, history, politics, literature, media, sociology, science and technology and gender in its ambit. It has been designed to introduce students to the various ways Australian issues are addressed and analysed by a variety of interdisciplinary and disciplinary approaches.

Major Study

A major in Australian Studies consists of a minimum of 52 credit points. The major is made up of the three core subjects: AUST101 or AUST102, either AUST246 or HIST 218, and AUST300. The balance of credit points is made up by taking subjects with Australian content offered by the following Programs within the Faculty: Aboriginal Studies, Communication and Cultural Studies, English, History, Politics, Science Technology and Society and Sociology. A list of some of these subjects can be seen below. To complete the major, students will need to take a minimum of 12 credit points at 100-level (AUST101 or AUST102 plus one 100-level subject from the list), a minimum of 16 credit points at 200-level (AUST246 or HIST218 plus one 200-level subject from the list) and a minimum of 24 credit points at 300-level (AUST300 plus two 300-level subjects from the list).

Students should ensure that they have the necessary prerequisites to take the subjects of their choice or have had the prerequisites waived by the Convenor of the relevant Program. Those interested in Honours in Australian Studies should consult the Honours co-ordinator of the School. A notice board with information on Australian Studies can be found in the History and Politics corridor on the second floor of the Arts building (Bldg 19).

100-Level

(a minimum of 12 cp, including AUST101 or AUST102)

Core		
AUST101	Australian Studies: Cultures and Identities	6
Or		
AUST102	Narrating the Nation	6

(Students may use AUST101 or AUST102 as an elective if they have not selected it as a core subject).

Electives 6 cp from		
ABST100	Introduction to Aboriginal Cultures	6
ABST150	Introduction to Aboriginal Australia	6
AUST101	Australian Studies: Cultures and Identities	6
AUST102	Narrating the Nation	6
ENGL113	Contemporary Writing in Australia	6
HIST121	Dispossessed, Diggers and Democrats: Australia 1788-1880s	6
POL111	Australian Politics	6
POL141	Change and Debate in Contemporary Australian Politics	6
SOC103	Aspects of Australian Society	6
STS120	Technology in Society: East and West	6

200-Level

(a minimum of 16 cp, including AUST246 or HIST 218)

Core

AUST246	A Sociology of Australia's Indigenous People: Contemporary Issues and Debates	8
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or

HIST218	Consensus, Conflict and Culture: Australia 1888 - 1988	8
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Electives 8 cp from

ABST200	Aboriginal History Since Invasion	8
CCS215	Race, Gender, Colonialism: Studies in Australian Culture	8
CCS219	Australian Screen	8
ENGL231	Australian Drama and Theatre	8
ENGL244	Children's Literature in Australia	8
ENGL260	Nineteenth-Century Australian Literary Culture	8
HIST218	Consensus, Conflict and Culture: Australia 1888 - 1988	8
POL222	Australian Public Policy	8
POL226	Australian Political Thought	8
POL290	Women in Society: Productive and Reproductive Labour	8
SOC205	Sociology of the Family	8
SOC222	Sociology of Crime and Justice	8
SOC242	Contemporary Issues in Society	8
STS220	Technology in Society, East and West	8

300-Level

(a minimum of 24 cp, including AUST300)

Core

AUST300	Twentieth Century Australian Literary Culture*	8
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Electives 16 cp from

ABST300	Indigenous Theories of De/Colonisation	8
ABST301	Research Methods and Issues in Aboriginal Studies	8
CCS330	The Practices of Everyday Life	8
CCS352	Flashpoints: Contestations in Contemporary Australian Culture	8
CCS357	Television Cultures	8
ENGL346	Comparative Australian/Canadian Writing	8
ENGL359	Contemporary Australian Drama	8
HIST315	Comparative Settler Societies	8
HIST318	The Making of the Modern Australian Woman	8

Course Structures

HIST336	Australians and War: The Homefront	8
HIST394	Commodification History	8
SOC305	Race and Ethnic Studies	8
SOC308	Social and Public Policy	8
SOC310	Community Organisations, the Third Sector and Civil Society	8
SOC330	The Sociology of Gender Relations	8
SOC341	Special Topic in Sociology	8

* **Students please note:** Students may enrol in the subject Twentieth Century Australian Literary Culture under one of the following subject codes: AUST300, ENGL371 or HIST380. All students in the subject attend the one lecture group and any one of the subject codes will be accepted in any of the majors containing the subject.

Example: Students majoring in English normally enrol in the subject as ENGL371 Twentieth Century Australian Literary Culture. If, however, they have studied the subject as HIST380 or AUST300, it can still count as an English subject at 300 level. This also applies for Australian Studies and History.

Double majors: Students who are attempting any two of the three majors may use this subject as the one subject which they can count across two majors. (The 8 credit point value of the subject is only counted once).

Communication Studies

Communication Studies, as offered in the Communication and Cultural Studies Program, is an interdisciplinary study which considers questions of interaction and conversation, text and image, and studies communication industries and communication technologies. While there are some practical components in selected subjects, the approach to Communication Studies is strongly conceptual, situating communication studies in broad social, political, historical and cultural contexts, as well as investigating the ways in which audiences are positioned and meanings are constructed.

Honours Program

Communication and Cultural Studies offers an Honours Program. Students must maintain a credit average in completing the requirements for the Communication Studies major or its equivalent before being eligible to undertake the Honours year. Students considering Honours should discuss their undergraduate programs with the Honours co-ordinator of the School.

Postgraduate Studies

Students should consult the Postgraduate Calendar for details of course structure and content.

Textbooks

Students should contact the Uni Centre bookshop and the subject co-ordinators for a list of textbooks.

Communication Studies Major

The Communication Studies major will be made up of at least 54 credit points: at 100-level, CCS105 (6 cp); 24 credit points at 200-level and 24 credit points at 300-level.

Of the 54 credit points, at least 38 credit points will be in subjects with the CCS prefix. At 200-level, 16 cp must be in subjects with the CCS prefix, including either CCS207 or CCS221 (one of these two subjects must be completed). At 300-level, at least 16 credit points will be from subjects with the CCS prefix. The remaining 16 cp for the major may be made up of CCS subjects or subjects from other units approved for inclusion in the Communication Studies major. (See list of recommended subjects from other Units below).

Quotas may be applied to entry to the major in Communication, including entry to CCS105.

Pre-requisites

Entry to all CCS 200-level subjects will require 36 credit points. Entry to CCS 300-level subjects will require 36 credit points including at least 8 credit points at CCS 200-level. Study abroad and exchange students can consult with the Convenor of Program about entry to upper level CCS subjects.

100-Level

CCS105	Introduction to Communication and Cultural Studies	6
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200-Level

For the major: 24 credit points. 16 cp of CCS subjects which must include either one or both of CCS207 and CCS221. The remaining 8 cp may be a CCS subject or a subject chosen from the list of approved subjects below.

CCS207	Signs of Power: Culture and Representation	8
CCS215	Race, Gender, Colonialism: Studies in Australian Culture	8
CCS217	Film Form and Style	8
CCS219	Australian Screen	8
CCS221	Critical Cultural Practice	8
CCS223	Introduction to Publishing Studies: Print	8
CCS225	Introduction to Electronic Publishing	8

300-Level

For the major: 24 cp which must include at least two CCS subjects; The remaining 8 cp may be a CCS subject or a subject chosen from the list of approved subjects below.

CCS330	The Practices of Everyday Life	8
CCS333	Popular Genres	8
CCS334	Technologies of The Body	8
CCS335	Electronic Cultures	8
CCS337	Hollywood and American Culture	8
CCS339	Hollywood and the Globalisation of Culture	8
CCS343	Directed Study	8
CCS348	Television, Globalisation and Cultural Identity	8
CCS351	Semiotics and Communication	8
CCS352	Flashpoints: Contestations in Contemporary Australian Culture	8
CCS357	Television Cultures	8
CCS388	International Media Theories and Systems (not offered till 2004)	8

400-Level

CCS400	Honours	48
CCS405	Joint Honours	48
CCS407	Special Study	8

Subjects not having the prefix CCS, and approved for inclusion in the Communication Studies major.

Up to two of the following subjects may be included in the major; one 200-level subject and one 300-level subject.

SOC241	Culture and Communication	8
PHIL255	Interpretation and Communication	8
POL224	Politics and the Media	8
STS241	Technological Change, Popular Culture and New Media	8
ABST200	Aboriginal History Since Invasion	8
EDUC314	Language and Ideology	8
ENGL350	Fantasy and Popular Culture	8
HIST379	Culture and Identity in Indonesian History: 1870-2002	8
PHIL322	Theories of Knowledge and Metaphysics B	8
POL324	Culture and Politics	8
POL368	Protest and Power in America: The Sixties	8
SOC305	Race and Ethnic Studies	8
WRIT315	Writing for Film and TV300	6
WRIT317	Arts Journalism 300	6
ABST300	Indigenous Theories of De/Colonisation	8

Community & Environment

(Available at the Shoalhaven and Moss Vale Campuses, Batemans Bay Library and Education Access Centre and Bega Education Access Centre)

Major Study

The Community and Environment major is made up of 78 - 80 credit points, consisting of four to five core subjects at 100-level (24 - 30 credit points), three to four core subjects at 200-level (24 - 32 credit points) and 24 credit points at 300-level made up of the two core subjects and one elective from the 300-level Arts offerings. The remainder of the degree (64 - 66 credit points) consists of electives chosen from Arts or from the subjects offered from the other degrees offered at the South Coast and Southern Highlands campuses.

The BA is a coherent interdisciplinary degree based around a core and electives chosen from a range of subjects offered by the Faculties of Arts, Commerce, Informatics and Science. Some subjects that are also offered on the Wollongong campus will be available in a flexible delivery mode in Nowra, Batemans Bay, Bega and Moss Vale.

Students gain a broad general education with an emphasis on gaining transferable skills in written and oral communication, research and computer applications. While the traditional humanities and social sciences skills of reading to understand, writing essays and making convincing oral presentations are central, so are the related skills of report and submission writing, understanding the use of statistics in arguments and using the new technologies to find and present information.

Students are able to study progressions of subjects with a strong Australian content in the areas of environment, social and public policy, cultural heritage (including Aboriginal studies, history and literature), and communication studies (including film and television).

Honours

At the end of a three year undergraduate degree, a fourth or Honours year is available for eligible students.

100-Level

Core

ARTS112	People and Place	6
ARTS113	Society and Representation	6
CCS105	Introduction to Communication and Cultural Studies	6
ELS161	English for Academic Purposes: a First Language Perspective	6
PHIL151*	Practical Reasoning A	6

Electives**

ABST150	Introduction to Aboriginal Australia	6
GEOS142	The Human Environment: Problems and Change	6

200-Level

Core

ENGL260	Nineteenth Century Australian Literary Culture	8
HIST218	Consensus, Conflict and Culture: Australia, 1888-1988	8
PHIL214*	Practical Reasoning B	8
SOC231	Social Analysis	8

Electives**

ABST200	Aboriginal History Since Invasion	8
CCS219	Australian Screen	8
GEOS243	Rural Australia: Economy, Community and Environment	8
POL290	Women in Society: Productive and Reproductive Labour	8
STS218	Environment in Crisis: Technology and Society	8

300-Level

Core

SOC308	Social and Public Policy	8
STS300	The Environmental Context	8

Electives**

SOC306	Researching Everyday Life	8
ABST300	Indigenous Theories of De/Colonisation	8
ENGL337	Sex, Power and Chivalry: Medieval to Modern Literature	8
HIST334	Regional History	8
HIST380/ AUST300/ ENGL371	Twentieth Century Australian Literary Culture	8

* Note Students take EITHER PHIL151 or 214

400-Level

ARTS401	Community and Environment Honours	48
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** Electives may also be chosen from other Faculties' subjects offered at the South Coast and Moss Vale campuses, subject to meeting entry requirements.

English Language Studies

The English Language Studies (ELS) major provides two orientations: a TESOL (Teaching English to Speakers of other Languages) orientation which can lead to a professional qualification in TESOL if further study is undertaken in the Faculty of Education, and an English for Professional Purposes orientation.

A major in English Language Studies for Non-English Speaking Background (NESB) students consists of 58 credit points, and must include 18 cp at 100-level, 16 cp at 200-level and 24 cp at 300-level, as set out below. A major in English Language Studies for English Speaking Background (ESB) students consists of 52 credit points, and must include 12 cp at 100-level, 16 cp at 200-level and 24 cp at 300-level, as set out below. Students who are uncertain whether they should be in the NESB or the ESB stream must consult the ELS co-ordinator.

Note: LING210 is counted towards majors in French, Italian, Japanese and English Language Studies.

TESOL Orientation

100-Level - NESB students

ELS151	English for Academic Purposes: A Second Language Perspective	6
ELS152	English Language Studies 1	6
ELS171	An Introduction to Linguistics: The English Language	6

100-Level - ESB students

ELS161	English for Academic Purposes: A First Language Perspective	6
ELS171	An Introduction to Linguistics: The English Language	6

200-Level - NESB and ESB students

ELS271	English Language Studies 2	8
LING210	Communicating in a Foreign Language	8

300-Level - NESB and ESB students

ELS371	English Language Studies 3	8
LING310	Language and Communication in a Global Context	8

Plus any one of the following:

EDUL331	English Language: Examining Learners' Problems	8
EDUL340	Materials and Technology in Second Language Teaching	8
EDUL350	Programming and Methodology in Second Language Teaching	8
EDUL360	Practicum or Project in Language Teaching	8

English for Professional Purposes Orientation

100-Level - NESB students

ELS151	English for Academic Purposes: A Second Language Perspective	6
ELS152	English Language Studies 1	6
ELS171	An Introduction to Linguistics: The English Language	6

100-Level - ESB students

ELS161	English for Academic Purposes: A First Language Perspective	6
ELS171	An Introduction to Linguistics: The English Language	6

200-Level - NESB and ESB students

ELS271	English Language Studies 2	8
Plus one of the following:		
PHIL255	Interpretation and Communication	8
CCS223	Introduction to Publishing Studies: Print	8

300-Level - NESB and ESB students

ELS371	English Language Studies 3	8
LING310	Language and Communication in a Global Context	8
EDUL314	Language and Ideology	8

400-Level

ELS450	Honours in English Language Studies	48
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Honours in English Language Studies

Students who have achieved a credit average or higher in ELS and wish to undertake further study may apply to do honours. Honours in English Language Studies consists of coursework (50%) and a supervised thesis (50%). Students will (1) write three major essays, totalling 11,000-12,000 words, focussing on i) theoretical models of linguistics; ii) topics in English Language Studies and iii) methodologies in linguistics; (2) prepare and present orally a research proposal in English Language Studies; (3) write a 15,000-word dissertation based on research proposed in (2) above, and (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled.

English Studies

Major Study

A major study in English Studies is made up of at least 54 credit points: 6 at 100-level, 24 at 200-level and 24 at 300-level. Of the 54, at least 46 credit points will be in subjects having the prefix ENGL with at least 6 credit points at 100-level and at least 16 credit points at 300-level having that prefix. The remaining 8 credit points may be made up of ENGL subjects or subjects from other units approved for inclusion in the English Studies major. These subjects are listed at the end of this entry. At 300-level, Pass Conceded or Pass Restricted grades will not accrue credit points towards the major.

The English Studies Program offers subjects at 100-, 200-, 300-, and 400- (Honours) level, in the BA degree.

In the areas of Theatre and Writing, the Program has close working relationships with the Faculty of Creative Arts and, under certain circumstances and with the approval of the relevant Convenors, students from the English Studies Program may undertake a limited number of subjects offered in the BCA. Similarly, students from the Faculty of Creative Arts may take Literature, Screen and Theatre subjects within the Program.

Pre-requisites for 200- and 300-Level Subjects

Students must have at least 6 credit points from 100-level English subjects to gain entry into 200-level subjects.

For most 300-level subjects, students must have at least 6cp of subjects with the prefix ENGL at 100-level, 6cp of subjects with the prefix ENGL at 200-level and any other 6cp. For prerequisites to ENGL340 see subject descriptions.

Assessment

Assessment in this Program is normally by a combination of essays, tutorial/seminar presentations, journals and/or short, in-class or take-home exams. Drama subjects may have an additional practical component.

The assessment requirements of each subject are set out in the individual subject outlines which students receive in the first week of session. Only students who have completed ALL PARTS of the assessment requirement of a subject will be eligible to be awarded a passing grade.

Attendance

Satisfactory completion of a subject requires attendance at a minimum of 80% of tutorials/seminars. Students are expected to attend all lectures in each subject.

Textbooks

Students should check the UniCentre bookshop before buying texts for a subject.

English Honours

Students who achieve a credit average or better in English and who wish to undertake a further year of English study or proceed to research-based higher degrees should consider enrolling in English Honours. This Program has an "end-on" honours year, which means that there are no specific Honours subjects at second and third year levels. Students complete the requirements for the English major and the undergraduate pass degree (and may if they wish, graduate as pass degree students) before being eligible to undertake the Honours year.

Entry to 400-level (Honours) is determined by a recommendation from the Co-ordinator of the School, following the student's application to the University and the School for admission to the Honours year. The Program normally accepts only students whose average English grade is a Credit or above, particularly at 200- and 300-levels. Approved students then enrol in a 48-credit point course, ENGL400, which consists of three (3) subjects and a 15,000-word thesis on a topic chosen by the student, in consultation with the Program. This may be taken as a one-year full-time course, or as a part-time course of up to four consecutive sessions (not including Summer).

Students considering Honours should discuss their undergraduate subject choices with the Honours Co-ordinator for the School prior to the commencement of their first session of enrolment.

All offerings depend on the availability of staff and enrolment numbers in the subject.

100-Level		
ENGL113	Contemporary Writing in Australia	6
ENGL117	Forms of the Imagination	6
ENGL120	An Introduction to Literature and Screen Studies	6
ENGL121	Text and Gender	6
ENGL199	Understanding Literary Techniques	6
200-Level		
Students without English 100-level subjects may be admitted to subjects in English 200-level with the approval of the Convenor of Program.		
ENGL228	English Renaissance Literature and Culture	8
ENGL229	Romantics and Victorians: English Literature from 1790-1900	8
ENGL230	Page to Stage: Modes of Performance	8
ENGL231	Australian Drama and Theatre	8
ENGL243	Fantasy and Children's Literature	8
ENGL244	Children's Literature in Australia	8
ENGL248	Chaucer	8
ENGL253	Major Twentieth-Century Writers	8
ENGL255	Eighteenth Century Literature and Culture	8
ENGL259	An Introduction to Canadian Writing	8
ENGL260	Nineteenth Century Australian Literary Culture	8
ENGL264	Modernism	8
ENGL265	English and the Empire	8
ENGL299	The Vikings: Old Norse Culture, Language and Literature	8
300-Level		
Students without the appropriate pre-requisites may be admitted to subjects in English 300-level with the approval of the Convenor of Program.		
Note: At 300-level, Pass Conceded or Pass Restricted grades will not accrue credit points towards the major.		
ENGL312	Shakespeare, Jonson and their Contemporaries	8
ENGL330	Theatre in English since 1968	8
ENGL331	Modern Drama	8
ENGL334	Critical Theory: Development and Debates	8
ENGL337	Sex, Power and Chivalry: Medieval to Modern Literature	8
ENGL340	Directed Study in English	8
ENGL345	Twentieth Century Women Writers	8
ENGL346	Comparative Australian/Canadian Writing	8
ENGL350	Fantasy and Popular Fiction	8
ENGL355	Fourteenth Century Literature	8
ENGL359	Contemporary Australian Drama	8
ENGL365	Nineteenth Century Women Writers	8
ENGL366	Literatures of Colonised Cultures	8
ENGL371	Twentieth Century Australian Literary Culture*	8
ENGL373	Literatures of Colonising Cultures	8
ENGL374	Novel into Film	8
ENGL376	Representing India	8
ENGL398	The Vikings: Old Norse Culture, Language and Literature (Advanced)	8
400-Level		
ENGL400	English IV Honours	48
ENGL403	Combined Honours	48
ENGL499	Special Study	8

Course Structures

Non ENGL subjects which will count towards the English Major

The following subjects will accrue credit points towards the English major. Students wishing to enrol in these subjects must satisfy the subject prerequisites.

CCS215	Race, Gender, Colonialism: Studies in Australian Culture	8
CCS217	Film, Form and Style	8
CCS219	Australian Screen	8
CCS221	Critical Cultural Practice	8
CCS223	Introduction to Publishing Studies: Print	8
CCS225	Introduction to Electronic Publishing	8
CCS330	The Practices of Everyday life	8
CCS335	Electronic Cultures	8
CCS337	Hollywood and American Culture	8
CCS339	Hollywood and the Globalisation of Culture	8
GENE216	Women in Society: Images and Representations	8
LANG305	Literature and Society in Renaissance Europe	8
PHIL255	Interpretation and Communication	8

* **Students please note:** Students may enrol in the subject Twentieth Century Australian Literary Culture under one of the following subject codes: AUST300, ENGL371 or HIST380. All students in the subject attend the one lecture group and any one of the subject codes will be accepted in any of the majors containing the subject.

Example: Students majoring in English normally enrol in the subject as ENGL371 Twentieth Century Australian Literary Culture. If, however, they have studied the subject as HIST380 or AUST300, it can still count as an English subject at 300 level. This also applies for Australian Studies and History.

Double majors: Students who are attempting any two of the three majors may use this subject as the one subject which they can count across two majors. (The 8 credit point value of the subject is only counted once).

European Studies

A major in European Studies will consist of a minimum of 52 credit points, including a minimum of 28 cp chosen from Schedules 1, 2 or 3 and the remainder from Schedule 4. Students must include 24 cp at 300-level.

Students wishing to study French should take the subjects listed in Schedule 1 below. Students wishing to study Italian should take the subjects listed in Schedule 2 below. Students wishing to study Spanish should take the subjects listed in Schedule 3 below.

For details of the individual subjects including prerequisites and session offered, see the description of subjects, or consult the on-line subject database.

Schedule I (French core subjects)

FREN151	French IA Language	6
or		
FREN251	French IIA Language	8

FREN152	French IB Language	6
or		
FREN252	French IIB Language	8
EURO220/ HIST210	The European Union: Post war European Integration, 1945-1995	8
EURO320	Nations without States in the European Union	8

Schedule II (Italian core subjects)

ITAL151	Italian IA Language	6
or		
ITAL251	Italian IIA Language and Literature	8
ITAL152	Italian IB Language	6
or		
ITAL252	Italian IIB Language and Literature	8
EURO220/ HIST210	The European Union: Post war European Integration, 1945-1995	8
EURO320	Nations without States in the European Union	8

Schedule III (Spanish core subjects)

SPAN151	Spanish for Beginners I	6
SPAN152	Spanish for Beginners II	6
EURO320	Nations without States in the European Union	8
EURO220/ HIST210	The European Union: Post war European Integration, 1945-1995	8

Schedule IV (Elective subjects)

ENGL228	English Renaissance Literature and Culture	8
ENGL229	Romantics and Victorians: English Literature from 1780-1900	8
ENGL230	Page to Stage: Modes of Performance	8
ENGL248	Chaucer	8
ENGL253	Major Twentieth-Century Writers	8
ENGL255	Eighteenth Century Literature and Culture	8
ENGL264	Modernism	8
ENGL299	The Vikings: Old Norse Culture, Language and Literature	8
ENGL312	Shakespeare, Jonson and their Contemporaries	8
ENGL334	Critical Theory	8
ENGL337	Sex, Power and Chivalry: Medieval to Modern Literature	8
ENGL355	Fourteenth Century Literature	8
ENGL398	The Vikings: Old Norse Culture, Language and Literature (Advanced)	8
FREN110	France and the French	6
FREN210	France in the Twentieth Century	8
FREN361	French III C	8
FREN362	French III D	8
HIST108	War, Dictatorship and Propaganda in Europe, 1918-1945	6
HIST124	The Cold War and After	6
HIST216	Ancient History: Greece	8
HIST217	Ancient History: Rome	8
HIST232	Russia in War and Revolution	8
HIST286	From Ancient Kingdoms to Colonies in Southeast Asia, 1500-1900	8
HIST338	Advanced Topics in the History of Science, 1500-1800	8
HIST360	War, Death and Society, Europe 1350-1650	8
HIST363	Revolutions in World History	8

IITAL110	Italy and the Italians	6
ITAL361	Interpreting I	8
ITAL362	Interpreting II	8
LING210	Communicating in a Foreign Language	8
LANG305	Literature and Society in Renaissance Europe	8
LANG371	Advanced Studies in Language/Culture A	8
LANG372	Advanced Studies in Language/Culture B	8
LANG373	Advanced Studies in Language/Culture C	8
PHIL211	Greek Philosophy	8
POL314	Power and the Modern State	8
POL315	Post-Communist Politics	8
STS336	Advanced Topics in the History of Science	8

Note: Students who have not taken the following subjects as core subjects may take them as electives: FREN251, FREN252, ITAL251, ITAL252, EURO220/HIST210, EURO320.

French

Major Study

A major in French for beginners or near beginners consists of 66 credit points, and must include 18 cp at 100-level, 24 cp at 200-level and 24 cp at 300-level, as set out below. Students who have achieved a strong 2 Unit HSC pass or equivalent may choose to enter the language sequence at the level of FREN251 and complete a 54 cp major comprising 6 cp (civilisation) at 100-level, 24 cp at 200-level and 24 cp at 300-level, as set out below.

All students wishing to enter the French major at the level of FREN251 must obtain formal approval from the French co-ordinator.

Subject to the pre-requisites listed in the subject database, language and literature/civilization subjects may be taken independently of one another, eg French 1A Language may be taken without also taking EURO110. However students wishing to complete a major in French must complete the sequence set out below.

Native or near-native speakers, whose major also consists of 54 cp, may be granted waivers for FREN251 and FREN252. Such waivers will be granted only at the time of first enrolment in French, in accordance with the Program's policy and with the formal approval of the French co-ordinator or the Convenor of Program. Replacement subjects to make up the 54cp for the major are to be chosen from the additional subjects listed below. Credit may be granted for language courses taken at University level in accordance with established University of Wollongong guidelines.

Note: The subject LING210 is counted towards majors in French, Italian, Japanese and English Language Studies. The subject LANG305 may be counted towards majors in French, Italian and English.

100-Level

FREN151	French IA Language	6
FREN152	French IB Language	6
FREN110	France and the French	6

200-Level		
FREN251	French IIA Language	8
FREN252	French IIB Language	8
LING210	Communicating in a Foreign Language	8

300-Level

FREN351	French IIIA Language	8
FREN352	French IIIB Language	8
LANG305	Literature and Society in Renaissance Europe	8

Depending on availability, additional subjects may be taken from:

FREN210	Twentieth-Century France	8
FREN361	French IIIC	8
FREN362	French IIID	8
LANG371	Advanced Studies in Language/Culture A	8
LANG372	Advanced Studies in Language/Culture B	8
LANG373	Advanced Studies in Language/Culture C	8
FREN391	French Study Abroad A	8
FREN392	French Study Abroad B	8
FREN393	French Study Abroad C	8

Other Relevant Subjects

Students are advised that any of the following subjects, while not approved for inclusion in the major, would act as useful companion subjects:

100-Level

ELS171	An Introduction to Linguistics: The English Language	6
ELS151	English for Academic Purposes: A Second Language Perspective	6

or

ELS161	English for Academic Purposes: A First Language Perspective	6
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200-Level

EURO220/ HIST210	The European Union: Post-war integration 1945-1995	8
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300-Level

EURO320	Nations Without States in the European Union	8
LING310	Language and Communication in a Global Context	8

Assessment

In all subjects, assessment may include essays, seminar papers, projects, periodic tests and field work, as well as final examinations. The precise weighting given to each component will be discussed with classes at the beginning of each session.

Entry to Honours

Students wishing to enter the Honours program should have completed a major in French. At 300-level an average of credit performance or better is required. Joint Honours candidates must have satisfied the requirements for admission to Honours in both languages. Students enrolling in Honours in French take the following subject:

FREN450	French IV Honours	48
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Combined French and Italian Honours

Students wishing to undertake a combined Honours year in French and Italian enrol in the following subject:

LANG425 Combined French and Italian Honours 48

Gender Studies

Gender Studies, with its motivating force of women's studies, is just as needed now as it ever was—perhaps in some respects more so—with the increasingly sophisticated and pervasive attempts to persuade the consumer / reader / user that all is equal and, finally, merely a matter of choice.

One of the tasks of this major will be to address and redress this notion. It is an area of intense public debate and we seek to equip our students not only to enter into this debate but at some future time perhaps, to lead it.

The major is made up of subjects from the Faculties of Arts, Commerce, Education, Law and Science. It is an interdisciplinary major which recognises that students come from a range of backgrounds and may want to study over a range of areas. There are no core subjects. A number of the subjects within the proposed major deal not only with the impact of being gendered as female, but also with definitions of masculinity and with queer theory, an area of study more commonly associated with sexuality than gender.

The Gender Studies major will encourage students to develop greater tolerance and understanding of gender equity issues, values which they could bring to debates in the wider community.

Major Study

A major in Gender Studies will consist of at least 54 credit points chosen from the following range of subjects (at least 24 credit points must be at 300 level). Students will choose at least five subjects from the list of Specialist Electives, and no more than two from the list of General Electives. Normal pre-requisites apply for the following subjects unless these are waived by the Head of Unit. This applies, in particular, to LAW subjects, for which LAW100 Law in Society is a necessary pre-requisite and will not be waived. Please note: not all subjects will be available in any one year.

Specialist Electives

To satisfy the requirements of the major, students must choose at least five subjects from this list.

100-Level			
ENGL121	Text and Gender		6
200-Level			
ECON208	Gender Work and Family		8
EDUC292	Gender and Social Justice		8
ENGL260	Nineteenth Century Australian Literary Culture		8
POL290	Women in Society – Productive Reproductive Labour		8

PHIL260 Philosophy of Feminism A (also available as PHIL363) 8

300-Level
ENGL337 Sex Power and Chivalry: Medieval to Modern Literature 8
ENGL345 Twentieth Century Women Writers 8
ENGL365 Nineteenth Century Women Writers 8

AUST300/
ENGL371/ Twentieth Century Australian Literary Culture 8
HIST380
HIST318 The Making of the Modern Australian Woman 8
PHIL363 Philosophy of Feminism B 8
SOC330 Sociology of Gender Relations 8
CCS334 Technologies of the Body 8
LAW335 Anti-Discrimination Law 6
LAW349 Feminism and the Law 6

General Electives

To satisfy the requirements of the major, students must choose no more than two subjects from this list.

100-Level			
GEOS142	The Human Environment: Problems and Change		6
SOC103	Aspects of Australian Society		6
200-Level			
CCS215	Race, Gender, Colonialism: Studies in Australian Culture		8
EDUF212	Education II		6
ENGL259	Introduction to Canadian Literature		8
SOC205	Sociology of the Family		8
300-Level			
GEOS348	Cultural Landscapes		8
LAW303	Children, Families and the Law		6
PHIL380	Bioethics		8

History

History offers subjects in social history, the social and political consequence of war, feminist history, revolution and colonialism, representation and history, world history and cultural and labour history. Emphasis lies on Australia, Europe, South East Asia and the Americas.

History is offered at all undergraduate levels: 100-level (first year), 200-level (second year) and 300-level (third year). 100-level subjects are each worth 6 credit points, 200-level and 300-level subjects are each worth 8 credit points.

Certain History subjects are well-suited to programs containing a major in Australian Studies and Resource and Environmental Studies.

Honours

Students with demonstrated ability and an interest in historical research may undertake honours, a fourth year of specialised historical enquiry and research. Students should discuss honours course requirements with the School's honours coordinator at the conclusion of their 200-level subjects.

Major Study

A major in History consists of 52 credit points, 24 of which must be at 300-level. As students progress through the levels of a History major, the subjects offered become more sophisticated in approach.

300-level subjects place greater emphasis on comparative and theoretical aspects of the discipline and encourage students to undertake original research.

Entry into any 200-level history subject requires a pass in at least one of the 100-level subjects. Entry into any 300-level subject requires 14 credit points of history, at least 8 of which must be at 200-level.

Students taking a major in History can count up to 16 credit points from the following: ABST100, ABST150, ABST200, AUST246, FREN210, STS212 and STS238/338. Note: students enrolled in a double major may only cross-count one subject.

100-Level

AUST101	Australian Studies, Cultures and Identities	6
AUST102	Narrating the Nation	6
HIST107	Empires, Colonies and the Clash of Civilisations	6
HIST108	War, Dictatorship and Propaganda in Europe, 1918-1945	6
HIST121	Dispossessed, Diggers and Democrats: Australia, 1788-1888	6
HIST124	The Cold War and After	6
POL141	Change and Debate in Contemporary Australian Politics	6

200-Level

HIST210	The European Union: Postwar European Integration, 1945-1995	8
HIST216	Ancient History: Greece	8
HIST217	Ancient History: Rome	8
HIST218	Consensus, Conflict and Culture: Australia 1888-1988	8
HIST232	Russia in War and Revolution	8
HIST275	The Growth of the United States, 1865-1919	8
HIST276	America's Rise to Globalism Since 1919	8
HIST286	From Ancient Kingdoms to Colonial Southeast Asia, 1500-1900	8
HIST288	Religion and Military Rule in Southeast Asia	8
HIST291	Film and History	8
HIST300	Reporting War: A History	8
POL230	Latin America: The Politics of Conquest and Colonisation	8

300-Level

HIST315	Comparative Settler Capitalism	8
HIST318	The Making of the Modern Australian Woman	8
HIST325	Theory and Method of History	8
HIST334	Regional History	8
HIST336	Australians and War: The Homefront	8
HIST338	Advanced Topics in the History of Science, 1500-1800	8
HIST360	Death, War and Society, Europe 1350-1650	8
HIST361	Fascism and the Authoritarian Right in Twentieth Century Europe	8

HIST363	Revolutions in World History	8
HIST379	Cultural and Identity Indonesian History 1870-2002	8
HIST380	Twentieth Century Australian Literary Culture*	8
HIST388	Vietnam in War and Revolution: Indo-Chinese Societies, 1860-2001	8
HIST394	Commodification History	8
POL315	The Politics of Post-Communist Countries	8
POL368	Protest and Power in America: the Sixties	8
400-Level		
HIST401	History IV (Honours)	48
HIST430	Joint Honours in History and another Discipline	48

* Students please note: Students may enrol in the subject Twentieth Century Australian Literary Culture under one of the following subject codes: AUST300, ENGL371 or HIST380. All students in the subject attend the one lecture group and any one of the subject codes will be accepted in any of the majors containing the subject.

Example: Students majoring in English normally enrol in the subject as ENGL371 Twentieth Century Australian Literary Culture. If, however, they have studied the subject as HIST380 or AUST300, it can still count as an English subject at 300 level. This also applies for Australian Studies and History.

Double majors: Students who are attempting any two of the three majors may use this subject as the one subject which they can count across two majors. (The 8 credit point value of the subject is only counted once).

History & Politics Joint Major

The School of History and Politics also offers a Joint Major for students with an interest in both disciplines. The Major offers students the opportunity to explore two disciplines without the need to complete two separate majors (sometimes known as a Double Major), and it offers students the opportunity to combine the specialist areas offered by the History and Politics Program. The Joint Major consists of a minimum of 76 credit points. A minimum of 38 credit points must be taken from History subjects and a minimum of 38 credit points must be taken from Politics subjects. Students taking the Joint Major must have completed at least one 100-level subject, one 200-level subject and one 300-level subject drawn from the History schedule and at least one 100-level subject, one 200-level subject and one 300-level subject drawn from the Politics schedule. The balance can be made up from any subjects from 100- to 300-level, providing pre-requisites have been met for the subjects chosen, or the waiving of pre-requisites has been approved by the Convenor of Program.

Please note: At 300 level, students must complete at least 24 credit points from the History and Politics majors.

Information Studies

This major, using a variety of perspectives, enables students to use, critically analyse, reflect on and transform the rapidly changing information systems in society.

Major Study

A major study in Information Studies for the Bachelor of Arts degree is available by undertaking the following program.

If required subjects in particular strands are not available, please see the coordinator of the major for advice on appropriate alternatives.

A major in Information Studies is an interdisciplinary program of core and optional subjects of between 60 and 76 credit points, depending on the course strands chosen by the student. It includes at least 24 credit points at 300 level. Subjects are drawn from the Faculties of Arts, Commerce, Informatics and Law.

Core

CCS105	Introduction to Communication and Cultural Studies	6
CSCI102	Introduction to Information Technology B*	6
STS128	Computers in Society	6
or		
STS228	Computers in Society	8

*Note: students who have not completed NSW HSC 2 (60 or better) or 3 unit computing studies or equivalent, normally require CSCI101 as a prerequisite to CSCI102. Students who are uncertain about this requirement should consult the Undergraduate Co-ordinator in Information Technology and Computer Science.

Options

Two of the following strands must be completed but students cannot count both strand 2 and strand 5.

Strand 1

All of the following:

CCS223	Introduction to Publishing Studies: Print	8
CCS225	Introduction to Electronic Publishing	8
CCS335	Electronic Cultures	8

and

CCS348	Television, Globalisation and Cultural Identity	8
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or

CCS357	Television Cultures	8
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Strand 2

All of the following:

IACT201	Information Technology and Citizens' Rights	6
IACT202	The Structure and Organisation of Telecommunications	6
IACT301	Information and Communication Security Issues	6
IACT303	Worldwide Networking	6

Strand 3

LAW100	Law in Society	6
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and two of the following:

LAW331	Intellectual Property Law	6
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LAW348	Media Law	6
LAW487	Special Topic in Law	6

Or

LAW488	Special Topic in Law	6
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Note: Students choosing LAW331 normally need to have taken LAW210.

Note: Students choosing LAW487/488 should consult with the Dean of Law about a topic appropriate to this major.

Strand 4

Three of the following subjects, including at least two at 300-level

POL224	Politics and the Media	8
STS229 / STS329	Scientific and Technological Controversy	8

STS240 / STS340	Technological Change, Popular Culture and New Media	8
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STS288/ST S388	Science and the Media	8
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Strand 5

All of the following:

BUS211	Systems Analysis and Design	6
BUS212	Database Management Systems	6
BUS311	Advanced Database Management Systems	6
BUS312	Distributed Information Systems	6

Additional Information

Students are strongly encouraged to take MGMT102 Business Communications as an elective. Students completing the major may be considered for joint honours in the two disciplines which provided the specialist strands. To undertake honours in a single discipline students must have completed the requirements of a major in that discipline.

Italian

Major Study

A major in Italian for beginners or near beginners consists of 66 credit points, and must include 18cp at 100-level, 24cp at 200-level and 24cp at 300-level, as set out below. Students who have achieved a strong 2 Unit HSC pass or equivalent may choose to enter the language sequence at the level of ITAL251 and complete a 54cp major comprising 6cp (civilisation) at 100-level, 24cp at 200-level and 24cp at 300-level, as set out below. All students wishing to enter the Italian major at the level of ITAL251 or ITAL152 must obtain approval from the Italian co-ordinator.

Native or near-native speakers, whose major also consists of 54cp, may be granted waivers for ITAL251 and ITAL252. Such waivers will be granted only at the time of first enrolment in Italian, in accordance with the Program's policy and with the formal approval of the Italian co-ordinator or the Convenor of Program.

Replacement subjects, to make up the 54cp for the major are to be chosen from the additional subjects listed below.

Credit may be granted for language courses taken at University level in accordance with established University of Wollongong guidelines.

Subject to the pre-requisites listed in the subject database, language and literature/civilization subjects may be taken independently of one another, eg Italian 1A Language may be taken without also taking ITAL110.

However students wishing to major in Italian must complete the following sequence.

Note: The subject LING210 is counted towards majors in French, Italian, Japanese and English Language Studies. The subject LANG305 may be counted towards majors in French, Italian and English.

100-Level

ITAL151	Italian IA Language	6
ITAL152	Italian IB Language	6
ITAL110	Italy and the Italians	6

200-Level

ITAL251	Italian IIA Language and Literature	8
ITAL252	Italian IIB Language and Literature	8
LING210	Communicating in a Foreign Language	8

300-Level

ITAL351	Italian IIIA Language and Literature	8
ITAL352	Italian IIIB Language and Literature	8
LANG305	Literature and Society in Renaissance Europe	8

Depending on availability and satisfaction of appropriate pre-requisites, one or more subjects may be taken from:

ITAL361	Interpreting I (pre-requisite must be ITAL352)	8
ITAL362	Interpreting II (pre-requisite must be ITAL361)	8
LANG371	Advanced Studies in Language/Culture A	8
LANG372	Advanced Studies in Language/Culture B	8
LANG373	Advanced Studies in Language/Culture C	8
ITAL391	Italian Study Abroad A	8
ITAL392	Italian Study Abroad B	8
ITAL393	Italian Study Abroad C	8

Assessment

In all subjects, assessment may include essays, seminar papers, projects, periodic tests and field work, as well as final examinations. The precise weighting given to each component will be discussed with classes at the beginning of each session.

Entry to Honours

Students wishing to enter the Honours program should have completed a major in Italian. At 300-level an average of credit performance or better is required. Joint Honours candidates must have satisfied the requirements for admission to Honours in both languages. Students in Italian Honours enrol in the following subject:

ITAL450	Italian IV Honours	48
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Combined French and Italian Honours

Students wishing to undertake a combined Honours year in French and Italian enrol in the following subject:

LANG425	Combined French and Italian Honours	48
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Other Relevant Subjects

Students are advised that any of the following subjects, while not approved for inclusion in the major, would act as useful companion subjects:

ELS171	An Introduction to Linguistics: The English Language	6
ELS151	English for Academic Purposes: A Second Language Perspective	6
or		
ELS161	English for Academic Purposes: A First Language Perspective	6
EURO220/ HIST210	The European Union: Postwar Integration 1945 to 1995	8
EURO210	Nations Without States in the European Union	8
LING310	Language and Communication in a Global Context	8

Japanese

Major Study

The Japanese major is intended for students enrolling for BA, double BA degree or BA/BCom. There are four possible entry points, beginners, post-HSC, intermediate or advanced. For beginners, the major consists of 82 credit points, for Post HSC, 74 credit points, for intermediate, 62, and for advanced students, 54 credit points. A unique feature of this course is the possibility of a period of study in Japan for beginners, post-HSC and intermediate entry students. Intermediate and Advanced stream students are required to successfully complete a placement test. The Post HSC stream is designed for students having completed either 2 unit or 3 unit Japanese at a NSW high school or equivalent. The beginner's stream assumes no prior knowledge of the language. The Japanese major articulates with NSW TAFE Certificate 3 in Japanese. Students wishing to study beginner's Japanese but NOT major are encouraged to take JAPA141 in Session 1, or JAPA101 in Summer Session, if available. JAPA102 and JAPA103 are also available for beginners who are interested in basic Japanese for either teaching or business respectively. JAPA110 is available to all students who wish to familiarise themselves with Japanese culture and history but who do not wish to pursue language studies. Another special feature on offer at Wollongong for suitably qualified graduates is one year of study at a Japanese University in JAPA550 for which some generous scholarships are available.

The Modern Languages Program has had considerable success in obtaining funding and scholarships to assist with the costs of travel and residence in Japan.

However, funding is not guaranteed and students may need to meet the costs associated with travel and accommodation for any periods of study in Japan.

Note: The subject LING210 may be counted towards majors in French, Italian, Japanese and English Language Studies.

100-Level

Post-HSC

JAPA110	Japan and the Japanese	6
JAPA161	Post HSC Japanese I	6
JAPA162	Post HSC Japanese II	6

Beginners or near beginners

JAPA110	Japan and the Japanese	6
JAPA141	Beginners' Japanese I	6
JAPA142	Beginners' Japanese II	6
JAPA143	Beginners' Japanese III	8

Intermediate and Advanced

JAPA110	Japan and the Japanese	6
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200-Level (All Students)

JAPA261	Intermediate Japanese I	8
JAPA262	Intermediate Japanese II	8
JAPA271	In-country Japanese Session (Japan)*	8
LING210	Communicating in a Foreign Language	8

300-Level (All Students)

JAPA310	Japanese Economics and Media	8
JAPA361	Advanced Japanese I	8
JAPA362	Advanced Japanese II	8

Japanese Elective Subjects

JAPA101	An Introduction to Japanese	6
JAPA102	Japanese Studies for Educational Purposes	6
JAPA103	Japanese Studies for Business Purposes	6

*Subject to availability.

Entry To Honours

Students wishing to enter the Honours program will have completed a major in Japanese with a high credit average. Honours students enrol in the following subject:

JAPA450	Japanese IV (Honours)	48
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Graduate Diploma in Arts (Japanese)

Students who qualify and are accepted for entry into the Graduate Diploma in Arts (Japanese) take the following subject:

JAPA550	Japanese Studies Abroad	48
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Philosophy

Philosophy may be studied at first, second, third, and fourth year (Honours) levels, and at the postgraduate level.

Philosophy Major

A major in Philosophy comprises 52 credit points of PHIL subjects, of which at least 24 credit points are 300-level PHIL subjects (that POL211 may be counted in place of one 200-level PHIL subject, or one of POL314 and POL324 may be counted in place of one 300-level PHIL subject, with the approval of the Convenor of Program).

Philosophy studies within the Program divide into two broad streams of study - (1) Ethics, Politics and Law and (2) Knowledge, Mind and Metaphysics. It is recommended to students that they include in their major a spread of subjects across these two streams.

100-Level

PHIL101	Knowledge, World and Values A	6
PHIL102	Body, Mind and Persons A	6
PHIL106	Media, Ethics and Law	6
PHIL112	Logic A	6
PHIL151	Practical Reasoning A	6

200-Level

PHIL201	Knowledge, World and Values B	6
PHIL202	Body, Mind and Persons B	6
PHIL206	Practical Ethics	8
PHIL211	Greek Philosophy	8
PHIL214	Practical Reasoning B	8
PHIL215	Philosophy of the Arts	8
PHIL216	Logic B	8
PHIL231	Formal Logic A	8
PHIL232	Political Philosophy A	8
PHIL255	Interpretation and Communication	8
PHIL256	Ethics and the Environment A	6
PHIL258	Ethics and the Environment B	8
PHIL260	Philosophy of Feminism A	8
PHIL262	Theories of Knowledge and Metaphysics A	8
PHIL270	Philosophy of Law	8
PHIL271	Special Philosophical Questions A	8
PHIL284	Ethics A	8
PHIL286	Philosophy of Social Science	8
PHIL288	Philosophy of Mind and Action A	8

Other approved 200-level subject

POL211	Democracy in Theory and Practice	8
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300-Level

PHIL301	Ethics B	8
PHIL305	Special Philosophical Questions B	8
PHIL322	Theories of Knowledge and Metaphysics	8
PHIL351	Philosophy of Mind and Action B	8
PHIL361	Formal Logic B	8
PHIL363	Philosophy of Feminism B	8
PHIL370	Topics in Philosophy of Law	8
PHIL380	Bioethics	8
PHIL383	Political Philosophy B	8
PHIL390	Contemporary Political Philosophy	8

Other approved 300-level subjects (students may choose one POL subject)

POL314	Power and the Modern State	8
POL324	Culture and Politics	8

400-Level

PHIL403	Philosophy Honours	48
PHIL413	Combined Philosophy Honours	48

Philosophy Honours

Students who find that their interest in Philosophy is keen, and whose early work shows promise, are strongly recommended to plan a course of study which leaves open the possibility of taking a fourth (Honours) year, either exclusively in Philosophy ('Pure' Honours) or in conjunction with some other discipline ('Combined' Honours).

An increasing number of other Programs within the University do permit the possibility of an Honours degree combined with Philosophy, and students interested in combining the study of Philosophy with the study of a discipline offered by another Program to Honours level should contact both Programs at the earliest opportunity, in order to ensure that they undertake a planned course of study which makes this possible at 400-level.

Admission to the Honours year (400-level) in Philosophy (whether pure or combined) depends upon the quantity and quality of the student's philosophical studies at the 100-, 200-, and 300- levels, and compliance with the guidelines set out under (a) to (c) below.

Students contemplating progressing to Honours in Philosophy (pure or combined) should discuss their proposed program of study with the Philosophy Honours (400-level) co-ordinator at the beginning of each year of enrolment. (Students contemplating combined Honours should also consult the equivalent person in the other Program at the beginning of each year of enrolment.)

Entry to Philosophy Honours is determined by a recommendation from the Head of School, following the student's application to the University and the School for admission to the Honours year. Students may expect to be recommended for admission to 'pure' Philosophy Honours candidature if they:

- a) complete the requirements for a major in Philosophy, while including in their major at least one of PHIL284, PHIL301, PHIL390, PHIL232, PHIL283, and at least one of PHIL 262, PHIL322 PHIL288 or PHIL351
- b) acquire a basic competence in formal logic (e.g., as certified by at least a pass in PHIL112 or PHIL216), and
- c) attain an average of Credit or better in post 100-level PHIL subjects.

Students may expect to be recommended for admission to 'combined' Honours candidature (including Philosophy) if, in addition to meeting the above requirements, they also meet such requirements as are laid down by the other Program in which Honours candidature is proposed.

Notwithstanding these provisions the Convenor of the School of English Literatures, Philosophy and Languages may, in respect of any applicant for entry to Honours, request written work and/or the opinions of the applicant's previous teachers as further evidence of the applicant's capacity to undertake the study of Philosophy at advanced level.

Announcements

Official Program announcements concerning the details of subject requirements (e.g. deadlines for essays, procedures for applying for extensions etc.) and teaching arrangements (e.g. class times, locations, and variations) are made from time to time on the Philosophy Program noticeboard.

Students are expected to consult the Program noticeboard regularly (at least once a week), and failure to consult the notice board will not be accepted as an excuse.

Assessment

Requirements vary from subject to subject and are set out in general terms in each of the subject entries.

It should be noted that, notwithstanding any of these provisions, the Philosophy Program Assessment Committee may, at its discretion, in respect of any subject in which assessment is by a combination of (a) in-session work and (b) end of session or end of year examinations, attach greater weight to (b) than the aggregate of (a) and (b), should the level of performance under (b) disclose significant evidence of improvement in respect of the subject as a whole.

Politics

The discipline of Politics is an exciting, vibrant and constantly changing body of ideas, approaches and methods. The Politics program offers subjects in Australian politics, political theory, international relations, comparative politics, the politics of developing countries, public policy, the post communist world and cultural studies across a broad range of countries from advanced industrial nations to developing and less developed countries. Students majoring in Politics are advised to study as broadly as possible across the areas offered by the discipline.

Political study involves examining the origins and nature of consent, authority and consensus, which underpin social order and without which all other human endeavours would become impossible. As a result political study inevitably involves morality and values but requires a sound knowledge of the political institutions, political economy, cultures, classes, genders, ethnicities and forces for change in the countries under analysis. Politics can occur at many levels from international relations to the nation state, public discourse and social relations, to personal and family relations.

Political studies at the University of Wollongong place considerable emphasis on developing strong theoretical foundations to equip students to analyse the continuing challenges of a Globalising world and their role within it. The discipline places a great deal of importance on the roles of culture and policy in both the developed and developing world.

Major Study

A major in Politics consists of 52 credit points, including at least 24 credit points at 300-level in Politics subjects. Graduates with a Politics major will normally have included at least one subject from each of the following areas in their program: (1) Australian Politics, (2) Political Theory and (3) the Politics of a country other than Australia or Comparative Politics or International Relations.

Course Structures

The following subjects, although they do not have a politics prefix, can be counted as part of the politics major: HIST210, HIST336 and HIST361. Students majoring in Politics may also count up to 16 cp from the following subjects: PHIL232, PHIL 270, PHIL 390, SOC 221, SOC 308. Note: students enrolled in a double major may only cross-count one subject.

Note: Certain Politics subjects can count towards a major in Communication Studies, History or Philosophy. Others are well suited to programs containing a major in Resource and Environmental Studies.

If you are uncertain about any aspect of the above, please do not hesitate to contact a member of the Politics staff.

100-Level

POL111	Australian Politics	6
POL121	Politics in a Globalising World	6
POL141	Change and Debate in Contemporary Australian Politics	6

200-Level

POL211	Democracy in Theory and Practice	8
POL216	Politics in the USA	8
POL222	Australian Public Policy	8
POL224	Politics and the Media	8
POL225	International Relations: An Introduction	8
POL226	Australian Political Thought	8
POL230	Latin America: The Politics of Conquest and Colonisation	8

POL290	Women in Society: Productive and Reproductive and Labour	8
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HIST210	The European Union: Post-war integration 1945 to 1995	8
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300-Level

POL314	Power and the Modern State	8
POL315	Post-Communist Politics	8
POL317	Politics in the South Pacific	8
POL318	The Asian Tigers - Newly Industrialising Countries in Transition	8

POL319	Political Economy in the New Millennium	8
POL323	North and South: Approaches to Relations between Advanced, Industrialising and Less Developed Countries	8

POL324	Culture and Politics	8
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POL368	Protest and Power in America: The Sixties	8
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HIST336	Australian and War –: The Homefront	8
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HIST361	Fascism and the Authoritarian Right in Twentieth Century Europe	8
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400-Level

POL401	Politics IV (Honours)	48
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POL430	Joint Honours in Politics and another Discipline	48
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History & Politics Joint Major

The School of History and Politics also offers a Joint Major for students with an interest in both disciplines. The Major offers students the opportunity to explore two disciplines without the need to complete two separate majors (sometimes known as a Double Major), and it offers students the opportunity to combine the specialist areas offered by the History and Politics Programs.

The Joint Major consists of a minimum of 76 credit points. A minimum of 38 credit points must be taken from History subjects and a minimum of 38 credit points must be taken from Politics subjects. Students taking the Joint Major must have completed at least one 100-level subject, one 200-level subject and one 300-level subject drawn from History subjects and at least one 100-level subject, one 200-level subject and one 300-level subject drawn from Politics subjects. The balance can be made up from any subjects from 100- to 300-level, providing pre-requisites have been met for the subjects chosen, or the waiving of pre-requisites has been approved by the Convenor of Program. At 300-level, students must have at least 24 cp of subjects from the History and Politics Majors.

Resource & Environmental Studies

Many environmental problems are not technical issues but involve political struggles, ethical choices, human behaviour, economic trade-offs and value conflicts over scientific knowledge. To tackle these wider social dimensions intrinsic to most environmental issues of concern today, a wide-ranging social analysis is valuable and often essential.

The major study in Resource and Environmental Studies combines study from areas such as economics, geography, law, philosophy, and science, technology and society. It looks at environmental issues from a social science perspective.

For further information please contact the Science, Technology and Society Program.

A major study in Resource and Environmental Studies for the Bachelor of Arts degree is available by undertaking the following program. It must include at least 24 credit points at 300-level.

A major in Resource and Environmental Studies involves an interdisciplinary combination of core and optional subjects totalling from 70 to 98 credit points, depending on the options chosen. The core is made up of five subjects from Australian Studies, Geosciences, Science, Technology and Society and Philosophy. Students must also choose optional subject sequences from two of four areas: Science, Technology and Society, Geosciences, Law or Economics.

Core

AUST101	Australian Studies: Cultures and Identities	6
GEOS142	The Human Environment: Problems and Change	6
STS116	Environment in Crisis: Technology and Society	6
PHIL256	Ethics and the Environment A	6
STS300	The Environmental Context	8

Options

Two of sequences A, B, C and D must be completed.

Sequence A

Both of the following:

ECON309	Environmental Economics	8
ECON311	Natural Resource Economics	8

(Note: students undertaking sequence A are strongly recommended to take ECON111, Introductory Microeconomics. Furthermore, to be able to handle ECON311 well, it is recommended that students also take ECON215, Microeconomic Theory and Policy.)

Sequence B

At least 14 credit points from the following:

GEOS242	Living in Cities	6
GEOS246	A Hungry World: Food Resources and the World Economy	6
GEOS231	Environmental Impact of Societies	6
GEOS347	Northern Neighbours: Economic and Social Change in the Asia Pacific Rim	8
GEOS349	Population, Health and Environment	8

(Note: students undertaking sequence B are also encouraged to consider taking GEOS112, Physical Environments. Students must have successfully completed at least one 200-level subject as a prerequisite for 300-level subjects.)

Sequence C

STS200	Social Aspects of Science and Technology	8
STS238/338	Changing Images of Nature and the Environment	8

or

STS329	Scientific and Technological Controversy	8
STS335	The Politics of Risk	8

Sequence D

All of the following:

LAW100	Law in Society	6
LAW308	Administrative Law	6
LAW334	Environmental Law	6

Science, Technology and Society

Modern science and technology underpin almost every feature of our society. They impinge daily upon our lives and shape our futures. Science, Technology and Society is the academic discipline which studies the origin, nature and social impact of science and technology.

To be considered fully educated today, you must have learned to examine for yourself questions such as, 'What are science and technology? Why and how have they grown in Western Societies? How can we best control and direct science and technology?' In the past generation there has been a revolution in our understanding of the answers to these questions. The field of Science, Technology and Society is where this intellectual revolution is taking place. STS has a long and distinguished history in European and North American Universities. In the last twenty-five years it has undergone enormous expansion.

In Australia there are now STS programs at Melbourne, NSW, Murdoch, Griffith, as well as here at Wollongong, where we have one of the longest established programs in the country.

Taking a major in STS will help equip you to play a productive role as a manager of technological change in industry, as a policy analyst in government, as a commentator on scientific and technological controversies in the media, or as a researcher helping us further understand the way science and technology develop and can be shaped to best serve humanity.

STS can be studied as a major, leading to Honours, Masters and PhD programs; as a joint major with another subject (eg with History, Sociology, English, Psychology or Philosophy); or STS subjects can be selected to complement majors in these subjects or in others, such as Science, Economics, Accountancy, Education, Metallurgy and Computing Science.

STS Major

60 credit points, including:

(a) 52 cp of STS, including:

- i) either STS100/103/200/203 Social Aspects of Science and Technology or STS229/329 Scientific and Technological Controversy
- ii) at least 24 cp of STS at 300-level.

(b) An additional 8 cp may be taken from the following: any STS subject; AUST101; CCS105; CCS334; CCS337; HIST338; HIST363; PHIL256; PHIL258; PHIL262; PHIL322; POL121; POL224; POL314; SOC104; SOC221 (replaced by SOC224 in 2003); SOC231; SOC241.

STS Subject List

Many of the STS subjects have multiple versions depending on level, credit points and mode of delivery. Students will need to choose the subject appropriate to their program of study. In general, subject numbers beginning with the number one are for 1st year students, with a two are for 2nd year students and with a three are for third year students

STS100	Social Aspects of Science and Technology	6
STS200	Social Aspects of Science and Technology	8
STS103	Social Aspects of Science and Technology	6
STS203	Social Aspects of Science and Technology	8
STS112	The Scientific Revolution: History, Philosophy and Politics of Science	6
STS212	The Scientific Revolution: History, Philosophy and Politics of Science	8
STS117	The Scientific Revolution: History, Philosophy and Politics of Science	6
STS217	The Scientific Revolution: History, Philosophy and Politics of Science	8
STS116	Environment in Crisis: Technology and Society	6

Course Structures

STS216	Environment in Crisis: Technology and Society	6
STS218	Environment in Crisis: Technology and Society	8
STS120	Technology in Society: East and West	6
STS220	Technology in Society: East and West	8
STS221	Technology in Society: East and West	6
STS128	Computers in Society	6
STS228	Computers in Society	8
STS215	Globalisation: Technology, Culture and Media	8
STS315	Globalisation: Technology, Culture and Media	8
STS223	The Politics of Medicine and Health	8
STS323	The Politics of Medicine and Health	8
STS229	Scientific and Technological Controversy	8
STS329	Scientific and Technological Controversy	8
STS235	The Politics of Risk	8
STS335	The Politics of Risk	8
STS376	The Politics of Risk	6
STS238	Changing Images of Nature and the Environment	8
STS338	Changing Images of Nature and the Environment	8
STS240	Technological change, popular culture and new media	8
STS241	Technological change, popular culture and new media	6
STS340	Technological change, popular culture and new media	8
STS250	From Molecular Genetics to Biotechnology	8
STS350	From Molecular Genetics to Biotechnology	8
STS260	Technology and Body Politics	8
STS360	Technology and Body Politics	8
STS288	Science and the media	8
STS388	Science and the media	8
STS300	The Environmental Context	8
STS306	Special Topics in the Social and Policy Aspects of Engineering	6
STS390	Media, War and Peace	8
STS399	Research Topics in Science Technology and Society	8
STS400	Science Technology and Society Studies Honours	48
STS430	Joint Honours in Science and Technology Studies and Another Discipline	24

Double major in STS and Business Information System

Students wishing to consider this option should first consult with the Heads of BUSS and STS.

Joint Major in Sociology & Science, Technology & Society (STS)

Joint major in STS and Sociology: Students wishing to consider this option should first consult with the Convenors of Sociology and STS. The full requirements of the joint major are set out in the Sociology entry.

Sociology

Sociology is the study of social life, cultural and social change and the social causes and consequences of human behaviour. By acquiring sociological skills students develop the ability to analyse a wide variety of social processes, institutions, causes of social change and the structures of groups and societies. Specific areas of study for sociologists include gender and social class, crime and punishment, race and ethnicity, the family, welfare and education reform, everyday life experiences, social movements, social change in Asia, sport and entertainment, and youth and popular culture.

In a rapidly changing world sociology offers distinctive perspectives that contribute solutions to complex problems covering issues such as social inequality, globalisation, criminal justice and racism. Sociology is an exciting discipline with expanding opportunities for a wide range of career paths.

The Sociology Program introduces students to the three vital areas of study in social science: research methods, social and public policy and social theory. Research methods subjects stress the ability to formulate specific and relevant research questions and the acquisition of skills in teamwork, project development and report writing. Policy subjects also emphasise an understanding of contemporary Australian society and the development of policy writing, lobbying, evaluation and analysis. Social theory is essential for any meaningful analysis of the complexities of everyday life. Students who are majoring in the discipline need to successfully complete either SOC103 Aspects of Australian Society or SOC104 Communication, Media and Society, and SOC203 Explaining Society, SOC231 Social Analysis and SOC306 Researching Everyday Life.

Honours

Students majoring in Sociology are encouraged to consider undertaking the Honours program. Entry into the 4th Year BA (Hons) program in Sociology is normally available to students who attain a High Credit average in two 300-level Sociology subjects. Students who may be considering Sociology Honours should consult with the Honours Co-ordinator for the School of Social Sciences, Media and Communication during their second or third year of Sociology study.

A number of options are available for students to complete Combined Honours in Sociology and another discipline, eg. History, Psychology, STS, CCS, Geography or English. Students wishing to consider this option should first consult with the Honours Co-ordinator of the School. If possible, this should be done during the second year.

Postgraduate Studies in Sociology

Students should consult the Postgraduate Calendar for details of course structure and content.

Major Study

A major in Sociology consists of at least 54 credit points:

- at least 6 credit points of Sociology at 100 level in either SOC103 or SOC104
- at least 24 credit points at 200-level including SOC203 and SOC231 and an elective from Sociology subjects or a subject chosen from the list of other approved subjects at 200-level listed below;
- 24 credit points at 300-level including SOC306 and one other SOC subject. The remaining 8 credit points may be a SOC subject or a subject from the list of other approved subjects at 300-level listed below.

100-Level

SOC103	Aspects of Australian Society	6
SOC104	Communication, Media and Society	6
SOC110	Understanding Audiences	6

200-Level

SOC203	Explaining Society	8
SOC205	Sociology of the Family	8
SOC206	Youth and Popular Culture	8
SOC222	Sociology of Crime and Justice	8

SOC224	Violence, Fear and Civilisation: the Evolution of States	8
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SOC231	Social Analysis	8
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SOC241	Culture and Communication	8
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SOC242	Contemporary Issues in Society	8
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SOC243	Contesting Asia: Culture, Diversity, Difference	8
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SOC244	Punishment: Purpose, Practice, Policy	8
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Other approved 200-level subjects

(students may include one subject in the Sociology major)

AUST246	A Sociology of Australia's Indigenous People: Contemporary Issues and Debates	8
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PHIL232	Political Philosophy	8
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PHIL286	Philosophy of Social Science	8
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POL224	Politics and the Media	8
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POL290	Women in Society: Productive and Reproductive Labour	8
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300-Level

SOC302	Contemporary Social and Political Thought	8
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SOC303	The Individual in Society	8
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SOC305	Race and Ethnic Studies	8
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SOC306	Researching Everyday Life	8
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SOC308	Social and Public Policy	8
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SOC309	Social Movement and Community Activism	8
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SOC310	Community Organisations, the Third Sector and Civil Society	8
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SOC318	Modernity, Development and Social Change	8
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SOC330	The Sociology of Gender Relations	8
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SOC334	Bread and Circuses	8
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SOC341	Special Topics in Sociology	8
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SOC349	Social Regulation: Policies and Issues	8
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Other approved 300-Level subjects

(students may include one subject in the Sociology major)

PHIL390	Contemporary Political Philosophy	8
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POL314	Power and the Modern State	8
POL319	Political Economy in the New Millennium	8
POL318	The Asian Tigers: Newly Industrialising Countries in Transition	8

400-Level

SOC400	Sociology IV Honours	48
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SOC450	Joint Honours in Psychology and Sociology	48
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SOC451	Joint Honours in Sociology and Another Discipline	48
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Joint Major in Sociology and Science, Technology and Society (STS)

This joint major is intended for students whose main disciplinary interest is in the sociology of science and technology. The joint major provides both depth in sociological theory and examination of a range of issues in science and technology. It is a joint major rather than a double major. However, by taking additional subjects in STS and Sociology the joint major can be converted into a double major. There are a total of 76 compulsory cp within the program.

Sociology requirements: At 100-level, students must do 6 cp of Sociology subjects at 100-level, including at least one of SOC103 or SOC104.

At 200-level, students must do SOC203 Explaining Society and SOC231 Social Analysis.

At 300-level, students must do SOC306 Researching Everyday Life and one other Sociology subject.

STS requirements: 38 cp of STS, including STS100 Social Aspects of Science and Technology or STS229 Scientific and Technological Controversy, with at least 16 cp at 300-level.

Independent Subjects and Subject Areas**Arts Internship**

See details of this subject in the subject description of ARTS301

Linguistics

The following subjects form part of the English Language Studies major, but may be taken independently:

ELS171	An Introduction to Linguistics: The English Language	6
LING210	Communicating in a Foreign Language	8

Spanish

The following subjects are included in the European Studies major, but may be taken independently:

100-Level		
SPAN151	Spanish for Beginners I	6
SPAN152	Spanish for Beginners II	6

200-Level

SPAN251	Spanish intermediate I	8
SPAN252	Spanish intermediate II	8

Major Study areas offered by other Faculties

In the Bachelor of Arts, Course code 702 (single degree) as from 2003, these may be taken as second majors only. BA students wishing to take one of these majors must combine it with a major from the Faculty of Arts.

Accountancy

(Taught by the Faculty of Commerce)

Accountancy may be undertaken as a second major in the Bachelor of Arts, provided that the first major is selected from one of the major studies offered by the Faculty of Arts and provided that all the degree requirements are met.

To qualify for a major study in Accountancy in the Bachelor of Arts, students must complete successfully the following subjects:

ACCY100	Accounting IA	6
ACCY102	Accounting IB	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6

Plus a further 6 credit points of 300 accounting subjects

The Academic Senate has approved the following combinations of subjects as providing an approved substitute for Financial Accounting III or Management Accounting III:

- a) either Financial Accounting III or Management Accounting III plus any other 300-level subjects offered by the Program of Accounting and Finance aggregating not less than 12 credit points;
- b) either Financial Accounting III or Management Accounting III plus any subject at 300-level aggregating not less than 12 credit points offered by either the Computing Science, Economics, or Mathematics Departments; or Law Faculty;
- c) either Financial Accounting III or Management Accounting III together with other subjects at 300-level offered by the Program aggregating not less than 6 credit points PLUS subjects aggregating not less than 6 credit points selected from the General Schedule 300-level subjects approved by the Head, Department of Accounting and Finance.

Applied Statistics

Please see the entry for Mathematics and Applied Statistics.

Economics

(Taught by the Faculty of Commerce)

To qualify for a major study in Economics in the Bachelor of Arts, students must complete successfully the following subjects:

ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8

The Head of the Department of Economics may grant specified credit for any or all of these subjects upon evidence of completion, at a satisfactory standard of pass, of comparable subjects elsewhere.

Plus a further 8 credit points of 200-level subjects and 24 credit points of 300-level subjects listed in the Commerce Course Structures, Major C3.

Education

(Taught by the Faculty of Education)

A Major in Education in the Bachelor of Arts is made up of at least 48 credit points and students must successfully complete the following subjects:

EDUF111	Education I	6
EDUF212	Education II	6

plus

a further 24 credit points from 300 and 400 level subjects listed in the 3 recommended specialised strands below

plus

a further 12 credit points from subjects listed in the 3 recommended specialised strands below. Subjects may also be selected from those listed in the Education Course Structures with an EDUE prefix. Related disciplines, such as Communication Studies, English Language Studies, Psychology or Sociology, may be studied if approved of the Faculty of Education - BA (Education) Coordinator.

Notes

A major in Education in an Arts degree is not a recognised teacher-training credential. However, although some study in Education is recommended for students interested in a career in any instructional or communication-oriented field.

Students interested in pursuing a teacher-training credential by completing the Graduate Diploma In Education at the completion of their undergraduate degree, should consult with the Faculty Of Education - Director, Graduate Diploma In Education.

Certain Education subjects may be recognised as part of a major study in areas such as Communication Studies, English Language Studies, Psychology or Sociology. Students should consult the relevant Program coordinator for further information.

Study in Education in the Arts degree is grouped into 3 recommended specialised strands:

1. Language in Education
2. Equity and socio-cultural diversity
3. Educational Psychology and Special Education

The suggested pattern of studies for each recommended specialised strand is outlined below. Students are free to select subjects across the recommended specialised strands and are able to incorporate related areas of interest into a comprehensive program of studies. It is recommended that students consult with the BA Coordinator within the Faculty of Education regarding their intended program of studies.

First Year of Study

Core Subjects

EDUF111	Education I	6
EDUF212	Education II	6

Second/Third Year of Study

Language in Education Stream *

* Students should note that a specialist qualification in Language Teaching, the Certificate In Second Language Teaching is also available. Contact the Faculty Of Education for further information.

EDUC291	Culture, Immigration and Education	8
EDUE303	Teaching Language and Literacy Through Literature in Early Childhood Years	6
EDUE304	Teaching Language Through Literature in the Primary and Middle Years	6
EDUL314	Language and Ideology	8
EDUL331	English Language: Examining Learners Problems	8
EDUL340	Materials and Technology in Second Language Teaching	8
EDUL350	Programming and Methodology in Second Language Teaching	8
EDUL360	Practicum or Project in Second Language Teaching	8
EDUT301	Research Methods	6

Equity And Socio-cultural Diversity Stream

EDUC323	Curriculum and Program Evaluation	8
EDUC291	Culture, Immigration and Education	8
EDUC292	Gender and Social Justice	8
EDUL314	Language and Ideology	8
EDUE301	Issues in Aboriginal Education	6
EDUE302	Aboriginal Pedagogy	6
EDUT301	Research Methods	6

Educational Psychology and Special Education Stream

EDUC213	Educational Psychology of Typical Children	6
EDUC217	Educational Psychology of Atypical Children and Introductory Educational Measurement	6
EDUF204	Learners with Exceptional Needs	6

EDUF232	Early Intervention and Children with Special Needs	6
EDUF311	Education III	6
EDUE320	Behaviour Management (Not to count with EDUE311)	6
EDUE321	Reading Difficulties (Not to count with EDUE312)	6
EDUE411	Disability issues across the Life Span	6
EDUE412	Programming for Individuals with Moderate to Severe Disabilities	6
EDUT301	Research Methods	6
400-Level		
EDUZ401	Education Honours	24

Geography

(Taught by the Faculty of Science)

Note: As Human Geography is the most common major amongst Arts students, the requirements of this major are outlined below.

Students wishing to major in Geology, Geosciences or Physical Geography within the BA degree should consult the Course Structures of the Faculty of Science.

Students anticipating a career in teaching would be well advised to choose options from both physical and human geography, and may also choose Geology subjects depending on the prerequisites.

Human Geography

Major Study in Human Geography

100-Level

GEOS112	Physical Environments	6
GEOS142	The Human Environment: Problems and Changes	6

200 -Level

GEOS242	Living in Cities	6
GEOS243	The Bush and Beyond: Rural Society in Australia	6
GEOS246	A Hungry World: Food Resources and the World Economy	6

Plus one subject chosen from the following:

GEOS231	Environmental Impact of Societies	6
GEOS233	Discovering Downunder: A Geography of Australia	6
GEOS239	Remote Sensing of the Environment	6

300-Level

At least three subjects selected from

GEOS331	Environmental Management and Decision-making	8
GEOS333	Cultural Heritage Management	8
GEOS339	Geographic Information Systems	8
GEOS347	Northern Neighbours: Economic and Social Change in the Asia-Pacific Rim	8
GEOS349	Population, Health and Environment	8

Plus additional elective subjects at any level (subject to prerequisite requirements) chosen from the Science Schedule to total 90 credit points.

Industrial Relations

(Taught by the Faculty of Commerce)

Major Study

To qualify for a major study in Industrial Relations in the Bachelor of Arts, students must complete successfully the following subjects:

MGMT140	Industrial Relations B: Wage Determination in Australia	6
or		
MGMT240	Industrial Relations B: Wage Determination in Australia	8
plus		
MGMT142	Industrial Relations: A	6
or		
MGMT242	Industrial Relations: A	8
plus		
MGMT340	Comparative Studies in Industrial Relations	8
or		
MGMT341	International and Comparative Employment Relations	8
plus		
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8

plus an additional 8 to 12 credit points from the 300-level subjects listed in Major C-5 of the Faculty of Commerce Course Structures, to provide a total of at least 48 credit points. (Provided that in the case of ECON140 and ECON142 – from 2003 changed to MGMT140 and MGMT142 - the Head of the Department of Economics may grant specified credit for either or both of these subjects upon evidence of completion, at a satisfactory standard of pass, of comparable subjects elsewhere.)

Legal Studies

(Taught by the Faculty of Law)

Students wishing to major in legal studies in the Bachelor of Arts degree must complete 54 points of Legal Studies subjects at Pass Grade or better. LAW100 Law in Society is a compulsory subject in the BA major study. At least 24 credit points of the major study must be taken at the 300-level.

Class Hours

The maximum number of class hours will not exceed an average of four per week per subject. The subject program will specify the actual class hours required for each subject.

Seminars normally commence in the first week of session. Students are asked to indicate their preferred seminar/tutorial times prior to the commencement of session.

Important: There may be some restrictions on class sizes in Legal Studies subjects.

Accordingly, students are strongly advised to finalise their enrolment in Legal Studies subjects for BOTH Autumn and Spring sessions as early as possible, preferably before the commencement of the academic year. In certain instances, adding Legal Studies subjects after the enrolment or re-enrolment dates may not be possible.

100-Level		
LAW100	Law in Society	6
200-Level		
LAW210	Contract Law	6
300-Level		
LAW302	Law of Business Organisations	6
LAW303	Children, Families and the Law	6
LAW304	Criminal Law and the Process of Justice	6
LAW308	Administrative Law	6
LAW315	Taxation Law	6
LAW316	Occupational Health and Safety	6
LAW317	E-Commerce Law	6
LAW330	Law of Employment	6
LAW331	Intellectual Property Law	6
LAW332	Labour Relations Law	6
LAW334	Environmental Law	6
LAW335	Anti-Discrimination Law	6
LAW342	Law and Industrial Development	6
LAW343	International Law	6
LAW344	Indigenous Peoples and Legal Systems	6
LAW348	Media Law	6
LAW349	Feminism and Law	6
LAW352	Advanced Taxation Law	6
LAW360	Foreign Investment Law in the People's Republic of China	6
LAW364	Consumer Protection and Business Regulation	6
LAW366	Selected Issues in Legal Studies	6
LAW370	An Introduction to Civil Law in the People's Republic of China	6
400-Level		
LAW453	Studies in Taxation	6
LAW463	Jurisprudence	6
LAW464	Studies in Business Law	6
LAW465	Studies in Administrative Law	6
LAW466	Studies in Industrial Law	6
LAW467	Studies in Trade Practices and Consumer Law	6
LAW487	Special Topic in Law - A	6
LAW488	Special Topic in Law - B	6
LAW493	Research Essay	12

Management

(Taught by the Faculty of Commerce)

Management may be undertaken as a second major in the Bachelor of Arts, provided that the first major is selected from one of the major studies offered by the Faculty of Arts and provided that all the degree requirements are met. To qualify for a major study in Management in the Bachelor of Arts, students must complete successfully the following subjects:

ACCY100	Accounting IA	6
ACCY102	Accounting IB	6
MGMT102	Business Communications	6
MGMT110	Introduction to Management	6

Either		
MGMT201	Organisational Behaviour	6
or		
PSYC351	Industrial and Organisational Psychology	6
Plus		
MARK101	Introduction to Marketing	6
MARK398	Human Resource Management	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6
Plus 12 credit points from 300-level subjects offered by the Department of Management		

Marketing

(Taught by the Faculty of Commerce)

Marketing may be undertaken as a second major in the Bachelor of Arts, provided that the first major is selected from one of the major studies offered by the Faculty of Arts and provided that all the degree requirements are met.

To qualify for a major study in Marketing in the Bachelor of Arts, students must complete successfully the following subjects:

MARK101	Introduction to Marketing	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotion Strategy	6
MARK344	Marketing Strategy	6
Plus 12 credit points from the following		
MARK240	Marketing and Consumer Behaviour in East and South East Asia	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

Mathematics & Applied Statistics

(Taught by the Faculty of Informatics)

Note: As from 2003, students completing this major in the single Bachelor of Arts degree must also undertake a major study taught by the Faculty of Arts.

To satisfy the requirements for a major study in Applied Statistics, a student shall satisfactorily complete (at a grade of Pass or better) any MATH or STAT subjects listed below, to a total of at least 48 credit points; of which at least 18 credit points must be at 200 level and must include STAT231 and STAT232; and at least 24 credit points must be for 300 level STAT subjects. Students are welcome, and encouraged, to consult an academic adviser from the School of Mathematics and Applied Statistics about their choice of subjects.

For full details about pre-requisites etc, please refer to the Subject Database, by clicking on the subjects listed below.

All subjects may not be offered every year.

100-Level		
MATH111	Applied Mathematical Modelling I	6
MATH121	Discrete Mathematics	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
STAT131	Understanding Variation and Uncertainty	6
200-Level		
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6
MATH212	Applied Mathematical Modelling I2	6
MATH222	Continuous and Finite Mathematics	6
STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6
300-Level		
MATH302	Differential Equations 3	6
MATH305	Partial Differential Equations	6
MATH312	Applied Mathematical Modelling 3	6
MATH313	Industrial Mathematical Modelling	6
MATH316	Applied Dynamics	6
MATH317	Financial Calculus and Logistics	6
MATH321	Numerical Analysis	6
MATH322	Algebra	6
MATH323	Topology and Chaos	6
MATH324	Analysis	6
MATH371	Special Topics in Industrial and Applied Mathematics 3	6
MATH372	Special Topics in Mathematical Analysis 3	6
STAT304	Operations Research and Applied Probability	6
STAT332	Multiple Regression and Time Series	6
STAT333	Statistical Inference and Multivariate Analysis	6
STAT335	Sample Surveys and Experimental Design	6
STAT373	Special Topics in Probability and Statistics 3	6
400-Level		
MATH401	Mathematics 4 (Honours)	6
STAT401	Statistics 4 (Honours)	6
INFO411	Data Mining and Knowledge Discovery	6
INFO412	Mathematics for Cryptography	6

Other subjects available

Other MATH/STAT subjects available are listed below, but note that these subjects cannot be counted in a Major in Mathematics or Applied Statistics.

MATH122	Probability and Logic	6
MATH141	Mathematics 1C Part 1	6
MATH142	Mathematics 1C Part 2	6
MATH15	General Mathematics 1A	6
MATH161	Mathematics 1E Part 1	6
MATH162	Mathematics 1E Part 2	6
MATH283	Mathematics 2E for Engineers Part 1	6
STAT151	Introduction to the Concepts and Practice of Statistics	6
STAT252	Statistics for the Natural Sciences	6
PSYC354	Design and Analysis	6

Population Health

(Taught by the Faculty of Health and Behavioural Sciences)

For the Bachelor of Arts in Population Health in the Faculty of Arts (degree code 702), candidates must undertake all subjects prescribed for the Population Health major together with a major study from the Faculty of Arts. Additional subjects may be taken from the Arts Schedule, the Health & Behavioural Sciences Schedule or the General Schedule to make up the required 144 credit points.

The major in Population Health is designed to train students in skills to obtain, review and analyse health information, to plan and manage a project and to improve the health of populations. The major in Population Health may be taken by students who expect to be employed in the health system, but it should be considered by students who wish to be informed about a subject of interest to all Australians.

A number of postgraduate options are available to allow graduates to proceed into masters degrees (e.g. in public health, health policy and management) or into research programs.

Core Subjects

100 level

POP101	Population health – current health issues and their determinants	6
BMS103	Human growth nutrition and exercise	6
STAT151	Introduction to the concepts & practice of statistics	6
and one of		
ABST150	Introduction to Aboriginal Australia	6
or		
PSYC101	Introduction to behavioural science	6

200 level

POP201	Contemporary population health problems	6
POP210	Epidemiology	6
POP202	Promoting healthy lifestyles	6
POP203	Health policy and service structure	6

300 level

POP320	Project and program design, management and evaluation	8
POP321	Analysis and interpretation of evidence	8
POP331*	Population health project A	24

* Students taking a joint major with another specialisation should take POP332 Population Health Project B, 8 credit points.

Note: Students can include additional subjects in Population Health in their degree, including:

POP102 – Sex, drugs and rock'n'roll: public health perspectives

POP220 – Mass media and population health

POP221 – Behaviour change for population health

Psychology

(Taught by the Faculty of Health and Behavioural Sciences)

Students please note: The course code for the Bachelor of Arts in the Faculty of Arts is 702. Students enrolled under Course Code 708 should refer to the Faculty of Health and Behavioural Sciences, which administers that degree.

Note: Students completing this major in the single Bachelor of Arts degree under Course code 702 must also undertake a major study taught by the Faculty of Arts.

100-Level

Students must complete all three 100-level subjects

PSYC121	Foundations of Psychology A	6
PSYC122	Foundations of Psychology B	6
PSYC123	Theory, Design and Statistics in Psychology	6

200-Level (Options are available. See following notes.)

PSYC216	Psychology of Physical Activity	6
PSYC231	Personality	6
PSYC232#	Research Methods and Statistics	6
PSYC234	Biological Psychology and Learning	6
PSYC235	Introduction to Psychological Assessment	6
PSYC236	Cognition and Perception	6
PSYC241	Developmental & Social Psychology	6

Completion of PSYC232 prior to enrolment in PSYC235 is strongly recommended.

1. Students enrolled prior to 2003 intending to complete three years of Psychology only, must complete PSYC232, plus three Psychology elective subjects. An elective must be a 200 level subject, excluding PSYC216, and must include at least one from each of the following groups:

Group A - PSYC231, PSYC241

Group B - PSYC234, PSYC236

Students enrolling from 2003 must complete an additional 6 credit points at 200-level.

2. Students intending to proceed to an honours year in Psychology must complete PSYC232 and PSYC235, together with three electives from the following subjects: PSYC231, PSYC241, PSYC234, PSYC236.

300-Level (see notes)

24 credit points of Psychology at 200-level (excluding PSYC216) should be completed as a general pre-requisite to 300 level subjects. Further specific pre-requisites are indicated in brackets.

PSYC315	Psychology of Abnormality (PSYC231)	8
PSYC318	Change Throughout the Life Span (PSYC231)	8
PSYC345	Advanced Cognition (PSYC236)	8
PSYC347	Assessment and Intervention	8
PSYC348	History and Metatheory of Psychology	8
PSYC349	Visual Perception	8
PSYC350	Social Behaviour and Individual Differences (PSYC241)	8
PSYC352	Psychophysiology (PSYC234)	8
PSYC354	Design and Analysis (PSYC232)	8

1. Students intending to complete three years of Psychology only, must complete three Psychology electives, including at least one from each of the following groups:

Group A - PSYC345, PSYC349, PSYC352

Group B - PSYC315, PSYC318, PSYC347, PSYC348, PSYC350

2. Students intending to proceed to Honours in Psychology must complete PSYC348 and PSYC354 together with three electives which must include at least one from: PSYC345, PSYC349, PSYC352

3. Students enrolling from 2003 must complete PSYC315.

Bachelor of Communication and Media Studies

This degree draws on the university's expertise in global communication and digital media. It offers students the opportunity to develop competence in one of the specialist streams.

To qualify for the award of the degree of Bachelor of Communication and Media Studies a candidate shall accrue an aggregate of at least 144 credit points by satisfactory completion of subjects listed in the Course Structures of the Bachelor of Communication and Media Studies, the Course Structures of the Bachelor of Arts offered by the Faculty of Arts and the General Schedule

The 144 credit points shall include:

i. a major study composed of the core subjects for the degree together with the compulsory subjects from one of the specialist streams.

By completing the core subjects for the degree together with the compulsory subjects from two of the specialist streams a candidate may complete a double major;

ii. not more than 60 credit points at 100-level.

Continuation in the Bachelor of Communication and Media Studies will be dependent upon the student's achieving a cumulative average of at least 65% at the end of each academic year. Students who do not meet the required average will be transferred to the Bachelor of Arts (702).

Major Studies

Advertising and Marketing

Educational Multimedia (not available in 2003)

Journalism

Media Technology Studies

Screen Studies

Second majors from the Bachelor of Arts (702)

Students may combine a major from this degree with one of the following majors from the Bachelor of Arts -Course code 702.

(Students who do not want to exceed the 144 credit point minimum for the degree will need to choose a second major carefully.)

Aboriginal Studies

Asia Pacific Studies

Australian Studies

Communication Studies

Community and Environment*

English Language Studies

English Studies

European Studies

French

Gender Studies

History

Information Studies

Italian

Japanese

Philosophy

Politics

Resource and Environmental Studies

Science, Technology and Society

Sociology

*available at the Shoalhaven and Moss Vale Campuses and Bega and Batemans Bay Education access centres only.

Core subjects

All students enrolled in the degree must complete the following subjects:

<i>100 Level</i>		
CCS105	Introduction to Communication & Cultural Studies	6
SOC110	Understanding Audiences	6
POL121	Politics in a Globalising World	6
PHIL106	Media, Ethics and law	6
<i>200 Level</i>		
CCS207	Signs of Power	8
POL224	Politics & The Media	8
<i>300 Level</i>		
CCS388	International Media Theories & Systems (to be introduced in 2004)	8
STS390	Media, War and Peace	8

Summer Session electives

Summer Session subjects are optional and are available to all students enrolled in the degree. Students must satisfy prerequisites for upper-level subjects.

DESN108	Screen Production	6
DESN109	Screen Production B	6
DESN190	Introduction to Digital Imaging	6
DES2N11	Introduction to Web Design	6
JOUR299	Desktop publishing	8

Advertising and Marketing

This major will provide students with an understanding of markets, and how these may be reached by manipulating the "marketing mix", the core elements of marketing practice. A focus on the psychology of consumers as decision-makers provides a foundation for the management of the "marketing communication mix", the various channels through which goods and services are promoted and advertised in the marketplace. The subjects in the stream cover the theory and practice of marketing in both national and international contexts.

The Advertising and Marketing major is made up of the 56 credit point core and all the following compulsory subjects in the Advertising and Marketing stream:

MGMT110	Introduction to Management	6
MARK101	Introduction to Marketing	6
MARK217	Consumer Behaviour	6
MARK270	Services Marketing	6
MARK333	Advertising & Promotions Strategy	6
MARK343	International Marketing	6

Journalism

The Journalism sequence is designed to develop basic journalism skills to complement the conceptual knowledge of media process in the BA Communication & Media Studies program. Instead of looking at journalism from three separate media -- print, radio and television -- the sequence focuses on media convergence based on the practical foundation of generic print media techniques. Students take four core journalism subjects. Teaching approaches focus on learning by doing.

The Journalism major is made up of the 56 credit point core and all the following compulsory subjects in the Journalism stream:

JOUR201	Writing for the Media/Copy Editing	8
JOUR202	Feature Writing	8

(300-level subjects to be introduced in 2004)

JOUR301	Investigative Reporting	8
JOUR302	Directed Study /Practice	8

Media technology studies

To navigate in an information-rich environment, the key in the future will be the ability to continually learn to use, critically analyse, reflect on and transform the information systems in place. A crucial part of this is understanding the nature, dynamics and management of media technologies. Challenging the assumption that technologies are neutral and introduced solely on the basis of efficiency or consumer demand, the subjects in this stream explore the ways media technologies are chosen, promoted and contested by competing interest groups.

The major in Media Technology Studies is made up of the 56 credit point core and all the following compulsory subjects in the Media Technology Studies stream:

STS200	Introduction to Science, Technology and Society	8
STS228	Computers in Society	8

And any 2 of the following 300-level subjects

CCS335	Electronic Cultures	8
STS315	Globalisation: Technology, Culture and Media	8
STS388	Science and the Media	8

Screen studies

Students specialising in Screen Studies will gain experience in media content analysis, and will be introduced to the history of film and television production in Australia and the United States. In addition, they will become familiar with the key policy and theoretical issues raised by the globalisation of broadcast media. This specialisation will offer students a chance to develop advanced skills in research and critical analysis of the screen media.

The Screen Studies major is made up of the 56 credit point core and all the following compulsory subjects in the Screen Studies stream:

CCS217	Film Form & Style	8
CCS219	Australian Screen	8
CCS348	Television Globalisation & Cultural Identity	8

and one of the following three subjects:

CCS337	Hollywood and American Culture	8
CCS357	Television Cultures	8
ENGL350	Fantasy & Popular Fiction	8

Bachelor of Arts - Bachelor of Commerce

To qualify for the award of the double degree of Bachelor of Arts, Bachelor of Commerce a candidate shall accrue an aggregate of at least 216 credit points by satisfactory completion of subjects approved for inclusion in the Bachelor of Arts (702), the Bachelor of Commerce and the General Schedule.

The 216 credit points shall include:

- i) the subjects prescribed for one of the majors or combined majors for the Bachelor of Commerce degree;
- ii) at least 72 credit points, including a major study, for subjects listed in the Arts Course Structures, and including at least 36 credit points for subjects offered by member Units of the Faculty of Arts;
- iii) not more than 96 credit points for 100-level subjects.

The Arts major study and the Commerce major are to be chosen from two different disciplines.

The requirements for all Commerce majors are listed under the Bachelor of Commerce within the Faculty of Commerce.

An Honours degree of Bachelor of Arts or Bachelor of Commerce requires additional study (one year full-time, or two years part-time) and may be undertaken by students who meet the requirements for enrolment in Honours.

Students undertaking a major study in Modern Languages are required to discuss their academic program with the Co-ordinator of the relevant language. Students in the Japanese major study undertake some Summer Session study.

Bachelor of Arts - Bachelor of Laws

Refer to the Faculty of Law section for details of this double degree program.

Bachelor of Creative Arts - Bachelor of Arts

To qualify for award of the double degree of Bachelor of Creative Arts, Bachelor of Arts a candidate shall accrue an aggregate of at least 216 credit points by satisfactory completion of subjects approved for inclusion in the Bachelor of Creative Arts, the Bachelor of Arts and the General Schedule.

The 216 credit points shall include:

- i) a major study (108 credit points) as set out for the Bachelor of Creative Arts;
- ii) at least 72 credit points, including a major study, for subjects listed in the Arts Course Structure and including at least 36 credit points for subjects offered by members units of the Faculty of Arts;
- iii) not more than 96 credit points for 100-level subjects.

Where necessary, elective subjects to ensure a total of 216 credit points have been completed.

Bachelor of Engineering - Bachelor of Arts

Refer to the Faculty of Engineering or Faculty of Informatics section for details of this double degree program.

Bachelor of Science - Bachelor of Arts

Refer to the Faculty of Science section for details of this double degree program.

ARTS SUBJECT DESCRIPTIONS

ABST100 Introduction to Aboriginal Cultures 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Assessment: 1. web-based library assignment (10%) 2. literature review (20%) 3. tutorial project (30%) 4. major essay (40%)

Subject Description: This subject provides an introduction to the relationships between Aboriginal Peoples, land and cultures from pre-European to present times. Topics will vary from time to time, but could include identities, kinship, gender, childhood, Elders, authority, decision-making, conflict management, language, communication and local organisations. The subject has a particular emphasis on identifying and maintaining the cultural heritage of South Coast Aboriginal Peoples.

Subject Objectives: On successful completion of this subject each student should be able to: 1. Locate, retrieve and evaluate select bibliographic information on the cultures of Aboriginal Peoples, 2. Utilise appropriate referencing and essay writing methods, 3. Critique a select anthropological text on Aboriginal South Coast Peoples, 4. Articulate and evaluate their relationship with the Aboriginal culture of the locality in which they live, 5. Identify and describe at least one feature of a South Coast Aboriginal culture, and 6. Critically discuss the significance of at least one feature of a South Coast Aboriginal culture to the Aboriginal people of that area.

ABST150 Introduction to Aboriginal Australia 6cp

Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Bega Education Flexible
Access Centre

Spring Batemans Bay Flexible

Autumn Wollongong On Campus

Spring Moss Vale Flexible

Contact Hours: On Campus: 3 hours per week.

Assessment: 1. Minor Essay (15%) 2. tutorial Presentation (20%) 3. tutorial Paper (25%) 4. Reflective Journal (30%) 5. Attendance/Participation (10%)

Subject Description: This subject provides (international and local) students with a general introduction to cultures, histories, and select current issues within Aboriginal Australia, through the key concepts of colonisation and sites of struggle. Topics will vary, but may include the Dreaming, identity, kinship, music, art, literature, language, government policies, land rights, sovereignty, and appropriation of Aboriginality.

Subject Objectives: On successful completion of this subject each student should be able to: 1. Display literature retrieval skills relevant to a select area of Aboriginal culture, history or contemporary issues, 2. Utilise appropriate referencing and essay writing methods, 3. Display a capacity to orally articulate at least one key theme in Aboriginal culture and history, 4. Explain the significance of the Dreaming in relation to at least one aspect of Aboriginal cultures, 5. Demonstrate a basic understanding of the key concept of colonisation in relation to at least one aspect of Aboriginal culture or history, 6. Identify, describe and analyse at least one aspect of Aboriginal culture or history as a site of struggle for Aboriginal peoples, and 7. Identify and describe the significance to Aboriginal peoples of at least one contemporary issue.

ABST200 Aboriginal History Since Invasion 8cp

Autumn Wollongong On Campus

Autumn Shoalhaven Flexible

Autumn Batemans Bay Flexible

Autumn Bega Education Flexible
Access Centre

Contact Hours: 3 hours per week

Pre-requisites: At least 12 credit points at 100-level, including (ABST100) or (ABST150) or (VIS123) or (NURS144) or (equivalent approved by Head of Program)

Assessment: 1. Class Assignment(10%) 2. Bibliographic Critique (20%) 3. Tutorial Assignment (30%) 4. Practical or Theoretical Major Project (40%)

Subject Description: This subject introduces students to the field of Aboriginal history, with emphasis on directions set by Aboriginal historians. It also explores the oral tradition, and develops student understandings of the complexities of Aboriginal histories from 1788 by discussing a range of themes. Within this context the subject also encourages the exploration and retrieval of Aboriginal histories of the South Coast.

Subject Objectives: On successful completion of this subject each student should be able to: 1. Critically discuss the differences between non-Aboriginal and Aboriginal directions in Aboriginal history, 2. Identify and explain the significance of at least one theme in history in relation to the contemporary situation of Aboriginal Peoples, 3. Locate, retrieve and evaluate bibliographic information on at least one government-related report pertinent to a select theme in Aboriginal history, 4. Demonstrate a critical understanding of the nature and role of colonial perceptions in contemporary relations between Aboriginal and non-Aboriginal Australia. 5. Utilise referencing and essay writing methods appropriate to the field of history.

ABST300 Indigenous Theories of Decolonisation 8cp

Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Bega Education Flexible
Access Centre

Spring Batemans Bay Flexible

Contact Hours: 3 hours per week

Pre-requisites: (ABST100 and ABST200 plus 8 credit points at 200 level) or (ABST150 and ABST200 plus 8 credit points at 200 level)

Assessment: 1. Bibliographic/Internet Assignment (10%) 2. Oral Presentation (10%) 3. seminar Paper (20%) 4. Essay Plan (20%) 5. Major Assignment (40%)

Subject Description: This subject aims to enhance students' sociological and historical understandings of the processes of decolonisation and their own relationship to these processes. It examines a range of international and local theories formulated by Indigenous Peoples (such as Fanon, Friere, Langton, Smith, Memmi, Minh-ha, Nandy and others) and explores their relevance to the Australian situation. Key themes within this subject are power and empowerment at global, national, community and individual levels.

Subject Objectives: On successful completion of this subject each student should be able to: a) Identify and critically evaluate their own relationship to the process of colonisation and decolonisation from at least one theoretical perspective,

Subject Descriptions

b) Critically discuss at least one indigenous theory on an aspect of colonisation and decolonisation, c) Evaluate the relevance of at least one indigenous theory (on an aspect of colonisation and decolonisation) to at least one historical or contemporary situation within Australia, d) Demonstrate an understanding of the key concepts of power, empowerment, indigenous, colonisation, decolonisation and post colonialism, e) Conduct a world - wide Internet web-site search on information related to Indigenous Peoples, f) Locate, retrieve and evaluate information on Indigenous Peoples from one world wide Internet web-site and, g) Utilise appropriate research and essay writing methods.

ABST301 Research Methods and Issues in Aboriginal Studies 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (ABST100 plus ABST200 plus at least 8 credit points at 200 level)

Subject Description: This subject provides a systematic exploration of newly-emerging ideas on Indigenous research methodologies, and examines the implications of these for Aboriginal Studies in Australia. It also provides students with opportunities to explore select research techniques and evaluate their suitability for Aboriginal Studies. Students will also construct a detailed research proposal and undertake a research project.

ABST350 Special Topic in Aboriginal Studies 8cp

Spring Wollongong On Campus

Pre-requisites: ABST100 and ABST200, plus 22 credit points, plus approval for enrolment from the Head of Aboriginal Education Centre

Subject Description: This is a reading, or reading and research, subject offered under the direct supervision of one or more members of Aboriginal Studies staff. Topics for this subject may be chosen from any area of Aboriginal Studies which the Head of Program considers to be of suitable substance and level. As this subject is only offered depending on the availability of supervisory staff, students must consult with the Head of Program before enrolling.

ABST361 Issues in Aboriginal Education 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours per week.

Pre-requisites: (ABST100) or (ABST150) plus 16 credit points at 200 level

Exclusions: Not to count with EDUF211, EDUE301 or EDUE401

Assessment: 1. seminar Assignment (50%) 2. Project or Essay (40%) 3. Attendance/Participation (10%)

Subject Description: Provides students with historical and sociological understandings of the significant role formal education has played/plays as a site of cultural and political struggle for Aboriginal people. Through various topics (eg history of Aboriginal education, current policies, Aboriginal views on education) students will explore select key concepts (assimilation, institutional racism, colonisation, resistance, self-determination, decolonisation) with special attention to the preferred Aboriginal model of 'two ways' education.

Subject Objectives: On successful completion of this subject each student should be able to: 1. Clearly demonstrate an understanding of select concepts pertinent to Aboriginal education, especially assimilation, colonisation, institutional racism, resistance, and self-determination.

2. Explain the concept of 'both ways education' and its relationship with self-determination. 3. Critically discuss current aims of Aboriginal Education policies (NSW & Commonwealth). 4. Identify some cultural sensitive ways of understanding Aboriginal youth behaviour in formal education systems.

ABST362 Aboriginal Pedagogy 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours per week.

Pre-requisites: (ABST100) or (ABST150) plus 16 credits points at 200 level

Exclusions: Not to count with EDUF222, EDUE302 or EDUE402

Assessment: 1. Community Consultation Assignment (40%) 2. Major Project or Essay (50%) 3. Attendance/Participation (10%)

Subject Description: Explores Aboriginal teaching and learning styles and approaches to knowledge in order to develop theoretical understandings and professional skills that will facilitate: consultation with Aboriginal communities.

ARTS112 People and Place 6cp

Autumn Shoalhaven Flexible

Autumn Bega Education Access Centre Flexible

Autumn Batemans Bay Flexible

Autumn Moss Vale Flexible

Contact Hours: 2 hour seminar per week.

Assessment: Essay 1 (500-750 words) 15%; Annotated Bibliography (1,000 words) 30%; Essay 2 (1,200 words) 35%; Participation 20%

Subject Description: This subject will explore the idea of contested understandings of what it means to be Australian. The course will focus on a number of key areas and explore the ways in which a person's gender, ethnicity, class and citizenship status effect their experiences of living in this nation. The areas analysed are: the home, the paid work place, the environment and national spaces (memorials etc). The course also focuses on the ways in which some groups are excluded from important political, cultural and social and economic rights. In particular the exclusion of Indigenous people, women and migrants from full and equal participation is explored.

Subject Objectives: On successful completion of this subject, a student should be able to: 1) identify the key cultural, political, and historical debates about the meanings of place in Australian society; 2) demonstrate basic skills in accessing a range of research resources including library reference, journals, books and the internet; 3) demonstrate a capacity to write critical responses to quite complex cultural and social issues and problems; 4) effectively present research findings in a variety of written forms; 5) demonstrate a range of skills that enable the critical examination of various sources on Australian cultures and histories. 6) demonstrate in discussion forums an appreciation of and respect for cultural and intellectual diversity.

ARTS113 Society and Representation 6cp

Spring	Shoalhaven	Flexible
Spring	Batemans Bay	Flexible
Spring	Bega Education Access Centre	Flexible
Spring	Moss Vale	Flexible

Contact Hours: 2 hours per week

Exclusions: ENGL120 An Introduction to Literature and Screen Studies

Assessment: 1take-home test 15%; 1 library skills (ungraded but compulsory); 2 presentations 30%; 1 essay 45%; participation 10%

Subject Description: This subject introduces the idea that reality is meaningful once represented through sign systems including an interaction of textual conventions, social practices and cultural knowledges. It provides examples of different texts (literary and non-literary), practice in analysis and expression of argument, focussed around the topics of text, nature, gender and education. It proposes that meanings are always multiple and negotiated though based within structuring codes/discourses.

Subject Objectives: On completion of ARTS113, the successful student should: 1. be a confident beginning user of email, chatgroups and webpages; 2. have an understanding of how 'reality' is mediated by representation; 3. be able to recognise basic features of major media and genre conventions; 4. be able to identify discursive constructions of gender, nature, education; 5. be capable of producing a systematic interpretation of a number of text-types; 6. have skills in sustaining an argument orally and in writing/defending such; 7. be tolerant to other views while vigorously sifting valid from invalid reason; 8. be self-reflexive about positionality and meaning-making; and 9. have basic skills in accessing a range of library resources.

ARTS211 Social Science Perspectives on Health and Illness 6cp

Autumn	Wollongong	On Campus
Autumn	Bega Education Access Centre	Flexible

Contact Hours: Wollongong: 1 hour lecture, 2 hour seminar, Bega: 1hour video-conference fortnightly; 2hours tutorial face to face.

Exclusions: SOC111

Assessment: Small group research presentation (20%); Worksheets on skills development (30%); Short essay (20%); Report (30%).

Subject Description: Australian society provides the context for an examination of the major perspectives that inform the analysis of the social power relations that shape patterns of health and illness and the provision of health care services. Students will apply the theoretical frameworks to contemporary issues in health and illness including the introduction of new technologies, the practical meanings of care for different health professions and representations of health and illness in the popular media. The focus on small group learning activities means students have an opportunity to share knowledge and develop their ideas together.

Subject Objectives: On completing the subject successfully, students should be able to: 1. To identify social power relations in the health care setting including: the hierarchy of professional relationships; inequalities in the patient provider relationship,

and issues in the distribution health care resources in a community. 2. To discuss the bases of the power relations in terms of concepts including ethnicity, gender, class, race and age. 3. To use a social science method to observe and describe media representations of social power relations in a health care setting. 4. To discuss and analyse social relations in the form of an essay and a short report. 5. To work in teams to enhance learning.

ARTS301 Arts Internship 8cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hours seminar(+ 48 hours Internship).

Pre-requisites: 96 credits points and selection interview with careers service professional & subject coordinator

Assessment: Reflective journal/portfolio/resume 50%; seminar Essay (3000 words) 50%

Subject Description: Arts Internship is a subject that crosses boundaries between theory and practice. At the end of your degree this is an opportunity to reflect upon and develop strategies for using your knowledge and skills developed through studies in Arts in the world of work and in the pursuit of your goals in your career and in life. Students will critically examine: the discourses and skills learned in the Faculty of Arts, their personal learning of these discourses and skills, the discourses and skills of the "world of work" . They should develop understanding of these discourses and skills and their learning of them by undertaking an Internship in a community or business environment. Placement in the Internship is facilitated by the University after negotiation with the student. The Internship is of 48 hours duration completed in addition to class contact time. Reflective learning activities and the Internship are integral in the University assessment of student outcomes in the subject. Students are encouraged to embark on understandings of the relevance of their studies to their post university endeavours.

Subject Objectives: On successful completion of this subject, students should be able to: 1. articulate the skills and knowledge developed in Arts faculty subjects 2. critically assess their strengths in this kind of learning 3. articulate employer identified needs in workplaces 4. demonstrate ability to use their learning in a business or community environment.

ARTS401 Community and Environment Honours 48cp

Autumn	Batemans Bay	Flexible
Autumn	Bega Education Access Centre	Flexible
Autumn	Moss Vale	Flexible
Autumn	Shoalhaven	Flexible

Contact Hours: There will be 4 all day workshops comprising discussions for the two seminars. The workshops will be at a single location for students from all centres., Autumn There will be 4 all day workshops comprising discussions for the two seminars. The workshops will be at a single location for students from all centres., Autumn There will be 4 all day workshops comprising discussions for the two seminars. The workshops will be at a single location for students from all centres., Autumn There will be 4 all day workshops comprising discussions for the two seminars. The workshops will be at a single location for students from all centres., Autumn There will be 4 all day workshops comprising discussions for the two seminars. The workshops will be at a single location for students from all centres.

Pre-requisites: Major in Community and Environment with an average of 70 or above in at least three 300 level subjects.

Subject Descriptions

Assessment: 2 seminars and a literature review for thesis 50%; thesis 50%

Subject Description: An integrated interdisciplinary Honours program comprised of coursework and a supervised thesis has been designed to prepare students for further research in future employment or future study. The two seminars offer advanced research and skill development in the types of analysis and writing that are characteristic of humanities and social sciences. Preparing to Write a Thesis develops the high level research, analytic and writing skills needed to successfully complete a thesis.

Contemporary Debates in Humanities and Social Sciences is an exploration of two or three debates in the literature through reading, discussion and writing. Half of the subject is the development, research and writing of a 15,000 word research thesis under the supervision of an academic at the University of Wollongong. Students will begin to work with the supervisor during their first session of candidature with the goal of producing a draft of a literature review of the topic by the end of that session.

Subject Objectives: On successful completion of this subject, students should be able to: 1. demonstrate advanced research skills 2. articulate a focussed research proposal 3. present an oral version of the research proposal in a conference format 4. critically read and discuss selected current debates in the humanities and social sciences 5. write analytically about aspects of a current theoretical debate in the humanities and social sciences 6. conduct an analytic review of the relevant literature for a specific thesis topic 7. conduct research according to a plan negotiated with a supervisor 8. write an extended account to the research (the thesis).

ASIA299 Special Topics in South East Asian Studies 8cp

Summer Wollongong Flexible
2003/2004

Contact Hours: 2003/2004 Contact Study Abroad Office for more information.

Assessment: Essays and examination

Subject Description: Students will undertake a subject in a Southeast Asian university. At present exchange agreements exist with Prince of Songkla University in Thailand, Gadjah Mada University in Indonesia and the University of Indonesia, enabling subjects from those universities to be taken as part of a Wollongong BA. Subjects from other universities can be taken by arrangement with the Subject Director, Associate Professor Adrian Vickers.

ASIA399 Special Topics in South East Asian Studies 8cp

Summer Wollongong Flexible
2003/2004

Contact Hours: Contact Study Abroad Office for more information.

Assessment: Essays and examination

Subject Description: Students will undertake a subject in a Southeast Asian university. At present exchange agreements exist with Prince of Songkla University in Thailand, Gadjah Mada University in Indonesia and the University of Indonesia, enabling subjects from those universities to be taken as part of a Wollongong BA. Subjects from other universities can be taken by arrangement with the Subject Director, Associate Professor Adrian Vickers.

AUST101 Australian Studies: Cultures and Identities 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lectures and tutorials per week.

Assessment: essay 1 (1,200 words) 30%; essay 2 (2,000 words) 40%; annotated bibliography 20%; participation 10%.

Subject Description: This subject introduces students to some of the important issues and academic debates about identities in Australia.

It explores some of the principal features that characterise images of Australia, Australians and the Australian continent. It approaches the subject from an historical and cultural perspective and asks what 'being Australian' has meant to different people at different times, both for the social groups and individuals who have shaped dominant notions of national identity and those who have challenged them. What did it mean, for example, to Indigenous people, to women, to immigrants? The subject also critically examines expressions of Australian identity through some of its national rites and rituals such as Australia Day, Anzac Day, tourism, sport and national spectacles such as the Olympics.

Subject Objectives: On successful completion of this subject, a student should be able to: 1) identify the key cultural, political, and historical debates about the concept of Australian national identity 2) demonstrate basic skills in accessing a range of research resources including library reference, journals, books and the internet; 3) demonstrate a capacity to write critical responses to quite complex cultural and social issues and problems; 4) effectively present research findings in oral and written forms; 5) demonstrate a range of skills that enable the critical examination of various sources on Australian cultures and histories. 6) demonstrate in discussion forums an appreciation of and respect for cultural and intellectual diversity.

AUST102 Australian Studies: Narrating the Nation 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours lecture/tutorials/lab per week.

Assessment: Short answer assessment; library research bibliography; class participation; research essay

Subject Description: This subject introduces students to different perspectives on the meaning of Australia and Australianness in the 19th and 20th centuries. It explores a series of key texts, which represent Australia, Australians and the Australian continent through a wide variety of genres. Students explore these ideas from a combination of historical, literary and cultural perspectives. The subject asks how Australia and being Australian has been represented by different people and at different times both by social groups and individuals who have represented dominant notions of Australianness, and those who have challenged them.

Subject Objectives: On successful completion of this subject, students should be able to: 1. identify some of the key cultural texts that have shaped debates about the meaning of 'Australia'; 2. demonstrate a range of skills that enable the critical examination of a wide range of media and genres (including literary and historical writings, films, maps, paintings, journalism, legal documents etc); 3. utilise and critically appraise some basic theoretical concepts and terminology deployed in academic and public debates about Australian history, culture, society and politics; 4. effectively present research findings in written forms; 5. demonstrate in discussion forums an appreciation of and respect for cultural and intellectual diversity.

AUST300 Twentieth Century Australian Literary Culture 8cp

Spring	Wollongong	Flexible
Spring	Shoalhaven	Flexible
Spring	Bega Education Access Centre	Flexible
Spring	Batemans Bay	Flexible

Contact Hours: 1x3 hour seminar x 3wklly; +online interaction

Pre-requisites: (AUST101 and AUST246) or (AUST101 and HIST218) or (6cp of ARTS plus 8cp at 200 level)

Exclusions: HIST380 and ENGL371

Assessment: Bulletin Board Postings (1,000 words) 15%; essay 1 (1,500-2,000 words) 35%; essay 2 (1,500-2,000 words) 35%; participation 15%

Subject Description: This subject examines twentieth-century Australian literary culture in the context of contemporary critical theories of gender, "race" and class. Amongst other things, it examines the representation and critique of gender roles, the process by which national literary canons and national identity are constructed, and the manner in which imperialist ideology played a critical role in the representation of Aboriginal people and Aboriginality in the literature of the period

Subject Objectives: On successful completion of this subject, a student should be able to: 1) identify some of the cultural, political, ideological, historical and intellectual background of Australian literary culture in the twentieth century. 2) use scholarly commentaries on issues of race, class and gender to write critical readings of literary texts. 3) test ideas and arguments before student colleagues and staff in both written and oral forms, and consider the implications of any responses for their intellectual position. 4) demonstrate a respect for the ideas of others and offer critical and informed responses to them. 5) write historicised analyses of literary texts at an advanced level.

CCS 105 Introduction to Communication and Cultural Studies 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	Flexible
Autumn	Bega Education Access Centre	Flexible
Autumn	Batemans Bay	Flexible
Autumn	Moss Vale	Flexible

Contact Hours: Wollongong: 1 hour lecture, 2 hours seminar, Other Campuses: 3 hours workshop.

Exclusions: COMS100

Assessment: Presentation 30%; Essay 30%; Analysis 40%

Subject Description: This subject is an introduction to the concepts and terminology used in the fields of communication and cultural studies. It aims to provide a range of critical tools with which to analyse, critique and interrogate communications processes, texts, and audiences. It introduces students to models of communication with a stress on the study of signs, discourses and narratives. Students explore the tension between the way that social practice tries to regulate and stabilise meaning and the tendency for meaning to proliferate.

Subject Objectives: On completion of this subject, students should be able to: 1. identify forms of analysis and inquiry appropriate for the study of cultural texts; 2. demonstrate understanding of a key concept in Communication and Cultural Studies through oral exposition; 3. identify two pieces of communication and apply theoretical analysis to them;

4. write, in individual essay form, an analysis of a filmic text which deploys relevant concepts and terminology.

CCS 207 Signs of Power: Culture and Representation 8cp

Spring	Wollongong	On Campus
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Contact Hours: 1 hour lecture, 2 hours tutorial per week.

Pre-requisites: (36 credit points)

Exclusions: Not to count with CCS107

Assessment: seminar papers & exercises 40%, 1 essay 60%

Subject Description: In this unit we will explore cultural representations of the social world through an examination of signs, texts and social practices within the context of socio-cultural relations and processes. Having examined the premise that culture works like a language we will consider the questions of how representations are constructed, the contexts in which they are formed and the implications they have for issues of power and cultural politics. Particular attention will be paid to representations of gender and race within the texts of popular culture (television, magazines, advertising etc).

Subject Objectives: By the end of this course, students should be able to demonstrate their ability to: 1. identify forms of analysis and inquiry appropriate for the study of cultural representations; 2. identify a particular cultural representation within popular culture and apply theoretical analysis to it 3. write an individual essay related to issues of cultural representation.

CCS 215 Race, Gender, Colonialism: Studies in Australian Culture 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (36 credit points)

Assessment: seminar paper 15%, two essays 40% each, participation 5%

Subject Description: This subject examines nineteenth and twentieth century Australian cultural formations in the context of contemporary critical theories of gender, race and colonialism. It introduces students to the study of colonial discourse and the manner in which it engenders institutionalized subjects. In addition, it examines the representation and critique of gender; the appropriateness of nation and other terms as organizing principles; and the critiques produced through Aboriginal and immigrant cultural practices.

CCS 217 Film Form and Style 8cp

Autumn	Wollongong	On Campus
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Contact Hours: 1 hour lecture, 2 hour screening, 2 hours seminar hours per week.

Pre-requisites: (36 credit points)

Assessment: project/essay 50%, assignment 30%, seminar participation 20%

Subject Description: This subject is an introduction to the reading of film as a language and to cinema as an institution. It aims to introduce students to film analysis and to instruct students in how to watch films critically. The subject is divided into three complementary sections. The first part is devoted to considerations of film aesthetics, exploring aspects of form and style within classical Hollywood cinema. The second part concerns major theoretical approaches to film analysis, including (but not limited to) key readings on genre, spectatorship, authorship, ideology, and style.

Subject Descriptions

The third part focuses on alternatives to Hollywood, looking at stylistic and formal differences (and similarities) of a range of different national cinemas, directors, and periods. This section provides students with opportunities to apply the concepts from the readings to specific film examples which they may have not seen before.

Subject Objectives: On completion of this subject, students should be able to: 1. articulate an understanding of key terms for describing aspects of film as a language and cinema as an institution; 2. analyse major theoretical approaches to film analysis and evaluate different viewpoints;

3. interrogate the formal and aesthetic differences (and similarities) of a range of different national cinemas, directors, and periods; 4. work effectively in groups, negotiate roles and task responsibilities, and implement decisions;

5. develop a higher level of critical and analytical writing skills; 6. demonstrate skills in accessing a range of research resources, including academic journals, electronic texts, and databases.

CCS 219 Australian Screen 8cp

Spring Wollongong Flexible

Spring Shoalhaven Flexible

Spring Bega Education Access Centre Flexible

Spring Batemans Bay Flexible

Spring Moss Vale Flexible

Contact Hours: Flexible delivery, including screenings and online tutorials (3 hour equivalent per week).

Pre-requisites: (36 credit points)

Assessment: Journal 40%, Group project 10%, Essay 30%, Participation 20%

Subject Description: This subject covers the history of the Australian screen, from the early development of the industry, through the decline of the 1950s and 1960s and the government-assisted revival in the 1970s, to the present day. Arguments for and against a national cinema are considered, and the co-operation between Australian television and cinema in the production of a national image is explored. Please note that this subject has a significant online communication component. All necessary skills are taught in the subject and supported by documentation.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate their 1. understanding of the relationship between Australian media history, media policy, textual analysis and audience research; 2. ability to construct argument using primary and secondary sources; 3. skills in researching and communicating online.

CCS 221 Critical Cultural Practice 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (36 credit points)

Assessment: major essay 50%, textual analysis 30%, seminar paper 15%, seminar participation 5%

Subject Description: This subject is an introduction to contemporary theories and practices of critical analysis. It is specifically concerned with theories of representation and the application of these theories in socio-cultural contexts. The subject examines a broad range of cultural texts as sites upon which critical skills may be developed in an informed theoretical framework.

CCS 223 Introduction to Publishing Studies: Print 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hours seminar/workshop per week.

Pre-requisites: (36 credit points)

Assessment: tutorial paper 20%, sessional essay 40%, publication exercise 40%

Subject Description: A study of the processes and products of publishing in all media and forms from their origins of historical development up to the contemporary infotech age, treating these as instances of cultural production, dissemination, and reception as well as addressing the various socio-economic, cultural, political and legal conditions, contexts and issues involved.

Practical, experiential approaches will be employed and, to this end, various workshops (eg desktop publishing) will be offered.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate 1. critical understanding of the social, political, legal and cultural issues surrounding the development of print publishing; 2. ability to apply a range of printing and publishing skills developed in workshops; 3. skills in communicating research developed through in-class presentation and essays.

CCS 225 Introduction to Electronic Publishing 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (36 credit points)

Assessment: Essay (25%), seminar Paper (30%), Project (35%), Participation (10%)

Subject Description: This subject surveys electronic publishing from desktop publishing to the world wide web, thus complementing CCS223 Introduction to Publishing Studies: Print. It covers the history of publishing in electronic form, the features and possibilities of the medium including audio and moving images, its formats, distinctive genres and cultural impact. It includes some production work in desktop publishing and web pages.

Subject Objectives: Students successfully completing CCS225 should be able to: 1. analyse, discuss and comment on aspects of the history, development, particular nature and cultural impact of electronic publishing; 2. demonstrate an in-depth understanding of a particular genre, practice or use of the electronic medium; 3. demonstrate a working knowledge of the production of web pages; 4. display advanced skills in cultural and textual analysis, in essay writing and oral presentation.

CCS 330 The Practices of Everyday Life 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week.

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: seminar Presentation 30%; Textual Exercise 30%; Essay 40%

Subject Description: This subject introduces students to a range of theories which enable the critical re-evaluation of the practices of everyday life in the context of popular culture. Students will critically re-evaluate everyday practices in relation to tactical consumption, unauthorised pleasures, oppositional uses and the unintended effects of power. Topics discussed include: kitsch, camp and the culture of trash; commodification and identity; indigeneity and race in popular culture;

the codification of suburban and urban spaces; gender performance, sexual identity and the politics of drag.

Subject Objectives: On completion of the subject, students should be able to: 1. Demonstrate a strong understanding of the theoretical approaches studied in the course; 2. Deploy those theories in the critical analysis of everyday practice and cultural artefacts; 3. Discuss the interrelations of everyday practices and discourses of power.

CCS 333 Popular Genres 8cp

Spring Wollongong On Campus

Contact Hours: 1 x 3 hour lecture/screening; 1 x 2 hour seminar per week

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: Two quizzes 30%, Essay 25%, Research paper 35%, Participation 10%

Subject Description: This is a course in film genres, investigating the evolution and significance of key genres such as film noir, horror, fantasy and science fiction. The course examines the political and social contexts in which different genres emerge, their literary antecedents, and the philosophical questions they could be said to raise. Students will be introduced to a range of theoretical approaches to the analysis of film, and course materials draw on psychoanalytic, feminist, historical and poststructuralist writings, among others, to debate the meaning and significance of classic genre films from the 1930s to the present.

Subject Objectives: Students who successfully complete this subject should have: 1) A sense of how and why genres evolve over time 2) An understanding of the social/political/psychic aspects of different genres 3) An introduction to classic film texts 4) An enhanced understanding of the language of film.

CCS 334 Technologies of the Body 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: seminar paper 20%, Essay 30%, Major essay 40%, Participation 10%

Subject Description: This subject is an introduction to the discursive and material analysis of definitions and descriptions brought to bear on the body across a number of institutional and disciplinary sites. As such, it examines major theoretical and critical concerns about the socio-cultural practices associated with the representation of bodies. These concerns emanate from and include Feminist, Postcolonial, Postmodern, Psychoanalytic, Poststructuralist and Queer Theoretical debates about identity and representation.

CCS 335 Electronic Cultures 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: Short report 20%, seminar paper 30%, Essay/journal 40%, Participation 10%

Subject Description: This subject covers text, practices and impact of electronic culture in cyberspace or elsewhere. Students will consider how concepts of the body, gender, identity and community are formulated in the electronic environment; they will scrutinise notions of authoring and authority, reading and interactivity, and will explore issues of access and equity, and policies dealing with regulation, copyright and privacy. This subject complements Publishing Studies offered in CCS223 and CCS225.

Subject Objectives: Students successfully completing CCS335 should be able to: 1. demonstrate a familiarity with the forms and practices of electronic culture including the contents and mode of presentation of typical electronic texts; 2. demonstrate an awareness of the main debates inspired by the new media and an understanding of its impact on culture in Australia and elsewhere; 3. analyse the implications of the texts and practices found in the electronic environment using an appropriate theoretical framework; 4. display advanced skills in cultural and textual analysis and in essay writing.

CCS 337 Hollywood and American Culture 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour screening, 2 hour tutorial per week.

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: minor essay 30%, major essay 50%, participation 20%

Subject Description: A study of American cinema and its interaction with American popular and political culture, covering the development of the studio system; the transition from silent to sound; Hollywood's response to censorship demands; the representation of social, sexual and political issues in the 1950s in particular; and the relationship between American cinema and television to the end of the 1960s.

Subject Objectives: A student successfully completing this subject should be able to 1. demonstrate a clear understanding of the impact of American industry policy on studio film production; 2. complete an independently designed research project combining textual analysis and American cultural history 3. analyse and assess the value of theoretical arguments relevant to film studies.

CCS 339 Hollywood and the Globalisation of Culture 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: minor essay 30%, major essay 50%, participation 20%

Subject Description: This subject examines the history of Hollywood and its interaction with American popular culture since 1968. In addition, it explores the influence of Hollywood on global screen production and distribution, considering other national cinema histories in the context of resistance to, or collaboration with, the dominant American national cinema. The rise of American independent production is addressed, as well as principal theoretical shifts in film and media theory since the 1970s.

CCS 341 Screen Studies: Advanced seminar 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: major essay/video project 50%, minor assignment 30%, seminar presentation 20%

Subject Description: This subject allows students to undertake advanced detailed study of a specific screen genre or industry. The special topic studied is subject to staff availability and expertise. Special topics to be offered may include advanced television study, new Black Cinema, Queer Screen, the Hollywood Musical, British Cinema, Early Cinemas, German Cinema.

CCS 343 Directed Study 8cp

Spring	Wollongong	On Campus
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Autumn	Wollongong	On Campus
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Contact Hours: 3 hours seminar.**Pre-requisites:** (36cp including 8cp in 200 level CCS)**Restrictions:** Available only in special circumstances. Students can only enrol after consulting with and gaining the approval of the Convenor of Program.**Assessment:** Assignments to be negotiated with the Subject Co-ordinator in the first week of session.**Subject Description:** Directed reading, research and other investigative activities lead to the production of a major essay or report in a field of study selected by the student and approved by the Convenor of Program. Prospective students must have a Distinction average in CCS, unless in exceptional circumstances, and entry depends on the availability of staff.**CCS 348 Television, Globalisation and Cultural Identity 8cp**

Autumn	Wollongong	On Campus
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Contact Hours: 1 hour lecture, 2 hours seminar per week.**Pre-requisites:** (36cp including 8cp in 200 level CCS)**Exclusions:** Not to count with CCS341**Assessment:****Subject Description:** In this subject we explore the rise of global television and explore its contribution to the construction of cultural identities. The course should introduce students to a set of key concepts and empirical studies with which to explore the impact of global television. Particular stress is laid on the discursive and symbolic character of identity and the emergence of hybridity in the context of globalisation. The subject will allow students to examine the issues of: Modernity, globalization and 'new' technology; Emerging patterns in the communications Industries; The global appeal of soap opera and news; Audiences and cultural identity: race and nation; and Cultural Identity, globalization and cultural imperialism**Subject Objectives:** Students should be able to: 1. identify the forms of analysis and inquiry appropriate for the study of global television; 2. identify a particular issue in the study of global television and apply theoretical analysis to it; 3. collect appropriate materials related to the chosen issue; 4. work co-operatively and constructively with others in the context of a project group; 5. offer an oral report on the issues raised within the project; 6. write an individual essay on an identifiable issue of global media.**CCS 352 Flashpoints, Contestations in Contemporary Australian Culture 8cp**

Summer 2003/2004	Wollongong	On Campus
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Contact Hours: 4 hour seminar per week.**Pre-requisites:** (36cp including 8cp in 200 level CCS)**Assessment:** seminar presentation 25%; seminar write-up 25%; major essay 50%**Subject Description:** Contemporary Australian culture has been subject to perturbation as a consequence of a series of culture wars in which culture (and the culture) has become the site of contestation between discourses of the media, age, race and ethnicity, and gender. Focusing on a selection of these cultural flashpoints, this subject will examine moments of crisis in Australian culture via these discourses and the particular cultural practices and products involved.**Subject Objectives:** Students should be able to: 1. Identify and engage with debates concerning contemporary Australian culture. 2. critically analyse a range of cultural texts and practices using cultural studies theories 3. Produce a critically evaluated research project that focuses on a contemporary 'Flashpoint' in Australian culture.**CCS 351 Semiotics and Communication 8cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** (36cp including 8cp in 200 level CCS)**Assessment:** Case Study 45%, Essay 30%, Reading Report 15%, Class Participation 10%**Subject Description:** This subject will seek to explain and analyse communication and interaction processes in terms of patterns of verbal and non-verbal signs and language. Relevant semiotic and communication concepts and readings will be introduced.

Subtopics include gestures and body language, conversation analysis, visual messages and communication media. Students will undertake an empirical case study.

CCS 357 Television Cultures 8cp

Spring	Wollongong	On Campus
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Spring	Shoalhaven	Flexible
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Spring	Bega Education Access Centre	Flexible
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Spring	Batemans Bay	Flexible
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Contact Hours: 2 hour lecture/screening, 2 hour tutorial per week.**Pre-requisites:** (36cp including 8cp in 200 level CCS)**Exclusions:** Not to count with CCS257**Assessment:** Participation 20%; Essay/research project 50%; Group presentation 30%**Subject Description:** This subject surveys the major debates and issues involved in TV theory and criticism. It examines television as a social and cultural practice, looking at formal and aesthetic features of television genres, issues of representation and identity, and historical and technological developments of television in Australia within a global context.**Subject Objectives:** On completion of this subject, students should be able to: 1. Articulate your understanding of major theories and key terms for describing aspects of critical television studies. 2. Analyse key issues concerning TV studies and evaluate different viewpoints. 3. Interrogate the discursive means by which representations of gender, class, and race are constructed and critiqued in Australian and International television programs and advertisements. 4. Work effectively in groups, negotiate roles and task responsibilities, and implement decisions. 5. Develop a higher level of writing skills. 6. Demonstrate more advanced skills in accessing a range of research resources, including electronic texts.**CCS 388 International Media Theories and Systems 8cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** (36cp including 8cp in 200 level CCS)**Assessment:** Commentaries (30%); Group Debate (20%); Essay (50%)**Subject Description:** This subject examines key theoretical concepts concerning media systems and networks of mass media found in the nation, Asia Pacific region, and beyond.

We will examine international media industries and consider a range of topics including but not limited to the Public sphere, the industrialisation of art and culture in the age of mass production, the political influence of culture, technological determinism, media convergence, and global concentration of media ownership and the pursuit of new media markets. Students should develop a conceptual framework with which to evaluate the roles of mass media in different types of societies, economies and political systems.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Understand the complex roles of various international media, and recognize and discuss specific aspects and theoretical issues within specific historical, political and economic contexts. 2. Analyse both content and context of media: these include messages and channels, as well as common patterns of relationship between media, technology, state, audiences, and institutions. 3. Analyse significant media systems and structures with reference to relations of social power in each type of society. 4. Assess ideological agendas about media systems and international communications policies in the context of current and future developments. 5. Apply their knowledge of the subject (including their research findings) in an interactive group debate presentation.

CCS 400 Honours 48cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Contact Hours: 3 hour seminar per week.

Pre-requisites: (Major in CCS at credit average - not to include Pass Terminating grades)

Assessment: dissertation or project 50%, plus seminar papers, essays, projects, research reports etc as required in the particular units of a program of complementary studies arranged for each candidate 50%.

Subject Description: 1. A dissertation (or project+) of 15,000 words or equivalent on a topic developed in consultation with the student's supervisor and approved by the Convenor (24 cp); 2. A program of complementary studies comprised of coursework subjects and project work+ arranged in consultation with each student and approved by the Convenor (24 cp).

CCS 405 Joint Honours in Communication & Cult Studies and Another Discipline 48cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Pre-requisites: (Major in CCS at credit average - not to include Pass Terminating grades)

Subject Description: This will consist of a course of studies approved by the Convenor of Program in collaboration with the Convenor of the other academic unit concerned and will normally be composed of elements offered at 400-level by each unit.

CCS 407 Special Study 8cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Pre-requisites: (Major in CCS at credit average - not to include Pass Terminating grades)

Subject Description: This subject is designed to enable students enrolled in Honours in other Programs to take one of the subjects in the Communication and Cultural Studies Honours Program. Enrolment is subject to the approval of the Convenor of Program.

**ELS 151 English For Academic Purposes: 6cp
A Second Language Perspective**

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture; 2 hour tutorial per week.

Pre-requisites: Minimum IELTS score of 6 for International students

Assessment: Classwork 15%; Written assignment 55%; Oral assignment 30%

Subject Description: This subject provides an introduction to English for Academic Purposes primarily for Non-English Speaking Background (NESB) students who have undertaken their school studies in a language other than English.

It will introduce and examine a general range of texts used in academic contexts, such as Explanation, Exposition and Discussion etc. It will focus on some of the key distinguishing features of academic writing.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Achieve a basic proficiency in EAP for NESB students; 2. Identify common academic text types; 3. Reproduce common academic text types.

ELS 152 English Language Studies 1 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours Lecture and 2 hours tutorials per week.

Pre-requisites: ELS151

Assessment: Class work 20%, Essay 60%, Examination 20%.

Subject Description: ELS152 introduces students from a non-English speaking background to a range of skills, resources and understandings which are vital for successful participation at university. The course has two strands, Culture and Language. In the Culture strand we examine some features of the Academic tradition on which Wollongong University is based. We will critically analyse these features and compare them with those in other traditions of learning. In the Language strand we examine a range of resources which assist you to produce written and spoken texts in the academic style which is expected at university. In identifying and using these resources we will also be introducing an understanding of the basic structures and grammar of the English language. Throughout both strands, skills and strategies for listening, reading, writing and viewing in a tertiary context are explicitly introduced and practised.

Subject Objectives: on successful completion of this subject, a student should be able to: 1. Achieve an intermediate proficiency in ELS for NESB students; 2. Identify a range of academic text types; 3. Analyse a range of academic genres; 4. Reproduce a range of academic genres.

**ELS 161 English For Academic Purposes: 6cp
A First Language Perspective**

Autumn Wollongong On Campus

Autumn Shoalhaven Flexible

Autumn Bega Education Access Centre Flexible

Subject Descriptions

Autumn Batemans Bay Flexible

Autumn Moss Vale Flexible

Contact Hours: 2 hour lecture; 2 hour tutorial per week

Assessment: Class work 20%, written assignment 60%, final test 20%

Subject Description: ELS161 introduces you to range of skills, resources and understandings which are vital for successful participation at university. The course has two strands, Culture and Language. In the culture strand we examine some features of the Academic tradition on which Wollongong University is based. We will critically analyse these features and compare them with those in other traditions of learning. In the Language Strand we examine a range of resources which assist you to produce written and spoken texts in the academic style which is expected at university. In identifying and using these resources, we will also be introducing an understanding of the basic structures and grammar of the English language. These understandings are further developed in other subjects within the English Language Studies program. Throughout both strands, skills and strategies for speaking, listening, reading, writing and viewing in a tertiary context are explicitly introduced and practiced.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Achieve a basic proficiency in English for Academic Purposes for ESB students; 2. Identify a range of written and oral academic genres; 3. Analyse a range of written and oral academic genres; 4. Reproduce a range of written and oral academic genres.

ELS 171 An Introduction to Linguistics: The English Language 6cp

Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Bega Education Access Centre Flexible

Spring Batemans Bay Flexible

Spring Moss Vale Flexible

Contact Hours: 2hour Lecture; 1hour tutorial per week.

Exclusions: Not to count with ENGL130 or LANG110

Assessment: seminar papers and exercises 60%, 1 essay 40%

Subject Description: ELS171 offers an introduction to the study of English language and linguistic theory. Its purpose is to explore the nature of spoken and written language and the relationship between language and the context in which it occurs. There will be a strong focus on the development of an understanding of the tools of linguistic analysis to describe grammar, meaning and context. The approach to language is a functional one: language is as it is because of what it does in real life situations.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve a basic understanding of linguistic principles as applied to SFL; 2. analyse the linguistic elements and their function in designated texts; 3. construct situationally appropriate texts.

ELS 271 English Language Studies 2 8cp

Autumn Wollongong On Campus

Contact Hours: 2hour lecture; 2hour tutorial per week.

Pre-requisites: (ELS171 & ELS151 & ELS152) OR (ELS171 & ELS161)

Exclusions: Not to count with ELS261

Assessment: assignments 50%, participation 10%, portfolio 10%, essay 30%

Subject Description: This subject is the first 200 level subject in the English Language Studies major. Students will be working with discipline specific language looking at the linguistic features that separate and define them.

In particular, students will be investigating cohesion and thematic development across a selected range of disciplines.

Subject Objectives: On completion of this subject, a student should be able to: 1. achieve an advanced proficiency in EAP for both ESB and NESB students; 2. identify a range of discipline specific academic text types; 3. analyse a range of discipline specific academic text types.

ELS 371 English Language Studies 3 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: ELS271

Exclusions: Not to count with ELS361

Assessment: Oral and written assignment 50%, portfolio 10%, participation 10%, essay 30%

Subject Description: This subject follows ELS271. Students will be investigating abstraction, technicality, attitude and opinion across a selected range of disciplines.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. commitment to independent learning and critical analysis; 2. ability to logically analyse issues; 3. an understanding of information literacy; 4. self-confidence combined with oral and written academic english communicatin skills.

ELS450 Honours in English Language Studies 48cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Pre-requisites: a major in ELS (credit average) or equivalent.

Assessment: Dissertation 50%. Essays and oral presentation 50%

Subject Description: A BA(Hons) in English Language Studies comprises of coursework (50%) and a supervised thesis (50%), which has been designed to prepare students for further research in future employment or future study. Honours in ELS requires the student to: (1) write three major essays totalling 11000-12000 words focusing on i) theoretical models in linguistics, ii) topics in English Language Studies, and iii) methodologies in linguistics; (2) prepare and present orally a research proposal on a topic in English Language Studies to be approved by the ELS Honours Coordinator; (3) write a 15000 word dissertation based on research proposed in (2) above; and (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled.

Subject Objectives: On successful completion of this subject, students should be able to: 1. prepare and present orally a research proposal; 2. prepare an annotated bibliography; 3. produce a literature review; 4. critically analyse a range of theories within the discipline of English Language Studies; 5. demonstrate a high level of written and oral communication; 6. research a relevant topic in English Language Studies; 7. critically analyse a range of methodologies within the discipline of English Language Studies;

8. write up an extended account of the research project in the form of a thesis.

ENGL113 Contemporary Writing in Australia 6cp

Spring Wollongong On Campus

Contact Hours: 2 x 1 hour lecture; 1hour tutorial per week.

Exclusions: ENGL190

Assessment: 2 Essays 60% (25% & 35%); 1 class presentation 15% (10 to 15 minute presentation); 1 Practical Exercise 15% (1 in-class quiz); Class participation 10%.

Subject Description: This subject will examine texts which challenge the idea that there is one representative "literature" in Australia. Through an examination of the various discourses, myths and historical narratives which construct cultural identity, it will focus on the question of genre and gender construction, and on the function of autobiography and fiction in constructing a national literature. The subject will feature guest writers and performers.

Subject Objectives: At the conclusion of the subject, successful students should be able to: 1. define the basic terminology and concepts (eg discourse, ideology, displacement, alienation, social construction, indigeneity, narrative, myth, positionality, culture, national identity); 2. describe the various discourses, myths, historical narratives, that construct cultural identity, and identify their inscription in a broad range of texts; 3. explain the function of history, autobiography and fiction in constructing a national literature; 4. contrast "Migrant Writing", "Indigenous Writing", "Anglo Writing"; 5. demonstrate an appreciation of indigenous and migrant cultures; 6. write a critical analysis of "National Identity" and "National Literature" and interrogate and challenge the idea that "one representative literature speaks for all Australians".

ENGL117 Forms of the Imagination 6cp

Contact Hours: Not on offer in 2003.

Subject Description: Since the decline of realism, fantasy in fiction is no longer dismissed out of hand as mere escapism. Now the creation of other worlds and other possibilities appears as a necessary exercise of the human capacity for imagination. In this subject we study many kinds of imaginative fiction (and their corresponding social backgrounds); eg myth; Arthurian Romance; the Gothic; the supernatural; surrealism; science fiction; swords and sorcery; magic realism.

ENGL120 An Introduction to Literature and Screen Studies 6cp

Autumn Wollongong On Campus

Contact Hours: 2 x 1 hour lectures and 1 x 1hour tutorial per week.

Assessment: 2 essays 35% & 45%; take-home exercise 10%; library skills test (ungraded but compulsory); class participation 10%.

Subject Description: This subject is an introduction to the 'reading' and criticism of texts in various forms and media. Students will be introduced to the principles, processes and methodologies involved in the critical 'reading' of texts drawn from prose fiction, poetry, advertising, journalism, theatre, film, television, etc. The texts selected for study will be treated on their own individual terms as expressive communicative examples of the various forms and media.

Subject Objectives: At the conclusion of this subject the successful student should: 1. grasp the expanded notion of 'text' and understand that 'how' a text means is an integral part of 'what' it means; 2. be familiar with several kinds of literary and popular texts: drama, film, novel, verse etc; 3. understand the basic conventions of each genre and how each uses particular devices to create meaning; 4. be able to demonstrate how texts arise from social contexts and construct particular kinds of "readers" appropriate to those contexts; 5. be familiar with concepts of discourse, reader position and intertextuality; 6. have developed skills in the critical close reading of texts; 7. have developed basic information retrieval skills relevant to this and other subjects.

ENGL121 Text and Gender 6cp

Contact Hours: Not on offer in 2003.

Exclusions: (ENGL108) or (ENGL110)

Assessment: 2 Essays; 1 Class presentation; 1 Take-home exam

Subject Description: This subject is primarily concerned with the definition and construction of the notions 'female' and 'male' in literary and cinematic texts. These texts will be drawn from historical periods from the Renaissance to the present and include poems, pamphlets, stories, novels and the screen texts of cinema and cyberspace.

Subject Objectives: At the conclusion of the subject, successful students should be able to: 1. demonstrate an understanding of the content/meanings of the texts studied. 2. describe some of the rhetorical, generic, and linguistic strategies the texts use to produce meaning. 3. demonstrate an understanding of the relationship between the texts and their cultural context with particular attention paid to the ways in which culture produces 'gender'. 4. show an initial understanding of the ways concepts such as 'human', 'woman', 'man', 'female', 'male', 'feminine', and 'masculine' are produced by and through culture.

ENGL199 Understanding Literary Techniques 6cp

Contact Hours: Not on offer in 2003

Assessment: 2 seminar papers 30% each; 1 practical criticism exercise 30%; participation 10%

Subject Description: This subject is particularly suited to the needs of mature-age students and students who do not feel confident in the techniques of close textual analysis. Each seminar will include a short lecture on a particular literary device (eg metaphor, symbol, the narrative voice), a workshop wherein several examples will be analysed, and a paper presented by a student.

ENGL228 English Renaissance Literature and Culture 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour seminar per week.

Pre-requisites: At least 6 cp at 100-level English

Assessment: 1 essay; 1 tutorial paper; 2 short critical exercises

Subject Description: This subject introduces students to the literature and culture of the English Renaissance. It focuses on a diversity of texts including plays, poetry, autobiographical writing, historical narrative, and contemporary observations; texts written by a number of major and minor writers of the period (eg Shakespeare, Donne, Milton, Thomas Kyd, 'Ephelia',

Subject Descriptions

Mary Rich, Thomas Hariot, Walter Raleigh, Queen Elizabeth and others). The subject concentrates on the ways these texts inform and are informed by three major cultural contexts: the historical, the social, and the literary/generic.

Subject Objectives: Students who successfully complete this subject should be able to: 1. demonstrate an understanding of the content/meanings of the literary texts studied. 2. describe the rhetorical, generic, and linguistic strategies the texts use to produce meaning; 3. show knowledge of the relationship between the texts and their social, historical, and literary contexts; and,

4. provide a critical analysis of the texts by identifying and describing the inter-relationship between the above three dimensions of study.

ENGL229 Romanticism & Victorians: English Literature From 1790-1900 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: At least 6 cp at 100-level English

Assessment: 1 take-home test 30%; 2 essays 35% each

Subject Description: This is a study of the revolution of imagination. The literature in this subject represents an influential part of the cultural production of a century of European history that includes the French, Industrial and Scientific Revolutions - a period of exciting, daunting upheaval in political, social, scientific and aesthetic theory and which includes the writings of the Romantic Poets, the Bronte sisters, Tennyson, Barrett-Browning, Hardy, George Eliot and Dickens.

Subject Objectives: Students who successfully complete this subject should be able to: 1. demonstrate an understanding of the context/meanings of the literary texts studied; 2. describe the rhetorical, generic, and linguistic strategies the texts use to produce meaning; 3. show knowledge of the relationship between the texts and their social and literary contexts; and 4. provide a critical analysis of the texts by identifying and describing, where appropriate, the inter-relationship between the above three dimensions of study.

ENGL230 Page to Stage: Modes of Performance 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: At least 6 cp at 100-level English

Assessment: 1 essay; 1 seminar presentation; theatre review; class participation

Subject Description: From ancient Greece through to contemporary Hollywood, dramatic performance has functioned to entertain, to educate, and to call for change. Today's TV and cinema culture has a rich dramatic heritage of which we too often remain unaware. This subject provides an introduction to the study of performance through text, theory, and practice. Elements of performance will be explored through the study of specific scripts, and through practical work drawn from various performance modes. The connections between performances and their cultural contexts will be explored, with special emphasis on gender, sexuality, politics and nation. We will also consider the crucial influence of genre - whether comedy, tragedy, satire, or morality play - on performance and dramatic convention. The texts in the course will range from Greek tragedy through the medieval and Renaissance stages to the avant garde and experimental challenges of the twentieth century.

Subject Objectives: Students completing ENGL230 should be able to: 1. demonstrate a familiarity with a cross-historical range of dramatic texts, and with the dramatic and technical considerations relevant to the performance of these texts; 2. critically analyse the texts chosen for study; 3. discuss representations of gender, sexuality, race and nationhood, and the role of dramatic texts in the exploration of moral, ethical, political and philosophical questions.

ENGL231 Australian Drama and Theatre 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: At least 6 cp at 100-level English

Subject Description: By reference to representative texts, as well as by practical exercises, this subject involves the investigation of the development of Australian drama from 1788, and the relationship between Australian drama and the Australian theatre enterprise.

ENGL243 Fantasy and Children's Literature 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: At least 6 cp at 100-level English

Assessment: 2 practical exercises (15% each); 1 tutorial paper (30%); 1 major essay (30%) - to be confirmed at first lecture

Subject Description: This subject begins with a discussion of the fairy tale, its uses, meaning and relevance in today's world. This will be followed by a study of modern fantasy literature for children and young adults by British, American and Australian authors.

Subject Objectives: Students completing ENGL243 should 1. be able to demonstrate a familiarity with the fantasy genre in relation to writing for children and young adults 2. be able to critically analyse the texts selected for study 3. have an understanding of the social factors determining the production and circulation of children's and young adult's literature.

ENGL244 Children's Literature in Australia 8cp

Summer Wollongong On Campus
2003/2004

Contact Hours: 2 x 1 hour lecture, 2 x 1 hour tutorial per week.

Pre-requisites: At least 6 cp at 100-level English

Assessment: Examination 15%; tutorial paper 30%; major essay 45%; participation 10%

Subject Description: This course will focus primarily on contemporary Australian Children's fiction, but it will also offer a wider context for an appreciation of children's literature by examining a range of texts, including some early Australian Children's literature. This subject will also include talks by major Children's authors.

Subject Objectives: Students completing ENGL244 should be able to: 1. demonstrate a familiarity with a diversity of contemporary children's literature 2. critically analyse the texts chosen for study 3. discuss the construction and representation of cultural constructs such as gender, sexuality and 'race' in the context of nineteenth- and twentieth-century children's literature.

ENGL248 Chaucer 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: (At least 6 cp at 100-level English)

Assessment: 2 essays; 1 translation test

Subject Description: This subject involves the study of some of The Canterbury Tales of Geoffrey Chaucer and also provides an introduction to the literary and cultural context of his time. It considers the construction and representation of gender, sexuality, love, marriage, youth and age. The subject is designed to make Chaucer accessible to modern readers, who will find the texts racy, bawdy, witty, ironic, in their coverage of a wide range of human experience.

Subject Objectives: Students completing this subject should be able to: 1. demonstrate a familiarity with Chaucer's work, its reception and reworking in later periods 2. critically analyse the texts chosen for study 3. discuss the construction and representation of cultural concepts like gender, sexuality, love, marriage, youth and age in the context of fourteenth-century England 4. demonstrate an ability to read and understand Chaucer's English.

ENGL253 Major Twentieth Century Writers 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: At least 6 cp at 100-level English

Subject Description: A study of major modern writers in English from England, America, Ireland and New Zealand.

ENGL255 Eighteenth Century Literature and Culture 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: At least 6 cp at 100-level English

Exclusions: ENGL256

Assessment: 1 essay; 1 tutorial paper; 2 short critical exercises

Subject Description: Eighteenth-century English literature ranges from the biting social satire of Pope and Swift to the increasing popularity at the end of the century of the 'new' genres of Feeling - the Gothic and the novel of Sensibility. The period is known for its comic writing but this subject also focuses on the work of women writers - those 'other Augustans' whose skills of social observation considerably broaden our understanding of the period.

Subject Objectives: Students who successfully complete this subject should be able to: 1. demonstrate an understanding of the content/meanings of the literary texts studied. 2. describe the rhetorical, generic, and linguistic strategies the texts use to produce meaning. 3. show knowledge of the relationship between the texts and their social, historical, and literary contexts; and 4. provide a critical analysis of the texts by identifying and describing the inter-relationship between the above three dimensions of study.

ENGL259 An Introduction to Canadian Writing 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: At least 6 cp at 100-level English.

Assessment: 1 essay 50%; 1 presentation & report 40%; class participation 10%

Subject Description: This subject will focus primarily on contemporary Canadian fiction, but it will also offer a wider context for an appreciation of this country's literature and culture through an examination of a range of texts: exploration journals, poetry and fiction by First Nations and Canadian writers (including, Michael Ondaatje and Margaret Atwood).

The texts for this subject illustrate a wide range of issues, styles and preoccupations in Canadian literature.

Subject Objectives: Students completing ENGL259 should be able to: 1. demonstrate a familiarity with a diversity of contemporary Canadian writing and related moments of cultural importance; 2. critically analyse the texts chosen for study; 3. discuss the construction and representation of cultural constructs such as gender, sexuality and "race" in the context of nineteenth and twentieth-century Canadian literature.

ENGL260 Nineteenth Century Australian Literary Culture 8cp

Autumn Wollongong Flexible

Autumn Shoalhaven Flexible

Autumn Bega Education Flexible
Access Centre

Autumn Batemans Bay Flexible

Autumn Moss Vale Flexible

Contact Hours: 1x3hour seminar every third week; +online interaction per week.

Pre-requisites: (At least 6 cp of English at 100-level) or (ARTS113)

Exclusions: (ENGL236) OR (ENGL258) OR (ENGL291) OR (CCS 215)

Assessment: 1000 word essay 30%; 2000 word essay 40%; 7 Best bulletin board postings 15%; Participation 15%

Subject Description: This subject examines nineteenth-century Australian literary culture in the context of contemporary critical theories of gender, race, class and colonialism. Amongst other things, it examines the representation and critique of gender roles, the process by which national literary canons and national identity are constructed, and the manner in which colonial ideology played a critical role in the representation of Aboriginal people and Aboriginality in the literature of the period.

Subject Objectives: On completion of this subject, you should be able to: 1. articulate your understanding of the processes and structures by which canons of national literatures produce their notion of national identity. 2. Interrogate the discursive means by which gender roles, class positions and the figure of the indigene are simultaneously constructed and critiqued in the literature of nineteenth-century Australia. 3. Demonstrate a range of critical skills which enable the examination of the presuppositions which inform a range of cultural practices and artefacts. 4. Have more advanced skills in accessing a range of research resources, including electronic texts. 5. Be able to work effectively in groups and to negotiate roles and task responsibilities. 6. To demonstrate a capacity to write in a variety of styles and genres.

ENGL264 Modernism 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: At least 6 cp at 100-level English

Exclusions: (ENGL253)

Assessment: 1 take-home test 30%; 2 essays 35% ea - to be confirmed at first lecture

Subject Description: This subject focuses on the theory and cultural production of modernism from the 1890s to the 1940s and the exciting textual dynamic that brings the disciplines of verbal and visual arts, science and technology into tension. Literary texts by Kafka, Synge, Camus, Lawrence, Eliot, Woolf, Yeats, Stein, Faulkner and Joyce will be read in conjunction with texts from science, psychology, art and music.

Subject Objectives: Students who successfully complete this subject should be able to: 1. demonstrate an understanding of the context/meanings of the literary texts studied; 2. describe the rhetorical, generic, and linguistic strategies the texts use to produce meaning; 3. show knowledge of the relationship between the texts and their social and literary contexts; and 4. provide a critical analysis of the texts by identifying and describing, where appropriate, the inter-relationship between the above three dimensions of study.

ENGL265 English and the Empire 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: At least 6 cp at 100-level English.

Assessment: 1 take-home test 15%; 1 presentation 35%; 1 essay 45%; class participation 5%

Subject Description: This subject considers supposedly 'universal' and 'neutral' English literary classics to show how the discipline of English literature arose out of imperialist expansion and created a literary set of representations that served to justify global power differentials. It inspects overtly colonial fiction to see how its discourse operates and it also surveys some of the counter-discursive texts exposing, parodying and subverting colonialist representations.

Subject Objectives: At the successful completion of this subject, students should: 1. have an understanding of major features of imperial discourse

2. be familiar with a range of fiction and poetry arising from British Empire history 3. be able to articulate how these texts reflect and/or contest such a 'legacy' 4. have an understanding of ways in which 'English' is implicated in (neo-) imperialist national and global processes 5. be equipped to begin analysis of contemporary 'post-colonial' conditions.

ENGL299 The Vikings:Old Norse Culture, Language and Literature 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: At least 6 cp at 100-level English

Subject Description: This subject introduces students to the cultural and social achievements of the societies which produced the vikings: to the impressive literature they produced including the poetry, the family sagas, and the work of the historian Snorri Sturluson (in translation). It also gives students an insight into their language (Old Norse, or Old Icelandic) which is of great historical importance, and closely related to the earliest form of English.

ENGL312 Shakespeare, Jonson and Their Contemporaries 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points).

Assessment: 1 seminar paper; take-home exercise; essay/journal

Subject Description: A study of selected plays of the Elizabethan-Jacobean period with special reference to the relationships between the plays, contemporary English society and its concerns, and to the conditions of performance. The subject has been designed to complement the study of Shakespeare and seventeenth-century literature provided in ENGL228.

Subject Objectives: Students completing this subject should be able to: 1. analyse and understand the connections between certain plays by Shakespeare, Jonson, Marlowe and Webster, and Elizabethan-Jacobean society in particular; 2. analyse and understand more generally the connections between literary texts and society (then and now) 3. research, critically analyse and write critically on complex questions of textual and cultural formation.

ENGL330 Theatre in English Since 1968 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (at least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points).

Subject Description: This subject will examine recently performed plays in Britain, Ireland, Canada, and America, focussing on innovative approaches to performance and subject matter. We will look at the cultural politics of theatre in the contemporary Western state, the possibilities for political theatre, the revival of popular theatre by the New Left and feminist movements, and the interplay between theatre, other media, and new technologies such as cyberspace.

ENGL331 Modern Drama 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 cp.)

BCA Theatre strand students with 12 cp in Theatre subjects may enrol in this subject without the English pre-req, but will still need a waiver form signed by the Head of Program

Exclusions: THEA301

Subject Description: A study of the major movements in drama of the late nineteenth century and their development in the twentieth century, in their theatrical contexts.

ENGL334 Critical Theory: Development and Debates 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Assessment: 2 essays 30% and 40%; 1 seminar presentation 20%; class participation 10%

Subject Description: This subject is an introduction to several critical movements that have currency in contemporary literary and cultural studies: structuralism, poststructuralism, psychoanalysis, materialist and historicist approaches, feminism and theories of gender and sexuality, and theories of post-coloniality and ethnicity. The subject explores the tensions and connections between these movements, attending to the ways in which each movement approaches questions of subjectivity and textual meaning. Students are also given the opportunity in one essay to deploy theoretical concepts through the reading of a literary text.

Subject Objectives: Students completing the course should be able to: 1. demonstrate a familiarity with the aims and methodologies of several important contemporary critical movements; 2. discuss the relations and interactions between these movements; 3. critically analyse literary and cultural theories, not simply "apply" them; 4. deploy theoretical concepts in the analysis of cultural artefacts, eg novels and films. More generally, students completing the course will have further developed critical thinking and essay writing skills.

ENGL337 Sex, Power, and Chivalry - Medieval to Modern Literature 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points) or (ARTS113 and 6 credit points of ENGL and any other 6 credit points)

Assessment: 1 essay; tutorial presentation; journal; class participation

Subject Description: This subject begins by providing an introduction to some of the major chivalric texts of the later Middle Ages, including Malory's tales of King Arthur, the love lyrics of the troubadours and the female trobairitz, and the lais of Marie de France. It then goes on to examine Cervantes' and others' famous early satires on knightly masculinity, Victorian writers' nostalgic revisitation of Camelot, modern popular romance fiction, the postmodern queer chivalry of Kathy Acker, and the hardbitten knights of Hollywood Westerns. It takes a literary-historical approach, exploring the fascinating and highly complex relationship between gender and social rank in chivalric texts, and traces these texts' changing preoccupation with the issues of power, heroism, sexuality, secrecy, fidelity and betrayal. No previous knowledge of medieval literature is assumed.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Develop a familiarity with a range of chivalric texts 2. Identify, read, and discuss Middle English and other medieval texts competently 3. Critically analyse the texts chosen for study, focussing on their representation of gender

4. Display a critical understanding of the relationship between text and historical context 5. Explain the role of literature in perpetuating or changing social and cultural values

ENGL340 Directed Study in English 8cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: negotiated.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Co-requisites: (12cp of 300 level ENGL)

Restrictions: Students MUST have a DISTINCTION average in all English subjects.

Subject Description: Directed reading, research and other investigative activities lead to the production of a major essay/report in a field of study selected by the student. Approval must be sought from Convenor of English Studies Program prior to enrolment. Entry to subject depends on availability of staff to supervise student in particular course of study. Prospective students must have a Distinction average in English.

ENGL345 Twentieth Century Women Writers 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture + 1.5hour tutorial per week.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Assessment: 2 take-home tests; 1 presentation and paper; 1 essay

Subject Description: This subject deals with the work of six modern women writers: Virginia Woolf, Katherine Mansfield, Sylvia Plath, Dorothy Hewett, Alice Walker and Jamaica Kincaid.

Of particular concern are the cultural processes which so often lead to the mythologising of a woman writer's life, and the way this life/myth interacts with interpretations of that writer's work.

Subject Objectives: Students who successfully complete this subject should be able to: 1. demonstrate an understanding of the content/meanings of the literary texts studied; 2. describe the rhetorical, generic, and linguistic strategies the texts use to produce meaning;

3. show knowledge of the relationship between the texts and their social and literary contexts with particular attention paid to the autobiographical genre and the complex entanglement of the life, the text, the gender and the persona(s) of authors studies; and 4. provide a critical analysis of the texts by identifying and describing, where appropriate, the inter-relationship between the above dimensions of study.

ENGL346 Comparative Australian/Canadian Writing 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Assessment: 1 final essay 40%; 1 written presentation 30%; 1 take-home quiz 20%; participation 10%

Subject Description: This course is constructed around the discussion of written and filmic texts.

Though it is articulated around the theme of Australian and Canadian novels, films, poetry & plays, it will also focus on a number of general critical issues and theories including genre & generic conventions, feminism, post-colonialism, post-structuralism and on the strategies which various writers & film-makers from both countries use to put forward such perspectives. The dominant focus of the subject will be to examine the ways that writing from minority groups have redefined the shape and space of Canadian and Australian creative works. This subject will be focused to spotlight Indigenous writers and writers of colour, and to deal directly with theory written by these cultural practitioners about their own work.

Subject Objectives: Students completing this course should be able to: 1. demonstrate a general knowledge of comparative theory; 2. critically analyse the texts chosen for study; 3. discuss the construction and representation of cultural concepts such as gender, 'race' and class in the context of speculative modes of production; 4. demonstrate an understanding of the way race, gender and ideology function in the production of individual and national identity formation; 5. demonstrate a familiarity with genre analysis and its application to a range of texts.

ENGL350 Fantasy and Popular Fiction 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points).

Exclusions: CCS333

Assessment: 1 major paper 40%; 1 take-home exam 20%; 1 presentation & paper 30%; participation 10%

Subject Description: This subject will explore the development of various non-realistic genres of popular fiction such as other-world fantasy, science fiction, gothic, horror, fairy tale and talking animal story.

Subject Descriptions

Students will study a range of texts, from the X-Files to Alien and Dracula and situate them in the context of contemporary critical and cultural theory.

Subject Objectives: Students completing this course should be able to: 1. demonstrate a general knowledge of a diversity of fantasy writing and criticism; 2. critically analyse the texts chosen for study; discuss the construction and representation of cultural concepts such as gender, 'race' and class in the context of speculative modes of production; 3. demonstrate a familiarity with genre analysis and its application to a range of texts.

ENGL355 Fourteenth Century Literature 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Subject Description: Students will study Chaucer's 'The Wife of Bath's Tale', the religious dream-poem 'Pearl', the Arthurian story, 'Sir Gawain and the Green Knight' and look at current approaches including feminist and gender-based readings. The selected editions of texts are easily readable with glosses and paraphrases. A reader with study hints and critical readings will be available.

ENGL359 Contemporary Australian Drama 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 18 cp incl 6cp of 100-level ENGL and ENGL230) or (At least 18 cp incl 6cp of 100-level ENGL and ENGL231) or (At least 18 cp incl 6cp of 100-level ENGL and ENGL330) or (At least 18 cp incl 6cp of 100-level ENGL and ENGL331) or (any THEA subject)

Subject Description: An examination of the theatrical, literary and social development in Australian Drama from 1970. Texts will include (when available) first and second drafts, manuscripts in pre-production preparation, rehearsal texts and published plays. New texts may be drawn from scripts workshopped at the annual National Playwrights' Conference or from dramaturgical departments allied with the State Theatre Companies.

ENGL365 Nineteenth-Century Women Writers 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture and 1.5 hour tutorial per week.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Assessment: 1 essay; 1 tutorial paper; 1 take-home exam

Subject Description: This subject looks at the work of women writers in England, Australia and the United States in the Nineteenth Century, through different types of writing - fiction, poetry, diaries and journalism. The subject examines the establishment of the female writing self within the cultural structures of the nineteenth century and the engagement of that self with the social and literary conventions of that time.

Subject Objectives: Students who successfully complete this subject should be able to: 1. demonstrate an understanding of the content/meanings of the literary texts studied. 2. describe the rhetorical, generic, and linguistic strategies the texts use to produce meaning. 3. show knowledge of the relationship between the texts and their social and literary contexts with particular attention paid to the gendered nature of these contexts for women of the period. 4. provide a focal point for discussion of the social and legal position of women throughout the nineteenth century;

5. provide a critical analysis of the texts by identifying and describing, where appropriate, the inter-relationship between the above for dimensions of study.

ENGL366 Literatures of Colonised Cultures 8cp

Spring Wollongong On Campus

Contact Hours: 3 hour seminar per week.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points).

Assessment: One take-home test 15%; one seminar paper 30%; one essay 45%; class participation 10%

Subject Description: This subject offers a survey introduction to writing in English from Africa, the Caribbean, the Pacific or South East Asia. (The focus region will rotate depending on staff availability. Refer to the English Studies Program for details.) Issues of colonialism, cultural identity, language use, genre transformation and cultural politics will be discussed. Texts will normally include representative stories, novels, drama, poetry and film.

Subject Objectives: On completing this subject successfully, students should: 1. gain familiarity with some major literary texts from Africa and the 'Black diaspora'. 2. be able to put them in their cultural/historical contexts and appreciate the regional differences of these contexts. 3. be able to identify in texts some of the common elements claimed for a 'Black aesthetic'. 4. have developed some understanding of issues attaching to the critical evaluation of Black writing.

ENGL373 Literatures of Colonising Cultures 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points).

Assessment: Essay 45%; seminar presentation & write up 30%; test or research exercise 15%; participation 10%

Subject Description: This subject offers a survey introduction to writing in English from Australia, Canada, New Zealand or South Africa. (The focus region will rotate depending on staff availability. Refer to the English Studies Program for details.) Issues of colonialism, cultural identity, language use, nation formation, genre transformation and cultural politics will be discussed. Texts will normally include representative stories, novels, drama, poetry and film.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Identify key aspects of regional traditions used in selected texts 2. Critically analyse textual representations of colonialism, gender, class, nation 3. Have an awareness of the politics of language use in regional writing 4. Discuss how genre and style respond to different social, historical and cultural contexts 5. Show familiarity with key works of regional writing in English 6. Relate study of these texts to wider critical issues in postcolonial studies.

ENGL374 Novel into Film 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points).

Assessment: 1 paper 40%; 1 take-home test or practical critique 20%; 1 presentation and report 30%; participation 10%

Subject Description: This subject will examine the worlds of literature and film as separate entities and the fascinating third world which they create when they come together.

Using adaptation theory the subject will examine some of the many difficulties which are encountered when a book is brought to the screen, or when a film is translated into a novel.

Subject Objectives: On successfully completing this subject students should be able to identify key debates on the subject of adaptation theory and should be able to apply these to analyze the way texts are shaped by political, economic, and cultural forces. They should understand the debate which has raged over the bias of print and come to understand that neither film nor print texts are to be valorized over the other. Finally, they should have refined their analytical, interpretative, and essay writing skills.

ENGL376 Representing India 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Assessment: Essay 40%; Book or film review 20%; Class presentation/write-up 30%; Participation 10%

Subject Description: An introductory survey of novels, stories, poems, drama and film from/about India. Attention will be given to key cultural and historical contexts for writing, and selected critical concepts (e.g., orientalism, subalternity, issues of 'third world' feminism) will be introduced.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Identify key aspects of Hindu tradition used in selected texts 2. Critically analyse textual representations of gender, class, nation 3. Have an awareness of the politics of language use in Indian writing

4. Discuss how genre and style respond to different social, historical and cultural contexts 5. Show familiarity with key works of Indian writing in English 6. Relate study of these texts to wider critical issues in postcolonial studies.

ENGL398 The Vikings - Old Norse Culture, Language and Literature Advanced 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Subject Description: Not available

ENGL400 English IV Honours 48cp

Annual Wollongong On Campus

Spring 2003 / Wollongong On Campus

Autumn 2004

Contact Hours: seminars & meetings.

Pre-requisites: Major in English at credit average

Restrictions: Entry to the Honours Year shall be determined on the advice of the Honours Co-ordinator and Convenor of Program

Subject Description: The Honours course consists of three subjects and a dissertation of 15,000 words. Course work constitutes 60%, and dissertation 40% of the final mark. Supervision must be arranged through the Honours Co-ordinator, in consultation with the Convenor of Program. Offerings are subject to the availability of staff. Students may be able to take subjects, other than English Studies subjects, after consultation with the Honours Co-ordinator.

ENGL403 Combined Honours 48cp

Annual Wollongong On Campus

Spring 2003 / Wollongong On Campus

Autumn 2004

Contact Hours: seminar & meetings.

Pre-requisites: Major in English at credit average.

Subject Description: The combined Honours course will consist of a program of study approved by the Convenor of the English Studies Program in collaboration with the Convenor of the other Department or Program concerned. The course will normally be composed of elements offered at 400-level by the two Departments or Programs.

ENGL499 Special Study 8cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: 2 hour seminar per week

Pre-requisites: Negotiated between Convenor of English Studies and Convenor of other Program involved.

Restrictions: STUDENTS MUST HAVE APPROVAL OF CONVENOR OF PROGRAM PRIOR TO ENROLLING.

Subject Description: This subject is designed to enable Honours students from other departments or programs to take one of the subjects in the English Studies Program Honours course. Enrolment is subject to the approval of the Convenor of Program.

EURO320 Nations without States in the European Union 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours per week lecture/seminar per week.

Exclusions: EURO210

Assessment: Research project 30%; Essay 25%; Take-home exam 10%; Presentation 10%; Film commentary 15%; Participation 10%

Subject Description: This subject aims to study a range of European indigenous minorities and the dynamics of their relationship not only with the Nation-States within which they are situated, but also with each other. It will look at the historical, political and economic integration of these minorities into the wider state and how the rapid political and economic changes occurring in the European Union (EU) affect these relationships.

Subject Objectives: on successful completion of this subject, a student should be able to: 1. Understand the origins and development of linguistic minorities in the E.U; 2. Demonstrate an understanding of the historical/social/political/linguistic aspects of minorities; 3. Have a basic understanding of the relationship between state/regions/minorities and E.U; 4. Understand the process of colonisation; 5. Thoroughly understand one linguistic minority (at least); 6. Understand the concept of "Nationalism"; 7. Appreciate the parallels existing between minorities in E.U and the Aborigines in Australia.

FREN110 France and the French: the essentials 6cp

Autumn Wollongong On Campus

Contact Hours: 2hours lecture/seminar per week.

Assessment: two essay outlines 40%, one essay 30%, short quizzes 10%, final test 10%, tutorial performance 10%

Subject Description: This subject aims to introduce students to specific geographical, historical, cultural forces and social frameworks which contributed to shape modern France and its people. It seeks to provide essential information which forms a very basic part of every French speaker's consciousness by focusing on some of the elements of French culture which every French person possesses after finishing the minimum required education. The rationale behind such a subject is that such knowledge is assumed by every writer, journalist, film maker and students need to know that context in order to understand the various works they are studying in the Program.

Subject Objectives: On successful completion of this subject, students should be able to develop a basic knowledge of: 1. historical events that shaped France; 2. artistic, cultural and literary movements in France; 3. cultural norms and practices in France; 4. linguistic differences and development in France;

FREN151 French IA Language 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours lecture/practical per week.

Assessment: assignments, tests

Subject Description: This subject, a semi-intensive course, is the entry point to the French major for beginners or near-beginners in French. There is a dual focus on communicative and structural aspects of the language. Listening, speaking, reading and writing skills are developed through a combination of the classroom activities and assignments. Grammar and speaking skills are supported by computer-based activities. Oral and written assessment tasks are continuous throughout the session.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Comprehend simple spoken French in common situations; 2. Extract essential information from basic texts in French, such as short newspaper articles and letters; 3. Express themselves orally in French in situations of basic social interaction, such as initiating conversation, expressing simple ideas, opinions and experiences, and requesting information; 4. Express themselves accurately in written French using simple vocabulary and constructions; perceive system in language and use that awareness to generate meaning; 5. Demonstrate an insight into the values and attitudes of people from another culture.

FREN152 French IB Language 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours lecture/practical per week.

Pre-requisites: FREN151

Assessment: assignments, tests

Subject Description: The program begun in FREN151 is sustained and developed, advancing students' proficiency in listening, speaking, reading and writing, and emphasising both communicative and structural aspects of the language. Students read a set of contemporary French short stories and items from current newspapers. Grammar and speaking skills are supported by computer-based activities. Oral and written assessment tasks are continuous throughout the session.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. comprehend simple spoken French in a variety of situations; 2. comprehend brief reports of current affairs in French; 3. read and respond personally to short stories, poems and songs in French; 4. express themselves orally in French in a wide range of everyday situations;

5. express themselves accurately in written French using a range of vocabulary and constructions; 6. perceive system in language and use that awareness to generate meaning; 7. demonstrate an insight into the values and attitudes of people from another culture.

FREN210 France in the Twentieth Century 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours lecture/seminar per week.

Assessment: Two essays 50%; seminar paper 20%; and periodic assessment 30%

Subject Description: The aim of this subject is to provide an understanding of contemporary French society by tracing the main movements that have occurred over the past three decades in French history, culture and politics. Lectures will cover topics such as political institutions, the French economy, education, immigration, women's rights, and technological change.

FREN251 French IIA Language 8cp

Autumn Wollongong On Campus

Contact Hours: 4 hours lecture/practical per week.

Pre-requisites: (FREN152) or (approval of Head of Program on basis of HSC French).

Assessment: assignments, presentations, tests

Subject Description: This subject is the entry point to the French major for students with a sound pass in 2U HSC French (or equivalent), and the second year of language studies for beginners or near-beginners.

Language skills are developed and consolidated through the study of print, audio and video materials; current affairs; a systematic review of basic grammar; listening and conversation activities; and exercises in written expression and reading comprehension. Revision and maintenance of core grammar are achieved through a program of computer-based exercises.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Students should achieve improved comprehension of the speech of French native speakers in situations of everyday communication 2. Students should develop strategies for coping with unfamiliar lexical and syntactic elements of the written and spoken language 3. Students should make more flexible use of known language and should be more willing to experiment with unfamiliar language in recounting events and expressing ideas and opinions 4. Students should be able to read and respond personally to increasingly sophisticated texts 5. Students should be able to view televised news bulletins, access current affairs Web sites, and synthesise information into written reports 6. Through exposure to televised news bulletins students will be initiated into the social, cultural and political fabric of contemporary France 7. Students will consolidate and expand their working knowledge of basic French grammar.

FREN252 French IIB Language 8cp

Spring Wollongong On Campus

Contact Hours: 4 hours lecture/practical per week.

Pre-requisites: FREN251

Assessment: assignments, presentations, tests

Subject Description: The program for FREN251 is continued and expanded.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Students should achieve improved comprehension of the speech of French native speakers in situations of everyday communication. 2. Students should develop strategies for coping with unfamiliar lexical and syntactic elements of the written and spoken language. 3. Students should make more flexible use of known language and should be more willing to experiment with unfamiliar language in recounting events and expressing ideas and opinions. 4. Students should be able to read and respond personally to increasingly sophisticated texts. 5. Students should be able to view televised news bulletins, access current affairs Web sites, and synthesise information into written reports. 6. Through exposure to televised news bulletins students will be initiated into the social, cultural and political fabric of contemporary France. 7. Students will consolidate and expand their working knowledge of basic French grammar.

FREN351 French IIIA Language 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lecture/practical per week.

Pre-requisites: FREN252

Assessment: assignments, tests

Subject Description: The subject has analytical and functional components. A study is made of a wide range of styles and registers of written French, including literary, business and commercial texts. The development of students' spoken and written expression is built on the study of current affairs material and contemporary cultural phenomena, and on everyday communication needs. Source materials are multimedia - audio, video, print and Internet. Sensitivity to language structure is enhanced through translation exercises, detailed textual analysis and advanced grammar.

Revision and maintenance of core grammar are achieved through a program of computer-based

Subject Objectives: On successful completion of this subject, students should be able to: 1. comprehend normal spoken French and current affairs as presented in contemporary media; 2. express themselves comfortably in French in everyday situations; 3. gather and synthesise information on topics of current interest from different French-language sources and in different media. 4. recognise culture-specific information and cultural suppositions in French source material; 5. present a personal response (written and spoken) to issues presented in the French media; 6. demonstrate sustained mastery of fundamental French grammar; 7. use effectively the resources of tools such as bilingual dictionaries and descriptive grammars; 8. produce an accurate translation into English of non-specialist French documents.

FREN352 French IIIB Language 8cp

Spring Wollongong On Campus

Contact Hours: 3 hours lecture/practical per week.

Pre-requisites: FREN351

Assessment: assignments, tests

Subject Description: The program for FREN351 is continued and expanded.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. comprehend normal spoken French and current affairs as presented in contemporary media; 2. express themselves comfortably in French in everyday situations;

3. gather and synthesise information on topics of current interest from different French-language sources and in different media. 4. recognise culture-specific information and cultural suppositions in French source material; 5. present a personal response (written and spoken) to issues presented in the French media; 6. demonstrate sustained mastery of fundamental French grammar; 7. use effectively the resources of tools such as bilingual dictionaries and descriptive grammars; 8. produce an accurate translation into English of non-specialist French documents; 9. identify key features of style and register in a range of contemporary French writing.

FREN361 French IIIC 8cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Contact Hours: 1 hour seminar, 2 hours supervised work per week.

Pre-requisites: FREN252

Assessment: set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff. Topics, as determined by the Coordinator for French, will be chosen from an area of French language, literature or civilisation and provide a program of advanced work complementing the student's prior studies in French.

FREN362 French IIID 8cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: 1 hour seminar, 2 hours supervised work per week.

Pre-requisites: FREN252

Assessment: set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff. Topics, as determined by the Coordinator for French, will be chosen from an area of French language, literature or civilisation and provide a program of advanced work complementing the student's prior studies in French.

FREN391 French Study Abroad A 8cp

Autumn France On Campus

Spring France On Campus

Summer France On Campus

2003/2004

Contact Hours: determined by host university,

Assessment: not available

Subject Description: Students taking this subject will undertake an approved course of studies at a French University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date from Australia. Any variation to the initial proposal must be approved by the Head of Program and approval will be given only in exceptional circumstances.

FREN392 French Study Abroad B 8cp

Autumn	France	On Campus
Spring	France	On Campus
Summer	France	On Campus

2003/2004

Contact Hours: to be determined by host university,

Subject Description: Students taking this subject will undertake an approved course of studies at a French University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date from Australia. Any variation to the initial proposal must be approved by the Head of Program and approval will be given only in exceptional circumstances.

FREN393 French Study Abroad C 8cp

Autumn	France	On Campus
Spring	France	On Campus
Summer	France	On Campus

2003/2004

Contact Hours: to be determined by host university,**Assessment:** not available

Subject Description: Students taking this subject will undertake an approved course of studies at a French University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date from Australia. Any variation to the initial proposal must be approved by the Head of Program and approval will be given only in exceptional circumstances.

FREN450 French IV Honours 48cp

Annual	Wollongong	On Campus
Spring 2003 / Autumn 2004	Wollongong	On Campus

Pre-requisites: FREN352**Assessment:** Dissertation 50%. Essays and oral presentation 50%

Subject Description: To be awarded a BA(Hons) in French students must: (1) write a 15000 word dissertation based on the student's own supervised research on a topic in French studies to be approved by the French Honours Coordinator. The dissertation will be assessed by one internal and one external examiner; (2) write two to three major essays totalling 11000-12000 words focusing on designated theoretical issues, current academic debate, or methodological processes; (3) deliver an oral presentation of the research proposal; (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled. At least one of the written assessment items must be in French and at least one in English, the mix to be determined by the French Honours Coordinator. The oral presentation may be delivered in either French or English

Subject Objectives: On successful completion of this course a student should be able to: (1) prepare a research proposal; (2) prepare an annotated bibliography; (3) produce a literature review;

(4) critically analyse a range of theories within the relevant discipline; (5) demonstrate a high level of written and oral communication skills in both French and English; (6) achieve specialised knowledge in an area of French studies.

GENE216 Women in Society: Images and Representation 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** 8 cp

Subject Description: This subject focuses on cultural representations of women in industrial societies in sexual, maternal and work roles. The images of women in literature, art and popular culture will be examined using contemporary feminist perspectives.

HIST107 Empires, Colonies and the Clash of Civilisations 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 3 hours per week lectures, tutorials and WebCT per week.

Assessment: Essay of 2,000 words 35%; examination or optional essay of 1,500 words 30%; tutorial exercise of 400 words (WebCT based) 10%; tutorial paper of 800 words 15%; tutorial participation 10%.

Subject Description: Examines the history of empires and colonisation with particular emphasis on the way in which those empires interacted and clashed especially European and Islamic empires. Major themes include theories of empire building and colonisation, relations between indigenous populations and imperial authorities, the roles of religion, militarism and commerce in empire. Empires to be studied could include: Mongol, Ottoman, Chinese, Mughal, Iberian, Dutch, British.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. develop a command of basic knowledge of the empires studied; 2. identify common themes in processes of imperialism; 3. differentiate between different empires on the basis of temporal and cultural factors;

4. describe features of interactions between colonisers and indigenous populations; 5. explain how empires contribute to population movements 6. demonstrate the links between empires and economic patterns.

HIST108 War, Dictatorship and Propaganda in Europe 1918-1945 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 3 hours per week lectures, tutorials and WebCT per week.

Assessment: Essay of 1,500 words 35%; examination 30%; weekly tutorial exercises 25%; participation 10%.

Subject Description: This subject compares the Soviet and Nazi dictatorships. It examines the historical roots, political systems, uses of violence, everyday life and political imagery of the Soviet Union and Nazi Germany between the wars. It compares the leadership style of Hitler and Stalin and their contribution to the outbreak and course of World War Two.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Express clearly in written and oral form the his/her view on the main similarities and differences of the Soviet and Nazi dictatorships

2. Critically evaluate concepts employed by historians and political scientists to interpret the Soviet and Nazi dictatorships
3. Use electronic resources for the purposes of research and discussion
4. Demonstrate a knowledge of the basic historian's conventions
5. etc.

HIST121 Dispossessed, Diggers and Democrats: Australia 1788 to 1888 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week lectures & tutorials per week.

Assessment: 2 essays 35% each; tutorial presentation and annotated bibliography 10%; tutorial exercise 10%; tutorial participation 10%.

Subject Description: This subject focuses on history from below the extraordinary experiences and contributions of ordinary people in colonial Australia. It examines the British dis/possession of Australia; the character of penal society and the transformation to free society; the interaction of European and Aboriginal societies; European exploration and the politics of land ownership; the gold rushes; ethnicity and race in colonial society; gender relations and power; the development of a working class and labour movement; the dominance and impact of the middle class culture and ideology of progressive liberalism; and the changing character of work and consumption.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate detailed knowledge of key factors shaping the evolution of Australian society in the 19th century. 2. Demonstrate an ability to critically evaluate and use a range of primary sources. 3. Demonstrate an awareness of the existence of historiographical debates and the evolution of historical knowledge. 4. Express clearly in written and oral form his/her views on issues raised in the subject. 5. Access electronic and Web-based sources of information.

HIST124 The Cold War and After 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours lectures, tutorials and WebCT per week.

Assessment: Essay (1,500 words) 35%; exam 30%; weekly tutorial exercises 25%; participation 10%.

Subject Description: This subject examines the politics and image making of the forty-year contest between the American and Soviet superpowers. To help in the understanding of different concepts and interpretations of the Cold War, a number of case studies are undertaken. These include the battle for Europe, the Suez Crisis, the Cuban Missile Crisis, the Vietnam War, and the fall of the Soviet Union as well as the peacekeeping mission in the post-cold war period.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Express clearly in written and oral form his/her view of the origins, course and outcome of the Cold War. 2. Critically evaluate concepts employed by historians and political scientists to interpret the politics and image making of the Cold War. 3. Use electronic resources for the purposes of research and discussion. 4. Demonstrate a knowledge of the basic historian's conventions. 5. etc.

HIST210 The European Union: Post-war integration, 1945 to 1995 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture plus 1 hour tutorial per week.

Pre-requisites: (6 cp of HIST) or (AUST101) or (6cp of POL)

Assessment: Summary of article 15%; tutorial presentation 15%; 1 essay 30%; exam 30%; tutorial participation 10%

Subject Description: This subject identifies and examines the political, economic and social processes driving European integration from the end of World War Two to 1995. It explores the thinking behind and the development of the European Economic Community (EEC), the pivotal role of France and Germany in European integration, the relationship between nation states and supranational institutions, and the implications for Europe of the Cold War and collapse of the Soviet bloc.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Use electronic databases and the internet to identify and exploit primary and secondary sources. 2. Demonstrate an understanding of the political, economic, and social causes underpinning European integration and the creation and evolution of the EEC and several other European institutions and organizations. 3. Demonstrate a basic understanding of the structure and role of the EEC, structural changes, and the relationship between supranational institutions and nation States. 4. Demonstrate a knowledge of the identity and role of the major States that promoted, influenced and challenged moves towards European integration.

HIST216 Ancient History: Greece 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: (6 cp of HIST)

Exclusions: Not to count with HIST205

Assessment: Minor Essay 30%; Major essay 45%; tutorial paper 15%; Participation 10%

Subject Description: This subject covers the history of Greece from the Archaic period to the Hellenistic kingdoms. After a background survey of Egypt and Mesopotamia it examines the development of the Greek polis, with particular emphasis on Athens and Sparta, the classical age of Athens, the Peloponnesian War and its effects, Alexander the Great and the diffusion of Greek culture through the Hellenistic Kingdoms. Themes to be explored include the nature of Athenian democracy, Attic tragedy, the role of women, militarism.

Subject Objectives: On successful completion of this subject, students should be able to: 1. demonstrate a knowledge and an understanding of those developments in ancient Greece that still influence Western society today. 2. demonstrate an awareness of the problems associated with the use of 'primary' sources in translation and the ability to use these sources critically for historical research. 3. demonstrate an awareness of the range and scope of recent scholarship on Greece and possess the ability to analyse and critically evaluate these sources for historical research. 4. possess a knowledge and understanding of the social, political, intellectual and economic factors that shaped Greek history.

HIST217 Ancient History: Rome 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (6 cp of HIST)

Exclusions: Not to count with HIST205

Assessment: Minor Essay 30%; Major essay 45%; tutorial paper 15%; Participation 10%

Subject Description: This subject examines the history of Rome from the early republic to the collapse of the Western Empire in the fifth century CE.

As well as providing a general survey of Roman History it will also focus on a number of key themes. These could include: the republican system of government, women in Rome, the significance of the military, Roman culture, slavery, the rise of Christianity, crises of the later empire. Some comparison with other contemporary Eurasian empires will be made.

Subject Objectives: On successful completion of this subject, students should be able to: 1. demonstrate a knowledge and an understanding of those developments in ancient Rome that still influence Western society today. 2. demonstrate an awareness of the problems associated with the use of 'primary' sources in translation and the ability to use these sources critically for historical research. 3. demonstrate an awareness of the range and scope of recent scholarship in Rome and possess the ability to analyse and critically evaluate these sources for historical research. 4. possess a knowledge and understanding of that social, political, intellectual and economic developments that created the dynamic of Roman history.

HIST218 **Consensus, Conflict and Culture: 8cp** **Australia 1888-1988**

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	Flexible
Autumn	Bega Education Access Centre	Flexible
Autumn	Batemans Bay	Flexible
Autumn	Moss Vale	Flexible

Contact Hours: On Campus: 1 hour lecture, 2 hour tutorial, Flexible: 3 hours lectures and tutorials per week.

Pre-requisites: (6 cp of HIST). or (AUST101) or (6cp of ARTS).

Assessment: Essay 1 30%; essay 2 45%; tutorial presentation and annotated bibliography 15%; participation 10%

Subject Description: Examines the history of Australians and their society in the second century of European settlement. Focuses on how Australians understood their society, and how those understandings helped shape Australian history. Topics studied are class and gender in the 1890s; nation making; indigenous Australians; modernization; impacts of wars; immigration; industrialisation; the making of a consumer society; gender and ethnicity politics; 1960s social protest and transformations.

Subject Objectives: on successful completion of this subject, a student should be able to: 1. Demonstrate detailed knowledge of key factors shaping the evolution of Australian society in the 20th century. 2. Demonstrate an ability to critically evaluate and use a range of primary and secondary sources. 3. Demonstrate an awareness of the existence of historiographical debates and the evolution of historical knowledge. 4. Express clearly in written and oral form his/her views on issues raised in the subject.

HIST232 **Russia in War and Revolution 8cp**

Autumn	Wollongong	On Campus
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Contact Hours: 3 hours per week lectures, tutorials and WebCT per week.

Pre-requisites: (6 cp of HIST) or (AUST101)

Assessment: 1 essay (1,500 words) 35%; exam 30%; weekly tutorial exercises 25%; participation 10%

Subject Description: This subject looks at a broad sweep of Russian history from the Vikings to the collapse of the Soviet Union in comparative context.

Topics dealt with in detail include early Russia, the Mongols, the tsars, the Russian revolution, the Soviet Union and the Gorbachev era. The subject investigates the crucial role Russia has played in world history.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Express clearly in written and oral form the his/her view on the main themes of Russian history 2. Critically evaluate concepts employed by historians and political scientists to Russian and Soviet history 3. Use electronic resources for the purposes of research and discussion 4. etc

HIST275 **The Growth of the United States, 8cp** **1865-1898**

Contact Hours: Not on offer in 2003

Pre-requisites: (6 cp of HIST) or (AUST101)

Assessment: Two essays (2,000 words each) (25% & 35%) tutorial Paper (1,000 words) & Presentation (30%) tutorial Participation (10%)

Subject Description: This subject examines the growth of the United States in the period following the American Civil War. It looks at the frontier experience and the role of Manifest Destiny. It also considers the impact of industrial change. Issues of race, class, gender and ethnicity are considered as factors in the development of the postbellum United States. Attention is directed to the tensions of an expanding nation state and the Spanish-American War of 1898 is used as a measure of US progress in the second half of the nineteenth century.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Express views raised in this subject clearly in oral and written form. 2. Demonstrate an awareness of differing interpretations about the growth of the United States. 3. Appreciate the impact of diverse issues like class, race, gender and ethnicity on the development of the antebellum United States. 4. Critically evaluate the formation of the United States as a modern nation state. 5. Use modern technology for purposes of discussion and learning.

HIST276 **America's Rise to Globalism 8cp** **Since 1919**

Spring	Wollongong	On Campus
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Contact Hours: 1 hour lecture, 2 hour seminar per week.

Pre-requisites: (6 cp of HIST) or (AUST101).

Assessment: Two essays (30% each) tutorial Paper (1,000 words) (30%) tutorial Participation (10%)

Subject Description: This subject is concerned with the rise of the United States to world leadership. The US entered the European war massively in debt as a consequence of its industrial expansion during previous decades. It emerged as the great creditor nation of the world. During the remainder of the twentieth century, this position of pre-eminent wealth was converted into global power. The dominance of the United States and its emergence as the reigning hegemon is explored through a range of political, diplomatic, military, social, and economic issues.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Express views raised in this subject clearly in oral and written form. 2. Demonstrate an awareness of differing interpretations about the rise of the United States to global leadership. 3. Appreciate the impact of diverse political, economic, social, diplomatic, and military factors on the rise of the United States. 4. Critically evaluate the expansion of the United States as a world power. 5. Use modern technology for purposes of discussion and learning.

HIST286 From Ancient Kingdoms to Colonies: Southeast Asia, 1500-1900 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lectures and tutorials per week.**Pre-requisites:** (6 cp of HIST) or (AUST101).**Assessment:** 1 X 2,000 word essay 40%; 2 tutorial papers (1,500 words each) 25% each; participation 10%**Subject Description:** Examines the forces of change in Southeast Asia between 1500 and 1900. Religion, trade and social organisation such as law and slavery. The changing European role in Southeast Asia from marginal traders to colonial rulers is viewed as part of the process of change which allowed tribal groups to survive until the age of high colonialism.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. Demonstrate a knowledge of the impact of colonisation on Southeast Asian societies; 2. Critically evaluating the historiography of colonisation; 3. Express clearly in written and oral form views on issues raised by the subject; 4. Demonstrate the ability present views on these issues in oral form; 5. Demonstrate an awareness of cultural diversity.**HIST288 Religion and Military Rule in Southeast Asia 8cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** (6 cp of HIST) or (AUST101)**Assessment:** 1 essay of 1,500 words 30%; 1 essay of 2,500 words 40%; 1 tutorial exercise in two parts 20%; tutorial participation 10%**Subject Description:** Examines the twentieth-century experiences of colonialism, nationalism and modernisation in Burma, Thailand, Laos and Cambodia. We ask what the roles of Buddhism and ethnicity were in these transformations, and how they are compatible with the two forces of socialism and militarism.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. develop a command of basic knowledge of the countries studied; 2. analyse relationships between religion and social and political action; 3. describe cultural, social and economic features of modernisation; 4. explain the roles of ethnicity and nationalism in relationship to identity; 5. explain the rise of forms of militarism especially in relation to the state; 6. demonstrate links between patterns of colonial rule and present-day problems in Southeast Asia.**HIST291 Film and History 8cp**

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.**Pre-requisites:** (6 cp of HIST) or (AUST101) or (6cp of ENGL) or (6cp of CCS) or (6cp of POL).**Assessment:** Essay (2,000 words) 30%; film review (2,000 words) 30%; tutorial presentation with annotated bibliography 10%; WebCT discussion 30%**Subject Description:** Film is a powerful tool when it comes to representations of the past, frequently commanding more authority than the works of scholars. Using selected examples, this subject examines the use of film as an interpretive tool in historical representation, setting a film version of selected events against the interpretations of scholars. History, rather than the medium, is the focus of the subject.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. Critically evaluate the use of film as an interpretive approach to history;

2. Express clearly in written and oral form views on issues raised in the subject; 3. Demonstrate an awareness of different ways of approaching a study of the past; 4. Demonstrate an appreciation of and respect for cultural diversity; 5. Use modern technology for discussion;

HIST300 Reporting War: A History 8cp

Spring Wollongong On Campus

Contact Hours: 3 hours - lecture, tutorials and WebCT per week.**Pre-requisites:** (14 cp of HIST incl 8cp at 200-level Hist).**Assessment:** Short answer assessments 20%; Class participation 10%; Research essay 40%; Examination 30%**Subject Description:** This subject deals with the relationship between war and media in the twentieth century. It critically examines the conventions and clichés of war reporting as well as representations of war in literature and film. It analyses the role of media and public opinion in encouraging and discouraging war. The subject surveys the major conflicts of the twentieth century and case studies are drawn from World Wars One and Two, the Vietnam and Gulf Wars as well as more recent conflict in Europe and East Timor.**Subject Objectives:** On successful completion of this subject, students should be able to: 1. identify the conventions of war reporting in a historical and comparative perspective 2. demonstrate an understanding of academic debates about the media's role in generating conflict and conflict resolution 3. critically appraise popular representations of war in literature and film 4. present research findings in written and oral forms.**HIST315 Comparative Settler Capitalism 8cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level)**Assessment:** Minor essay 30%; major essay 45%; review essay 15%; participation 10%**Subject Description:** The term settler capitalism describes the specific form of colonialism typified by Australia, New Zealand, South Africa and Argentina. This course examines and explains the remarkable similarities and the subtle differences in these societies' histories. Beginning around 1700, it seeks to identify the unique features of Australian historical evolution, and those features that Australia shares with the other societies.

Topics include environmental colonisation and history, indigenous societies, transplanting European economic forms, people and culture; gender relations; working class histories; state formation and nation building.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. describe and use the concept settler capitalism as a typology and theory; 2. describe key similarities and differences in Australian, New Zealand, Argentinian and South African histories; 3. critically evaluate the relative importance of environmental, social, cultural and political factors in accounting for historical similarities and differences; 4. support his/her ideas with appropriate use of historical evidence.

HIST318 The Making of the Modern Australian Woman 8cp
Autumn Wollongong On Campus
Contact Hours: 3 hours per week lectures and tutorials per week.
Pre-requisites: (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level).
Assessment: 2 seminar papers 60%; research paper 30%; tutorial participation 10%
Subject Description: Examines the major forces determining the position of women in twentieth century Australia. Topics include the domestic ideology, the demographic transition of the late nineteenth century, structural change in the economy, widening educational opportunities and the growth of tertiary sector employment for women. A major focus is the interaction of ethnicity, class and gender in constructing the diverse social category of womanhood.
Subject Objectives: On successfully completing this subject students should be able to evaluate the main forces which have altered the lives of Australian women in the twentieth century. They should be able to describe the economic and demographic factors which have interacted to produce these changes. They should be able to distinguish between first and second wave feminism and to trace the intellectual underpinnings of each. They should be familiar with the historiographical debate on women's history and the way in which this subject has achieved a place in the University curriculum. Finally they should have acquired more sophisticated skills in historical analysis and essay writing.

HIST325 Theory and Method of History 8cp
Spring Wollongong On Campus
Contact Hours: 2 hour seminar per week.
Pre-requisites: (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level)
Assessment: Minor essay 35%; research proposal 50%; participation 15%
Subject Description: Explores theory and practice of contemporary historical enquiry. Theoretical issues include: causation in historical enquiry, types of explanation, facts versus values, varieties of history writing, the production and status of historical knowledge. Methodology issues include: formulating research problems, planning and undertaking research, understanding and using secondary and primary sources, accessing and retrieving research information.
Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate knowledge of the relevance of theory to historical enquiry
 2. Demonstrate knowledge of historical research methods 3. Formulate a research proposal using appropriate theory and method 4. Critically assess a range of ways of doing history 5. Identify key issues in the construction of historical knowledge 6. Express his/her views on issues raised in the subject.

HIST334 Regional History 8cp
Autumn Wollongong On Campus
Autumn Shoalhaven Flexible
Autumn Bega Education Access Centre Flexible
Autumn Batemans Bay Flexible
Contact Hours: 1hours lecture, 2 hour tutorial and WebCT per week.
Pre-requisites: (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp at 200-level) or (AUST101 and POL230) or (POL230 and 6cp of HIST at 100-level) or (14cp of ARTS) or (6cp of ARTS plus 8cp at 200-level).
Assessment: Essay of 3,000 words 40%; book review of 1,500 words 20%; seminar presentation with annotated bibliography 20%; WebCT discussion 20%
Subject Description: Regional studies approach history from the perspective of place. They examine the response of regional and local communities to the general responses identified by historians. This subject examines the nature of regional identity, place and landscape using both theoretical literature and case studies. The regions chosen can vary from year to year.
Subject Objectives: On successful completion of this subject, a student should be able to: 1. Critically evaluate the use of regional methodology as an analytical tool; 2. Critically evaluate the use of the regional concept by a leading regional historian; 3. Assess the place of regions within popular culture; 4. Analyse the place of the regional form within popular culture as an approach to historical interpretation; 5. Express clearly in written and oral form views on issues raised during the subject; 6. Use modern technology for both research purposes and for discussion; 7. Demonstrate an awareness of disciplinary approaches to regional theory outside the discipline of History.

HIST336 Australians and War, The Homefront 8cp
Autumn Wollongong On Campus
Contact Hours: 1 hour lecture and 2 hours tutorials per week.
Pre-requisites: (14 cp of HIST with 8 cp at 200 level) or (AUST 101 with 8 cp at 200 level) or (AUST 101 and POL 230) or (POL 230 and 6 cp of HIST at 100 level) or (14 cp of POL with 8 cp at 200 level).
Assessment: Issues review 2500 words (30%); Research project of 3000 words (40%); tutorial presentation with annotated bibliography (20%); Participation (10%)
Subject Description: Examines the impact of war on Australian society with an emphasis on the Home Front. Major themes examined include the geopolitical context for war, enlistment and conscription, women and families in wartime Australia, Indigenous Australians and war, social change and political change, religion, propaganda, prisoners and internees, digger and Anzac as national building myths and the nature of commemoration. Selected campaigns in which Australians played a significant part will be acknowledged. On alternate years the subject will focus either on the period to 1918 or the period from 1939.
Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate a knowledge of the impact of war on Australian society; 2. Critically evaluate the historiography of war and Australian society;
 3. Express clearly in written and oral form views on issues raised by the subject 4. Demonstrate the ability to undertake research using primary sources; 5 Critically evaluate the work of one historian in the field.

HIST338 Advanced Topics in the History of Science 1500-1800 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level)**Assessment:** Essay 50%; 2 seminar report write-ups 50%**Subject Description:** Deals each year with one advanced history of science topic in the Scientific Revolution and/or Enlightenment. Textual criticism of primary sources is emphasised, along with recent historiographical debates.

Topics include: the body in the Scientific Revolution; Descartes and the rise of the Mechanical Philosophy; the experimental life - origins or processes; Newton and Newtonianism; the natural philosophical field and its sites - universities, courts, scientific societies and correspondence networks.

HIST360 War, death and society: Europe 1350-1650 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours seminar.**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level).**Assessment:** Summary of article 10%; seminar paper 20%; Research essay 30%; Participation 10%; Examination 30%**Subject Description:** This subject focuses on factors in the development of European states and society, including the great epidemics and wars of the period and their impact. Topics will include the Black Death and rebellions and wars of the 15th, 16th and 17th centuries (up to 1650).**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. Use electronic databases and the internet to identify and exploit primary and secondary sources. 2. Demonstrate an understanding of the economic, social and political reasons for the decline of feudalism, the changing nature and role and impact of war, its impact on society, and the emergence of the modern European state.**HIST361 Fascism and the Authoritarian Right in Twentieth Century Europe 8cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level) or (14cp of POL with 8cp at 200-level)**Assessment:** tutorial paper 20%; Research Essay 50%; Examination 30%**Subject Description:** Examines the authoritarian Right and fascism in twentieth century Europe. The theoretical literature regarding the nature of fascism will be analysed, followed by an examination of the ideological origins of fascism. A number of right wing regimes, including Fascist Italy, Nazi Germany, Franco's Spain and Vichy France are then considered. The aim is to examine the extent to which these regimes can be described as fascist.**HIST379 Culture and Identity in Indonesian History, 1870-2002 8cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level)**Assessment:** One essay of 1,500 words (30%); One essay of 2,500 words (40%); One tutorial exercise (20%); tutorial participation (10%)**Subject Description:** Examines Indonesian experience and perceptions of the modern age. Using novels, autobiographies, films and other texts the subject examines the roles of Javanese and other cultures in Indonesian nationalism, Dutch colonialism, the Revolution, the politics of culture in post-Revolution Indonesia, the rise of the military and the role of Socialism. Particular attention is paid to the ideology of development in Suharto's Indonesia, using tourism in Bali as a case study.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. develop a command of basic knowledge of Indonesian history; 2. analyse relationships between culture and politics using sources from a variety of media; 3. demonstrate a knowledge of issues in historiography; 4. explain problems of development in relation to state policies; 5. analyse the roles of different ideologies in social change; 6. explain the concept of modernity and its social and cultural implications.**HIST388 Vietnam in War and Revolution: Indo-Chinese Societies 1860-1980 8cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level)**Assessment:** A book review of 1500 words (20%); Research project of 3000 words (40%); tutorial presentation with annotated bibliography (30); tutorial participation (10%)**Subject Description:** Examining the crucial period which shaped the modern nation-states of Vietnam, Cambodia and Laos. Pays special attention to the French colonisation, social movements leading to the Communists taking over in 1945, the Vietnam War, and the Khmer Rouge.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. Demonstrate a knowledge of the impact of colonisation on Southeast Asian societies; 2. Critically evaluating the historiography of colonisation; 3. Express clearly in written and oral form views on issues raised by the subject; 4. Demonstrate the ability present views on these issues in oral form; 5. Demonstrating understanding of research processes. 6. Demonstrate an awareness of cultural diversity.**HIST394 Commodification History 8cp****Autumn** Wollongong On Campus**Contact Hours:** 1 hour lecture and 2 hours seminar per week.**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level).**Assessment:** Review Essay [15%]; Minor Essay [25%]; Research Essay [50%]; Participation [10%]**Subject Description:** Commodification history studies the historical processes that lead to the increasing commodification of everyday life.

Subject Descriptions

The subject studies historical examples of commodification in Australia and Asian-Pacific societies, including labour, consumption, aboriginality, art and culture, sport, human reproduction, nature, and information.

The course emphasises the social, political and cultural dimensions of commodification, when understood as a site of struggle or alliance between social groups [classes, genders, ethnicities, sexualities]. The course also examines the relationship between commodification and the construction of selfhood in different societies. The specific case studies can vary from year to year.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Define the historical process of commodification. 2. Critically evaluate its social, collective and individual impacts. 3. Evaluate the contributions to commodification studies made by key theorists.

4. Analyse the process of commodification in specific societies, and in relation to specific examples. 5. Critically debate the social implications of commodification as a general process.

HIST401 History IV (Honours) 48cp

Annual Wollongong On Campus

Spring 2003 / Wollongong On Campus

Autumn 2004

Contact Hours: 2 hours seminar per week.

Pre-requisites: 52 cp in a History Major at an average of no less than 70% (including HIST325 Theory and Method at 70% or better)

Assessment: Research thesis 60%; 2 - 3 essays 40%;

Subject Description: Requirements: (1) Research thesis of 15,000-20,000 words, based on student's own supervised research and making a modest contribution to historical knowledge; (2) Two to three major essays totalling 11,000 - 12,000 words based on the seminar series (3) Regular attendance at weekly honours seminars (two sessions); (4) A work in progress report to be delivered to the seminar group

HIST430 Joint Honours in History and Another Discipline 48cp

Annual Wollongong On Campus

Spring 2003 / Wollongong On Campus

Autumn 2004

Contact Hours: 2 hours seminar per week.

Pre-requisites: 52 credit points in a History major at an average of no less than 70% (including HIST325 Theory and Method at 70% or better).

Assessment: Established on a case by case basis

Subject Description: Students are advised to contact the Program well before the session in which they intend to begin their Honours year so that precise subject requirements can be arranged with the other Program.

ITAL110 Italy and the Italians: the essentials 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture/seminar.

Exclusions: EURO110

Assessment: two essay outlines 40%, one essay 30%, short quizzes 10%, final test 10%, tutorial performance 10%

Subject Description: This subject aims to introduce students to specific geographical, historical, cultural forces and social frameworks which contributed to shape modern Italy and its people. It seeks to provide essential information which forms a very basic part of every Italian speaker's consciousness by focussing on some of the elements of Italian culture which every Italian person possesses after finishing the minimum required education.

The rationale behind such a subject is that such knowledge is assumed by every writer, journalist, film maker and students need to know that context in order to understand the linguistic and cultural aspects of Italy studied in their other subjects.

Subject Objectives: On successful completion of this subject, students should be able to develop a basic knowledge of: 1. historical events that shaped Italy; 2. artistic, cultural and literary movements in Italy; 3. cultural norms and practices in Italy; 4. linguistic differences and development in Italy.

ITAL151 Italian IA Language 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours tutorial/practical per week.

Exclusions: LANG153 or ITAL103

Assessment: Written tests 30% Computer tests 15% Language laboratory assignments 15% Other written assignments 15% Oral test 15% Participation 10%

Subject Description: This is a semi-intensive language course for beginners or near-beginners in Italian and presupposes no prior study of the language. The approach is a functional-notional one which places major emphasis on the communicative functions of language. Revision and maintenance of core grammar are achieved through computer-aided language learning exercises. Oral and written skills are developed through a combination of classroom activities, language laboratory exercises and assignments. Up to date cultural information is also given.

Subject Objectives: On successful completion of this subject students should: 1. achieve a basic proficiency in listening and speaking Italian; 2. achieve a basic proficiency in reading and writing Italian; 3. gain an understanding of major cultural and social values of Italians.

ITAL152 Italian IB Language 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours tutorial/practical per week.

Pre-requisites: ITAL151

Assessment: Written tests 30% Computer tests 15% Language laboratory assignments 15% Other written assignments 15% Oral test 15% Participation 10%

Subject Description: The program begun in ITAL151 is sustained and developed. Revision and maintenance of core grammar are achieved through a programme of computer-aided language learning exercises. Oral and written skills are developed through a combination of classroom activities, language laboratory exercises and assignments. Oral and written assessments are continuous throughout the session. Successful completion of ITAL152 qualifies students for entry into ITAL251 and ITAL210.

Subject Objectives: On successful completion of this subject, students should further their 1. basic proficiency in listening and speaking Italian; 2. basic proficiency in reading and writing Italian; 3. understanding of major cultural and social values of Italians.

ITAL251 Italian IIA Language and Literature 8cp

Autumn Wollongong On Campus

Contact Hours: 4 hours tutorial/practical per week.**Pre-requisites:** ITAL152**Assessment:** Written tests 30% Conversation 15% Oral presentation 15% Other assignments 15% Language laboratory assignments 15% Participation 10%**Subject Description:** The emphasis is on the further development of all the communicative skills in standard Italian. Major attention is given to more complex language structures and their use. Fluency for direct oral communication is further strengthened through a laboratory tape program and small group conversation practicals. The various communicative skills are developed by the use of carefully programmed**Subject Objectives:** On successful completion of this subject students should: 1. further develop their proficiency in listening and speaking Italian; 2. further develop their proficiency in reading and writing Italian; 3. further develop their knowledge of various cultural and social values of Italians; 4. be able to use information from a variety of Italian media.**ITAL252 Italian IIB Language and Literature 8cp**

Spring Wollongong On Campus

Contact Hours: 4 hours tutorial/practical per week.**Pre-requisites:** ITAL251**Assessment:** Written tests 30% Conversation 15% Oral presentation 15% Other assignments 15% Language laboratory assignments 15% Participation 10%**Subject Description:** The program began in ITAL251 is continued.**Subject Objectives:** on successful completion of this subject students should: 1. further develop their proficiency in listening and speaking Italian; 2. further develop their proficiency in reading and writing Italian; 3. further develop their knowledge of various cultural and social values of Italians; 4. be able to use information from a variety of Italian media.**ITAL351 Italian IIIA Language and Literature 8cp**

Autumn Wollongong On Campus

Contact Hours: 3 hours tutorial/practical per week.**Pre-requisites:** ITAL252**Assessment:** Written tests 30% Oral test 20% Assignments (Lab. Manual and tapes) 20% Oral presentations 20% Participation 10%**Subject Description:** This is an advanced subject in Italian language and stylistics. Fine points of advanced grammar, linguistic structure and stylistic use are studied. Reading comprehension, translation, text analysis and written expression are further developed by the use of graded selections taken from the contemporary printed media and from contemporary works of Italian literature.**Subject Objectives:** On successful completion of this subject students should: 1. refine their proficiency in listening and speaking Italian; 2. refine their proficiency in reading and writing Italian; 3. further develop their knowledge of various cultural and social values of Italians; 4. be able to use information from a variety of Italian media.**ITAL352 Italian IIID Language and Literature 8cp**

Spring Wollongong On Campus

Contact Hours: 3 hours tutorial/practical per week.**Pre-requisites:** ITAL351**Assessment:** Written tests 30% Oral test 20% Assignments (Lab. Manual and tapes) 20% Oral presentations 20% Participation 10%**Subject Description:** The program begun in ITAL351 is continued.**Subject Objectives:** On successful completion of this subject students should: 1. refine their proficiency in listening and speaking Italian; 2. refine their proficiency in reading and writing Italian; 3. further develop their knowledge of various cultural and social values of Italians; 4. be able to use information from a variety of Italian media.**ITAL361 Interpreting I 8cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** ITAL352**Assessment:** Final Test 30% Translation assignments 25% Language laboratory assignments 10% Feedback assignments 10% Essay 10% Participation 10%**Subject Description:** The course has a dual purpose: (1) Consolidation and advancement of language studies undertaken in previous years leading to advanced proficiency in written and oral communication skills and in translation; (2) Development of the language and associated skills and cultural knowledge compatible with the ability to function as interpreter at a level equivalent to NAATI paraprofessional accreditation (formerly level 2).**Subject Objectives:** On successful completion of this subject students should: 1. refine their proficiency in listening and speaking Italian; 2. refine their proficiency in reading and writing Italian; 3. further develop interpreting and translating skills at paraprofessional level**ITAL362 Interpreting II 8cp**

Spring Wollongong On Campus

Contact Hours: 5 hours lecture/practical per week.**Pre-requisites:** ITAL361**Assessment:** Final Test 30% Translation assignments 25% Language laboratory assignments 10% Feedback assignments 10% Essay 10% Participation 10%**Subject Description:** The course begun in ITAL361 is continued and expanded**Subject Objectives:** On successful completion of this subject students should: 1. refine their proficiency in listening and speaking Italian; 2. refine their proficiency in reading and writing Italian; 3. further develop interpreting and translating skills at paraprofessional level.**ITAL391 Italian Study Abroad A 8cp**

Autumn Italy On Campus

Spring Italy On Campus

Summer Italy On Campus

2003/2004

Contact Hours: as required.**Assessment:** to be advised by host university

Subject Descriptions

Subject Description: Students taking this subject will undertake an approved course of study at an Italian University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date.

ITAL392	Italian Study Abroad B	8cp
Autumn	Italy	On Campus
Spring	Italy	On Campus
Summer 2003/2004	Italy	On Campus

Contact Hours: as required.

Assessment: to be determined by host University

Subject Description: Students taking this subject will undertake an approved course of study at an Italian University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date.

ITAL393	Italian Study Abroad C	8cp
Autumn	Italy	On Campus
Spring	Italy	On Campus
Summer 2003/2004	Italy	On Campus

Contact Hours: as required.

Assessment: to be determined by host university

Subject Description: Students taking this subject will undertake an approved course of study at an Italian University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date.

ITAL450	Italian IV Honours	48cp
Annual	Wollongong	On Campus
Spring 2003 / Autumn 2004	Wollongong	On Campus

Assessment: Dissertation 50%. Essays and oral presentation 50%

Subject Description: To be awarded a BA(Hons) in Italian students must: (1) write a 15000 word dissertation based on the student's own supervised research on a topic in Italian studies to be approved by the Italian Honours Coordinator. The dissertation will be assessed by one internal and one external examiner; (2) write two to three major essays totalling 11000-12000 words focusing on designated theoretical issues, current academic debate, or methodological processes; (3) deliver an oral presentation of the research proposal; (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled. At least one of the written assessment items must be in Italian and at least one in English, the mix to be determined by the Italian Honours Coordinator.

The oral presentation may be delivered in either Italian or English.

Subject Objectives: On successful completion of this course a student should be able to: (1) prepare a research proposal; (2) prepare an annotated bibliography; (3) produce a literature review; (4) critically analyse a range of theories within the relevant discipline; (5) demonstrate a high level of written and oral communication skills in both Italian and English; (6) achieve specialised knowledge in an area of Italian studies.

JAPA101	An Introduction to Japanese	6cp
Summer 2003/2004	Wollongong	On Campus

Contact Hours: 6 hours lecture/practicals per week.

Exclusions: (JAPA102) or (JAPA103)

Assessment: assignments, classwork, tests.

Subject Description: This subject is not part of the Japanese major, but is being offered as an elective subject in the Summer Session. It is designed for students with no prior knowledge of the Japanese language. It will introduce the syllabaries of Japanese, Hiragana and Katakana and survival language functions relevant to contemporary contexts.

Subject Objectives: On successful completion of this subject students should 1. achieve an elemental competency in reading and writing Japanese. 2. achieve a basic proficiency in listening and speaking Japanese. 3. demonstrate a basic understanding of contemporary Japan.

JAPA102	Japanese Studies for Educational Purposes	6cp
Autumn	Wollongong	On Campus

Contact Hours: 3 hours lecture/practical per week.

Exclusions: (JAPA101) or (JAPA103)

Assessment: Language tests 45%, assignments 45%, participation 10%

Subject Description: This subject is not part of the Japanese major, but is being offered as an elective subject in the Bachelor of Education (Primary). It is designed for students with no prior knowledge of the Japanese language. It will introduce the syllabaries of Japanese, Hiragana and Katakana and survival language functions relevant to educational contexts. It will also survey current issues in Japanese education. It is divided into language seminars and Japanese studies lectures.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve an elemental competency in reading and writing Japanese. 2. achieve a basic proficiency in listening and speaking Japanese. 3. demonstrate a basic understanding of the social context in which Japanese is spoken. 4. produce Japanese teaching materials for use in schools.

JAPA103	Japanese Studies for Business Purposes	6cp
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Autumn	Wollongong	On Campus
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Contact Hours: 3 hours lecture/practical per week.

Exclusions: (JAPA101) or (JAPA102)

Assessment: Language tests 70%, Assignments 20%, Participation 10%

Subject Description: This subject is not part of the Japanese major, but is being offered as an elective subject in the Bachelor of Commerce. It is designed for students with no prior knowledge of the Japanese language. It will introduce the syllabaries of Japanese, Hiragana and Katakana and survival language functions relevant to commerce contexts. It will also survey current issues in Japanese business. It is divided into language seminars and Japanese studies lectures.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve an elemental competency in reading and writing Japanese. 2. achieve a basic proficiency in listening and speaking Japanese. 3. demonstrate a basic understanding of the social context in which Japanese is spoken. 4. demonstrate an understanding of issues related to Japanese business matters.

JAPA110 Japan and the Japanese 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture, 1 hour practical per week.

Assessment: Continuous assessment 90%; participation 10%

Subject Description: This course familiarises students with Japan and some of the main issues that have influenced the formation of modern Japan. The approach in this subject is chronological, but will cover themes ranging from public to private spheres, from regional to national to international spheres, focussing on political developments as well as social and cultural aspects of Japan's transformation in the past two centuries. Students will also be asked to consider some theoretical and abstract concepts such as Orientalism, Imperialism or the construction of national myths for example. These are concepts that will also be useful in other subjects across faculty.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. demonstrate an understanding and knowledge of various social issues concerning Japan. 2. have developed competencies in critical analysis of issues. 3. have developed written competencies through essays. 4. have developed oral skills through discussion.

JAPA141 Beginners' Japanese I 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours lect/prac per week.

Exclusions: JAPA151

Assessment: Continuous assessment 90%; participation 10%

Subject Description: Introduces the basics of Japanese language covering the pronunciation and the writing of the hiragana and katakana syllabaries and Chinese characters, as well as basic Japanese sentence construction. A situational approach will be used, with each lesson presenting students with increasingly complex situations.

Subject Objectives: On successful completion of this subject, students should be able to: 1. achieve an elemental competency in reading and writing Japanese. 2. achieve a basic proficiency in listening and speaking Japanese. 3. demonstrate a basic understanding of contemporary Japan.

JAPA142 Beginners' Japanese II 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours lecture/practical per week.

Pre-requisites: (JAPA151) or (JAPA141)

Exclusions: JAPA152

Assessment: Continuous assessment 90%; participation 10%.

Subject Description: The program begun in JAPA151/JAPA141 is continued and expanded.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve a higher elementary competency in reading and writing Japanese. 2. achieve a higher elementary competency in listening and speaking Japanese. 3. demonstrate a basic understanding of contemporary Japan.

JAPA143 Beginners' Japanese III 8cp

Summer Wollongong On Campus

2003/2004

Contact Hours: 11 hours lecture/practicals per week.

Pre-requisites: (JAPA152) or (JAPA142)

Exclusions: (JAPA153) or (JAPA154)

Assessment: Continuous assessment 90%; participation 10%

Subject Description: The program begun in JAPA151/JAPA141 and JAPA152/JAPA142 is continued and expanded.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve a higher elementary competency in reading and writing Japanese. 2. achieve a higher elementary competency in listening and speaking Japanese. 3. demonstrate a basic understanding of contemporary Japan.

JAPA161 Post HSC Japanese I 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: (Pass in 2Unit/3Unit HSC equivalent).

Assessment: Continuous assessment 90%, participation 10%

Subject Description: Development of skills in speaking, listening to, reading and writing Japanese. Study of social context and aesthetic use of the language. Development of language study skills, computer skills and understanding of language in general.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve a higher elementary competency in reading and writing Japanese. 2. achieve a higher elementary competency in listening and speaking Japanese. 3. demonstrate a basic understanding of contemporary Japan.

JAPA162 Post HSC Japanese II 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: JAPA161

Assessment: Continuous assessment 90%, participation 10%

Subject Description: The program for JAPA161 is expanded and developed.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve a higher elementary competency in reading and writing Japanese. 2. achieve a higher elementary competency in listening and speaking Japanese. 3. demonstrate a basic understanding of contemporary Japan.

JAPA261 Intermediate Japanese I 8cp

Autumn Wollongong On Campus

Contact Hours: 5 hours lecture/practical per week.**Pre-requisites:** (JAPA153) or (JAPA143) or (JAPA162) or (JAPA154)**Assessment:** Continuous assessment 90%; participation 10%**Subject Description:** The program begun in JAPA141/151/161 is continued and expanded.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. achieve a higher elementary competency in reading and writing Japanese. 2. achieve a higher elementary competency in listening and speaking Japanese. 3. demonstrate a basic understanding of contemporary Japan.**JAPA262 Intermediate Japanese II 8cp**

Spring Wollongong On Campus

Contact Hours: 6 hours Lecture /practical per week**Assessment:** Continuous assessment 90%; participation 10%**Subject Description:** The program begun in JAPA141/151/161 is continued and expanded.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. achieve a higher elementary competency in reading and writing Japanese. 2. achieve a higher elementary competency in listening and speaking Japanese. 3. demonstrate a basic understanding of contemporary Japan.**JAPA264 Japanese IIC Language (Wollongong) 8cp**

Winter Wollongong On Campus

Contact Hours: Winter Supervision for set work.**Pre-requisites:** (JAPA261)**Exclusions:** JAPA271**Assessment:** tests 50%, assignments 50%**Subject Description:** In the event that students are unable to do JAPA271 In-Country Japanese Session due to serious illness or visa problems, they will, at the discretion of the Convenor of Program, be permitted to take this subject in place of JAPA271. This subject is offered at the University of Wollongong.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. achieve a further elementary competency in reading and writing Japanese; and 2. achieve further understanding of aspects of Japanese society through research tasks.**JAPA271 In-country Japanese session 8cp**Winter Kawasaki On Campus
International
Centre**Contact Hours:** 20-25 hours per week for 3 weeks.**Pre-requisites:** (JAPA261)**Exclusions:** JAPA264**Assessment:** Diary and critique Japanese society (log book); Speech presentation; Task and activities relating to everyday life in Japan**Subject Description:** In-country Japanese session requires the students to live with a Japanese host family in Kawasaki (Wollongong's sister city) and attend all lectures / seminars / excursions that are arranged to enhance both language and cultural understanding. Excursions include visits to schools and seminars include cultural experiences such as kimono and tea ceremony. Assessments include public speaking in Japanese. The aims are to: Develop performance in speaking and understanding Japanese; develop reading and writing skills with an emphasis on functional literacy; experience basic research in Japan; to experience living with a Japanese family; develop understanding of and capacity to operate and communicate in Japan's cultural environment; and develop understanding of culture in general.**Subject Objectives:** On successful completion of this subject, students should be able to: 1. Manage daily life in Japan using Japanese 2. Have a deeper understanding of the different aspects of Japanese society. 3. Improve the ability to speak, read, write and hear Japanese.

4. Prepare and deliver speeches in Japanese in front of Japanese people.

JAPA310 Japanese Economics and Media 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours lecture/seminar per week.**Pre-requisites:** (JAPA262)**Assessment:** Assignments and tests 90%; classwork 10%**Subject Description:** This subject will introduce students to the study of the language of Japanese economics, and media using Japanese and English language materials.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. read and comprehend Japanese written material regarding economic and social issues; 2. access and read Japanese newspapers; 3. comprehend Japanese news on TV; and 4. develop understanding and knowledge concerning various economic and social issues in Japan through research and presentations.**JAPA361 Advanced Japanese I 8cp**

Autumn Wollongong On Campus

Contact Hours: 5 hours lecture/practical per week.**Pre-requisites:** (JAPA262)**Assessment:** Assignments & tests 90%; classwork 10%**Subject Description:** This subject will further develop students' skills in speaking, listening to, reading and writing Japanese. The language will be studied in its social context. Computer skills and understanding of language in general will be developed further.**Subject Objectives:** On successful completion of this subject, a student should be able to: 1. achieve an advanced competency in reading, writing and comprehension of Japanese. 2. achieve an advanced proficiency in listening and comprehension of Japanese. 3. demonstrate the ability to express one's own opinion constructively and articulately in Japanese.**JAPA362 Advanced Japanese II 8cp**

Spring Wollongong On Campus

Contact Hours: 5 hours lecture/practical per week.**Pre-requisites:** (JAPA361)**Co-requisites:** JAPA310

Assessment: Assignments & tests 90%; classwork 10%

Subject Description: This subject will further develop students' skills in speaking, listening to, reading and writing Japanese. The language will be studied in its social context. Computer skills and understanding of language in general will be developed further.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve an advanced competency in reading, writing and comprehension of Japanese. 2. achieve an advanced proficiency in listening and comprehension of Japanese. 3. demonstrate the ability to express one's own opinion constructively and articulately in Japanese.

JAPA450 Japanese IV Honours 48cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Pre-requisites: (JAPA310 & JAPA362)

Assessment: Dissertation 50%. Essays and oral presentation 50%

Subject Description: To be awarded a BA(Hons) in Japanese students must: (1) write a 15000 word dissertation based on the student's own supervised research on a topic in Japanese studies to be approved by the Japanese Honours Coordinator. The dissertation will be assessed by one internal and one external examiner; (2) write two to three major essays totalling 11000-12000 words focusing on designated theoretical issues, current academic debate, or methodological processes; (3) deliver an oral presentation of the research proposal; (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled. At least one of the written assessment items must be in Japanese and at least one in English, the mix to be determined by the Japanese Honours Coordinator. The oral presentation may be delivered in either Japanese or English

Subject Objectives: On successful completion of this course a student should be able to: (1) prepare a research proposal; (2) prepare an annotated bibliography; (3) produce a literature review; (4) critically analyse a range of theories within the relevant discipline; (5) demonstrate a high level of written and oral communication skills in both Japanese and English; (6) achieve specialised knowledge in an area of Japanese studies.

JAPA550 Japanese Studies Abroad 48cp

Annual Japan On Campus

Contact Hours: As required.

Pre-requisites: A university degree

Assessment: Continuous assessment 50%; exit assessment 50%

Subject Description: This course involves the study for one full academic year at a Japanese University. Students who have no knowledge of the Japanese language will enter an elementary language. Those students with Japanese language skills will be placed into the host university's programme. In order to pass the subject, a 'pass' must be obtained in the final exit test (at the level appropriate to the student's entry point) upon return to Wollongong. Students successfully completing this subject will be awarded the Graduate Diploma of Arts (Japanese).

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve an appropriate level of competency in reading and writing Japanese. 2. achieve an appropriate level of proficiency in listening and speaking Japanese.

3. demonstrate an understanding of contemporary Japan (social customs, current affairs etc). 4. demonstrate language development and cultural experience.

LANG196 Chinese (Mandarin) Level 1 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: none

Assessment: class work 20%, tests 20%, oral test 20%, final exam 40%

Subject Description: This subject aims to equip students with survival skills in speaking and listening to Mandarin Chinese, and to give them an introduction to the writing system. It should also give students some grasp of the social context of the language.

LANG197 Chinese (Mandarin) 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: LANG196 or equivalent

LANG198 Chinese (Mandarin) – Intermediate Level for Other Dialect Speakers 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: General literacy in written Chinese

Assessment: class work 20%, tests 20%, oral presentation 20%, final exam 40%

Subject Description: It is designed for students from a Chinese background who speak dialects other than Mandarin. Applicants should have already acquired a near intermediate level of Chinese prior to the course. The subject aims to further develop students' four basic language skills - listening, speaking, reading and writing. Special attention will be given to the dialects they speak and to improvement in students' pronunciation in Mandarin. Emphasis will be on the practical use of the language, both oral and written.

LANG305 Literature and Society in Renaissance Europe 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hours seminar per week.

Pre-requisites: 24 credit points

Assessment: two essays, two quizzes, tutorial participation

Subject Description: The Renaissance constitutes a crucial period in Western civilisation. It saw a re-orientation of the arts and sciences which deeply influenced the course of European, and indeed world history. The subject will begin by examining the works of Dante Alighieri and will proceed to stress the contradictory nature of the Renaissance, concentrating on Italy and France. It will examine the literature (with works by Boccaccio, Petrarch, Machiavelli, Vasari, Rabelais, Montaigne, Ronsard, Du Bellay), art, and learning of the period, while exploring underlying social and political tensions.

Subject Objectives: Students should develop 1. A knowledge of the manifestations of Renaissance thought in the literature, art and society of Italy and France. 2. An ability to relate phenomena of the Italian and French Renaissance to a broader European framework. 3. In-depth first-hand knowledge of specific authors and their major works, and awareness of the influence of those works on later movements.

4. An understanding of the major linguistic developments of the period (revision, standardisation, refinement) and their relation to the arts, society and politics. 5 A reasoned, personal, source-based response to one or more manifestations of Renaissance thought.

LANG371 Advanced Studies in Language/ Culture A 8cp

Spring Wollongong On Campus
Autumn Wollongong On Campus

Contact Hours: 1 hour seminar, 2 hours supervised work per week.

Assessment: set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff in the student's chosen area of specialisation in the Modern Languages Program. This subject provides an opportunity for upper level students in French, Italian, Japanese or English Language Studies to pursue a program of advanced work in approved areas of linguistic or cultural studies in the relevant language. For details of availability of topics offered, students should consult the Coordinator of their language strand. Entry to this subject is at the discretion of the Head of Program.

Subject Objectives: On successful completion of this subject: 1. achieve advanced knowledge and proficiency in the defined area of study; 2. achieve advanced competency in some or all of the macro-skills in the relevant language; 3. develop research skills related to the defined topic.

LANG372 Advanced Studies in Language/ Culture B 8cp

Spring Wollongong On Campus
Autumn Wollongong On Campus

Contact Hours: 1 hour seminar, 2 hours supervised work per week.

Assessment: set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff in the student's chosen area of specialisation in the Modern Languages Program. It subject provides an opportunity for upper level students in French, Italian, Japanese or English Language Studies to pursue a program of advanced work in approved areas of linguistic or cultural studies in the relevant language. For details of availability of topics offered, students should consult the Coordinator of their language strand. Entry to this subject is at the discretion of the Head of Program.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve advanced knowledge and proficiency in the defined area of study; 2. achieve advanced competency in some or all of the macro-skills in the relevant language; 3. develop research skills related to the defined topic.

LANG373 Advanced Studies in Language/ Culture C 8cp

Autumn Wollongong On Campus
Spring Wollongong On Campus

Contact Hours: 1 hour seminar and 2 hours supervised work per week.

Assessment: set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff in the student's chosen area of specialisation in the Modern Languages Program. This subject provides an opportunity for upper level students in French, Italian, Japanese or English Language Studies to pursue a program of advanced work in approved areas of linguistic or cultural studies in the relevant language. For details of availability of topics offered, students should consult the Coordinator of their language strand. Entry to this subject is at the discretion of the Head of Program.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve advanced knowledge and proficiency in the defined area of study; 2. achieve advanced competency in some or all of the macro-skills in the relevant language; 3. develop research skills related to the defined topic.

LANG425 Combined French and Italian Honours 48cp

Annual Wollongong On Campus
Spring 2003 / Autumn 2004 Wollongong On Campus

Assessment: Dissertation 50%. Essays and oral presentation 50%

Subject Description: To be awarded a BA(Hons) in French and Italian students must: (1) write a 15000 word dissertation based on the student's own supervised research on a topic in French or Italian studies to be approved by the French and Italian Honours Coordinators. The dissertation will be assessed by one internal and one external examiner; (2) write two to three major essays totalling 11000-12000 words focusing on designated theoretical issues, current academic debate, and methodological processes; (3) deliver an oral presentation on the research proposal; (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled. At least one of the written assessment items must be in French and at least one in Italian, the mix to be determined by the Honours Coordinators. The oral presentation may be delivered in French, Italian or English.

Subject Objectives: On successful completion of this course a student should be able to: (1) prepare a research proposal; (2) prepare an annotated bibliography; (2) produce a literature review; (4) critically analyse a range of theories within the relevant discipline; (5) demonstrate a high level of written and oral communication skills in French, Italian and English; (6) achieve specialised knowledge in an area of French or Italian studies.

LING210 Communicating in a Foreign Language 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture/practical per week.

Exclusions: Not to count with LANG210

Assessment: Tests, assignments, team work

Subject Description: This subject aims to provide language students with a better understanding of the process of second language acquisition (SLA) and of bilingualism. We focus on the linguistic, socio-cultural and personal factors which affect SLA and discuss bilingualism as an individual and a societal phenomenon. This subject is compulsory for students majoring in a language or in ELS.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. achieve a basic understanding of the principles of applied linguistics as applied to SLA, bilingualism and phonetics and phonology; 2. analyse socio-cultural factors impacting on linguistic use; 3. identify the stages in L1 & L2 learning/acquisition; 4. achieve a basic proficiency in phonetic analysis.

**LING310 Language and communication in 8cp
a global context**

Spring Wollongong On Campus

Contact Hours: 3 hours lecture/seminar per week.

Pre-requisites: 24 credit points of BA subjects

Exclusions: Not to count with ELS362

Assessment: Test (30%), class-based tasks and presentations (40%), assignment (30%)

Subject Description: This subject examines the impact of globalisation on communication with a specific focus on the role and functions of English. It traces the spread of English across the world as a native, second and foreign language and discusses its impact on the status of other languages. It pays particular attention to the use of English in intercultural encounters. Another focus is on analysing and producing texts characteristic of global English in business, the media and education.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. demonstrate a knowledge and understanding of the English language in a global context; 2. recognise domain specific global English contexts; 3. analyse factors and forces in the spread of English; 4. recognise different varieties of English and the associated socio-cultural factors.

PHIL101 Knowledge, World and Values A 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour tutorial per week.

Exclusions: (PHIL201) or (PHIL103) or (PHIL203)

Assessment: Essay (40%); examination (40%); tutorial (20%)

Subject Description: Exploration of: 1. scepticism and theories of justification of belief 2. theories of the self and its identity through time 3. issues relating to realism and idealism 4. the nature of moral values; cultural relativism; the subjectivity/objectivity of values; self-interest and morality 5. the justification of political institutions; rights and authority; the obligation to obey the state; equality and justice; law and morality. 6. Introduction to philosophical skills and approach.

Subject Objectives: Upon successful completion of this subject students should have developed familiarity with some of the central issues, text and authors in the theory of knowledge, moral philosophy and political philosophy. Students should also have developed an understanding of the nature of philosophical approaches to the issues covered and should have developed skills in argumentation, reading and writing in philosophy.

PHIL102 Body, Mind and Persons A 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour tutorial per week.

Exclusions: (PHIL202) or (PHIL103) or (PHIL203)

Assessment: Essay (40%); examination (40%); tutorial (20%)

Subject Description: Body, Mind and Persons is an introduction to some central philosophical issues concerning persons and their place in the world. Topics covered are from the following major areas: Mind and Body We begin by asking why philosophers have been concerned with the status of the mind. This section then offers a critical examination of some philosopher s accounts of the nature of the human mind and the relationship between our minds and our bodies. Matters of the Self, Life and Death This section explores a range of issues relating to the value of our lives as persons. We ask such questions as: can anyone knowingly and willingly do wrong? what is the relationship between living the good life and living the moral life? what consequences does determinism have for the way we regard and react to others? what is evilness/goodness or beauty/ugliness of character or soul? what is the relation between our sexuality and our personhood? can we make a principled distinction between good and bad sex? is our death something bad for us? These questions will relate to issues which have come up elsewhere in the subject.

Subject Objectives: On Successful completion of this subject, a student should be able to: 1. Demonstrate, orally and in writing, acquaintance with some of the main figures, issues, and schools of thought associated with the philosophy of mind and the philosophical discussion of qualitative aspects of personhood. 2. Research, produce, and reference an essay in a format appropriate for a Philosophy essay. 3. Engage in Philosophical debate while demonstrating a basic understanding of the distinctive features of such debate. 4. Demonstrate, orally and in writing, an appreciation of the emphasis placed in Philosophy on the value of argument and the role of reasons.

PHIL106 Media, Ethics and Law 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture; 1hour seminar per week.

Assessment: tutorial Paper 10%; tutorial Participation 10%; Essay 40%; Exam 40%

Subject Description: This subject critically examines the ethical and legal contexts of media and media practice. Students will consider the tensions among ethical judgements, professional codes of ethical practice and legal regulation for workers in media industries. An example might be where a journalist s obligation to respect confidentiality might clash with a legal obligation not to withhold evidence about a crime. Issues examined in this subject may include: Privacy, pornography, defamation, bias, questions of cultural and gender diversity; censorship and self-censorship.

Subject Objectives: On successful completion of this subject, students should be able to: 1. analyse and critically discuss ethical and legal implications of media practice; 2. produce clear and cogent arguments verbally and in writing; 3. participate actively and productively in classroom discussion.

PHIL112 Logic A 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour practical per week.

Exclusions: (PHIL153) or (PHIL216) or (PHIL253) or (MATH223)

Assessment: Class tests (40%); examination (60%)

Subject Description: An introduction to formal logic covering (i) the representation of arguments in English in the symbolic languages of propositional logic and predicate logic;

Subject Descriptions

(ii) the use of tables as a method of testing for validity within propositional logic; and (iii) formal proof as a method of establishing validity within both propositional logic and predicate logic.

Subject Objectives: On successful completion of this subject, students should be able to, 1. demonstrate understanding of the basic principles of deductive logic, 2. translate between ordinary language and the languages of classical propositional and classical predicate logic, 3. construct proofs of validity in classical propositional logic and classical predicate logic 4. test for validity and invalidity in classical propositional logic.

PHIL151 Practical Reasoning A 6cp

Autumn	Wollongong	Flexible
Autumn	Shoalhaven	Flexible
Autumn	Bega Education Access Centre	Flexible
Autumn	Batemans Bay	Flexible
Autumn	Moss Vale	Flexible

Contact Hours: Wollongong: 2 hour lecture, 1 hour practical per week, Other Campuses: 2 hour seminar per week.

Exclusions: (PHIL153) or (PHIL253) or (PHIL214)

Assessment: Class tests (40%); examination (60%)

Subject Description: An introduction to the informal study of reasoning designed to improve the ability to organise and analyse bodies of information clearly, systematically and critically regardless of the student's area of specialisation. Topics include inductive and deductive reasoning; distinguishing good from bad arguments; meaning and definition; common fallacies and dirty debating tricks; complex problem solving and scientific method.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate an understanding of the major kinds of logical reasoning in everyday use inductive and deductive arguments and display an ability to distinguish good from bad arguments of these kinds. 2. Demonstrate a grasp of the most commonly encountered kinds of definition and understand the purposes for which they are useful. 3. Demonstrate an ability to recognise the structure of, and to critically analyse, sustained arguments encountered in everyday life. 4. Display an understanding of the principles that govern practical problem solving and an ability to apply those principles to the solution of everyday problems.

PHIL201 Knowledge, World and Values B 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hour lecture, 1 hour tutorial per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL101) or (PHIL103) or (PHIL203)

Assessment: Essay (40%); examination (40%); tutorial (20%)

Subject Description: Exploration of: 1. scepticism and theories of justification of belief 2. theories of the self and its identity through time 3. issues relating to realism and idealism 4. the nature of moral values; cultural relativism; the subjectivity/objectivity of values; self-interest and morality 5. the justification of political institutions; rights and authority; the obligation to obey the state; equality and justice; law and morality. 6. Introduction to philosophical skills and approach.

Subject Objectives: Upon successful completion of this subject students should have developed familiarity with some of the central issues, text and authors in the theory of knowledge, moral philosophy and political philosophy.

Students should also have developed an understanding of the nature of philosophical approaches to the issues covered and should have developed skills in argumentation, reading and writing in philosophy.

PHIL202 Body, Mind and Persons B 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour lecture, 1 hour tutorial per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL102) or (PHIL103) or (PHIL203)

Assessment: Essay (40%); examination (40%); tutorial (20%)

Subject Description: Body, Mind and Persons is an introduction to some central philosophical issues concerning persons and their place in the world. Topics covered are from the following major areas: Mind and Body We begin by asking why philosophers have been concerned with the status of the mind. This section then offers a critical examination of some philosopher's accounts of the nature of the human mind and the relationship between our minds and our bodies. Matters of the Self, Life and Death This section explores a range of issues relating to the value of our lives as persons. We ask such questions as: can anyone knowingly and willingly do wrong? what is the relationship between living the good life and living the moral life? what consequences does determinism have for the way we regard and react to others? what is evilness/goodness or beauty/ugliness of character or soul? what is the relation between our sexuality and our personhood? can we make a principled distinction between good and bad sex? is our death something bad for us? These questions will relate to issues which have come up elsewhere in the subject.

Subject Objectives: On Successful completion of this subject, a student should be able to: 1. Demonstrate, orally and in writing, acquaintance with some of the main figures, issues, and schools of thought associated with the philosophy of mind and the philosophical discussion of qualitative aspects of personhood. 2. Research, produce, and reference an essay in a format appropriate for a Philosophy essay. 3. Engage in Philosophical debate while demonstrating a basic understanding of the distinctive features of such debate. 4. Demonstrate, orally and in writing, an appreciation of the emphasis placed in Philosophy on the value of argument and the role of reasons.

PHIL206 Practical Ethics 8cp

Autumn	Wollongong	On Campus
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Contact Hours: 3 hours lecture/seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: A systematic study of a range of ethical problems facing contemporary western society. A major objective of this subject will be to identify the theoretical assumptions behind particular moral viewpoints. Topics will include a selection of the following: privacy; pornography and censorship; prejudice and discrimination; capital punishment; sexual ethics; sexual harassment; rape; war; abortion; infanticide; suicide; genetic engineering.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate, orally and in writing, an ability to understand the issues in dispute in a range of complex moral problems of practical importance. 2. Apply logic and reason in the defence of their views on these problems and to appreciate the theoretical implications of both their own position and those of opposed views.

3. Engage in distinctively philosophical debate about these problems. 4. Research, produce and reference essays in a format appropriate for a philosophy essay.

PHIL211 Greek Philosophy 8cp

Summer Wollongong On Campus
2003/2004

Contact Hours: 4 hour lecture, 2hour practical per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy.

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: Introduces philosophy by way of one of the great classics of Western literature, Plato's *The Republic*. Involves an exposition and critical assessment of Plato's theory of the just state, the just person and justice for women, the nature of knowledge, the aims of education, the best sort of government and the proper roles of artists and philosophers in society. No prior knowledge of philosophy or ancient history is required.

PHIL214 Practical Reasoning B 8cp

Autumn Wollongong On Campus

Autumn Bega Education Access Centre Flexible

Autumn Shoalhaven Flexible

Autumn Batemans Bay Flexible

Autumn Moss Vale Flexible

Contact Hours: On Campus: 2 hour lecture, 1 hour practical per week, Flexible: 2 hour seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL151) or (PHIL153) or (PHIL253)

Assessment: Class tests (40%); examination (60%)

Subject Description: An introduction to the informal study of reasoning designed to improve the ability to organise and analyse bodies of information clearly, systematically and critically regardless of the student's area of specialisation. Topics include inductive and deductive reasoning; distinguishing good from bad arguments; meaning and definition; common fallacies and dirty debating tricks; complex problem solving and scientific method.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate an understanding of the major kinds of logical reasoning in everyday use inductive and deductive arguments and display an ability to distinguish good from bad arguments of these kinds. 2. Demonstrate a grasp of the most commonly encountered kinds of definition and understand the purposes for which they are useful. 3. Demonstrate an ability to recognise the structure of, and to critically analyse, sustained arguments encountered in everyday life. 4. Display an understanding of the principles that govern practical problem solving and an ability to apply those principles to the solution of everyday problems.

PHIL215 Philosophy of the Arts 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL202) or (PHIL252) or (PHIL254) or (PHIL354)

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: An examination at an advanced level of central issues in the philosophy of art, such as: What distinguishes art and aesthetic objects from other kinds of objects? What is the art object, eg is Beethoven's Ninth Symphony the manuscript, the published scores, the set of performances, or what? What does art have to do with truth, fantasy, make-believe, imagination or emotion? How do we interpret works of art? Are such interpretations arbitrary, subjective, objective, relative? Does art have any political role or a social value? Examples of different types of art, such as music, literature, film, painting, sculpture and architecture, will be used in attempting answers to these questions.

PHIL216 Logic B 8cp

Spring Wollongong On Campus

Summer Wollongong On Campus

2003/2004

Contact Hours: Spring 2 hour lecture, 1 hour practical per week, Summer 2003/2004 4 hour lecture; 2hour practical per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL112) or (PHIL153) or (PHIL253) or (MATH223)

Assessment: Class tests (40%); examination (60%)

Subject Description: An introduction to formal logic covering (i) the representation of arguments in English in the symbolic languages of propositional logic and predicate logic; (ii) the use of tables as a method of testing for validity within propositional logic; and (iii) formal proof as a method of establishing validity within both propositional logic and predicate logic.

Subject Objectives: On successful completion of this subject, students should be able to, 1. demonstrate understanding of the basic principles of deductive logic,

2. translate between ordinary language and the languages of classical propositional and classical predicate logic, 3. construct proofs of validity in classical propositional logic and classical predicate logic 4. test for validity and invalidity in classical propositional logic.

PHIL231 Formal Logic A 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (PHIL112) or (PHIL216)

Exclusions: (PHIL361) or (MATH223)

Assessment: Class tests (40%); examination (60%)

Subject Description: Provides a grounding in the fundamental concepts of modern formal logic. Main topics are (i) set theory and relations; (ii) semantic theory for propositional and predicate logic; (iii) formal proof procedures for propositional and predicate logic; and (iv) proof of the soundness and completeness of propositional logic.

PHIL232 Political Philosophy A 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture; 1 hour tutorial per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL332) or (PHIL257) or (PHIL357) or (POL214) or (POL314) or (PHIL383)

Assessment: Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Examines classical conservative, liberal, and radical political theorists, such as Plato, Aristotle, Hobbes, Locke, Bentham, Rousseau, Wolstonecraft and Marx. Topics discussed include: the nature of the state; political obligation and authority; liberty, equality and justice; democracy; human rights and human nature; morality and politics; alienation, oppression and revolution.

Subject Objectives: On successful completion of this subject a student should be able to: 1. Critically discuss the major figures in the history of political philosophy and identify the impact of their theories in contemporary debates. 2. Identify the broader philosophical significance of debates within political philosophy. 3. Identify the philosophical presuppositions and implications of terms such as political obligation, autonomy, and alienation. 4. Engage in critical debate about fundamental concepts in political theory. 5. Identify normative bases of major political theories.

PHIL255 Interpretation and Communication 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture; 1 hour tutorial per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: In this subject we examine issues in the philosophy of language, with emphasis on theories of interpretation and communication. The subject considers both analytic and contemporary European traditions, with the focus varying from year to year. Issues considered include: 1. theories of meaning, and meaning scepticism (what is meaning?, is it determinate? ..); 2. radical interpretation; 3. arguments regarding indeterminacy of interpretation or translation; 4. speech act theory and theories of communication; 5. the nature of literary meaning; 6. the concepts of 'author', 'text', and 'work'; 7. the significance of metaphor and other tropes. There will be special emphasis on close readings of central texts.

Subject Objectives: Upon successful completion of this subject, students should be able to: 1. Demonstrate familiarity with some central issues in philosophy of language, and debates surrounding those issues; 2. Demonstrate facility with close reading of philosophical texts; 3. Demonstrate a developed ability to reason and write in philosophy.

PHIL256 Ethics and the Environment A 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour tutorial per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: PHIL258

Assessment: Essay (30%); tutorial (20%); examination (50%)

Subject Description: A study of evaluative issues concerning the environment. Provides a grounding in debates about, for example, our obligations to non-human animals; whether wilderness areas have value independently of their value to humans; the problem of overpopulation and the question of our obligations to the 3rd world and to future generations; the value of biodiversity. This subject can also be taken as an 8 credit point subject, PHIL258, which shares lectures and tutorials, but has different assessment, reflecting the extra 2 credit points.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate, orally and in writing, an ability to understand the issues in dispute in a range of complex moral problems concerning the environment.

2. Understand why there is a widespread belief that there is an environmental crisis and should appreciate the peculiar challenge to orthodox theoretical ethics this crisis has created. 3. Apply logic and reason in the defence of their views on these problems and to appreciate the theoretical implications of both their own position and those of opposed views. 4. Engage in distinctively philosophical debate about these problems. 5. Research, produce and reference essays in a format appropriate for a philosophy essay.

PHIL258 Ethics and the Environment B 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour tutorial per week.

Pre-requisites: At least 18 credit points, not necessarily in Philosophy

Exclusions: (PHIL256)

Assessment: Essay (40%); exam (40%); seminar (20%)

Subject Description: A study of evaluative issues concerning the environment. Provides a grounding in debates about, for example, our obligation to non-human animals; whether wilderness areas have value independently of their value to humans; the problem of overpopulation and the question of our obligation to the 3rd world and to future generations; the value of biodiversity.

This subject shares lectures and tutorials with the 6 credit point subject, PHIL256, but has different assessment, reflecting the extra 2 credit points.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate, orally and in writing, an ability to understand the issues in dispute in a range of complex moral problems concerning the environment. 2. Understand why there is a widespread belief that there is an environmental crisis and should appreciate the peculiar challenge to orthodox theoretical ethics this crisis has created. 3. Apply logic and reason in the defence of their views on these problems and to appreciate the theoretical implications of both their own position and those of opposed views. 4. Engage in distinctively philosophical debate about these problems. 5. Research, produce and reference essays in a format appropriate for a philosophy essay.

PHIL260 Philosophy of Feminism A 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: PHIL363

Assessment: Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Introduction to feminist philosophy, examining the relationships between feminism and philosophy. Explores analytical and ethical issues which arise in feminist philosophy and the ways these issues divide feminists, through exploration of concepts such as: sex and gender difference, equality, justice, oppression, affect, exploitation and human nature as they occur in feminist theories.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Critically discuss some major figures in philosophy of feminism and identify the impact of their approaches in contemporary debates. 2. Identify the broader philosophical significance of debates within philosophy of feminism.

3. Identify the philosophical presuppositions and implications of terms such as sex and gender difference, equality, justice, oppression, emotions and rationality, oppression and human nature. 4. Engage in critical debate about central ideas in philosophy of feminism.

PHIL262 Theories of Knowledge and Metaphysics A 8cp

Spring Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: PHIL322

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: An examination of attempts to answer the central questions in the theory of knowledge and of the metaphysical implications of those attempts. The questions addressed include: What is knowledge?; Is knowledge possible? (the challenge of scepticism); Is knowledge different from information?; Is a normative epistemology possible or desirable?. We will discuss, eg debates over internalism and externalism, realism and anti-realism, descriptive and revisionary metaphysics.

Subject Objectives: On completion of this subject a student should be able to: 1. Critically discuss the main competing theories in the area.

2. Demonstrate familiarity with the philosophical implications of terms like realism and antirealism, foundationalism and coherentism, rationalism and empiricism. 3. Identify the broader philosophical significance of debates in the theory of knowledge and metaphysics. 4. Demonstrate a developed ability to reason and write philosophy.

PHIL270 Philosophy of Law 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: LLB312

Assessment: Essay on approaches to legal theory 40%; Research essay on issue in legal philosophy 60%

Subject Description: Introduction to philosophical issues in law. Topics will include a selection of the following: morality and the law; the harm principle; legal paternalism; rights and obligations; conscience and the law; the justification of punishment; conceptual and moral problems in legal decision-making (e.g. "wrongful life" cases, and arguments for a legal duty of active aid).

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Critically discuss some major approaches to philosophy of law and identify the impact of those approaches in contemporary debates. 2. Identify the broader philosophical significance of debates within philosophy of law, legal theory and jurisprudence. 3. Identify the philosophical presuppositions and implications of terms such as legal obligation, legal responsibility, intention, strict liability. 4. Engage in critical debate about key arguments in philosophy of law. 5. Identify normative bases of approaches to legal philosophy.

PHIL370 Topics in Philosophy of Law 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (At least 8 cp in Philosophy at 200-level or 300-level)

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: Advanced study of central issues in the philosophy of law. Topics will include a selection of the following: the nature and justification of law; agent responsibility: action, intention, will, negligence; collective responsibility; moral and legal evaluation; justification and excuse; the justification of criminal defences, e.g. provocation, necessity, duress, self-defence, insanity.

PHIL271 Special Philosophical Questions A 8cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Summer Wollongong On Campus

2003/2004

Contact Hours: 3 hour lecture/discussion per week.

Pre-requisites: Approval of Convenor of Program

Co-requisites:

Restrictions: Enrolment in this subject is restricted. Students may not enrol over the web. Please refer to the Convenor of Program for more information.

Assessment: Essays 100% (or an equivalent approved combination of essay(s) and exam(s) and seminar)

Subject Description: A detailed, supervised investigation of an approved philosophical topic, author, period, or school of thought.

PHIL284 Ethics A 8cp

Spring Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL301)

Assessment: Essay 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: A critical study of fundamental issues in moral philosophy. Among the topics discussed will be a selection of the following: Moral relativism; subjectivist and objectivist theories of morality; facts and values; moral realism; consequentialism; moral motivation; egoism and altruism; morality and rationality.

Subject Objectives: On completion of this subject a student should be able to: 1. Critically discuss the main competing theories in metaethics and normative ethics. 2. Demonstrate familiarity with the philosophical implications of terms like descriptivism, expressivism, consequentialism and deontology. 3. Identify the broader philosophical significance of debates in theoretical ethics. 4. Demonstrate a developed ability to reason and write about theoretical issues in ethics.

PHIL286 Philosophy of Social Science 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Assessment: Essay 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: A critical survey of contemporary philosophical theories about the nature of social science. Examines the naturalistic, interpretive, critical and postmodernist schools. This survey is animated by sceptical concerns regarding the very possibility of a social science, and of even the possibility of determinately interpreting each other. An underlying thematic focus will be the question of intercultural understanding, the significance of cultural relativism, and the possibility of multiculturalism.

Subject Objectives: On completion of this subject, students should demonstrate (1) understanding of the nature of the major contemporary schools in the Philosophy of Social Science, (2) an ability, through critical evaluation, to determine the strengths and weaknesses of these schools, and (3) an appreciation of the peculiar difficulties facing those who would develop a science of humans as social creatures.

PHIL288 Philosophy of Mind and Action A 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: PHIL351

Assessment: Essay 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: Examines contemporary issues in one or more of the following areas: metaphysics of mind (dualism, mind-body identity, functionalism, etc.);

theories of intention and agency; explanations of irrationality (such as divided mind accounts of self-deception and weakness of will); theories of emotion (its nature, epistemology and role in moral psychology); self-knowledge and first-person authority.

Subject Objectives: On completion of this subject a student should be able to: 1. Critically discuss the main competing theories in the area. 2. Demonstrate familiarity with the philosophical implications of terms like dualism, materialism, functionalism, and desire-belief psychology. 3. Identify the broader philosophical significance of debates in the theory of mind and action. 4. Demonstrate a developed ability to reason and write philosophy.

PHIL301 Ethics B 8cp

Spring Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: (At least 16 cp in PHIL at 200-level or 300-level)

Exclusions: (PHIL251) or (PHIL284)

Assessment: Essays 80% (or essay 40% and exam 40%)

Subject Description: A critical study at an advanced level of fundamental issues in moral philosophy. Among the topics discussed will be a selection of the following: Moral relativism; subjectivist and objectivist theories of morality; facts and values; moral realism; consequentialism; moral motivation; egoism and altruism; morality and rationality.

Subject Objectives: On completion of this subject a student should be able to: 1. Critically discuss the main competing theories in metaethics and normative ethics. 2. Demonstrate familiarity with the philosophical implications of terms like descriptivism, expressivism, consequentialism and deontology. 3. Identify the broader philosophical significance of debates in theoretical ethics. 4. Demonstrate a developed ability to reason and write about theoretical issues in ethics at an advanced level.

PHIL305 Special Philosophical Questions B8cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Summer Wollongong On Campus

2003/2004

Contact Hours: 3 hour lecture/discussion per week.

Pre-requisites: Approval of Convenor of Program

Restrictions: Enrolment in this subject is restricted. Students may not enrol over the web. Please refer to the Convenor of Program for more information.

Assessment: Essays 100% (or an equivalent approved combination of essay(s) and exam(s) and seminar)

Subject Description: A detailed, supervised investigation at an advanced level of an approved philosophical topic, author, period, or school of thought.

PHIL322 Theories of Knowledge and Metaphysics B 8cp

Spring Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: (At least 16 cp in PHIL at 200-level or 300-level)

Exclusions: (PHIL262)

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: An examination of attempts to answer the central questions in the theory of knowledge and of the metaphysical implications of those attempts. The question addressed include: what is knowledge?; is knowledge possible? (the challenge of scepticism); is knowledge different from information?; is a normative epistemology possible or desirable?. We will discuss, eg debates over internalism and externalism, realism and anti-realism, descriptive and revisionary metaphysics.

Subject Objectives: On completion of this subject a student should be able to: 1. Critically discuss the main competing theories in the area. 2. Demonstrate familiarity with the philosophical implications of terms like realism and antirealism, foundationalism and coherentism, rationalism and empiricism. 3. Identify the broader philosophical significance of debates in the theory of knowledge and metaphysics.

4. Demonstrate a developed ability to reason and write philosophy at an advanced level.

PHIL351 Philosophy of Mind and Action B 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: (At least 16 cp in PHIL at 200-level or 300-level)

Exclusions: (PHIL288)

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: Examines contemporary issues in one or more of the following areas: metaphysics of mind (dualism, mind-body identity, functionalism, etc.); theories of intention and agency; explanations of irrationality (such as divided mind accounts of self-deception and weakness of will); theories of emotion (its nature, epistemology and role in moral psychology); self-knowledge and first-person authority.

Subject Objectives: On completion of this subject a student should be able to: 1. Critically discuss the main competing theories in the area.

2. Demonstrate familiarity with the philosophical implications of terms like dualism, materialism, functionalism, and desire-belief psychology. 3. Identify the broader philosophical significance of debates in the theory of mind and action. 4. Demonstrate a developed ability to reason and write philosophy at an advanced level.

PHIL361 Formal Logic B 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (16 cp at 200-level and PHIL112) or (16 cp at 200-level and PHIL216)

Exclusions: (PHIL231) or (MATH223)

Assessment: Class tests (40%); examination (60%)

Subject Description: Provides an advanced grounding in the fundamental concepts of modern formal logic. Main topics are (i) set theory and relations; (ii) semantic theory for propositional and predicate logic; (iii) formal proof procedures for propositional and predicate logic; and (iv) proof of the soundness and completeness of propositional logic.

PHIL363 Philosophy of Feminism B 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: (At least 16 credit points in Philosophy at 200-level or 300-level)

Exclusions: (PHIL260)

Assessment: Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Introduction to feminist philosophy, examining the relationships between feminism and philosophy. Explores analytical and ethical issues which arise in feminist philosophy and the ways these issues divide feminists, through exploration of concepts such as: sex and gender difference, equality, justice, oppression, affect, exploitation and human nature as they occur in feminist theories.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Critically discuss some major figures in philosophy of feminism and identify the impact of their approaches in contemporary debates. 2. Identify the broader philosophical significance of debates within philosophy of feminism. 3. Identify the philosophical presuppositions and implications of terms such as sex and gender difference, equality, justice, oppression, emotions and rationality, oppression and human nature. 4. Engage in critical debate about central ideas in philosophy of feminism.

PHIL380 Bioethics 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture, 1 hour tutorial per week.

Pre-requisites: (At least 16 cp at 200-level or 300-level)

Exclusions: (PHIL365)

Assessment: Research essay on bioethical topic 40%; Research essay on bioethical topic 40%; seminar presentation and participation 20%

Subject Description: Philosophical examination of a range of bioethical problems. Topics will include: euthanasia and physician-assisted suicide; reproduction technology (e.g. IVF, cloning); anonymous donor programs; genetic counselling, screening and testing; surrogacy; allocation of health resources; organ transplantation; embryo and fetal research;

experimentation involving human subjects; research involving animals; the role of ethics committees; the nature of professional ethics.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Identify some major debates in bioethics and identify some significant philosophical features of those debates. 2. Critically analyse ethical arguments put forward in bioethics argue clearly and logically for their own ethical position. 3. Critically discuss some major approaches to bioethics and identify the impact of those approaches in contemporary debates. 4. Engage in critical debate about arguments concerning key distinctions in bioethics.

PHIL383 Political Philosophy B 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture; 1hour tutorial per week.

Pre-requisites: (At least 16 cp of Philosophy at 200-level or 300-level)

Exclusions: (PHIL232)

Assessment: Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Examines classical conservative, liberal, and radical political theorists, such as Plato, Aristotle, Hobbes, Locke, Bentham, Rousseau, Wolstonecraft and Marx. Topics discussed include: the nature of the state; obligation and authority; liberty, equality and justice; democracy; human rights and human nature; morality and politics; alienation, oppression and revolution.

Subject Objectives: On successful completion of this subject a student should be able to: 1. Critically discuss the major figures in the history of political philosophy and identify the impact of their theories in contemporary debates. 2. Identify the broader philosophical significance of debates within political philosophy. 3. Identify the philosophical presuppositions and implications of terms such as political obligation, autonomy, and alienation. 4. Engage in critical debate about fundamental concepts in political theory. 5. Identify normative bases of major political theories.

PHIL390 Contemporary Political Philosophy 8cp

Autumn Wollongong On Campus

Contact Hours: 2hours lecture; 1hour tutorial per week.

Pre-requisites: (At least 16 cp in PHIL at 200-level at 300-level).

Assessment: Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Examination of current themes in political philosophy. Explores differences in the role of the state, civil society and citizenship in recent liberal, communitarian and feminist political theory. In particular, examines the ways in which contemporary political philosophers respond to gender differences and ethnic diversity in their political theories.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Critically discuss some major figures and debates in contemporary political philosophy. 2. Identify the broader philosophical significance of debates within political philosophy. 3. Identify the philosophical presuppositions and implications of debates about political autonomy, social group difference, community. 4. Engage in critical debate about key concepts in contemporary political theory. 5. Identify normative bases of major contemporary political philosophical approaches.

Subject Descriptions

PHIL403 Philosophy Honours 48cp

Annual Wollongong On Campus

Spring 2003 / Wollongong On Campus

Autumn 2004

Contact Hours: Normally, 4 hours contact per week.

Pre-requisites: Entry to the Honours year or Honours subjects shall be determined on the advice of the Head of Program

Assessment: Thesis (50%); 3 Electives (50%)

Subject Description: Students do three electives (5,000-6,000 word essays required for each elective) which is worth 50%, and one thesis (approximately 12,000 words) also worth 50%. All assessable work for the electives is double marked. Thesis has one internal and one external marker. Students are expected to participate in the Honours and Postgraduate seminars. Ordinarily students are expected to complete PHIL403 within one year full time equivalent enrolment.

PHIL413 Combined Philosophy Honours 48cp

Annual Wollongong On Campus

Spring 2003 / Wollongong On Campus

Autumn 2004

Contact Hours: 4 hours contact per week.

Pre-requisites: Entry to combined Honours shall be determined on the advice of the Programs concerned.

Assessment: Thesis 50%, Electives 50%

Subject Description: The combined Honours course will consist of a program of study approved by the Head of the Philosophy Program in collaboration with the Head of the other Program concerned. The program will normally be composed of elements offered at 400 level by the two Programs, including a thesis of approximately 12,000 words.

POL 111 Australian Politics 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lectures & tutorials per week.

Assessment: Analytical media exercise 20%; essay 40%; examination 30%; tutorial participation 10%

Subject Description: This subject introduces students to the functions and operations of the basic institutions of politics (the parliament, constitution, cabinet, bureaucracy and High Court) in Australia, some of the ideas (democracy, liberalism, conservatism, social democracy, feminism), that are important in Australian political life, and some of the factors (political parties, gender, the media) that help to shape Australian political life. Students will be expected to understand what these institutions, ideas and practices actually contribute to Australian government and politics and what functions and roles they are supposed to/do perform.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. have a basic understanding of the following: The main functions which are performed by the houses of parliament, the cabinet, the public service, the Governor General, the constitution, the federal system, and the High Court. 2. give an account of and be able to analyse some of the important political ideas that shape Australian politics including liberalism, conservatism, democracy, social democracy, feminism and you should be able to give an account of the fundamental principles underlying these different political ideas. 3. give an account of and be able to analyse some of the the factors that influence Australian political life including political parties, gender, interest groups, the media.

POL 121 Politics in a Globalising World 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours lectures & tutorials per week.

Assessment: tutorial Paper: 20% of final grade; Essay: 30% of final grade; Exam (3hour) 30% of final grade; Journal 20% of final grade

Subject Description: The subject examines the impact of Globalisation on Australian politics and in international relations generally. Australia s role in the Asia Pacific Region is analysed and the causes of the Asian economic and financial crisis examined. Developments within the Triad of rich countries and key theories of globalisation are critically assessed. Special attention is paid to world poverty, migration, labour relations, race and ethnicity in world politics. The collapse of communism and the problems of democratic transition are analysed. Finally the implications of globalisation for democracy and social justice are examined.

Subject Objectives: On successful completion of this subject, a student should be able to: 1) Gather a wide range of political information using electronic and archival means, 2) read and understand data and a diverse range of literature. 3) analyse policies for their impact on developed and developing countries. 4) demonstrate a basic understanding of cultural differences. 5) develop critical skills in media analysis and 6)analyse the impact of globalisation on democratic values and justice in the world.

POL 141 Change and Debate in Contemporary Australian Politics 6cp

Contact Hours: Not on offer in 2003

Assessment: Book Review (30%); seminar Presentation (20%); Class Participation & WebCT postings (20%); Major Essay (30%)

Subject Description: The subject examines some of the major changes that have occurred in the Australian politics, society, culture and the economy since the election of the Howard government in 1996. This subject will explore these changes through an examination of key debates in Australian public life, and their implications for notions of identity, democracy, citizenship, class and community.

Topics covered include the myth of Australia as an egalitarian society, the changing nature of left and right , globalisation, reconciliation and Aboriginal sovereignty, refugees and immigration policy, the role of unionism in Australian politics, and the war on terrorism .

Subject Objectives: On successful completion of this subject, students should be able to: 1. understand and articulate different theories and concepts of power and how they can be applied to contemporary Australian society; 2. evaluate the significance of the major changes in Australian political culture since 1996; 3. identify major debates in the public culture created by these changes and analyse and evaluate the arguments used in these debates; 4. identify the political and cultural significance of these debates for post-2000 Australia.

POL 211 Democracy in Theory and Practice 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: (6cp of POL) or (6cp of HIST) or (6cp of PHIL) or (6cp of SOC).

Assessment: tutorial Paper 20% of Final grade; Essay 2000 words 40% of Final grade; Examination (containing seen and unseen questions) 30% of Final grade; Participation 10% of Final grade

Subject Description: The subject analyses and contrasts the development of two western traditions: democracy and republicanism. It examines their origins in Ancient Greece and Rome, the rise of different schools of liberalism, participatory and deliberative democracy, conservatism, pluralism, social democracy and European and Leninist Marxism. Contemporary critiques of Western democratic theory from feminist, neo Marxist, neo liberal, conservative, post modern and technocratic/ industrialist scholars are analysed and their suggested alternatives are examined. The subject examines not only the quality and coherence of the ideas expressed by respective thinkers but their practical implications and feasibility.

Subject Objectives: On successful completion of this subject, a student should be able to: 1) Express an overall knowledge of the main developments in western democratic theory. 2) Demonstrate an understanding of the major differences between ancient and modern democratic and republican theory. 3) Be able to articulate the relationship of democracy to values such as liberty, community, equality and justice. 4) Analyse competing political ideas. 5) Assess the feasibility and desirability of political programs and their practical implications.

POL 216 Politics in the USA 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: (6cp of POL)

Assessment: Essay 40%; Journal 30%; Exam 30%

Subject Description: This subject examines the American political system. It provides an introduction to the institutional context of American politics, focussing upon the structure and function of government, and also deals in depth with major factors and issues which shape politics today. The roles, in theory and practice, of the Constitution, the President, the Congress, the Supreme Court are examined. Political parties, election processes and campaigns are surveyed and analysed. These institutional aspects of American politics raise crucial questions about democracy and power, questions which the subject deals with at length.

Other areas of enquiry include the mass media and political culture generally, federalism and bureaucracy, and racial and class divisions. Attention is also paid to ideology and the making of public policy

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate a clear knowledge of the workings of the American political system. 2. Analyse critically the key institutional features of American politics. 3. Identify crucial issues which have significance on both a domestic and international level.

POL 222 Australian Public Policy 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: (6cp of POL) or (AUST101) or (HIST121)

Assessment: tutorial Paper 20% of final grade; Research paper 1500 words 40% of final grade; Exam (3hour) 30% of final grade; Class Participation 10% of final grade

Subject Description: The subject examines the formation and administration of Public Policy in Australia in a comparative framework, with special emphasis on comparisons with other advanced industrial societies. It examines areas such as; the impact of globalisation, and specific policy areas health, housing, transport, industry, policing, equal opportunities, social inequalities, urban and rural/regional problems and the environment. Legislative processes and outcomes are analysed and the influence of pressure groups/ corporations on government is critically examined. Students will be introduced to a range of theories of the Australian state, corporatism and globalisation

Subject Objectives: On successful completion of this subject, a student should be able to: 1) Gather information using electronic and archival means, 2) read and understand statistical information, 3) analyse policies, 4) demonstrate a basic understanding of policy processes and state theories, 5) appreciate the multi cultural diversity of Australia and 6) analyse the importance of the goals of social justice and inclusion in policy formulation.

POL 224 Politics and the Media 8cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: (6cp of POL) or (6cp of CCS)

Assessment: Essay 40%; tutorial paper 30%; examination 30%

Subject Description: This subject examines the political role and power of the mass media. Particular attention is paid to the manufacture of news, the construction of news frames, the function of agenda-setting, the issue of bias, the use and abuse of media by politicians, the question of ownership and control, the role of advertising. While the major focus is on news reporting and commentary, cultural politics in general (including popular culture) is examined.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate a clear knowledge of the workings of the media in both a local and international context. 2. Analyse critically newspaper articles and television programmes (both news/documentary and entertainment). 3. Be aware of the many debates about the nature and role of mass culture.

POL 225 International Relations: An Introduction 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week lectures and tutorials per week.

Pre-requisites: (6cp of POL).

Assessment: tutorial paper 20%; essay 40%; exam 30%; tutorial participation 10%

Subject Description: Provides an introduction to the study of International Relations. Its focus is on concepts, issues and theories of particular contemporary relevance: Realism, Idealism, feminist perspectives, dependency and interdependence, globalism, etc. Close critical attention is paid to the United Nations, security and other global and regional regimes, international relations in the Asia-Pacific region, including Asia-Pacific co-operation, regional organisations and the world after September 11.

POL 226 Australian Political Thought 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (6cp of POL) or (AUST101) or (HIST121)

Assessment: 2 essays 80%; tutorial paper 20%

Subject Description: Examines the major traditions of political thought in Australia; conceptions of Australia (including nationalism, republicanism, internationalism); liberalism (including Deakinite, free trade, cultural); conservatism; socialism, social democracy and labourism; and feminism. These traditions will be examined both historically and in terms of their contemporary expression. Issues to be considered include the role of the state, democracy and citizenship, cultural diversity, the private/public distinction.

POL 230 Latin America: The Politics of Conquest and Colonisation 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (6cp of POL) or (6cp of HIST)

Assessment: 1 x 1,000 word tutorial paper 20%; 2 x 2,000 word essays 70%; class participation 10%

Subject Description: This subject provides an overview of the conquest and colonisation of Latin America by the West. Columbus did not "discover" America. Many millions lived there before the arrival of Europeans. Indeed the Aztec capital - Tenochtitlan (now Mexico City) - was possibly the largest city in the world by the time the Spanish conquistadores arrived.

We begin the course with a look at two of the pre-Columbian empires - the Aztecs and the Incas. The conquest of the Americas is often used to mark the beginning of what has been called the "rise of the West". The subject deals with why and how the West eventually established such dominance. It does so in the context of on-going controversies about this, about the motivations for the conquest and the dynamics of settler societies and colonial structures. In particular we will examine world-systems and dependency perspectives on these processes. All of this is dealt with in terms of its implications for "third world" societies today. During the subject we will also sample the rich and varied culture of Latin America - its food, music, literature and film.

POL 290 Women in Society: Productive and Reproductive Labour 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (6cp of POL) or (12cp at 100-level in any subject/s)

Exclusions: GENE215

Assessment: Group Project - poster, oral presentation, written presentation 30%; Essay 30%; Short paper 20%; Participation - email 10%; tutorial 10%

Subject Description: This subject examines the constitution of gendered subjectivity, especially femininity, in industrialised societies. Key feminist concerns are addressed through the analysis of recent Australian publications about women focussing on paid work, family life, legal processes, sexuality and popular media. The role of the liberal democratic state in the regulation of gender relations is explored. Team work forms the core of student learning with discussion and project groups nearly every week.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Explain gender difference, embodiment, social reproduction and related concepts in terms of the workforce, the home and popular culture.

2. Understand of the social production of subjectivity through experiences of race/ethnicity, class, gender and sexuality. 3. Write critically about a specific argument in the literature. 4. Learn through team work. 5.etc

POL 314 Power and the Modern State 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL)

Assessment: tutorial paper 20%; Research Essay 50%; Examination 30%

Subject Description: Examines the nature and exercise of power in the modern state. Surveys liberal, socialist and conservative writings on power and the state in relation to the development of the types of polity that characterise modern advanced industrial countries such as Australia and countries in Europe, East Asia and North America. Analyses concepts such as reason of state, sovereignty, class, individualism, civil society, nation, the welfare state and the idea of the decline the state.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Have an understanding of the forces that gave rise to the development of the modern state. 2. Demonstrate an appreciation of a variety of approaches to the modern state including liberal, conservative and socialist. 3. Analyse critically some of the key ideas associated with the modern state including sovereignty, state, welfare state, civil society, reason of state.

POL 315 The Politics of Post Communist Countries 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL)

Assessment: tutorial Paper 20% of Final Grade; Research Essay 40% of Final Grade; Examination (3hour)(containing seen and unseen questions) 30% of Final Grade; Participation 10% of Final Grade

Subject Description: This subject examines problems of transition from soviet-style state socialism in the successor states of the former USSR and Eastern Europe. It contrasts the Russian and East European experience with market transition in the Peoples Republic of China and the reasons differences persist. Issues examined include: new forms of political representation, the transition to a market economy, changing roles for women and men, social welfare provision, economic decline and corruption, reforming the legal system, trade unions and new social movements, and minority nationalities policy. Recent theories of state and civil society will be analysed

Subject Objectives: On successful completion of this subject, a student should be able to: 1) Outline the main features of the collapse of soviet-style socialism. 2) Analyse the reasons for successes and failures in the transition process. 3) Analyse policy formulation and key problem areas in post communist countries. 4) Use methods of comparative politics to compare different polities. 5) Demonstrate an understanding of recent social and political thought in the area.

POL 317 Politics in the South Pacific 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL)

Assessment: tutorial paper 20%; essay 40%; exam 30%; tutorial participation 10%

Subject Description: The subject analyses the politics and international relations of Papua New Guinea and other South Pacific island countries. Particular attention is paid to problems of government and issues in development, including external security and domestic law and order; decolonisation and constitutional change; interethnic and other internal conflicts; economic participation and distribution; foreign policy-making and regional cooperation, including relations with external actors.

POL 318 The Asian Tigers - Newly Industrialising Countries in Transition 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour tutorial per week.

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL)

Assessment: tutorial paper 20%; essay 40%; exam 30%; tutorial participation 10%

Subject Description: Once they were called "miracle" economies. The extraordinarily rapid economic growth of these Newly Industrialising Countries - South Korea, Taiwan and Singapore - seemed to point the way forward for "third world" societies everywhere. But today the Tigers are in serious economic crisis - the miracle has turned into a mess. Some have argued that the earlier success of the Tiger economies derived from the cultural values of their people. Others claimed that their political structures or economic policies were the key to their achievements.

This subjects looks at these and other explanations and places them in the context both of older processes of industrialisation - particularly those which took place in Europe and Japan - and of the continuing poverty of "third world" societies today. Finally, we will examine the shifts from authoritarian to civilian government and the effects on economy and society in these states.

POL 319 Political Economy in the New Millennium 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: (14 cp of POL with 8 cp at 200 level) or (HIST210 with 6 cp of POL)

Assessment: tutorial paper 20%; Review essay 40%; Examination 30%; Participation 10%

Subject Description: The subject covers the development of Political Economic theory from antiquity to the present day. The centrality of political economy to political enquiry is stressed. It discusses major theorists from Plato, Quesnay, Steuart, Locke, Adam Smith, John Stuart Mill, Karl Marx and John Maynard Keynes to contemporary thinkers, debates and issues. It analyses core aspects of their approach to key political questions, such as: the role of the modern state, human nature, social order, civil society, freedom and necessity, production, distribution and justice. It questions the relevance of their thought to contemporary issues in a (post)-modern environment.

Subject Objectives: On successful completion of this subject, a student should be able to: 1 Analyse and interpret primary texts in their historical and theoretical contexts. 2 Explain the role of core values in the formation of the modern state. 3 Demonstrate an understanding of the role of key economic concepts in modern life.

4 Understand the main differences between the major political economic traditions. 5 Apply abstract concepts to practical issues.

POL 323 North & South: Approaches to Relationships Between Advanced Industrial & Less Developed Countries 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL).

Assessment: tutorial paper 20%; essay 40%; exam 30%; tutorial participation 10%

Subject Description: The subject analyses some of the most important approaches towards the practice and study of international relations as they apply to development in and relations between advanced, industrialising and less developed countries. Attention is paid to South-East Asia and the South Pacific, as well as the newly industrialising countries of Latin America and East Asia, regional co-operation, and other aspects of the foreign relations of countries in both regions. Topics studied include diplomacy, defence, trade, investment and other kinds of international inter-actions.

POL 324 Culture and Politics 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL)

Assessment: tutorial paper 30%; essay 40%; exam 30%

Subject Description: This subject examines key debates concerning cultural politics in the twentieth century. Particular attention is paid to debates about Marxism and modernism, the political impact of mass culture, feminist cultural politics and the political significance of postmodernism. Key intellectual groupings analysed include the Frankfurt School, the Birmingham Centre for Contemporary Cultural Studies, American and French cultural feminism, the New York intellectuals, the Situationists. A major focus of the subject is upon the ways in which culture and politics intersect, the cultural forms which are most bound up with the world of politics and the political processes which are shaped by cultural forces.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate a clear knowledge of key debates in the field of cultural politics in the twentieth century.

2. Analyse critically the work of certain major thinkers in the twentieth century. 3. Deal with abstract and complex ideas in creative ways.

POL 368 Protest and Power in America : The Sixties 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL) or (14 cp of HIST with 8cp at 200-level) or (AUST101 with 8cp of HIST at 200-level).

Assessment: Essays 30%; essays 40%; one exam 30%

Subject Description: The 1960s was a pivotal decade in contemporary history and this subject examines the political upheavals, social transformations and cultural rebellions of those years in the USA.

Subject Descriptions

Analysis will focus upon the civil rights and black power movements, the new left, the student movement, the anti-war movement, the women's and gay liberation movements and the counter-culture. These movements sponsored significant social changes and raised issues which are still reverberating today.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate a clear knowledge of the many issues which became prominent in America during the 1960s. 2. Analyse critically the role of social movements in the 1960s. 3. Be aware of the way in which the 1960s still helps shape contemporary politics, society and culture.

POL 401 Politics IV (Honours) 48cp

Annual Wollongong On Campus
Spring 2003 / Autumn 2004 Wollongong On Campus

Contact Hours: 2 hour seminar per week.

Pre-requisites: 52 credit points in a Politics major at an average of no less than 70%

Assessment: Thesis 60%; essays 40%

Subject Description: Requirements: (1) Research thesis of 15,000-20,000 words, based on student's own supervised research and making a modest contribution to political knowledge; (2) Two to three major essays totalling 11,000 - 12,000 words based on the seminar series (3) Regular attendance at weekly honours seminars (two sessions); (4) A work in progress report to be delivered to the seminar group

POL 430 Joint Honours in Politics and Another Discipline 48cp

Annual Wollongong On Campus
Spring 2003 / Autumn 2004 Wollongong On Campus

Contact Hours: 2 hour seminar per week.

Pre-requisites: 52 credit points in a Politics major at an average of no less than 70%.

Assessment: Depends on the nature of the combined degree

Subject Description: Students are advised to contact the Head of Program well before the session in which they intend to begin their Honours year so that precise course requirements can be arranged with the other Program.

SOC 103 Aspects of Australian Society 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week.

Assessment: Report and exercises 20%; tutorial presentation 10%; tutorial participation 10%; Major essay (1500 words) 25%; Examination 35%

Subject Description: The subject concentrates on the basic issues involved in understanding both society in general, globalisation and contemporary Australian society. Themes of inequality and power are explored through the four dimensions of class, gender, ethnicity and the environment. The ways in which our individual lives intersect with the broader social structures are explored thorough an examination of family life, paid work, the influence of the media, and the impact of social movements.

Subject Objectives: On successful completion of this subject a student should be able to: 1. Define and use terms applicable to the study of Sociology within a social and cultural context. 2. Demonstrate an understanding of the range of theories and concepts utilized in the discipline. 3. Relate general theoretical concepts to specific phenomena. 4. Understand and utilize key methodological strategies in the study of the various levels of society. 5. Develop creative and innovative strategies for negotiating the rapidly changing future of human societies.

SOC 104 Communication, Media and Society 6cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week

Exclusions: (CCS109)

Assessment: Report and exercises 20%; tutorial presentation 10%; tutorial participation 10%; Major essay (1500 words) 25%; Examination 35%

Subject Description: Communication binds societies together, and the forms it takes range from the personal to the globe-spanning web of electronic communication. This subject examines the spectrum of communication from a sociological perspective, focusing not simply on the 'vehicle' of transmission but rather on what is being transmitted and its impact on society. The focus is on the media as a vehicle for cultural communication, fragmentation and change, introduces theoretical methodological issues, and its impact is evaluated in the areas of: tourism, religion, visuality and the television culture, and crime.

Subject Objectives: On successful completion of this subject a student should be able to: 1. Define and use terms applicable to the study of Sociology within a social and cultural context. 2. Demonstrate an understanding of the range of theories and concepts utilized in the discipline.

3. Relate general theoretical concepts to specific phenomena. 4. Understand and utilize key methodological strategies in the study of the various levels of society. 5. Develop creative and innovative strategies for negotiating the rapidly changing future of human societies.

SOC 110 Understanding Audiences 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Assessment: Content analysis exercise 30%; Focus group exercise 30%; Mid-session multiple-choice test 20%; End of session multiple choice test 20%

Subject Description: Understanding the nature of media audiences is fundamental to media and communication studies. This subject examines the concept of audience from a variety of perspectives.

Issues and topics include: the creation of audiences by the media; media audiences for popular culture (music-videos, magazines, sport); fans and fandom; advertising; television ratings; the gendered audience. A fundamental understanding of quantitative and qualitative research into various audience groupings, the use of appropriate analytical tools, and the ability to critically analyse academic and industry-based audience research are some of the skills taught in this subject.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Understand the nature of media audiences and how audiences relate to different media. 2. Identify the key theories used to understand media audiences. 3. Understand how audience research is carried-out and applied by media industries and media researchers.

4. Conduct some basic qualitative and quantitative audience research. 5. Critically reflect on, and analyse, audience research studies.

SOC 203 Explaining Society 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week

Pre-requisites: (12 credit points)

Assessment: Article review 20%; seminar paper 40%; Mid session exam 20%; Final Exam 20%.

Subject Description: Students are introduced to sociological theory, considered as a constantly evolving form of socially organized practical activity. What do people do with sociological theories, and what do sociological theories do with people? Examples will be drawn from a wide variety of classic and contemporary writings in sociology and cognate areas of the human sciences. We will emphasise seeking commonalities and parallels among theories with a view to possible accommodation or synthesis, while identifying outstanding points of disagreement and considering various means for their resolution in logical analysis, empirical research and application to questions of policy or organization.

Subject Objectives: Upon completion, students should be able to: 1. develop useful theories about people in society, and suggest ways of testing or applying them as appropriate; 2. use these in sustained arguments, spoken and written, responding to peer feedback; 3. identify the main features of sociological theorizing and forms of explanation by reviewing a book; 4. recognize and apply key sociological concepts, theories and theorists under multiple-choice examination conditions; 5. give correct terminology and other basics under short-answer examination conditions; and 6. reflect on ethical conduct of social theory and vice-versa.

SOC 205 Sociology of the Family 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (12 credit points)

Assessment: Interview transcript 20%; seminar presentation & paper 30%; seminar preparation 10%; Interpretive analysis 40%

Subject Description: The family occupies a contradictory place in contemporary social thought, on one hand seen as natural part of social life and on the other in crisis. This subject explores the diverse sociological approaches to the family through a comparative analysis of family life in Australia and selected Asian countries. It places these theoretical perspectives in the context of the changes in family form and the life cycle from early modern times to the present.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate an understanding of a range of sociological and anthropological theories

2. Apply a range of sociological and anthropological theories to the study of the family and various stages of the life cycle 3. Develop competence and confidence in the use of written and verbal skills in the analysis of a range of issues dealt with in the subject 4. Gain experience in applying sociological methodologies 5. Develop skills in critically analysing texts 6. Prepare and deliver oral presentations

SOC 206 Youth and Popular Culture 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week

Pre-requisites: (12 credit points)

Assessment: Policy analysis paper (20%); Subcultures project (40%); Mid-session multiple choice test (20%); End of session multiple-choice test (20%)

Subject Description: This subject reviews sociological conceptions of culture, explores the creation of sub-cultures, and identifies major forms, and theories, of contemporary popular culture. It will evaluate the position of young people in Australian society, and analyse the development of youth policy in terms of how society constructs youth as a social problem and how the state politically regulates young people's lives. Finally it will also consider youth as social agents (e.g. as consumers and citizens) and consider the many ways youth construct and use a variety of popular cultural forms (e.g. fashion, music, dance).

Subject Objectives: On successful completion of this subject, students should be able to: 1. Develop an understanding of competing theories and approaches in the sociology of culture. 2. Understand the relationship between youth and the state. 3. Show how popular culture formation is a continually changing and contested process. 4. Understand the links between youth, popular culture, consumerism and consumption. 5. Devise and conduct some basic research on youth subcultures.

SOC 222 Sociology of Crime and Justice 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (12 credit points)

Assessment: Research essay 50%; critical commentaries 30%; group presentation 20%

Subject Description: The course is a critical and contextual look at aspects of the criminal justice system in, primarily, New South Wales. Areas covered include: policing, the court system, the representation of crime, public space, juveniles and justice, the criminalisation of social disadvantage and white-collar crime.

These areas are addressed through an interdisciplinary framework that draws on ideas from sociology, criminology, social theory and cultural studies. Students are encouraged to consider how we are constituted in relation to the criminal justice system; rather than looking at the system from an imagined position outside its intricate and complex practices, institutions and representations.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. think critically and creatively to challenge accepted or commonsense knowledge about the crime problem. 2. have an understanding of how the criminal justice system works in NSW 3. reflect on criminology and sociology as disciplines, that is, as part of the human sciences. 4. examine some of the sources of criminal justice policy - media-public opinion, criminology and political opportunism. 5. work in a team to give a presentation on a set topic.

SOC 224 Violence, Fear and Civilisation: 8cp the Evolution of States

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week

Pre-requisites: (12 credit points)

Assessment: Email list postings 10%; Major research paper 50%; Multiple-choice and short-answer examination 40%

Subject Description: This is a comparative-historical overview of what happens to fear and violence in human life with increasing social-structural complexity and state development. With the growth and differentiation of populations, changing patterns in the use and threat of force have been noted and correlated with other aspects of customary personal life and behaviour, knowledge and social institutions. Such concepts as civilizing and decivilizing processes seek to characterize these variations. How are we the same as and different from other peoples, or our own ancestors, when it comes to the disciplining of our nastier urges? Implications for current policy debates will be considered. Topics for papers or discussion might include: origin of the state, sources of civil conflict, welfare and warfare states, as well as medieval manners, Dahomean warrior women, the Knights Templar, and whether we will ever know what the Yanomamv are really like.

Subject Objectives: On successful completion of this subject, students should be able to: 1. display orally and in writing an appreciation of both diversities and similarities in processes of state evolution; 2. discuss and answer questions on a number of key texts in the area of civilizational theory; 3. conduct library and net-based research and present the results in a seminar paper; 4. show in email discussion both an informed knowledge of the subject matter and appropriate online behaviour.

SOC 231 Social Analysis 8cp

Spring	Wollongong	On Campus
Spring	Shoalhaven	Flexible
Spring	Bega Education Access Centre	Flexible
Spring	Batemans Bay	Flexible
Spring	Moss Vale	Flexible

Contact Hours: Flexible delivery, lectures face to face, lecture notes, 2 hour seminar (3hours equivalent per week)

Pre-requisites: (12 credit points)

Exclusions: Not to count with SOC296

Assessment: Report review 10%; Research proposal 20%; Short answer exercises 30%; Research report 40%

Subject Description: This subject introduces students to key methods in social research: literature-based research, content analysis of documents, secondary analysis of statistics, and observation. Students will learn the value of using multiple research methods to explore and explain social relations. This is a skills based subject which includes undertaking library research, constructing and reading tables, manipulating a computer database, and writing a research report. The students will study aspects of the University of Wollongong.

Subject Objectives: Learning Objectives: At the end of this subject a student should be able to: 1) Use the library as a resource for original research; 2) Collect and analyse unobtrusive data; 3) Construct and manipulate secondary statistical data; and 4) Conduct a research project and develop report writing skills

SOC 242 Contemporary Issues in Society 8cp

Autumn	Wollongong	On Campus
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Contact Hours: 1 hour lecture and 2 hour seminar per week.

Pre-requisites: (12 credit points)

Assessment: Introductory essay 25%; tutorial presentation 20%; Participation 15%; Major essay (2000 words) 40%

Subject Description: The subject will extend the concepts and forms of argument introduced in 100 level subjects to current social issues. The focus will vary from year to year, depending upon the prominence of particular social issues and the availability of staff. Among topics that might be covered are: Aborigines, unemployment, globalisation, family forms, welfare forms and poverty.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Define and use terms applicable to the study of Sociology within a social and cultural context. 2. Demonstrate an understanding of the range of theories and concepts utilized in the arguments concerning Globalisation and on its effect on the environment. 3. Relate general Sociological theoretical concepts to specific phenomena. 4. Understand and utilize key methodological strategies in the study of the various levels involved. 5. Develop creative and innovative strategies for negotiating the rapidly changing future of human societies.

SOC 243 Contesting Asia: Culture, Diversity, Difference 8cp

Autumn	Wollongong	On Campus
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Contact Hours: 1 hour lecture, 2 hour seminar per week.

Pre-requisites: (12 credit points)

Exclusions: Not to count with HIST287

Assessment: Critical summaries 10%; mid-session class test 25%; oral presentation 20%; subject summary assignment 45%

Subject Description: This subject will examine the intersection of culture, economy and religion in Asia. It will analyse the significance of comparative approaches in sociology and anthropology in the age of globalisation. Drawing upon contrasting examples from contemporary Asian societies, particularly South Asia this subject will investigate some of the taken for granted assumptions about the process of social change. It will consider the notion of difference to explore the ways in which diverse groups within the region assert their cultural identities, resist marginalisation and critique forms of inequality. We will also pay attention to how Asian cultures have been represented in Western texts.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. demonstrate an understanding of social change in the sphere of culture, religion and economy in selected Asian countries 2. acquire knowledge of comparative approaches in sociology and anthropology for studying social change in Asian societies and cultures 3. apply a range of theories to explain forms of inequality in South Asia 4. develop skills in critically analysing texts 5. work in small groups 6. prepare and deliver oral presentations

SOC 244 Punishment: Purpose, Practice, Policy 8cp

Spring	Wollongong	On Campus
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Contact Hours: 1 hour lecture; 2 hour seminar per week

Pre-requisites: (12 credit points)

Assessment: Research essay 50%; Concept paper 30%; Group presentation 20%

Subject Description: Why do we punish those who break the law; what benefit is gained, and for whom, from imprisonment and other forms of criminal justice sanctions? Are jails for retribution, rehabilitation, deterrence, revenge, a symbol of control or order, a way to make us feel superior? Once some the reasons or justifications for punishment are addressed we look at some of the multiple ways to punish offenders and some policy options that can, or cannot make a difference.

The course is an investigation into the more general issue of what we as a society get out of punishment and what it costs each of us, ie the differential impact of punishment on various sections of society.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. discuss the main justifications for punishing offenders; 2. outline and analyse the main forms of sanctions available to the criminal justice system; 3. produce a detailed analysis of some of the main concepts involved in purposes of punishment; 4. to make and sustain links between the purposes and practices of punishment; 5. develop and present a group project on a set topic.

SOC 302 Contemporary Social and Political Thought 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 16 cp at 200-level Sociology including SOC203

Assessment: Major essay 40%; seminar paper 30%; Presentation & participation 20%

Subject Description: This subject intends to provide an overview of twentieth century developments in the discipline through an examination of contemporary issues, debates and controversies. Students will examine some critical issues such as interests, consciousness and action; social and cultural reproduction, ideology and hegemony; power, knowledge and resistance, culture and globalisation. The debates around these issues will be explored through a variety of theoretical perspectives.

SOC 303 The Individual in Society 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 16 cp at 200-level of Sociology

Assessment: Exercises 40%; Group project presentation 20%; group major report 40%

Subject Description: This subject examines fundamental aspects of human identity and explores the extent to which an individual is 'socially constructed'.

The subject broadly addresses the question of how personal identity is achieved and communicated in the context of change and uncertainty. The individual is located in the historical, cultural and institutional context of 'modern'/postmodern' times through a consideration of contemporary myths ideologies and practices which provide structure and meaning to daily life (eg love, gender, truth). These issues involve cross-cultural exploration of different models of self, identity and relationship. Students have the opportunity to explore a range of perspectives including interactionist, structuralist, post-structuralist and post-modern approaches to questions of identity and communication. This also involves some consideration of 'non-western' traditions and questions about the ecological status of human identity.

SOC 305 Race and Ethnic Studies 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week

Pre-requisites: (16 cp at 200-level Sociology) or (ABST100 plus 8 credit points of 200-level Sociology)

Assessment: seminar paper 20%; seminar presentation 15%; Mid session class test 25%; Open book final examination 40%

Subject Description: This subject introduces students to theories of race, racism, ethnicity and migration.

These will be linked to other dimensions of social structure and action, in particular class and gender relations. Global political economy, international migration and the process of ethnic group formation will be examined as the basis for many current situations of ethnic diversity. For Australia, we will look at the situation of indigenous people and of immigrants, and examine the role of cultural diversity in the development of social relations and national identity. We will also examine such issues at the international level. Examples will be drawn both from Australia and other countries. The subject includes consideration of the subjective and structural dimensions of racial oppression, ethnic mobilisation and liberation movements, as well as an analysis of the theoretical and substantive relationships between culture, identity and resistance.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. demonstrate an understanding of current issues relating to race and ethnicity on a global scale 2. evaluate different theoretical frameworks in sociology and anthropology that have been utilised to explain race and ethnic relations in different social contexts 3. apply sociological analyses to several current issues 4. use the library as a resource for original research 5. work in small groups 6. critically analyse the work of others 7. communicate and argue sociologically

SOC 306 Researching Everyday Life 8cp

Autumn Wollongong On Campus

Autumn Shoalhaven Flexible

Autumn Bega Education Access Centre Flexible

Autumn Batemans Bay Flexible

Contact Hours: Wollongong Campus: Flexible delivery 1 hour lecture, 2 hour seminar + online interaction, Other Campuses: online lectures, 2hour weekly seminar + online interaction (3hours equivalent per week)

Pre-requisites: (16cp at 200-level Sociology) or (ARTS113 and 16cp at 200-level including SOC231)

Assessment: Exercises 40%; Group project presentation 20%; Group major report 40%.

Subject Description: This subject will build on the research skills introduced in SOC 231. Contemporary debates in research methodology will be addressed through lectures, discussion and critical evaluation of the literature. Tools for advanced data analysis will be developed in skills-based workshops. Students will have an opportunity to practise the skills by conducting a group project.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. make a substantial contribution to the design and conduct of an empirical sociological investigation; 2. discuss and critically evaluate social research literature in a manner consistent with contemporary best practice; 3. work productively as a member of a research team; 4. present findings orally and in writing.

SOC 308 Social and Public Policy 8cp

Spring Wollongong Flexible

Spring Shoalhaven Flexible

Spring Bega Education Access Centre Flexible

Spring Batemans Bay Flexible

Subject Descriptions

Contact Hours: Wollongong: lectures face to face & online interaction + 2hour weekly seminar (3hour equivalent per week), Other Campuses: Flexible delivery, online lectures, video conference & online interaction + 2hour weekly seminar (3hours equivalent per week)

Pre-requisites: (16cp at 200-level Sociology) or (16cp at 200-level Politics) or (ARTS113 and 16cp at 200-level incl SOC231)

Assessment: Policy briefing paper 20%; submission presentation 30%; media exercise 10%; major essay 40%

Subject Description: This subject explores the relationship between social/public policy, policy models and sociological theory. The discussion of social/public policy in Australia will examine the changing role of the State, the development and impact of policy, and the historical and materialist base in which the State and its policies are located. Students will examine a wide range of contemporary policy concerns in Australia. This subject examines the theory and practice of policy analysis.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Formulate an overview of social/public policy theory, assumptions and processes. 2. Use some of the skills and knowledge required to engage in social policy analysis and research whether in a paid or unpaid capacity. 3. Analyse policy issues in contemporary Australian society. 4. Draft a submission and understand lobbying techniques (eg media) about a current policy issue.

SOC 309 Social Movement and Community Activism 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week

Pre-requisites: 16cp at 200-level Sociology

Assessment: Individual portfolio 30%, presentation 20%, research paper 50%.

Subject Description: Are social movements dead? Alternatively, have they simply re-invented themselves? The subject will examine how citizens (individually and collectively) accomplish and resist social change in our society.

Case studies of traditional organisations (trade unions), the new social movements (women, black/faith-based, urban, environmental) and web-based protest groups are used to illustrate political strategies ranging from a communication (symbols, music, slogans) and a social movement perspective are used to motivate participants.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Understand social movement literature, political strategies, community activism, methods of persuasion, power relations, global and local, mobilisation, and organising in a sociological framework; 2. Apply these core concepts to a case study of a social movement; 3. Explore the roles as social advocate, community activist and effective citizenship within the context of your local community; 4. Assess the advantages and limits of various strategies that are used to promote, resist and oppose social change.

SOC 310 Community Organisations, the Third Sector and Civil Society 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week

Pre-requisites: (16 cp at 200-level)

Assessment: Research paper (45%); Organisational project (35%); Presentation (20%)

Subject Description: When we see or hear the terms 'community organisations', 'volunteers', the 'community sector' and 'charities' many Australians think of the Salvos' (people feeding the poor and destitute, giving out blankets), the Red Cross and the Rural Fire Service (volunteering). This subject explores the diversity of these and other organisations found in the third sector, their history and role in contemporary society. The subject looks at some emerging theory about these organisations. It examines some of the major internal and external pressures facing organisations in an era of welfare state contraction, as well as the implication for workers, managers, volunteers and service users.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Understand concepts such as community sector, voluntarism, welfare state, third sector, charity, community organisations and community activism and apply them sociologically. 2. Understand role of these organisations in Australian society. 3. Understand the different roles of volunteer, worker and manager in these organisations. 4. Critically analyse the changes taking place to these organisations. 5. Apply this knowledge to policy debates.

SOC 318 Modernity, Development & Social Change 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2hour tutorial per week

Pre-requisites: 16 cp in Sociology at 200-level

Assessment: Analysis of development issue and policy 30%; seminar presentation & paper 30%; Class test 15%; and seen examination 25%

Subject Description: This subject will examine the development experience of people in the new global order. It will introduce students to the debates on modernity and development that emerged following the break up of European colonial empires. It will examine the ensuing interaction between rich and poor nations, and theoretical explanations for the emergence of international disparities of wealth. In particular it will focus on the Asia-Pacific region and explore the power laden international context in which development discourses are produced. A number of case studies will be utilised to explore local understanding of what constitutes development.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate an understanding of a range of sociological and anthropological theories 2. Apply sociological analyses to several current development issues 3. Use the library as a resource for original research 4. Work in small groups 5. Prepare and deliver oral presentations 6. Critically analyse the work of others 8. Communicate and argue sociologically. 9. Demonstrate an understanding of contemporary development issues in the region

SOC 330 The Sociology of Gender Relations 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 16 credit points in Sociology at 200 level

Assessment: seminar presentation 15%; minor essay 20%; seminar preparation 20%; open book examination 45%

Subject Description: This subject examines sociological theories that seek to explain the significance of gender as an organising principle of social life. It examines contemporary debates on the relationship between sex, gender and biology, and the intersection of gender and power.

The following issues are addressed through a comparative analysis of literature on masculinity and femininity: class, sexuality, ethnicity, the body, violence, and the state.

Subject Objectives: On successful completion of this subject, a student should be able to: 1) Understand the social significance of gender, and the different ways sociologists discuss it; 2) Apply sociological analyses to several current issues in gender relations; 3) Use the library as a resource for original research; 4) Work in small groups; 5) Use email to contribute to an on-line discussion group; 6) Critically analyse the work of others; and 7) Communicate and argue sociologically.

SOC 334 Bread & Circuses 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week

Pre-requisites: 16cp in Sociology at 200-level

Assessment: tutorial paper 20%; tutorial presentation 20%; Class participation 20%; Major essay 40%

Subject Description: Bread and Circuses explores the issues of spectacle and violence. Utilising the Roman Games as a starting point it focuses on the modern day media and electronic circus (newspapers, magazines, books, television, movies, radio and advertising industries). The subject examines three major areas: war, sport and horror in its analysis of spectacle and violence.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Define and use terms applicable to a Sociological study of spectacle and violence within a social and cultural context. 2. Demonstrate an understanding of the range of theories and concepts utilized in the arguments concerning both the functions and impact of spectacle and violence. 3. Relate general sociological theoretical concepts to specific phenomena in the areas of war, sport and horror in order to examine their interconnections. 4. Understand and utilize key methodological strategies in the study of the various levels involved. 5. Develop creative and innovative strategies for negotiating the rapidly changing future of human societies.

SOC 341 Special Topics in Sociology 8cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Contact Hours: see Convenor of Program

Pre-requisites: (16 cp at 200-level Sociology including SOC203 and SOC231 and permission of Convenor of Program)

Subject Description: Topics for this subject may be chosen from any area of Sociology which the Convenor of Program considers to be of suitable substance and level to be offered as a SOC300 subject. This will be a reading course offered under the direct supervision of a member of staff. For details of availability of topics offered, students should consult the Convenor of Program. This subject is available only in special circumstances.

SOC 349 Social Regulation Policies and Issues 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2hour tutorial per week

Pre-requisites: (16cp at 200-level) or (16cp at 200 level LAW or LLB)

Assessment: Research essay 50%; concept paper 30%; group presentation 20%

Subject Description: Why are some individuals and groups (the mentally ill, criminals, youth 'gangs', dole 'bludgers', soccer hooligans, asylum seekers, welfare 'cheats') subject to rigorous forms of social surveillance and social control than others in society? Theories of social control, welfare state regimes and neo-liberalism are used to address these questions. Alternate approaches to analysing these concerns (eg governance and governmentality) are briefly explored. The theories are linked to current issues including, crime prevention, border protection and unemployment.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Understanding of the following concepts: social control and regulation, neo-liberalism, welfare state regimes, and governmentality and apply them sociologically. 2. Use these concepts in relation to current policy debates and social practices. 3. Work in a team to produce a group presentation on a set topic. 4. Read social theory for its relevance to informing policy debates.

SOC 400 Sociology IV Honours 48cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Autumn 2004

Contact Hours: 2 hour seminar per week

Pre-requisites: Major in Sociology with a high credit average in two 300-level Sociology subjects

Assessment: 50% Thesis, 50% Coursework

Subject Description: To be awarded a BA(Hons) in Sociology students must successfully complete Soc910 and two other subjects to be agreed with the Honours Coordinator. Students shall not undertake subjects substantially similar to those already completed as part of their previous studies. Students must also undertake a supervised research project to be presented in a thesis of approximately 15,000 words.

SOC 450 Joint Honours in Psychology and Sociology 48cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Autumn 2004

Contact Hours: see Honours coordinator

Pre-requisites: Major in Sociology with a high credit average in two 300-level Sociology subjects

Assessment: 50% Thesis and 50% coursework

Subject Description: For details of the four year program for students intending to enrol in this subject, refer to entry under Program of Psychology.

SOC 451 Joint Honours in Sociology and Another Discipline 48cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Autumn 2004

Contact Hours: see Honours Coordinator

Pre-requisites: Major in Sociology with a high credit average in two 300-level Sociology subjects

Assessment: 50% thesis and 50% coursework

Subject Descriptions

Subject Description: The combined Honours course will consist of a program of study totalling 48 credit points approved by the Sociology Head of Program Head of Sociology in collaboration with the Head of the other Program concerned. The program will normally be composed of elements offered at 400-level by the two Programs.

SPAN110 Spain and the Spanish - An Introduction 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: SPAN151

SPAN151 Spanish for Beginners 1 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 3 hours tutorial, 1 hour laboratory per week.

Assessment: Continuous assessment 90%; Participation 10%

Subject Description: This multi-media subject for beginners or near beginners in Spanish presupposes no prior study of the language. It emphasises oral communication (listening and speaking) and the development of competence in reading and writing through a functional-notional approach with a major emphasis on the communicative functions and structural aspects of the language and the development of those skills necessary to fulfil this.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Comprehend simple spoken Spanish in common situations; 2. Extract essential information from basic texts in Spanish; 3 Express themselves orally in Spanish in situations of basic social interaction, such as initiating conversation, expressing simple ideas, opinions and experiences, and requesting information; 4. Express themselves accurately in written Spanish using simple vocabulary and constructions; perceive system in language and use that awareness to generate meaning; 5. Demonstrate an insight into the values and attitudes of people from another culture.

SPAN152 Spanish for Beginners 2 6cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 3hours tutorial, 1 hour laboratory per week

Pre-requisites: SPAN151

Assessment: Continuous assessment 90%; Participation 10%

Subject Description: The programme begun in SPAN 151 is sustained and developed, advancing students proficiency in listening, speaking, reading and writing, and emphasising both communicative and structural aspects of the language.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Comprehend simple spoken Spanish in a variety of situations;

2. Comprehend brief reports of current affairs in Spanish; 3. Read and respond personally to a variety of basic texts in Spanish; 4. Express themselves orally in Spanish in a wide range of everyday situations; 5. Express themselves accurately in written Spanish using a range of vocabulary and constructions; 6. Perceive system in language and use that awareness to generate meaning; 7. Demonstrate an insight into the values and attitudes of people from another culture.

SPAN161 Spanish IA Language 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: SPAN161

SPAN162 Spanish IB Language 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: SPAN161

SPAN251 Spanish Intermediate I 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2hours tutorial; 1hour laboratory per week.

Pre-requisites: (SPAN152 or equivalent)

Exclusions: SPAN205

Assessment: Continuous assessment of assignments, presentations, tests and participation

Subject Description: This subject further develops all the communicative skills in Spanish through the introduction of more complex language structures and active vocabulary development for use in oral communication, reading comprehension, stylistic analysis and written communication and composition.

Subject Objectives: On successful completion of this subject, students should be able to: 1. achieve improved comprehension of the speech of Spanish native speakers in situations of everyday communication; 2. develop strategies for coping with unfamiliar lexical and syntactic elements of the written and spoken language; 3. make more flexible use of known language and be more willing to experiment with unfamiliar language in recounting events and expressing ideas and opinions; 4. read and respond personally to increasingly sophisticated texts; 5. view televised news bulletins, access current affairs Web sites, and synthesise information into written reports; 6. through exposure to televised news bulletins and media websites students will be initiated into the social, cultural and political fabric of contemporary Spain and the Hispanic world; 7. consolidate and expand their working knowledge of basic Spanish grammar.

SPAN252 Spanish Intermediate II 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2hours tutorial, 1hour laboratory per week.

Pre-requisites: (SPAN251 or equivalent)

Exclusions: SPAN206

Assessment: Continuous assessment of assignments, presentations and tests

Subject Description: The programme for SPAN 251 is continued and expanded.

Subject Objectives: On successful completion of this subject, students should be able to: 1. achieve improved comprehension of the speech of Spanish native speakers in situations of everyday communication; 2. develop strategies for coping with unfamiliar lexical and syntactic elements of the written and spoken language; 3. make more flexible use of known language and be more willing to experiment with unfamiliar language in recounting events and expressing ideas and opinions; 4. read and respond personally to increasingly sophisticated texts;

5. view televised news bulletins, access current affairs Web sites, and synthesise information into written reports; 6. through exposure to televised news bulletins and media websites students will be initiated into the social, cultural and political fabric of contemporary Spain and the Hispanic world; 7. consolidate and expand their working knowledge of basic Spanish grammar.

SPAN261 Spanish IIA Language 8cp
Contact Hours: Not on offer in 2003
Pre-requisites: SPAN162

SPAN262 Spanish IIB Language 8cp
Contact Hours: Not on offer in 2003
Pre-requisites: SPAN261

SPAN351 Spanish IIIC Language 8cp
Contact Hours: Not on offer in 2003
Pre-requisites: SPAN352

SPAN352 Spanish IIID Language 8cp
Contact Hours: Not on offer in 2003
Pre-requisites: SPAN351

SPAN361 Spanish IIIA Language 8cp
Contact Hours: Not on offer in 2003
Pre-requisites: SPAN252

SPAN362 Spanish IIIB Language 8cp
Contact Hours: Not on offer in 2003
Pre-requisites: SPAN361

STS 100 Social Aspects of Science and Technology 6cp
Autumn Wollongong On Campus
Contact Hours: 2 hour lecture; 1 hour tutorial per week
Exclusions: (STS 103) OR (STS 190) OR (STS 200) OR (STS 203) OR (STS 290)

Assessment: Essays, presentations and class participation

Subject Description: This subject introduces different ways of analysing the social and historical dimensions of science, medicine and technology - their origins, dynamics, impacts and management. After breaking down some common myths about science and technology and their relation to society, it shows how we can conceptualise and investigate in a more fruitful way the formation of scientific knowledge, the development of technological artefacts and systems, and debates and policies concerning scientific and technological issues.

Subject Objectives: Drawing upon scholarship from the History Philosophy and Social Studies of Science and Technology STS100/200 students should develop critical insights into many of the important social and political dimensions of scientific and technological change. Students should acquire skills in critical reading and thinking, essay writing, research, and public speaking (through presenting seminars).

STS 103 Social Aspects of Science and Technology 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 6 cp of Arts subjects

Exclusions: (STS 100) OR (STS 203) OR (STS 190) OR (STS 200) OR (STS 290) STS 100 OR STS 103 OR STS 190 OR STS 200 OR STS 290

Assessment: Essays, assignments and exam

Subject Description: This subject introduces different ways of analysing the social and historical dimensions of science, medicine and technology - their origins, dynamics, impacts and management. After breaking down some common myths about science and technology and their relation to society, it shows how we can conceptualise and investigate in a more fruitful way the formation of scientific knowledge, the development of technological artefacts and systems, and debates and policies concerning scientific and technological issues.

STS 112 The Scientific Revolution: History, Philosophy & Politics of Science 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture; 1hour tutorial per week

Exclusions: (STS 117) OR (STS 192) OR (STS 212) OR (STS 217) OR (STS 292) OR (HIST250)

Assessment: Essays, presentations and class participation

Subject Description: This subject introduces fundamental issues and techniques in the history and philosophy of science. It examines the origins of modern European science, as exemplified in the work of Copernicus, Galileo, Newton and others. The social, religious, political and economic factors shaping the emergence and content of the new science are analysed. Emphasis is placed on critical historical thinking and use of tools from the sociology of scientific knowledge.

Subject Objectives: 1. To develop an understanding of the nature of modern science and of the reasons it developed in Western Civilisation. 2. To explore the role of social, religious, political and economic factors in shaping the emergence and content of new scientific theories and the demise of old ones. 3. To acquire perspectives and concepts suitable for critically analysing how science developed and how scientific knowledge is constructed, evaluated, and at times, radically altered. 4. To develop skills and techniques in the understanding and evaluation of historical source materials. 5. To develop the ability to communicate clearly and concisely, using the written and spoken word, and to construct persuasive and adequately supported arguments.

STS 116 Environment in Crisis: Technology and Society 6cp

Spring Wollongong On Campus

Contact Hours: WebCT lecture, 2 hour tutorial per week

Exclusions: (STS 216) OR (STS 218)

Assessment: Essay, presentations, test and class participation

Subject Description: This subject deals with the technological and social causes of environmental problems and the obstacles in the way of solutions being found to these problems. A range of case studies is used to illustrate the role of human activities in the environmental crisis and its solution. A focus on particular industries is complemented by an examination of the parts played by the media, governments, scientists, corporations and the community.

Subject Objectives: As a result of involvement in the activities of this subject students should be able to present in oral and written form critical analyses of the role of science and technology in the creation, explanation, prevention and solution of environmental problems, and, in particular: the social causes and consequences of environmental damage and the ways that debates on them are conducted; the procedures and techniques by which decisions on environmental controversies are, or might be, made, and action on them taken; different ways of explaining and understanding processes and activities associated with environmental controversies.

**STS 117 The Scientific Revolution: History, 6cp
Philosophy and Politics of Science**

Contact Hours: Not on offer in 2003

Pre-requisites: 6 cp of Arts subjects

Exclusions: (STS112) or (STS212) or (STS217) or (STS192) or (STS292) or (HIST250)

Assessment: Essays, assignments and exam

Subject Description: This subject introduces fundamental issues and techniques in the history and philosophy of science. It examines the origins of modern European science, as exemplified in the work of Copernicus, Galileo, Newton and others. The social, religious, political and economic factors shaping the emergence and content of the new science are analysed. Emphasis is placed on critical historical thinking and use of tools from the sociology of scientific knowledge.

**STS 120 Technology in Society: East and 6cp
West**

Spring Wollongong On Campus

Contact Hours: 2hour lecture, 1hour tutorial per week

Exclusions: (STS 220) OR (STS 221)

Assessment: Essays, presentations and class participation

Subject Description: The role of technology in the functioning of the modern industrial nation has become the focus of international attention. The Asia-Pacific region has expanded in influence, transnational corporations have proliferated and the older industrial nations are attempting to adjust. Why have these changes taken place and what do they mean?

This subject investigates the social, economic, and political context of technological change.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentation and other contributions to tutorials, that they: can discuss and evaluate meanings of the term 'technology' and conceptions of its nature; can identify and comment critically on key frameworks for understanding the relations between technology and society; can deploy appropriate concepts from social analysis in examining a particular technological issue or area of technological development and impacts; have developed their skills in finding and using arguments and information;

in summarising and critically evaluating such material; and in writing and speaking.

STS 128 Computers in Society 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture 1 hour tutorial per week.

Exclusions: STS 228

Assessment: Essays, presentations and class participation

Subject Description: This subject examines the development, role and implications of computers. How are computers being applied in factories, offices and schools? What is their effect on work? What patterns of employment are they helping to create? Has job loss from their introduction been compensated by new economic activity? Are computers leading to increased political control? What are their implications for privacy? Students are introduced to relevant concepts and theoretical frameworks from the social sciences.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentation and other contributions to tutorials, that they: can examine critically and discuss social issues concerning computers and other information and communications technologies; can identify and systematically examine influences shaping the development and introduction of information technologies and their social impacts, and the requirements of their management; can deploy in their explanations some fundamental concepts used in social analysis; have developed their skills in finding and using arguments and information; in summarising and critically evaluating such material; and in writing, speaking and collaborating in groups.

**STS 200 Social Aspects of Science and 8cp
Technology**

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture and 1 hour tutorial per week

Pre-requisites: 24 credit points

Exclusions: (STS 100) OR (STS 103) OR (STS 190) OR (STS 203) OR (STS 290)

Assessment: Essays, presentations and class participation

Subject Description: This subject introduces different ways of analysing the social and historical dimensions of science, medicine and technology - their origins, dynamics, impacts and management. After breaking down some common myths about science and technology and their relation to society, it shows how we can conceptualise and investigate in a more fruitful way the formation of scientific knowledge, the development of technological artefacts and systems, and debates and policies concerning scientific and technological issues.

Subject Objectives: Drawing upon scholarship from the History Philosophy and Social Studies of Science and Technology STS100/200 students should develop critical insights into many of the important social and political dimensions of scientific and technological change. Students should acquire skills in critical reading and thinking, essay writing, research, and public speaking (through presenting seminars).

**STS 203 Social Aspects of Science and 8cp
Technology**

Contact Hours: Not on offer in 2003

Pre-requisites: (24 cp including at least 1 Arts subject)

Exclusions: (STS100) or (STS200) or (STS190) or (STS290)

Assessment: Essays, assignments and exam

Subject Description: This subject introduces different ways of analysing the social and historical dimensions of science, medicine and technology - their origins, dynamics, impacts and management. After breaking down some common myths about science and technology and their relation to society, it shows how we can conceptualise and investigate in a more fruitful way the formation of scientific knowledge,

the development of technological artefacts and systems, and debates and policies concerning scientific and technological issues.

STS 212 The Scientific Revolution: History, Philosophy & Politics of Science 8cp

Spring Wollongong On Campus

Contact Hours: 2hour lecture and 1hour tutorial per week

Pre-requisites: 36 credit points

Exclusions: (STS 112) OR (STS 117) OR (STS 192) OR (STS 217) OR (STS 292) or (STS 250)

Assessment: Essays, presentations and class participation

Subject Description: This subject introduces fundamental issues and techniques in the history and philosophy of science. It examines the origins of modern European science, as exemplified in the work of Copernicus, Galileo, Newton and others. The social, religious, political and economic factors shaping the emergence and content of the new science are analysed. Emphasis is placed on critical historical thinking and use of tools from the sociology of scientific knowledge.

Subject Objectives: 1. To develop an understanding of the nature of modern science and of the reasons it developed in Western Civilisation. 2. To explore the role of social, religious, political and economic factors in shaping the emergence and content of new scientific theories and the demise of old ones. 3. To acquire perspectives and concepts suitable for critically analysing how science developed and how scientific knowledge is constructed, evaluated, and at times, radically altered. 4. To develop skills and techniques in the understanding and evaluation of historical source materials. 5. To develop the ability to communicate clearly and concisely, using the written and spoken word, and to construct persuasive and adequately supported arguments.

STS 215 Globalisation: technology, culture and media 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture 1hour tutorial per week

Pre-requisites: 36 credit points

Exclusions: STS 315

Assessment: Essays, presentations and class participation

Subject Description: The view that scientific, technological and economic development automatically leads to progress is very common. It underlies the thrust for spreading western technological and economic systems throughout the world. The historical development of this view is critically examined and the role that the media has played in its propagation discussed.

Subject Objectives: At the end of this subject, students should have demonstrated, that they: can identify and characterise different analyses and viewpoints about science and technology in industrial societies; have an appreciation of the historical origins and specificity of notions of 'progress' and images of science and technology;

have read work by some key authors on the relations of science, technology and society, and can comment on the significance of their contributions; are aware of the relation between STS analyses and practical intervention in policy and politics concerning scientific and technological issues, and some of the problems those two roles raise; can contribute to debates on some of the ethical and political issues about future uses and directions of science and technology;

have developed their skills in finding and using arguments and information; in critically evaluating such material; and in essay writing and seminar presentation.

STS 216 Environment in Crisis: Technology & Society 6cp

Spring Wollongong On Campus

Contact Hours: WebCT lecture and 2hour tutorial per week

Pre-requisites: 36 credit points

Exclusions: (STS 116) OR (STS 218)

Assessment: Essay, presentations, test and class participation

Subject Description: This subject deals with the technological and social causes of environmental problems and the obstacles in the way of solutions being found to these problems. A range of case studies is used to illustrate the role of human activities in the environmental crisis and its solution.

A focus on particular industries is complemented by an examination of the parts played by the media, governments, scientists, corporations and the community.

Subject Objectives: As a result of involvement in the activities of this subject students should be able to present in oral and written form critical analyses of the role of science and technology in the creation, explanation, prevention and solution of environmental problems, and, in particular: the social causes and consequences of environmental damage and the ways that debates on them are conducted; the procedures and techniques by which decisions on environmental controversies are, or might be, made, and action on them taken; different ways of explaining and understanding processes and activities associated with environmental controversies.

STS 217 The Scientific Revolution: History, Philosophy and Politics of Science 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: (24 cp including at least 1 Arts subject)

Exclusions: (STS112) or (STS117) or (STS192) or (STS212) or (STS292) or (HIST250)

Assessment: Essays, assignments and exam

Subject Description: This subject introduces fundamental issues and techniques in the history and philosophy of science. It examines the origins of modern European science, as exemplified in the work of Copernicus, Galileo, Newton and others. The social, religious, political and economic factors shaping the emergence and content of the new science are analysed. Emphasis is placed on critical historical thinking and use of tools from the sociology of scientific knowledge.

STS 218 Environment in Crisis: Technology and Society 8cp

Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Bega Education Access Centre Flexible

Spring Batemans Bay Flexible

Spring Moss Vale Flexible

Contact Hours: WebCT lecture and 2hour tutorial per week

Pre-requisites: 36 credit points

Exclusions: (STS 116) OR (STS 216)

Assessment: Essay, presentations, test and class participation

Subject Description: This subject deals with the technological and social causes of environmental problems and the obstacles in the way of solutions being found to these problems. A range of case studies is used to illustrate the role of human activities in the environmental crisis and its solution. A focus on particular industries is complemented by an examination of the parts played by the media, governments, scientists, corporations and the community.

Subject Objectives: As a result of involvement in the activities of this subject students should be able to present in oral and written form critical analyses of the role of science and technology in the creation, explanation, prevention and solution of environmental problems, and, in particular:- the social causes and consequences of environmental damage and the ways that debates on them are conducted; different ways of explaining and understanding processes and activities associated with environmental controversies.

STS 220 Technology in Society: East and West 8cp

Spring Wollongong On Campus
Contact Hours: 2hour lecture and 1 hour tutorial per week
Pre-requisites: 36 credit points
Exclusions: STS 120 OR STS 221

Assessment: Essays, presentations and class participation
Subject Description: The role of technology in the functioning of the modern industrial nation has become the focus of international attention. The Asia-Pacific region has expanded in influence, transnational corporations have proliferated and the older industrial nations are attempting to adjust. Why have these changes taken place and what do they mean? This subject investigates the social, economic, and political context of technological change.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentation and other contributions to tutorials, that they: can discuss and evaluate meanings of the term 'technology' and conceptions of its nature; can identify and comment critically on key frameworks for understanding the relations between technology and society; can deploy appropriate concepts from social analysis in examining a particular technological issue or area of technological development and impacts; have developed their skills in finding and using arguments and information; in summarising and critically evaluating such material; and in writing and speaking.

STS 221 Technology in Society: East and West 6cp

Spring Wollongong On Campus
Contact Hours: 2hour lecture and 1 hour tutorial per week.
Pre-requisites: 36 credit points
Exclusions: (STS 120) OR (STS 220)
Assessment: Essays, presentations and class participation

Subject Description: The role of technology in the functioning of the modern industrial nation has become the focus of international attention. The Asia-Pacific region has expanded in influence, transnational corporations have proliferated and the older industrial nations are attempting to adjust. Why have these changes taken place and what do they mean? This subject investigates the social, economic, and political context of technological change.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentation and other contributions to tutorials, that they: can discuss and evaluate meanings of the term 'technology' and conceptions of its nature; can identify and comment critically on key frameworks for understanding the relations between technology and society; can deploy appropriate concepts from social analysis in examining a particular technological issue or area of technological development and impacts; have developed their skills in finding and using arguments and information; in summarising and critically evaluating such material; and in writing and speaking.

STS 223 The Politics of Medicine and Health 8cp

Contact Hours: Not on offer in 2003
Pre-requisites: 36 credit points
Exclusions: (STS323) OR (STS936)

Assessment: Essays, presentations and class participation
Subject Description: This subject explores the social, economic and political dimensions of medicine and health care: the forces shaping them, their implications and their limitations. Themes and topics may include: the shaping of medical knowledge and discourses, and concepts of health and sickness; institutions and markets; evaluation of new remedies; technological innovation; health and medical policies; the politics of cancer; health in the workplace; ethical dilemmas; critiques of conventional medicine and health care; alternative health practices.

Subject Objectives: At the end of this subject, students should:
 1. have a substantive knowledge and understanding of a range of issues relating to contemporary medical knowledge and practice and the roles of various groups and social institutions in creating, perpetuating or challenging these interpretations and practices, and of the principal debates, contending viewpoints and claims concerning them; 2. understand different theoretical approaches to the analysis of medical knowledge and practice; 3. be able to apply some of these theoretical approaches and appropriate sociological concepts to examples of health and medical issues; 4. be able to critically examine and evaluate examples of contemporary debates in medicine and health; 5. have developed their skills in finding and using arguments and information, in summarising and critically evaluating such material, and in essay writing and seminar presentation.

STS 228 Computers in Society 8cp

Spring Wollongong On Campus
Contact Hours: 2 hour lecture and 1 hour tutorial per week
Pre-requisites: 24 credit points
Exclusions: STS 128

Assessment: Essays, presentations and class participation
Subject Description: This subject examines the development, role and implications of computers. How are computers being applied in factories, offices and schools? What is their effect on work? What patterns of employment are they helping to create? Has job loss from their introduction been compensated by new economic activity? Are computers leading to increased political control? What are their implications for privacy? Students are introduced to relevant concepts and theoretical frameworks from the social sciences.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentation and other contributions to tutorials, that they: can examine critically and discuss social issues concerning computers and other information and communications technologies; can identify and systematically examine influences shaping the development and introduction of information technologies and their social impacts, and the requirements of their management; can deploy in their explanations some fundamental concepts used in social analysis; have developed their skills in finding and using arguments and information; in summarising and critically evaluating such material; and in writing, speaking and collaborating in groups.

STS 229 Scientific and Technological Controversy 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 36 credit points

Exclusions: STS329

Assessment: Essays, presentations and class participation

Subject Description: Recent studies of scientific and technological controversies have shown that scientific 'facts' and technological systems cannot be dissociated from the social and political interests which they embody. According to this approach, controversies must be treated as inherently social and political processes where there are no impartial experts. This subject will consider the process by which scientific and technological controversies arise, are prosecuted and resolved, making extensive use of case studies.

Subject Objectives: At the end of this subject, students should have demonstrated, that they: can explain how a social constructionist view of knowledge formation can be applied to an understanding of controversies in science and technology, both among practitioners and in the public sphere; have gained a substantive knowledge and understanding of a selection of current or historical controversies in science and technology; can locate material on, and analyse the social processes involved in, such a controversy; understand and can deploy key concepts from social theory in these analyses; can outline key debates within the sociology of knowledge on ways of explaining the social formation of knowledge claims, and on the relation between analysis and intervention; have developed their skills in finding and using arguments and information; in critically evaluating such material; and in essay writing and seminar presentation.

STS 235 The Politics of Risk 8cp

Spring Wollongong On Campus

Contact Hours: 3hour lecture/seminar per week

Pre-requisites: 36 credit points

Exclusions: (STS 335) OR (STS 376) OR (STS931)

Assessment: Essays, presentations and class participation

Subject Description: This subject examines hazards to human life and health associated with technologies - in the workplace and the wider environment. It focuses on the politics and economics of the generation and distribution of hazards; methods and problems in analysing and evaluating risks; discourses, debates and decision-making on hazards;

and strategies for managing them. It compares different theoretical approaches for explaining these processes and debates and for informing intervention in them.

Subject Objectives: At the end of this subject, students should:

1. have a substantive knowledge and understanding of a number of risk and health and safety issues, and of the contending viewpoints and claims on these issues;
2. be able to identify and characterise different theoretical approaches in explaining the social treatment of hazards, and identify advantages, problems and implications of these approaches;
3. be able to apply some of these theoretical approaches, and appropriate social concepts, to examples of hazards issues;
4. be able to critically examine and evaluate contributions to debates on hazards issues;
5. be able to describe qualitatively some risk analysis procedures and techniques; and
6. have developed their skills in finding and using arguments and information; in summarising and critically evaluating such material; in particular, in finding and interpreting statistical information; and in essay writing and seminar presentation.

STS 238 Changing Images of Nature and the Environment 8cp

Spring Wollongong On Campus

Contact Hours: 2hour lecture and 1hour tutorial per week

Pre-requisites: (24 credit points)

Exclusions: STS338

Assessment: Essays, presentations and class participation

Subject Description: This subject employs historical methods to survey struggles to construct and impose images of nature. Topics include: 17th century debates over mechanism and human domination of nature; the Enlightenment and the Romantic backlash; the rise of new disciplines of geology and biology; the Darwinian synthesis; and the social construction of 'wilderness'. Attention is paid to developing students' ability to analyse contemporary environmental debates in contextual and historical terms.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate knowledge of how some theories of nature, the environment and humankind's place in nature, at several stages in the history of Western Civilisation have reflected, shaped and/or legitimated the material and technical practices of the societies in which they appeared. Students should also show that they have acquired skills in gathering and interpreting historical and contemporary source material and demonstrate the ability to communicate clearly and concisely, using the written and spoken word to construct persuasive and adequately supported arguments.

STS 240 Technological change, popular culture and new media 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 36 credit points

Exclusions: (STS241) OR (STS340)

Assessment: Essays, presentations and class participation

Subject Description: Technological change has a long history of transforming means of communication, from the printing press to the internet. New means of expression become possible, from the novel to electronic music. Popular culture interacts with technology both through artistic production and commercial distribution and control. Theories of communication and technology help to make sense of this complex dynamic.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentations and other contributions to tutorials, that they: can identify different perspectives in communication theory;

Subject Descriptions

recognise that rapidly changing information and communication technologies have an effect on the processes of human communication; can justify the need for links between theories of cognition and theories of communication; can apply the insights gained from the abstract study of communication and technology to the world of work; have developed their skills in finding and using arguments and information; in critically evaluating such material; and in essay writing and seminar presentation.

STS 241 Technological change, popular culture and new media 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 36 credit points

Exclusions: (STS240) OR (STS340)

Assessment: Essays, presentations and class participation

Subject Description: Technological change has a long history of transforming means of communication, from the printing press to the internet. New means of expression become possible, from the novel to electronic music. Popular culture interacts with technology both through artistic production and commercial distribution and control. Theories of communication and technology help to make sense of this complex dynamic.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentations and other contributions to tutorials, that they: can identify different perspectives in communication theory; recognise that rapidly changing information and communication technologies have an effect on the processes of human communication; can justify the need for links between theories of cognition and theories of communication; can apply the insights gained from the abstract study of communication and technology to the world of work; have developed their skills in finding and using arguments and information; in critically evaluating such material; and in essay writing and seminar presentation.

STS 250 From Molecular Genetics to Biotechnology 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture and 2hour tutorial per week

Pre-requisites: (Any STS subject) or (BIOL103) or (other relevant subject as determined by Head of Program)

Exclusions: STS350

Assessment: Essays, presentations and class participation

Subject Description: This subject examines the development, impact and social context of molecular biology and genetic engineering. Topics may include: the development of a model for DNA; the development of recombinant DNA techniques; Asilomar and safety; corporate influence on molecular biology; ethical and political issues in genetic screening and genetic engineering; regulation of biotechnology and social control of research priorities; legal and moral issues in the patenting of life forms; the human genome project; the release of recombinant organisms; and biotechnology industry in Australia.

Subject Objectives: At the end of this subject, students should have demonstrated that they: recognise that molecular biology has been influenced by social, political and personal factors; can explain how economic, political and social factors influence molecular biology and biotechnology; can identify and illustrate the issues and potential social and environmental consequences that may arise from the application of molecular biology to biotechnology; can evaluate policies and means of

controlling developments in molecular biology and genetic engineering; can critically analyse statements for and against the development and application of various applications of genetic engineering; can prepare and present oral and written presentations on non-technical aspects of molecular biology and biotechnology; can research the literature covering a particular application of genetic engineering.

STS 260 Technology and body politics 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 36 credit points

Exclusions: STS360

Assessment: Essays, presentations and class participation

Subject Description: People's understanding and images of the body, health and human nature have been structured by the science, medicine, popular belief and larger social forces of different historical periods. An understanding of this shaping of medical knowledge is essential to a critical awareness of contemporary health issues. This subject examines the social history of science, medicine and culture and introduces Foucauldian, feminist and social constructivist perspectives.

STS 288 Science and the Media 8cp

Spring Wollongong On Campus

Contact Hours: Spring 3hour lecture/seminar per week

Pre-requisites: 36 credit points

Exclusions: STS388

Assessment: Essays, presentations and class participation

Subject Description: Science increasingly frames social debates, and is itself socially directed. The media play a central role in both processes, a role often subject to criticism, especially from scientists. This subject examines the complex social dimensions of the relation between science, media and the 'public'. Topics may include: scientific knowledge in political debates; public understanding of science; media portrayals of science and scientists; science journalism; science as 'public knowledge'; and pro- versus anti-science 'movements'.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentations and other contributions to tutorials, that they: can describe and comment critically on some key issues in the public understanding of science and technology; can explain some of the relations between key elements involved in the public reception of scientific and technological issues, such as forms of presentation, arenas of debate, forms of participation, the authority of scientific expertise, and the perception of risks; can identify and evaluate different theoretical approaches to explaining these issues and relations; can deploy relevant theoretical concepts from social analysis in the examination of a case study; have developed their skills in finding and using arguments and information in critically evaluating such material; and in essay writing and seminar presentation.

STS 300 The Environmental Context 8cp

Autumn Wollongong On Campus

Autumn Shoalhaven Flexible

Autumn Bega Education Access Centre Flexible

Autumn Batemans Bay Flexible

Contact Hours: WebCT lecture, 2hour tutorial per week**Pre-requisites:** 24 cp at 100-level**Assessment:** Essay, presentations, test and class participation

Subject Description: Perspectives on the wider political, economic and social context of the environment are developed and explored. Topics covered include: an analysis of the principles and goals of sustainable development including issues of growth, valuation of the environment, the global dimension and equity; politics and social dynamics of environmental controversies; the politics of scientific knowledge about the environment; methods and policies for managing the environment.

Subject Objectives: At the end of this subject students should be able to: 1. explain and illustrate the concepts and principles associated with sustainable development; 2. identify and contrast a range of views and philosophies on different sides of environmental debates; 3. recognise the complexity of interactions between economics, politics, culture, social institutions and environmental outcomes; 4. critically analyse and evaluate environmental solutions, policies and policy instruments; 5. apply social theory and STS concepts to environmental issues and problems; 6. prepare and present oral and written presentations on an environmental problem or issue; 7. independently research a chosen environmental topic.

STS 306 Special Topics in the Social and Policy Aspects of Engineering 6cp

Autumn Wollongong On Campus

Contact Hours: Autumn 3 hours per week**Pre-requisites:** ENGG161 and Approval of Head of Program**Assessment:** Essays and/or presentations

Subject Description: This subject allows Engineering students to examine specific social, historical or policy aspects of engineering projects or of the work of engineers or technologists. Students must obtain the approval of the Engineering Faculty for the subject to count towards their degree and the approval of the STS Program for a specific programme of work.

STS 315 Globalisation: technology, culture and media 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture 1 hour tutorial per week.**Pre-requisites:** 16 credit points at 200 level**Exclusions:** STS215**Assessment:** Essays, presentations and class participation

Subject Description: The view that scientific, technological and economic development automatically leads to progress is very common. It underlies the thrust for spreading western technological and economic systems throughout the world. The historical development of this view is critically examined and the role that the media has played in its propagation discussed.

Subject Objectives: At the end of this subject, students should have demonstrated that they: can identify and characterise different analyses and viewpoints about science and technology in industrial societies; have an appreciation of the historical origins and specificity of notions of 'progress' and images of science and technology; have read work by some key authors on the relations of science, technology and society, and can comment on the significance of their contributions; are aware of the relation between STS analyses and practical intervention in policy and politics concerning scientific and technological issues, and some of the problems those two roles raise; can contribute to debates on some of the ethical and political issues about future uses and directions of science and technology; have developed their skills in finding and using arguments and information; in critically evaluating such material; and in essay writing and seminar presentation.

STS 323 The Politics of Medicine and Health 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** 16 credit points at 200 level**Exclusions:** (STS223) OR (STS936)**Assessment:** Essays, presentations and class participation

Subject Description: This subject explores the social, economic and political dimensions of medicine and health care: the forces shaping them, their implications and their limitations. Themes and topics may include: the shaping of medical knowledge and discourses, and concepts of health and sickness; institutions and markets; evaluation of new remedies; technological innovation; health and medical policies; the politics of cancer; health in the workplace; ethical dilemmas; critiques of conventional medicine and health care; alternative health practices.

Subject Objectives: At the end of this subject, students should:

1. have a substantive knowledge and understanding of a range of issues relating to contemporary medical knowledge and practice and the roles of various groups and social institutions in creating, perpetuating or challenging these interpretations and practices, and of the principal debates, contending viewpoints and claims concerning them;
2. understand different theoretical approaches to the analysis of medical knowledge and practice;
3. be able to apply some of these theoretical approaches and appropriate sociological concepts to examples of health and medical issues;
4. be able to critically examine and evaluate examples of contemporary debates in medicine and health;
5. have developed their skills in finding and using arguments and information, in summarising and critically evaluating such material, and in essay writing and seminar presentation.

STS 329 Scientific and Technological Controversy 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** (24cp at 200 level)**Exclusions:** STS229**Assessment:** Essays, presentations and class participation

Subject Description: Recent studies of scientific and technological controversies have shown that scientific 'facts' and technological systems cannot be dissociated from the social and political interests which they embody. According to this approach, controversies must be treated as inherently social and political processes where there are no impartial experts. This subject will consider the process by which scientific and technological controversies arise, are prosecuted and resolved, making extensive use of case studies.

Subject Objectives: At the end of this subject, students should have demonstrated, that they: can explain how a social constructionist view of knowledge formation can be applied to an understanding of controversies in science and technology, both among practitioners and in the public sphere; have gained a substantive knowledge and understanding of a selection of current or historical controversies in science and technology; can locate material on, and analyse the social processes involved in, such a controversy; understand and can deploy key concepts from social theory in these analyses; can outline key debates within the sociology of knowledge on ways of explaining the social formation of knowledge claims, and on the relation between analysis and intervention; have developed their skills in finding and using arguments and information; in critically evaluating such material; and in essay writing and seminar presentation.

STS 335 The Politics of Risk 8cp

Spring Wollongong On Campus

Contact Hours: 3hour lecture/seminar per week

Pre-requisites: 16 credit points at 200 level

Exclusions: (STS 235) OR (STS 376) OR (STS931)

Assessment: Essays, presentations and class participation

Subject Description: This subject examines hazards to human life and health associated with technologies - in the workplace and the wider environment. It focuses on the politics and economics of the generation and distribution of hazards; methods and problems in analysing and evaluating risks; discourses, debates and decision-making on hazards; and strategies for managing them. It compares different theoretical approaches for explaining these processes and debates and for informing intervention in them.

Subject Objectives: At the end of this subject, students should:

1. have a substantive knowledge and understanding of a number of risk and health and safety issues, and of the contending viewpoints and claims on these issues;

2. be able to identify and characterise different theoretical approaches in explaining the social treatment of hazards, and identify advantages, problems and implications of these approaches;
3. be able to apply some of these theoretical approaches, and appropriate social concepts, to examples of hazards issues;
4. be able to critically examine and evaluate contributions to debates on hazards issues;
5. be able to describe qualitatively some risk analysis procedures and techniques; and
6. have developed their skills in finding and using arguments and information; in summarising and critically evaluating such material; in particular, in finding and interpreting statistical information; and in essay writing and seminar presentation.

STS 336 Advanced Topics in the History of Science 1500-1800 8cp

Contact Hours: Not on offer in 2003

Subject Description: This subject deals each year with one advanced history of science topic in the Scientific Revolution and/or Enlightenment. Textual criticism of primary sources is emphasised, along with recent historiographical debates. Topics include: the body in the Scientific Revolution; Descartes and the rise of the Mechanical Philosophy; the experimental life - origins or processes; Newton and Newtonianism; the natural philosophical field and its sites - universities, courts, scientific societies and correspondence networks.

STS 338 Changing Images of Nature and the Environment 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture and 1 hour tutorial per week

Pre-requisites: 24cp at 200 level

Assessment: Essays, presentations and class participation

Subject Description: This subject employs historical methods to survey struggles to construct and impose images of nature. Topics include: 17th century debates over mechanism and human domination of nature; the Enlightenment and the Romantic backlash; the rise of new disciplines of geology and biology; the Darwinian synthesis; and the social construction of 'wilderness'. Attention is paid to developing students' ability to analyse contemporary environmental debates in contextual and historical terms.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate knowledge of how some theories of nature, the environment and humankind's place in nature, at several stages in the history of Western Civilisation have reflected, shaped and/or legitimated the material and technical practices of the societies in which they appeared. Students should also show that they have acquired skills in gathering and interpreting historical and contemporary source material and demonstrate the ability to communicate clearly and concisely, using the written and spoken word to construct persuasive and adequately supported arguments.

STS 340 Technological Change, Popular Culture and New Media 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 16 credit points at 200 level

Exclusions: (STS 240) OR (STS 241)

Assessment: Essays, presentations and class participation

Subject Description: Technological change has a long history of transforming means of communication, from the printing press to the internet.

New means of expression become possible, from the novel to electronic music. Popular culture interacts with technology both through artistic production and commercial distribution and control. Theories of communication and technology help to make sense of this complex dynamic.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentations and other contributions to tutorials, that they: can identify different perspectives in communication theory; recognise that rapidly changing information and communication technologies have an effect on the processes of human communication; can justify the need for links between theories of cognition and theories of communication;

can apply the insights gained from the abstract study of communication and technology to the world of work; have developed their skills in finding and using arguments and information; in critically evaluating such material; and in essay writing and seminar presentation.

STS 350 From Molecular Genetics to Biotechnology 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture and 2hour tutorial per week

Pre-requisites: 16 credit points at 200 level

Exclusions: STS 250

Assessment: Essays, presentation and class participation

Subject Description: This subject examines the development, impact and social context of molecular biology and genetic engineering. Topics may include: the development of a model for DNA; the development of recombinant DNA techniques; Asilomar and safety; corporate influence on molecular biology; ethical and political issues in genetic screening and genetic engineering; regulation of biotechnology and social control of research priorities; legal and moral issues in the patenting of life forms; the human genome project; the release of recombinant organisms; and biotechnology industry in Australia.

Subject Objectives: At the end of this subject, students should have demonstrated that they: recognise that molecular biology has been influenced by social, political and personal factors; can explain how economic, political and social factors influence molecular biology and biotechnology; can identify and illustrate the issues and potential social and environmental consequences that may arise from the application of molecular biology to biotechnology; can evaluate policies and means of controlling developments in molecular biology and genetic engineering; can critically analyse statements for and against the development and application of various applications of genetic engineering; can prepare and present oral and written presentations on non-technical aspects of molecular biology and biotechnology; can research the literature covering a particular application of genetic engineering.

STS 360 Technology and Body Politics 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 16 credit points at 200 level

Exclusions: STS 260

Assessment: Essays, presentations and class participation

Subject Description: People's understanding and images of the body, health and human nature have been structured by the science, medicine, popular belief and larger social forces of different historical periods. An understanding of this shaping of medical knowledge is essential to a critical awareness of contemporary health issues. This subject examines the social history of science, medicine and culture and introduces Foucauldian, feminist and social constructivist perspectives.

STS 376 The Politics of Risk 6cp

Spring Wollongong On Campus

Contact Hours: 3hour lecture/seminar per week

Pre-requisites: 16 credit points at 200 level

Exclusions: (STS 235) OR (STS335) OR (STS931)

Assessment: Essays, presentations and class participation

Subject Description: This subject examines hazards to human life and health associated with technologies - in the workplace and the wider environment. It focuses on the politics and economics of the generation and distribution of hazards; methods and problems in analysing and evaluating risks; discourses, debates and decision-making on hazards; and strategies for managing them. It compares different theoretical approaches for explaining these processes and debates and for informing intervention in them.

Subject Objectives: At the end of this subject, students should: 1. have a substantive knowledge and understanding of a number of risk and health and safety issues, and of the contending viewpoints and claims on these issues; 2. be able to identify and characterise different theoretical approaches in explaining the social treatment of hazards, and identify advantages, problems and implications of these approaches;

3. be able to apply some of these theoretical approaches, and appropriate social concepts, to examples of hazards issues; 4. be able to critically examine and evaluate contributions to debates on hazards issues; 5. be able to describe qualitatively some risk analysis procedures and techniques; and 6. have developed their skills in finding and using arguments and information; in summarising and critically evaluating such material; in particular, in finding and interpreting statistical information; and in essay writing and seminar presentation.

STS 388 Science and the Media 8cp

Spring Wollongong On Campus

Contact Hours: 3hour lecture/seminar per week

Pre-requisites: 16 credit points at 200 level

Exclusions: STS 288

Assessment: Essays, presentations and class participation

Subject Description: Science increasingly frames social debates, and is itself socially directed. The media play a central role in both processes, a role often subject to criticism, especially from scientists. This subject examines the complex social dimensions of the relation between science, media and the 'public'. Topics may include: scientific knowledge in political debates; public understanding of science; media portrayals of science and scientists; science journalism; science as 'public knowledge'; and pro- versus anti-science 'movements'.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work, oral presentations and other contributions to tutorials, that they: can describe and comment critically on some key issues in the public understanding of science and technology; can explain some of the relations between key elements involved in the public reception of scientific and technological issues, such as forms of presentation, arenas of debate, forms of participation, the authority of scientific expertise, and the perception of risks; can identify and evaluate different theoretical approaches to explaining these issues and relations; can deploy relevant theoretical concepts from social analysis in the examination of a case study; have developed their skills in finding and using arguments and information in critically evaluating such material; and in essay writing and seminar presentation.

STS 390 Media, War and Peace 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 24 credit points at 200 level

Assessment: Oral presentation 20%, Commentaries 30%, 3 worth 10% each; Essay 50%

Subject Description: War and violence are staples of media coverage. Explaining the content and style of coverage requires understanding both of media dynamics and international politics. Through case studies of war and peace journalism, military censorship and media management, and the psychology and politics of denial and acknowledgement of atrocities, students should learn how to interpret and intervene in media coverage on war and peace, violence and nonviolence. Use will be made of frameworks from communication theory, politics, and peace research.

Subject Objectives: On successful completion of this subject, students should be able to: 1. demonstrate knowledge of war and peace journalism, military censorship and media management 2. understand and apply theories explaining media dynamics and international politics 3. investigate media coverage on war and peace, violence and nonviolence

Subject Descriptions

4. contribute to public debates about war and peace, violence and nonviolence.

STS 399 Research Topics in Science and Technology Studies 8cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Pre-requisites: 16 credit points at 200 level and approval of Convenor of Program

Assessment: Written assignments and seminar presentations as required

Subject Description: This subject involves reading and research, supervised by one or more members of STS staff, and the production of a major report, on a topic the Program considers suited to the student's background, record and specialisation. A seminar presentation and/or other written assignments may also be required in the course of the research. Students must seek approval to enrol and must negotiate a topic before session starts.

Subject Objectives: At the end of this subject, students should have demonstrated, on the basis of written work and contributions to tutorials or individual discussions with a supervisor, that they can, with appropriate guidance, plan and undertake a project which will involve a review of literature on a social or policy issue in science, technology, medicine or the environment, and either or both designing and undertaking limited empirical or historical research to investigate an issue; and contributing to a theoretical debate appropriate to that issue. and in the course of this project, as appropriate: formulate and refine a research question; find, select and critically evaluate contributions to the literature on that question; apply appropriate analytical methods and concepts to the topic; analyse results of any empirical research; and produce a clear and coherent report on their research.

STS 400 Science, Technology and Society Studies 48cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Pre-requisites: Approval of Convenor of Program

Assessment: Thesis and coursework

Subject Description: Honours students undertake a 12 credit point subject on theory and methods in STS, specialist subjects totalling 12 CP, and a 24 credit point thesis. Students contribute to a series of seminars through the year.

Students considering Honours in STS should contact the Convenor of Program well in advance to seek approval for enrolment, discuss their programme, and negotiate a thesis topic and supervisor.

Subject Objectives: At the end of their Honours studies, students should have demonstrated that they can 1. plan and undertake a project involving (a) a review of literature and (b) designing and undertaking empirical or historical research to investigate that issue and/or contributing to a theoretical debate appropriate to that issue; and, as appropriate; 2. formulate and refine a research question; 3. find, select and critically evaluate contributions to the literature on that question; 4. apply appropriate analytical methods and concepts to the topic; 5. analyse results of any empirical research; and 6. produce a clear and coherent report on their research;

7. identify and characterise different theoretical perspectives on an appropriate issue; 8. identify major positions in debates between those perspectives, and their advantages, problems and implications; and 9. relate these theoretical insights, and apply appropriate social concepts, to examples.

STS 430 Joint Honours in Science, Technology & Society & Another Discipline 24cp

Annual Wollongong On Campus

Spring 2003 / Autumn 2004 Wollongong On Campus

Pre-requisites: Approval of Convenor of Program

Assessment: Thesis and coursework

Subject Description: Students should have completed studies in both disciplines accepted as equivalent to a major. The subject consists of components from the Honours programmes of each unit approved by both Convenors as forming a coherent programme, including a thesis. Students contribute to a series of seminars in STS through the year. Students considering Joint Honours should contact the unit Convenors well in advance to seek approval for enrolment, discuss their programme, and negotiate a thesis topic and supervisors.

Subject Objectives: At the end of their Honours studies, students should have demonstrated that they can 1. plan and undertake a project involving (a) a review of literature and (b) designing and undertaking empirical or historical research to investigate that issue and/or contributing to a theoretical debate appropriate to that issue; and, as appropriate; 2. formulate and refine a research question; 3. find, select and critically evaluate contributions to the literature on that question; 4. apply appropriate analytical methods and concepts to the topic; 5. analyse results of any empirical research; and 6. produce a clear and coherent report on their research; 7. identify and characterise different theoretical perspectives on an appropriate issue; 8. identify major positions in debates between those perspectives, and their advantages, problems and implications; 9. relate these theoretical insights, and apply appropriate social concepts, to examples.

Faculty of Commerce

Member Units

School of Accounting and Finance

School of Economics and Information Systems

School of Management, Marketing and Employment Relations

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Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Business Administration

Course Requirements

1. To qualify for award of the degree of Bachelor of Business Administration a candidate shall accrue an aggregate of at least 144 credit points by satisfactory completion of subjects listed in the program of Study.
2. A maximum of 72 credit points of 100-level subjects can be undertaken as part of the Bachelor of Business Administration Degree.
3. Students should note that a Pass Conceded, Pass Terminating or Pass Restricted grade at 300-level in any required subject within the program of study for the Bachelor of Business Administration, does not satisfy degree requirements.

Subject listing for the Bachelor of Business Administration

ACCY100	Accounting IA	6
ACCY102	Accounting IB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
FIN221	Business Finance I	6
BUSS110	Introduction to Business Information Systems	6
ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON121	Quantitative Methods I	6
MGMT142	Industrial Relations A	6
ECON230	Quantitative Analysis for Decision Making	6
MGMT348	Employers and Industrial Relations	8
LAW130	The Business of Law	6
MARK101	Introduction to Marketing	6
MARK217	Consumer Behaviour	6
MARK270	Services Marketing	6
MARK344	Marketing Strategy	6
MGMT110	Introduction to Management	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus four electives of which only 12cp may be from 100 level subjects

Subject listing for the Bachelor of Business Administration, offered at the Dubai Campus.

ACCY100	Accounting IA	6
ACCY102	Accounting IB	6
FIN221	Business Finance I	6
BUSS110	Introduction to Business Information Systems	6
ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON121	Quantitative Methods I	6
ECON230	Quantitative Analysis for Decision Making	6
MARK101	Introduction to Marketing	6
MGMT102	Business Communications	6
MGMT110	Introduction to Management	6
MGMT201	Organisational Behaviour	6
MGMT216	Operations Management	6

Plus at least one of the following

ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8

Plus

MGMT314	Strategic Management	6
MGMT389	International Business Management	6
MGMT398	Human Resources Management	6

Plus two of the following

ECON301	Monetary Economics	8
ECON302	Transition Economics	8
ECON307	International Monetary Economics	8
ECON310	Cost Benefit Analysis	8

Plus a further twenty four credit points of electives, twelve of which must be at 200-level or higher.

Bachelor of Business Administration (Accountancy)

Course Requirements

1. To qualify for the award of Bachelor of Business Administration (Accountancy) a candidate shall accrue an aggregate of at least 144 credit points by satisfactory completion of subjects listed in the program of study.
2. A maximum of 72 credit points of 100-level subjects can be undertaken as part of the Bachelor of Business Administration (Accountancy) Degree
3. Students should note that a Pass Conceded, Pass Terminating or Pass Restricted grade at 300-level in any required subject within the program of study for the Bachelor of Business Administration (Accountancy), does not satisfy the degree requirements.

The Bachelor of Business Administration (Accountancy) is currently offered at the Dubai Campus. Please refer to the School of Accounting and Finance for subject listing.

Bachelor of Business Administration (Hospitality)

This course will be offered in conjunction and concurrently with the TAFE Diploma in Hospitality Management. The Hospitality Management component will be delivered by TAFE and result in the award of a Diploma in Hospitality Management.

Course Requirements

1. To qualify for the award of Bachelor of Business Administration (Hospitality) a candidate shall accrue an aggregate of at least 144 credit points by satisfactory completion of subjects listed in the program of study.
2. A maximum of 72 credit points of 100-level subjects can be undertaken as part of the Bachelor of Business Administration (Hospitality) Degree.

- Students should note that a Pass Conceded, Pass Terminating or Pass Restricted grade at 300-level in any required subject within the program of study for the Bachelor of Business Administration (Hospitality), does not satisfy the degree requirements.
- Cross articulation may occur between the TAFE Diploma in Hospitality Management and the University of Wollongong Bachelor of Business Administration (Hospitality) provided these courses are completed concurrently.
- Should the Diploma in Hospitality Management be completed prior to enrolling in the BBA the standard articulation agreement will apply.
- All admission applications must be completed on an Undergraduate Course Application Form.

The Subject listing:

ACCY100	Accounting IA	6
ACCY102	Accounting IB	6
ECON111	Introductory Microeconomics	6
ECON121	Quantitative Methods I	6
ECON101	Macroeconomic Essentials for Business	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
FIN221	Business Finance I	6
ECON230	Quantitative Analysis for Decision Making	6
MARK217	Consumer Behaviour	6
MARK270	Services Marketing	6
MGMT398	Human Resource Management	6
MGMT348	Employers and Industrial Relations	8
MGMT314	Strategic Management	6
MARK344	Marketing Strategy	6

Plus those subjects for which credit is granted for the TAFE Diploma.

Bachelor of Business Administration (Logistics)

Subject listing for the Bachelor of Business Administration, offered at the Hong Kong Baptist University.

ACCY100	Accounting IA	6
ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON121	Quantitative Methods I	6
BUSS110	Introduction to Business Information Systems	6
MGMT110	Introduction to Management	6
MARK101	Introduction to Marketing	6
ECON230	Quantitative Analysis for Decision Making	6
BUSS211	Requirements Determination & Systems Analysis	6
BUSS212	Data Base Management	6
FIN221	Business Finance I	6
MGMT200	Management and Electronic Business	6
MGMT201	Organisational Behaviour	6
MGMT216	Operations Management	6
MGMT255	Inventory Management	6
ECON332	Managerial Economics & Operations Research	8
MARK317	Business to Business Marketing	6

MGMT332	Enterprise and Innovation	6
MGMT350	Total Quality Management	6
MGMT309	Supply Chain Management	6
MGMT328	Transport Logistics	6

Plus any two 300 level subjects offered by the Faculty of Commerce for which prerequisites have been met.

The Bachelor of Business Administration (Logistics) is currently offered at Hong Kong Baptist University. Please refer to the School of Management, Marketing and Employment Relations, for subject listing.

Bachelor of Accountancy

Course Requirements

- To qualify for the award of Bachelor of Accountancy a candidate must satisfactorily complete the subjects listed in the program of study.
- A maximum of 72 credit points of 100-level subjects can be undertaken as part of the Bachelor of Accountancy Degree.
- Students should note that a Pass Conceded, Pass Terminating or Pass Restricted grade at 300-level in any required subject within the program of study for the Bachelor of Accountancy does not satisfy the degree requirements.

The Bachelor of Accountancy is currently offered at Inti College, Malaysia campus. Please refer to the School of Accounting and Finance, for subject listing.

Bachelor of Commerce

- To qualify for award of the degree of Bachelor of Commerce a candidate shall accrue an aggregate of at least 144 credit points, including a major study and electives if required, by satisfactory completion of subjects listed in the General Schedule.
- Students must complete and pass all core subjects plus one of the approved BCom degree majors or combined majors.
- A maximum of 72 credit points of 100-level subjects can be undertaken as part of the Bachelor of Commerce Degree.
- Students should note that a Pass Conceded, Pass Terminating or Pass Restricted grade at 300-level in any required subject within the schedule for the selected major area does not satisfy degree requirements. A student wishing to graduate with a double major must obtain clear passes in both majors at 300-level to satisfy requirements.

Core Subjects for all Bachelor of Commerce

Candidates

ACCY100	Accounting IA	6
BUSS110	Introduction to Business Information Systems	6
ECON111	Introductory Microeconomics	6
ECON121	Quantitative Methods I	6
MARK101	Introduction to Marketing	6
MGMT110	Introduction to Management	6

Accountancy students may substitute STAT131 Understanding Variation and Risk for ECON121 Quantitative Methods I. Note that entry to this subject depends on HSC or equivalent performance (see General Schedule, School of Mathematics and Applied Statistics, for details).

Approved Majors for the BCom

Accountancy	C-2
Business Information Systems	C-4
Economics	C-3
Employment Relations	C-24
Finance	C-9
Financial Planning	C-71
Human Resource Management	C-61
Industrial Relations	C-5
International Business	C-50
Logistics	C-75
Management	C-6
Marketing	C-8

Approved Combined Majors for the BCom

Accountancy and Business Information Systems	C-13
Accountancy and Economics	C-12
Accountancy and Finance	C-41
Accountancy and Industrial Relations	C-11
Accountancy and Legal Studies	C-19
Accountancy and Management	C-10
Business Information Systems and Economics	C-17
Business Information Systems and Legal Studies	C-23
Business Information Systems and Management	C-18
Economics and Industrial Relations	C-14
Economics and Legal Studies	C-20
Economics and Management	C-15
Electronic Commerce and Accountancy	C-58
Electronic Commerce and Business Information systems	C-59
Electronic Commerce and Economics	C-60
Electronic Commerce and Finance	C-28
Electronic Commerce and Management	C-49
Electronic Commerce and Marketing	C-29
Finance and Business Information Systems	C-42
Finance and Economics	C-43
Finance and Industrial Relations	C-47
Finance and Legal Studies	C-44
Finance and Management	C-45
Finance and Marketing	C-46
Human Resource Management and Accountancy	C-62
Human Resource Management and Business Information Systems	C-63
Human Resource Management and Electronic Commerce	C-64
Human Resource Management and Finance	C-65
Human Resource Management and Industrial Relations	C-66
Human Resource Management and International Business	C-67

Human Resource Management and Economics	C-68
Human Resource Management and Management	C-69
Human Resource Management and Marketing	C-70
Human Resource Management and Legal Studies	C-74
Industrial Relations and Legal Studies	C-21
Industrial Relations and Management	C-16
International Business and Accountancy	C-56
International Business and Business Information Systems	C-55
International Business and Economics	C-54
International Business and Electronic Commerce	C-73
International Business and Finance	C-57
International Business and Legal Studies	C-72
International Business and Languages	C-53
International Business and Management	C-51
International Business and Marketing	C-52
Management and Legal Studies	C-22
Management and Marketing	C-37
Marketing and Accountancy	C-39
Marketing and Business Information Systems	C-36
Marketing and Economics	C-38
Marketing and Industrial Relations	C-48
Marketing and Legal Studies	C-40

BCom Major C-2 Accountancy

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the major in Accountancy:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
FIN221	Business Finance I	6
ACCY231	Information Systems in Accounting	6
LAW210	Contract Law	6
ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6

Plus six credit points from the 300 level subjects offered by the School of Accounting and Finance

BCom Major C-3 Economics

In addition to the core subjects, the following subjects are required for the major in Economics:

ECON101	Macroeconomic Essentials for Business	6
COMM100	Introduction to Employment Relations	6
ECON122	Quantitative Methods II	6
ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8

Plus at least two of the following:

ECON207	Economic Policy	8
ECON208	Gender, Work and the Family	8
ECON216	International Trade Theory and Policy	8
ECON221	Introductory Econometrics	8
ECON227	The Creative Economy: Technology, Innovation and Policy A	6
ECON228	Quantitative Analysis for Decision Making	8

ECON229	The Creative Economy: Technology, Innovation and Policy B	8
ECON231	Business Statistics and Forecasting	8
ECON251	Industry and Trade in East Asia	8
Plus at least three of the following:		
ECON301	Monetary Economics	8
ECON302	Transition Economics	8
ECON303	Economic Development Issues	8
ECON307	International Monetary Economics	8
ECON308	Labour Economics	8
ECON309	Environmental Economics	8
ECON310	Cost-Benefit Analysis	8
ECON311	Natural Resource Economics	8
ECON312	Industrial Economics	8
ECON315	Applied Microeconomics	8
ECON316	History of Economic Thought	8
ECON317	Economics of Health Care	8
ECON319	Electronic Commerce and the Economics of Information	6
ECON320	Entrepreneurship and Small Business	8
ECON322	Mathematical Economics	8
ECON327	Advanced Econometrics	8
ECON331	Financial Economics	8
ECON332	Managerial Economics and Operations Research	8
ECON333	Conflict and Cooperation	8
ECON334	Global Economics	8

BCom Major C-4 Business Information Systems

In addition to the core subjects, the following subjects are required for the major in Business Information Systems:

LAW100	Law in Society	6
Plus at least one of		
ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
ECON122	Quantitative Methods II	6
Plus		
BUSS102	Computer Systems	6
BUSS111	Business Programming I	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6
BUSS308	Computer Systems Management	6
BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6
BUSS317	Business Programming IV	6
BUSS318	Information Systems Project	6

BCom Major C-5 Industrial Relations

In addition to the core subjects, the following subjects are required for the major in Industrial Relations:

COMM100	Introduction to Employment Relations	6
ECON101	Macroeconomic Essentials for Business	6
LAW100	Law in Society	6
Plus one of the following		
MGMT140	Industrial Relations B: Wage Determination	6
MGMT240	Industrial Relations B: Wage Determination	8

Plus one of the following		
MGMT142	Industrial Relations A	6
MGMT242	Industrial Relations A	8
Plus one of the following		
MGMT340	Comparative Studies in Industrial Relations	8
MGMT341	International and Comparative Employment Relations	8
Plus		
ECON308	Labour Economics	8
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8
LAW332	Labour Relations Law	6
Plus at least one of the following:		
ECON208	Gender, Work and the Family	8
ECON215	Microeconomic Theory and Policy	8
MGMT243	Work and Employment Relations	8
ECON302	Transition Economics	8
ECON312	Industrial Economics	8
MGMT342	Research Topics in Industrial Relations	8
LAW330	Law of Employment	6
LAW335	Anti Discrimination Law	6
POL314	Power and the Modern State	8

BCom Major C-6 Management

In addition to the core subjects, the following subjects are required for the major in Management:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
FIN221	Business Finance I	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MGMT218	Competitive Analysis	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus at least one of the following

ECON230	Quantitative Analysis for Decision Making II	6
MARK239	Information for Marketing Decisions	6

Plus at least twelve credit points from 200-level subjects and twelve credit points from 300-level subjects offered by the School of Management, Marketing and Employment Relations.

BCom Major C-8 Marketing

In addition to the core subjects, the following subjects are required for the major in Marketing:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
Plus		
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6

Plus at least two, and up to a maximum of eight of the following:

MARK240	Marketing & Consumer Behaviour in East & South-East Asia	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6

Course Structures

MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

BCom Major C-9 Finance

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the major in Finance:

LAW100	Law in Society	6
ACCY102	Accounting IB	6
ECON122	Quantitative Methods II	6
ECON101	Macroeconomic Essentials for Business	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6
LAW210	Contract Law	6
FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6

Plus at least two of the following:

FIN226	Financial Institutions	6
ECON215	Microeconomic Theory and Policy	8
MATH201	Multivariate and Vector Calculus	6
FIN227	Finance in Small Business	6

Plus at least one of the following:

FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
ECON331	Financial Economics	8

BCom Major C-10 Accountancy & Management

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Accountancy and Management:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
MGMT102	Business Communications	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
FIN221	Business Finance I	6
LAW210	Contract Law	6
MGMT201	Organisational Behaviour	6
MGMT218	Competitive Analysis	6
ACCY302	Financial Accounting III	12

ACCY312	Management Accounting III	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus at least one of the following:

MGMT216	Operations Management	6
MGMT220	Organisational Studies	6

Plus six credit points from 200-level subjects and twelve credit points from 300-level subjects offered by the School of Management, Marketing and Employment Relations.

Plus six credit points from the 300 level subjects offered by the School of Accounting and Finance.

BCom Major C-11 Accountancy & Industrial Relations

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Accountancy and Industrial Relations:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
LAW100	Law in Society	6
COMM100	Introduction to Employment Relations	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
LAW210	Contract Law	6
ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6

Plus one of the following:

MGMT140	Industrial Relations B Wage Determination	6
MGMT240	Industrial Relations B: Wage Determination	8

Plus one of the following:

MGMT142	Industrial Relations A	6
MGMT242	Industrial Relations A	8

Plus one of the following:

LAW330	Law of Employment	6
LAW332	Labour Relations Law	6

Plus at least three of the following:

ECON308	Labour Economics	8
MGMT340	Comparative Studies in Industrial Relations	8
MGMT341	International and Comparative Employment Relations	8
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8

Plus six credit points from the 300 level subjects offered by the School of Accounting and Finance.

BCom Major C-12 Accountancy & Economics

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Accountancy and Economics:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
LAW100	Law in Society	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY 211	Management Accounting II	6
FIN221	Business Finance I	6
ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6
ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8
ECON228	Quantitative Analysis for Decision Making	8

Plus at least twenty four credit points of the 300-level Economics subjects listed in major C-3

Plus six credit points from the 300 level subjects offered by the School of Accounting and Finance.

BCom Major C-13 Accountancy & Business Information Systems

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Accountancy and Business Information Systems:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
ACCY231	Information Systems in Accounting	6
ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6
BUSS111	Business Programming I	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6
ECON122	Quantitative Methods II	6

Plus at least one of

BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6

Plus at least one of

BUSS308	Computer Systems Management	6
BUSS317	Business Programming IV	6

BCom Major C-14 Economics & Industrial Relations

In addition to the core subjects, the following subjects are required for the combined major in Economics and Industrial Relations:

COMM100	Introduction to Employment Relations	6
ECON101	Macroeconomic Essentials for Business	6
ECON122	Quantitative Methods II	6
LAW100	Law in Society	6

Plus one of the following

MGMT140	Industrial Relations B: Wage Determination	6
MGMT240	Industrial Relations B: Wage Determination	8

Plus one of the following

MGMT142	Industrial Relations A	6
MGMT242	Industrial Relations A	8

Plus one of the following

MGMT340	Comparative Studies in Industrial Relations	8
MGMT341	International and Comparative Employment Relations	8

Plus

ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8

Plus at least twenty four credit points of the 300-level Economics subjects listed in major C-3.

Plus one additional subject chosen from the specified or optional 300-level subjects listed in major C-5.

BCom Major C-15 Economics & Management

In addition to the core subjects, the following subjects are required for the combined major in Economics and Management:

ECON101	Macroeconomic Essentials for Business	6
MGMT102	Business Communications	6

Plus at least one of the following

ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6

Plus

ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8
ECON228	Quantitative Analysis for Decision Making I	8
MGMT201	Organisational Behaviour	6
MGMT218	Competitive Analysis	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Course Structures

Plus at least one of the following

MGMT216	Operations Management	6
MGMT220	Organisational Studies	6

Plus six credit points from 200-level and twelve credit points from 300-level subjects offered by the School of Management., Marketing and Employment Relations.

Plus at least twenty four credit points of the 300-level Economics subjects listed in major C-3.

BCom Major C-16 Industrial Relations & Management

In addition to the core subjects, the following subjects are required for the combined major in Industrial Relations and Management:

LAW100	Law in Society	6
COMM100	Introduction to Employment Relations	6
ECON101	Macroeconomic Essentials for Business	6

Plus one of the following

MGMT140	Industrial Relations B: Wage Determination	6
MGMT240	Industrial Relations B: Wage Determination	8

Plus one of the following

MGMT142	Industrial Relations A	6
MGMT242	Industrial Relations A	8

Plus

LAW330	Law of Employment	6
LAW332	Labour Relations Law	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MGMT218	Competitive Analysis	6
MGMT220	Organisational Studies	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus at least one of the following

MGMT215	Small Business Management	6
MGMT216	Operations Management	6

Plus at least three of the following

ECON308	Labour Economics	8
MGMT340	Comparative Studies in Industrial Relations	8
MGMT341	International and Comparative Employment Relations	8
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8

Plus twelve credit points from 300-level subjects offered by the School of Management, Marketing and Employment Relations.

BCom Major C-17 Business Information Systems & Economics

In addition to the core subjects, the following subjects are required for the combined major in Business Information Systems and Economics:

ECON101	Macroeconomic Essentials for Business	6
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Plus at least one of

ACCY102	Accounting IB	6
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COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6

Plus

BUSS111	Business Programming I	6
BUSS211	Requirements Determination and Systems Analysis	6

BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS311	Advanced Database Management Systems	6

BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6

ECON122	Quantitative Methods II	6
ECON215	Microeconomic Theory and Policy	8

ECON221	Econometrics	8
ECON228	Quantitative Analysis for Decision Making	8

Plus at least one of

BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6

Plus at least one of

BUSS308	Computer Systems Management	6
BUSS317	Business Programming IV	6

Plus at least 24 credit points of the 300-level Economics subjects listed in Major C-3

BCom Major C-18 Business Information Systems & Management

In addition to the core subjects, the following subjects are required for the combined major in Business Information Systems and Management:

At least one of the following

ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6

BUSS111	Business Programming I	6
LAW100	Law in Society	6

MGMT102	Business Communications	6
BUSS211	Requirements Determination and Systems Analysis	6

BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6

MGMT201	Organisational Behaviour	6
MGMT218	Competitive Analysis	6

BUSS311	Advanced Database Management Systems	6
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BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6

MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus at least one of

BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6

Plus at least one of

BUSS308	Computer Systems Management	6
BUSS317	Business Programming IV	6

Plus at least one of

ECON122	Quantitative Methods II	6
FIN221	Business Finance I	6

Plus six credit points from 200-level and twelve credit points from 300-level subjects offered by the School of Management, Marketing and Employment Relations.

BCom Major C-19 Accountancy & Legal Studies

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Accountancy and Legal Studies:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
LAW210	Contract Law	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6

Plus at least one of the following

FIN221	Business Finance I	6
ACCY231	Information Systems in Accounting	6

Plus at least two of the following

LAW302	Law of Business Organisations	6
LAW315	Taxation Law	6
LAW330	Law of Employment	6

Plus four of the following

ACCY368	Insolvencies	6
LAW308	Administrative Law	6
LAW331	Intellectual Property Law	6
LAW332	Labour Relations Law	6
LAW334	Environmental Law	6
LAW335	Anti-Discrimination Law	6
LAW352	Advanced Taxation Law	6
LAW364	Consumer Protection and Business Regulation	6
LAW366	Selected Issues in Legal Studies	6

Plus six credit points from the 300 level subjects offered by the School of Accounting and Finance.

BCom Major C-20 Economics & Legal Studies

The Head of the School of Economics and information Systems may approve the substitution of one 200-level subject from major C3-Economics in place of one of ECON205 or ECON215.

In addition to the core subjects, the following subjects are required for the combined major in Economics and Legal Studies:

ECON101	Macroeconomic Essentials for Business	6
LAW100	Law In Society	6
ECON122	Quantitative Methods II	6
ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8
LAW210	Contract Law	6

Plus two of the following

LAW302	Law of Business Organisations	6
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LAW315	Taxation Law	6
LAW330	Law of Employment	6
LAW334	Environmental Law	6

Plus at least twenty four credit points of Legal Studies at 300-level

Plus at least twenty four credit points of the 300-level Economics subjects listed in major C-3.

BCom Major C-21 Industrial Relations & Legal Studies

In addition to the core subjects, the following subjects are required for the combined major in Industrial Relations and Legal Studies:

ECON101	Macroeconomic Essentials for Business	6
COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6

Plus one of the following

MGMT140	Industrial Relations B: Wage Determination	6
MGMT240	Industrial Relations B: Wage Determination	8

Plus one of the following

MGMT142	Industrial Relations A	6
MGMT242	Industrial Relations A	8

Plus one of the following

MGMT340	Comparative Studies in Industrial Relations	8
MGMT341	International and Comparative Employment Relations	8

Plus

MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8
LAW210	Contract Law	6
LAW330	Law of Employment	6
LAW332	Labour Relations Law	6
LAW335	Anti-Discrimination Law	6

Plus eighteen credit points of 300-level Legal Studies subjects.

BCom Major C-22 Management & Legal Studies

In addition to the core subjects, the following subjects are required for the combined major in Management and Legal Studies:

At least one of the following:

ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6

Plus

LAW100	Law In Society	6
LAW210	Contract Law	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MGMT218	Competitive Analysis	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus at least one of the following

FIN221	Business Finance I	6
MGMT216	Operations Management	6
MGMT220	Organisational Studies	6

Course Structures

Plus at least two of the following

LAW302	Law of Business Organisations	6
LAW315	Taxation Law	6
LAW330	Law of Employment	6

Plus at least four of the following

ACCY368	Insolvencies	6
LAW308	Administrative Law	6
LAW331	Intellectual Property Law	6
LAW332	Labour Relations Law	6
LAW335	Anti-Discrimination Law	6
LAW352	Advanced Taxation Law	6
LAW364	Consumer Protection and Business Regulation	6
LAW366	Selected Issues in Legal Studies	6

Plus six credit points from 200-level subjects and twelve credit points from 300-level subjects offered by the School of Management, Marketing and Employment Relations.

BCom Major C-23 Business Information Systems & Legal Studies

In addition to the core subjects, the following subjects are required for the combined major in Business Information Systems and Legal Studies:

LAW100	Law in Society	6
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Plus at least one of

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6

Plus

BUSS111	Business Programming I	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6
ECON122	Quantitative Methods II	6
LAW210	Contract Law	6

Plus at least one of

BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6

Plus at least one of

BUSS308	Computer Systems Management	6
BUSS317	Business Programming IV	6

Plus at least two of

LAW302	Law of Business Organisations	6
LAW315	Taxation Law	6
LAW330	Law of Employment	6

Plus at least four of

LAW308	Administrative Law	6
LAW331	Intellectual Property Law	6
LAW332	Labour Relations Law	6
LAW334	Environmental Law	6
LAW335	Anti-Discrimination Law	6
LAW352	Advanced Taxation Law	6
LAW364	Consumer Protection and Business Regulations	6
LAW366	Selected Issues in Legal Studies	6

BCom Major C-24 Employment Relations

In addition to the core subjects, the following subjects are required for the major in Employment Relations:

COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6

MGMT220	Organisational Studies	6
MGMT314	Strategic Management	6
MGMT322	Training and Development	6
MGMT398	Human Resource Management	6

Plus one of the following

MGMT140	Industrial Relations B Wage Determination	6
MGMT240	Industrial Relations B Wage Determination	8

Plus one of the following

MGMT142	Industrial Relations A	6
MGMT242	Industrial Relations A	8

Plus

MGMT341	International and Comparative Employment Relations	8
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8

Plus at least three of the following

ECON101	Macroeconomic Essentials for Business	6
MGMT243	Work and Employment Relations	8
LAW210	Contract Law	6
MGMT202	Management of Change	6
MGMT205	Recruitment and Selection	6
ECON308	Labour Economics	8
MGMT342	Research Topics in Industrial Relations	8
LAW330	Law of Employment	6
LAW332	Labour Relations Law	6
LAW335	Anti-Discrimination Law	6
MGMT321	Occupational Health and Safety Management	6
MGMT351	Business Ethics	6

BCom Major C-28 Electronic Commerce & Finance

In addition to the core subjects, the following subjects are required for the combined major in Electronic Commerce and Finance:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6
ACCY231	Information Systems in Accounting	6
LAW210	Contract Law	6
ECON122	Quantitative Methods II	6

Plus at least one of the following

FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6

Plus

FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6
ACCY335	Advanced Information Systems in Accounting II	6
FIN353	Global Electronic Finance	6

Plus at least three of the following

FIN325	Banking Practice	6
FIN327	Risk & Insurance	6
ACCY332	Advanced Information Systems in Accounting	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
ECON331	Financial Economics	8

BCom Major C-29 Electronic Commerce & Marketing

In addition to the core subjects, the following subjects are required for the combined major in Electronic Commerce and Marketing:

ACCY102	Accounting IB	6
LAW100	Law in Society	6

Plus

MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6

Plus two of the following

MARK240	Marketing and Consumer Behaviour in East and South-East Asia	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

Plus

MGMT200	Management and Electronic Business	6
MGMT300	Innovation and Electronic Commerce	6
MARK301	Marketing on the Internet	6

Plus five subjects from the following (at least two of these must be at 300 level):

ACCY231	Information Systems in Accounting	6
ACCY332	Advanced Information Systems in Accounting	8
ACCY335	Advance Information Systems in Accounting II	6
FIN353	Global Electronic Finance	6
BUSS212	Database Management Systems	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
CSCI213	Java Programming and the Internet	6
CSCI214	Distributed Systems	6
CSCI311	Software Process Management	6
CSCI316	Network Computing	6
CSCI361	Computer Security	6
ECON230	Quantitative Analysis for Decision Making I	6
ECON312	Industrial Economics	6
ECON319	Electronic Commerce and the Economics of Information	6
IACT201	Information Technology and Citizens' Rights	6
IACT303	World Wide Networking	6
LAW210	Contract Law	8
LAW331	Intellectual Property Law	6

BCom Major C-36 Marketing & Business Information Systems

In addition to the core subjects, the following subjects are required for the combined major in Marketing and Business Information Systems:

LAW100	Law in Society	6
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Plus at least one of

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6

Plus

BUSS111	Business Programming I	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6

Plus at least one of

BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6

Plus at least one of

BUSS308	Computer Systems Management	6
BUSS317	Business Programming IV	6

Plus at least two of

MARK240	Marketing and Consumer Behaviour in East and South-East Asia	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

BCom Major C-37 Management & Marketing

In addition to the core subjects, the following subjects are required for the combined major in Management and Marketing:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
FIN221	Business Finance I	6

Plus

MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MARK217	Consumer Behaviour	6
MGMT218	Competitive Analysis	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
MGMT314	Strategic Management	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6

Course Structures

MGMT398 Human Resource Management 6

Plus two of the following

MARK240 Marketing and Consumer Behaviour in East and South-East Asia 6

MARK301 Marketing on the Internet 6

MARK317 Business to Business Marketing 6

MARK343 International Marketing 6

MARK356 New Product Marketing 6

MARK359 Sales Management 6

MARK395 Tourism Marketing 6

MARK397 Retail Marketing Management 6

Plus three of the following

MGMT215 Small Business Management 6

MGMT216 Operations Management 6

MGMT220 Organisational Studies 6

MGMT321 Occupational Health and Safety Management 6

MGMT322 Training and Development 6

MGMT332 Enterprise and Innovation 6

MGMT350 Total Quality Management 6

MGMT351 Business Ethics 6

MGMT389 International Business Management 6

ACCY102 Accounting IB 6

LAW100 Law in Society 6

ACCY201 Financial Accounting IIB 6

ACCY202 Financial Accounting IIA 6

ACCY211 Management Accounting II 6

FIN221 Business Finance I 6

ACCY302 Financial Accounting III 12

ACCY312 Management Accounting III 6

MARK217 Consumer Behaviour 6

MARK239 Information for Marketing Decisions 6

MARK270 Services Marketing 6

MARK319 Applied Marketing Research 6

MARK333 Advertising and Promotions Strategy 6

MARK344 Marketing Strategy 6

Plus two of the following

MARK240 Marketing and Consumer Behaviour in East and South-East Asia 6

MARK301 Marketing on the Internet 6

MARK317 Business to Business Marketing 6

MARK343 International Marketing 6

MARK356 New Product Marketing 6

MARK359 Sales Management 6

MARK395 Tourism Marketing 6

MARK397 Retail Marketing Management 6

Plus six credit points from the 300 level subjects offered by the School of Accounting and Finance.

BCom Major C-38 Marketing & Economics

In addition to the core subjects, the following subjects are required for the combined major in Marketing and Economics:

COMM100 Introduction to Employment Relations 6

ECON101 Macroeconomic Essentials for Business 6

ECON205 Macroeconomic Theory and Policy 8

ECON215 Microeconomic Theory and Policy 8

MARK217 Consumer Behaviour 6

MARK239 Information for Marketing Decisions 6

MARK270 Services Marketing 6

MARK319 Applied Marketing Research 6

MARK333 Advertising and Promotions Strategy 6

MARK344 Marketing Strategy 6

Plus two of the following

MARK240 Marketing and Consumer Behaviour in East and South-East Asia 6

MARK301 Marketing on the Internet 6

MARK317 Business to Business Marketing 6

MARK343 International Marketing 6

MARK356 New Product Marketing 6

MARK359 Sales Management 6

MARK395 Tourism Marketing 6

MARK397 Retail Marketing Management 6

Plus at least twenty four credit points of the 300-level Economics subjects listed in major C-3.

BCom Major C-40 Legal Studies & Marketing

In addition to the core subjects, the following subjects are required for the combined major in Legal Studies and Marketing:

LAW100 Law in Society 6

ACCY102 Accounting IB 6

Plus

LAW210 Contract Law 6

LAW364 Consumer Protection and Business Regulation 6

MARK217 Consumer Behaviour 6

MARK239 Information for Marketing Decisions 6

MARK270 Services Marketing 6

MARK319 Applied Marketing Research 6

MARK333 Advertising and Promotions Strategy 6

MARK344 Marketing Strategy 6

Plus at least three of the following

LAW302 Law of Business Organisations 6

LAW308 Administrative Law 6

LAW330 Law of Employment 6

LAW331 Intellectual Property Law 6

LAW334 Environmental Law 6

LAW335 Anti-Discrimination Law 6

Plus two of the following

MARK240 Marketing and Consumer Behaviour in East and South-East Asia 6

MARK301 Marketing on the Internet 6

MARK317 Business to Business Marketing 6

MARK343 International Marketing 6

MARK356 New Product Marketing 6

MARK359 Sales Management 6

MARK395 Tourism Marketing 6

MARK397 Retail Marketing Management 6

BCom Major C-39 Accountancy & Marketing

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Accountancy and Marketing:

BCom Major C-41 Accountancy & Finance

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Accountancy and Finance:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
FIN221	Business Finance I	6
FIN223	Investments I	6
ACCY231	Information Systems in Accounting	6
LAW210	Contract Law	6
ECON122	Quantitative Methods II	6

Plus at least one of the following

FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6

Plus

ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6
FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6

Plus at least one of the following

FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
ECON331	Financial Economics	8

Plus six credit points from the 300 level subjects offered by the School of Accounting and Finance.

BCom Major C-42 Finance & Business Information Systems

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Finance and Business Information Systems:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6
LAW210	Contract Law	6
ECON122	Quantitative Methods II	6
BUSS111	Business Programming I	6

BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6
FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statements Analysis	6

Plus at least one of

BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6

Plus at least one of

BUSS308	Computer Systems Management	6
BUSS317	Business Programming IV	6

Plus at least one of

FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6

Plus at least one of

FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
ECON331	Financial Economics	8

BCom Major C-43 Finance & Economics

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Finance and Economics:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ECON101	Macroeconomic Essentials for Business	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6
LAW210	Contract Law	6
ECON122	Quantitative Methods II	6
ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and policy	8

Plus at least one of the following

FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6
ECON207	Economic Policy	8
ECON216	International Trade Theory and Policy	8
ECON221	Econometrics	8
ECON251	Industry and Trade in East Asia	8

Plus

FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6
ECON301	Monetary Economics	8
ECON331	Financial Economics	8

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Plus at least one of the following

FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6

Plus at least one additional 300-level subject from major C-3.

BCom Major C-44 Finance & Legal Studies

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Finance and Legal Studies:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
LAW210	Contract Law	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6
ECON122	Quantitative Methods II	6

Plus one of the following

FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6

Plus

FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6

Plus at least one of the following

FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
ECON331	Financial Economics	8

Plus three of the following

ACCY368	Insolvencies	6
LAW302	Law of Business Organisations	6
LAW315	Taxation Law	6
LAW330	Law of Employment	6

Plus three of the following

LAW308	Administrative Law	6
LAW331	Intellectual Property Law	6
LAW332	Labour Relations Law	6
LAW334	Environmental Law	6
LAW335	Anti-Discrimination Law	6
LAW352	Advanced Taxation Law	6
LAW364	Consumer Protection and Business Regulation	6
LAW366	Selected Issues in Legal Studies	6

BCom Major C-45 Finance & Management

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined major in Finance and Management:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6
LAW210	Contract Law	6
ECON122	Quantitative Methods II	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MGMT218	Competitive Analysis	6

Plus at least one of the following

FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6

Plus

FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6

Plus at least one of the following

FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
ECON331	Financial Economics	8

Plus

MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus a further six credit points of 200-level subjects and twelve credit points of 300-level subjects offered by the School of Management, Marketing and Employment Relations.

BCom Major C-46 Finance & Marketing

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined majors in Finance and Marketing:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6

LAW210	Contract Law	6
ECON122	Quantitative Methods II	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
Plus at least one of the following		
FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6
Plus		
FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6
Plus at least one of the following		
FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
ECON331	Financial Economics	8
Plus		
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6
Plus two of the following		
MARK240	Marketing and Consumer Behaviour in East and South-East Asia	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

BCom Major C-47 Finance & Industrial Relations

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined majors in Finance and Industrial Relations:

ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6
LAW210	Contract Law	6
Plus one of the following		
MGMT140	Industrial Relations B: Wage Determination	6
MGMT240	Industrial Relations B: Wage Determination	8
Plus one of the following		
MGMT142	Industrial Relations A	6
MGMT242	Industrial Relations A	8
Plus at least one of the following		
FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6

Plus		
FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6
Plus at least one of the following		
FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
ECON331	Financial Economics	8
Plus three of the following		
MGMT341	International and Comparative Employment Relations	8
ECON308	Labour Economics	8
MGMT340	Comparative Studies in Industrial Relations	8
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8
Plus at least one of the following		
LAW330	Law of Employment	6
LAW332	Labour Relations Law	6
LAW335	Anti-discrimination Law	6
MGMT398	Human Resource Management	6

BCom Major C-48 Marketing & Industrial Relations

In addition to the core subjects, the following subjects are required for the combined major in Marketing and Industrial Relations:

COMM100	Introduction to Employment Relations	6
ECON101	Macroeconomic Essentials for Business	6
LAW100	Law in Society	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6
Plus one of the following		
MGMT140	Industrial Relations B: Wage Determination	6
MGMT240	Industrial Relations B: Wage Determination	8
Plus one of the following		
MGMT142	Industrial Relations A	6
MGMT242	Industrial Relations A	8
Plus two of the following		
MARK240	Marketing and Consumer Behaviour in East and South-East Asia	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6
Plus three of the following		
ECON308	Labour Economics	8
MGMT340	Comparative Studies in Industrial Relations	8
MGMT341	International and Comparative Employment Relations	8
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8
Plus at least one of the following		
LAW330	Law of Employment	6

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LAW332	Labour Relations Law	6
LAW335	Anti-Discrimination Law	6
MGMT398	Human Resource Management	6

BCom Major C-49 Electronic Commerce & Management

In addition to the core subjects, the following subjects are required for the combined major in Electronic Commerce and Management:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
MGMT102	Business Communications	6
BUSS211	Requirements Determination and Systems Analysis	6
MGMT200	Management and E-Business	6
MGMT201	Organisational Behaviour	6
MGMT218	Competitive Analysis	6
MGMT314	Strategic Management	6
MGMT300	Innovation and Electronic Commerce	6
MGMT398	Human Resource Management	6
MARK301	Marketing on the Internet	6

Plus four of the following, with at least two subjects at 300-Level

FIN221	Business Finance I	6
ACCY231	Information Systems in Accounting	6
FIN353	Global Electronic Finance	6
BUSS212	Database Management Systems	6
BUSS312	Distributed Information Systems	6
ECON319	Electronic Commerce & the Economics of Information	6
IACT201	Information Technology and Citizens' Rights	6
IACT303	World Wide Networking	6

Plus six credit points from 200-level subjects and twelve credit points from 300-level subjects offered by the School of Management, Marketing and Employment Relations.

BCom Major C-50 International Business

In addition to the core subjects, the following subjects are required for the major in International Business:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
FIN241	International Financial Management	6
MGMT341	International and Comparative Employment Relations	8
ECON216	International Trade Theory and Policy	8
ECON251	Industry and Trade in South East Asia	8
MARK343	International Marketing	6
MGMT204	Government, Regulation and International Business	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT389	International Business Management	6

BCom Major C-51 International Business & Management

In addition to the core subjects, the following subjects are required for the combined majors in International Business and Management:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
FIN241	International Financial Management	6
MGMT341	International & Comparative Employment Relations	8
ECON216	International Trade Theory and Policy	8
ECON251	Industry and Trade in South East Asia	8
MARK343	International Marketing	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MGMT204	Government, Regulation and International Business	6
MGMT216	Operations Management	6
MGMT218	Competitive Analysis	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT389	International Business Management	6
MGMT398	Human Resource Management	6

Plus one six credit point subject chosen from the General Schedule.

BCom Major C-52 International Business & Marketing

In addition to the core subjects, the following subjects are required for the combined majors in International Business and Marketing:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
FIN241	International Financial Management	6
MGMT341	International & Comparative Employment Relations	8
ECON216	International Trade Theory and Policy	8
ECON251	Industry & Trade in South East Asia	8
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK343	International Marketing	6
MARK344	Marketing Strategy	6

Plus one of the following:

MARK240	Marketing and Consumer Behaviour in East and South-East Asia	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

Plus

MGMT204	Government, Regulation and International Business	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT389	International Business Management	6

BCom Major C-53 International Business & Languages

In addition to the core subjects, the following subjects are required for the combined majors in International Business and Languages:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
FIN241	International Financial Management	6
MGMT341	International & Comparative Employment Relations	8
ECON216	International Trade Theory and Policy	8
ECON251	Industry & Trade in South East Asia	8
MARK343	International Marketing	6
MGMT204	Government, Regulation and International Business	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT389	International Business Management	6

Plus 36cp of an approved language sequence from the Faculty of Arts.

BCom Major C-54 International Business & Economics

In addition to the core subjects, the following subjects are required for the combined majors in International Business and Economics:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
FIN241	International Financial Management	6
MGMT341	International & Comparative Employment Relations	8
ECON205	Macroeconomic Theory & Policy	8
ECON215	Microeconomic Theory & Policy	8
ECON216	International Trade Theory and Policy	8
ECON251	Industry & Trade in South East Asia	8
MARK343	International Marketing	6
MGMT204	Government, Regulation and International Business	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT389	International Business Management	6

Plus twenty four credit points of 300 Level Economic subjects listed in major C-3.

BCom Major C-55 International Business & Business Information Systems

In addition to the core subjects, the following subjects are required for the combined majors in International Business and Business Information Systems:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
FIN241	International Financial Management	6
BUSS111	Business Programming I	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6

BUSS316	Information Systems Development Methodologies	6
MGMT341	International and Comparative Employment Relations	8
ECON216	International Trade Theory and Policy	8
ECON251	Industry and Trade in South East Asia	8
MARK343	International Marketing	6
MGMT204	Government, Regulation and International Business	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT389	International Business Management	6

Plus at least one of

BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6

Plus at least one of

BUSS308	Computer Systems Management	6
BUSS317	Business Programming IV	6

BCom Major C-56 International Business & Accountancy

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined majors in International Business and Accountancy:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
LAW210	Contract Law	6
ACCY202	Financial Accounting IIA	6
FIN241	International Financial Management	6
ACCY201	Financial Accounting IIB	6
ACCY211	Management Accounting II	6
ACCY231	Information Systems in Accounting	6
ECON216	International Trade Theory & Policy	8
ECON251	Industry and Trade in South East Asia	8
MGMT204	Government, Regulation and International Business	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT389	International Business Management	6
ACCY312	Management Accounting III	6
ACCY302	Financial Accounting III	12

Plus six credit points from the 300 level subjects offered by the School of Accounting and Finance.

BCom Major C-57 International Business & Finance

The Head of the School of Accounting and Finance, in the case of all course structures relating to Accountancy or Finance, may approve a candidate enrolling in a subject with a value of at least 6 credit points from the General Schedule in place of one of the Accountancy or Finance subjects of 6 credit points listed for Accountancy C-2 or Finance C-9.

In addition to the core subjects, the following subjects are required for the combined majors in International Business and Finance:

ACCY102	Accounting IB	6
ECON122	Quantitative Methods II	6
ECON101	Macroeconomic Essentials for Business	6
ACCY202	Financial Accounting IIA	6
FIN221	Business Finance I	6
FIN223	Investments I	6
FIN226	Financial Institutions	6
ECON216	International Trade Theory & Policy	8
ECON251	Industry and Trade in South East Asia	8
MGMT204	Government, Regulation and International Business	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT389	International Business Management	6
FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6
FIN351	International Business Finance	6

BCom Major C-58 Electronic Commerce & Accountancy

In addition to the core subjects, the following subjects are required for the combined major in Electronic Commerce and Accountancy:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
FIN221	Business Finance I	6
ACCY231	Information Systems in Accounting	6
LAW210	Contract Law	6
ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6
ACCY332	Advanced Information Systems in Accounting	6
ACCY335	Advanced Information Systems in Accounting II	6
FIN353	Global Electronic Finance	6

Plus twelve credit points from the 300 level subjects offered by the School of Accounting and Finance. LAW315 Taxation Law may be substituted for six of these credit points.

BCom Major C-59 Electronic Commerce & Business Information Systems

In addition to the core subjects, the following subjects are required for the combined major in Electronic Commerce and Business Information Systems:

BUSS102	Computer Systems	6
BUSS111	Business Programming I	6
ECON101	Macroeconomic Essentials for Business	6
LAW100	Law in Society	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS215	Business Programming III	6
ECON230	Quantitative Analysis for Decision Making II	6
IACT201	Information Technology and Citizens' Rights	6
MGMT200	Management and Electronic Business	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6
BUSS317	Business Programming IV	6
ECON319	Electronic Commerce and the Economics of Information	6
IACT303	World Wide Networking	6
MARK301	Marketing on the Internet	6

BCom Major C-60 Electronic Commerce & Economics

In addition to the core subjects, the following subjects are required for the combined major in Electronic Commerce and Economics:

ACCY102	Accounting IB	6
BUSS111	Business Programming I	6
ECON101	Macroeconomic Essentials for Business	6
ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8
ECON228	Quantitative Analysis for Decision Making	8
IACT201	Information Technology and Citizens' Rights	6
MGMT300	Innovation and Electronic Commerce	6
ECON312	Industrial Economics	8
ECON319	Electronic Commerce and the Economics of Information	6

Plus at least four of the following:

FIN221	Business Finance I	6
ACCY231	Information Systems in Accounting	6
BUSS211	Requirements Determination and Systems Analysis	6
MGMT200	Management and Electronic Business	6
FIN353	Global Electronic Finance	6
IACT303	World Wide Networking	6
MARK301	Marketing on the Internet	6

Plus one 300 level Economics subject from major C-3.

Plus one 200 or 300 level Economics subject from major C-3.

BCom Major C-61 Human Resource Management

In addition to the core subjects, the following subjects are required for the major in Human Resource Management:

COMM100	Introduction to Employment Relations	6
MGMT341	International and Comparative Employment Relations	8
LAW100	Law in Society	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MGMT202	Management of Change	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT301	Managing Across Cultures	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6

BCom Major C-62 Human Resource Management & Accountancy

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and Accountancy:

ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6
LAW210	Contract Law	6
ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
ACCY231	Information Systems in Accounting	6
ACCY302	Financial Accounting III	12
ACCY312	Management Accounting III	6
MGMT201	Organisational Behaviour	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6
MGMT341	International and Comparative Employment Relations	8

Plus six credit points from the 300 Level Subjects offered by the School of Accounting and Finance.

BCom Major C-63 Human Resource Management & Business Information Systems

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and Business Information Systems:

ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6
BUSS111	Business Programming I	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6

BUSS316	Information Systems Development Methodologies	6
MGMT341	International and Comparative Employment Relations	8
MGMT201	Organisational Behaviour	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6
ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6
Plus at least one of		
BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6
Plus at least one of		
BUSS308	Computer Systems Management	6
BUSS317	Business Programming IV	6

BCom Major C-64 Human Resource Management & Electronic Commerce

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and Electronic Commerce:

COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6
BUSS211	Requirements Determination and Systems Analysis	6
MGMT300	Innovation and Electronic-Commerce	6
MGMT341	International and Comparative Employment Relations	8
MARK301	Marketing on the Internet	6
MGMT200	Management and E-Business	6
MGMT201	Organisational Behaviour	6
MGMT202	Management of Change	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6
Plus three of the following:		
ACCY231	Information Systems in Accounting	6
FIN353	Global Electronic Finance	6
BUSS212	Database Management Systems	6
BUSS312	Distributed Information Systems	6
ECON319	Electronic Commerce and the Economics of Information	6
IACT201	Information Technology and Citizens' Rights	6
IACT303	World Wide Networking	6

BCom Major C-65 Human Resource Management & Finance

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and Finance:

ACCY102	Accounting IB	6
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Course Structures

COMM100	Introduction to Employment Relations	6	MGMT204	Government, Regulation and International Business	6
ECON122	Quantitative Methods II	6	MGMT205	Recruitment and Selection	6
ACCY202	Financial Accounting IIA	6	MGMT206	Managing Human Resources	6
FIN221	Business Finance I	6	MGMT220	Organisational Studies	6
FIN223	Investments I	6	MGMT301	Managing Across Cultures	6
FIN226	Financial Institutions	6	MGMT302	Business in Europe	6
FIN322	Business Finance II	6	MGMT314	Strategic Management	6
FIN323	Investments II	6	MGMT321	Occupational Health and Safety Management	6
FIN324	Financial Statement Analysis	6	MGMT322	Training and Development	6
FIN351	International Business Finance	6	MGMT341	International and Comparative Employment Relations	8
MGMT341	International and Comparative Employment Relations	8	MGMT389	International Business Management	6
MGMT201	Organisational Behaviour	6			
MGMT205	Recruitment and Selection	6			
MGMT206	Managing Human Resources	6			
MGMT220	Organisational Studies	6			
MGMT314	Strategic Management	6			
MGMT321	Occupational Health and Safety Management	6			
MGMT322	Training and Development	6			

Plus six credit points from the 300 Level Subjects offered by the School of Accounting and Finance.

BCom Major C-66 Human Resource Management & Industrial Relations

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and Industrial Relations:

COMM100	Introduction to Employment Relations	6
MGMT341	International and Comparative Employment Relations	8
LAW100	Law in Society	6
ECON101	Macroeconomic Essentials for Business	6
LAW330	Law of Employment	6
LAW332	Labour Relations Law	6
MGMT140	Industrial Relations B	6
MGMT142	Industrial Relations A	6
MGMT201	Organisational Behaviour	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT301	Managing Across Cultures	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6
MGMT348	Employers and Industrial Relations	8
MGMT352	Negotiation, Advocacy and Bargaining	8

BCom Major C-67 Human Resource Management & International Business

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and International Business:

ACCY102	Accounting IB	6
FIN241	International Financial Management	6
COMM100	Introduction to Employment Relations	6
ECON101	Macroeconomic Essentials for Business	6
ECON216	International Trade Theory and Policy	8
ECON251	Industry and Trade in South East Asia	8
MGMT201	Organisational Behaviour	6

MGMT204	Government, Regulation and International Business	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6
MGMT341	International and Comparative Employment Relations	8
MGMT389	International Business Management	6

BCom Major C-68 Human Resource Management & Economics

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and Economics:

COMM100	Introduction to Employment Relations	6
ECON101	Macroeconomic Essentials for Business	6
ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8
ECON216	International Trade Theory and Policy	8
ECON251	Industry and Trade in South East Asia	8
MGMT201	Organisational Behaviour	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6
MGMT341	International and Comparative Employment Relations	8
MGMT389	International Business Management	6

Plus twenty four credit points of 300 Level Economics subjects from Major C-3.

BCom Major C-69 Human Resource Management & Management

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and Management:

ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MGMT202	Management of Change	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT216	Operations Management	6
MGMT218	Competitive Analysis	6
MGMT220	Organisational Studies	6
MGMT301	Managing Across Cultures	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6

MGMT341	International and Comparative Employment Relations	8
MGMT389	International Business Management	6

Plus electives selected from the University General Schedule for which prerequisites have been met, totalling 18 credit points. Of the 18 credit points selected, no more than 12 credit points may be at 100 Level.

BCom Major C-70 Human Resource Management & Marketing

In addition to the core subjects, the following subjects are required for the combined major in Human Resource Management and Marketing:

ACCY102	Accounting IB	6
COMM100	Introduction to Employment Relations	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK270	Services Marketing	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK343	International Marketing	6
MARK344	Marketing Strategy	6

Plus one of the following:

MARK240	Marketing and Consumer Behaviour in East and South East Asia	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6
MGMT341	International and Comparative Employment Relations	8

Plus the following:

MGMT201	Organisational Behaviour	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT301	Managing Across Cultures	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6

BCom Major C-71 Financial Planning

In addition to the core subjects, the following subjects are required for the major in Financial Planning:

ACCY102	Accounting IB	6
LAW100	Law in Society	6
ECON101	Macroeconomic Essentials for Business	6
FIN221	Business Finance I	6
FIN223	Investments I	6
LAW210	Contract Law	6
FIN226	Financial Institutions	6
ACCY228	Tax Planning	6
FIN251	Introduction to Financial Planning	6
MGMT215	Small Business Management	6
FIN323	Investment II	6
FIN324	Financial Statement Analysis	6
FIN327	Risk and Insurance	6
FIN328	Retirement and Estate Planning	6
FIN329	Real Estate Planning	6

BCom Major C-72 International Business & Legal Studies

In addition to the core subjects the following subjects are required for the combined major of International Business and Legal Studies:

ACCY102	Accounting IB	6
FIN241	International Financial Management	6
MGMT341	International & Comparative Employment Relations	8
ECON101	Macroeconomic Essentials for Business	6
ECON216	International Trade Theory and Policy	8
ECON251	Industry Trade in South East Asia	8
LAW100	Law in Society	6
LAW210	Contract Law	6
LAW302	Law of Business Organisations	6
LAW315	Taxation Law	6
LAW330	Law of Employment	6
LAW343	International Law	6
MARK343	International Marketing	6
MGMT301	Managing Across Cultures	6
MGMT302	Business In Europe	6
MGMT389	International Business Management	6

Plus at least two of the following

LAW308	Administrative Law	6
LAW316	Occupational Health & Safety Law	6
LAW317	E-Commerce Law	6
LAW331	Intellectual Property Law	6
LAW332	Labour Relations Law	6
LAW335	Anti-Discrimination Law	6
LLB338	International Trade Law	6
LAW360	Foreign Investment Law in the Peoples Republic of China	6
LAW366	Selected Issues in Legal Studies	6
LAW380	Law for Environmental Managers	8

BCom Major C-73 International Business & E-Commerce

In addition to the core subjects the following subjects are required for the combined major of International Business and E-Commerce:

ACCY102	Accounting IB	6
FIN241	International Financial Management	6
BUSS211	Requirements Determination and Systems Analysis	6
MGMT300	Innovation & E-Commerce	6
MGMT341	International & Comparative Employment Relations	8
ECON101	Macroeconomic Essentials for Business	6
ECON216	International Trade Theory and Policy	8
ECON251	Industry Trade in South East Asia	8
MARK301	Marketing on the Internet	6
MARK343	International Marketing	6
MGMT200	Management & E-Business	6
MGMT204	Government Regulation and International Business	6
MGMT301	Managing Across Cultures	6

Course Structures

MGMT302	Business In Europe	6
MGMT389	International Business Management	6
Plus at least two of the following		
ACCY231	Information Systems in Accounting	6
FIN353	Global Electronic Finance	6
BUSS212	Database Management Systems	6
BUSS312	Distributed Information Systems	6
ECON319	Electronic Commerce and the Economics of Information	6
IACT201	Information Technology and Citizens' Rights	6
IACT303	Worldwide Networking	6

BCom Major C-74 Human Resource Management & Legal Studies

In addition to the core subjects the following subjects are required for the combined major of Human Resource Management and Legal Studies:

COMM100	Introduction to Employment Relations	6
LAW100	Law in Society	6
LAW210	Contract Law	6
MGMT102	Business Communications	6
MGMT201	Organisational Behaviour	6
MGMT202	Management of Change	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT220	Organisational Studies	6
MGMT301	Managing Across Cultures	6
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6

Plus at least four of the following

LAW302	Law of Business Organisations	6
LAW316	Occupational Health & Safety Law	6
LAW330	Law of Employment	6
LAW332	Labour Relations Law	6
LAW335	Anti-Discrimination Law	6

Plus at least two of the following

LAW308	Administrative Law	6
LAW315	Taxation Law	6
LAW317	E-Commerce Law	6
LAW331	Intellectual Property Law	6
LAW366	Selected Issues in Legal Studies	6

BCom Major C-75 Logistics

In addition to the core subjects the following subjects are required for the major of Logistics:

ACCY102	Accounting IB	6
ECON101	Macroeconomic Essentials for Business	6
ECON230	Quantitative Analysis for Decision Making	6
BUSS211	Requirements Determination & Systems Analysis	6
BUSS212	Data Base Management	6
FIN221	Business Finance I	6
MGMT200	Management and Electronic Business	6
MGMT201	Organisational Behaviour	6
MGMT216	Operations Management	6
MGMT255	Inventory Management	6

ECON332	Managerial Economics & Operations Research	8
MARK317	Business to Business Marketing	6
MGMT332	Enterprise and Innovation	6
MGMT350	Total Quality Management	6
MGMT309	Supply Chain Management	6
MGMT328	Transport Logistics Management	6

Plus any two 300 level subjects offered by the Faculty of Commerce for which prerequisites have been met.

Bachelor of Commerce (Honours)

The Bachelor of Commerce (Honours) is a one year, full time or equivalent part time course of 48 credit points.

General Admission rules

To be admitted to the Bachelor of Commerce (Honours) program, a candidate must satisfy Rule 103 (5), (6), (7), (8) of the Bachelor Degree Rules.

Majors

A Bachelor of Commerce (Honours) is available in the following majors:

Accountancy
Business Information Systems
Economics
Employment Relations
Finance
Financial Planning
Human Resource Management
Industrial Relations
International Business
Management
Marketing

Combined majors are also available.

To qualify for the award of Bachelor of Commerce (Honours) a candidate must satisfy Rule 112 of the Bachelor Degree Rules.

Bachelor of Mathematics & Finance

Refer to the Faculty of Informatics section for details of this degree program.

Bachelor of Mathematics & Economics

Refer to the Faculty of Informatics section for details of this degree program.

Double Degrees with Bachelor of Commerce

Students may combine their Commerce studies with studies in a number of other Faculties and qualify for the award of two degrees.

Double degrees are designed for students to complete two degrees in less time than it would normally take.

- Students must seek advice and approval from both Faculties before enrolment.

- Candidates must satisfy the entry requirements of both the degree programs.
- Double degrees, where both degrees are normally of three years duration will be a minimum of 216 credit points and take a minimum of four years to complete.
- Double degrees, where one of the degrees is normally of four years duration will be a minimum of 264 credit points and take a minimum of five years to complete.
- Students may be given exemptions where equivalences exist between subjects.

Bachelor of Commerce

For all double degrees, candidates are required to complete subjects from the Commerce Schedule, including core subjects and subjects to satisfy the requirements of one of the Commerce majors. Candidates need to be aware that the number of credit points required by each major varies.

In addition to the Commerce requirements, candidates need to complete one of the following:

Bachelor of Arts

To qualify for the double degree Bachelor of Arts - Bachelor of Commerce candidates must fulfil the following:

- complete at least 72 credit points, including a major study, for subjects listed in the Arts schedule, and including at least 36 credit points for subjects offered by member Units of the Faculty of Arts;
- not more than 96 credit points for 100-level subjects may be undertaken for both degrees;
- the Arts major study and the Commerce major are to be chosen from two different disciplines.

Or

Bachelor of Creative Arts

All students undertaking the Bachelor of Creative Arts - Bachelor of Commerce Double Degree must:

- complete a major study for the Bachelor of Creative Arts comprising 108 credit points of compulsory subjects as listed in the Creative Arts Schedule
- undertake, where necessary, elective subjects to ensure a total of 216 credit points have been completed.

Or

Bachelor of Engineering - Faculty of Engineering or Faculty of Informatics

For the award of Bachelor of Engineering - Bachelor of Commerce, a minimum of 264 credit points have to be completed.

All students undertaking the Bachelor of Engineering - Bachelor of Commerce Double Degree must complete

- a total of at least 174 credit points of engineering subjects made up of the Engineering core or compulsory subjects and one of the engineering majors.

The minimum of 174 credit points will be exceeded by some engineering program requirements.

- where required, at least 12 weeks of approved professional engineering experience during the course. Exemptions may be given to part-time candidates who are in approved full-time engineering employment.

Or

Bachelor of Laws

To qualify for the award of the degrees of Bachelor of Commerce and Bachelor of Laws a candidate must complete all compulsory subjects prescribed in the Law Schedule AND elective subjects prescribed in the Law Schedule, having a value of 56 credit points.

Notes:

- The Bachelor of Commerce major in Legal Studies is not available to students undertaking this double degree.
- Where the Commerce Schedule contains any subjects with the prefix LAW, the equivalent LLB subject may be substituted.
- Students wishing to be considered for the award of honours in Law MUST complete either LLB313 Legal Research Project A or LLB314 Legal Research Project B.

Or

Bachelor of Science - Faculty of Science

All students undertaking the Bachelor of Science - Bachelor of Commerce Double Degree must complete 90 credit points of subjects from the Science Schedule, including a Science major study.

Any extra credit points required to achieve a double degree total of 216 credit points, additional to the Commerce and Science Requirements specified above, may be selected from the Commerce, Science or General Schedule.

Or

Bachelor of Science - Faculty of Health and Behavioural Science

For the Bachelor of Science students will be required to complete subjects from the Health and Behavioural Sciences Schedule approved by the Faculty of Health and Behavioural Sciences.

Any additional subjects needed to complete a minimum of 216 credit points should be selected from the Health and Behavioural Sciences Schedule, the Commerce Schedule or the Science Schedule.

Or

Bachelor of Psychology - Faculty of Health & Behavioural Science

For the award of Bachelor Psychology - Bachelor of Commerce, a total of 264 credit points have to be completed.

Course Structures

This double degree fulfils the requirements needed to become a registered psychologist.

For the Bachelor of Psychology, students will be required to complete

- i) the 150 credit points of psychology subject requirements for the Bachelor of Psychology.
- ii) Any additional subjects needed to complete the required 264 credit points should be selected from either the Health and Behavioural Sciences Schedule or the Commerce Schedule.

Further information, including details of all these double degrees can be obtained by contacting the relevant Faculty Offices.

Commerce Majors available in other degree programs

Selected Commerce majors are also available through the following programs:

Bachelor of Arts

Students wishing to major in the following areas within an Arts degree are required to complete a double major. The first major must be chosen from the Arts Schedule. Refer to the Faculty of Arts section for details of these programs.

Bachelor of Arts (Accountancy)

Bachelor of Arts (Economics)

Bachelor of Arts (Industrial Relations)

Bachelor of Arts (Management)

Bachelor of Arts (Marketing)

Bachelor of Science (Human Resource Management)

Students wishing to major in Human Resource Management in the BSc degree are required to complete a double major. The first major must be chosen from the Science Schedule.

To qualify for a major study in Human Resource Management in the Bachelor of Science, students must complete successfully the following subjects:

COMM100	Introduction to Employment Relations	6
MGMT341	International and Comparative Employment Relations	8
MGMT110	Introduction to Management	6
MGMT201	Organisational Behaviour	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT301	Managing Across Cultures	6
MGMT314	Strategic Management	6
MGMT322	Training and Development	6

Bachelor of Science (Management)

Students wishing to major in Management in the BSc degree are required to complete a double major. The first major must be chosen from the Science Schedule.

To qualify for a major study in Management in the Bachelor of Science, students must complete successfully the following subjects:

ACCY100	Accounting IA	6
ACCY102	Accounting IB	6
MGMT102	Business Communications	6

MGMT110	Introduction to Management	6
Either		
MGMT201	Organisational Behaviour	6
or		
PSYC351	Industrial and Organisational Psychology	6
Plus		
MARK101	Introduction to Marketing	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus 12 credit points from 300-level subjects offered by the School of Management, Marketing and Employment Relations.

Bachelor of Science (Marketing) Bachelor of Mathematics (Marketing) Bachelor of Information and Communication Technology (Marketing)

Students wishing to major in Marketing in any of the above degree are required to complete a double major. The first major must be chosen from the relevant Schedule.

To qualify for a major study in Marketing in any of the above degrees, students must complete successfully the following subjects:

MARK101	Introduction to Marketing	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6

Plus 12 credit points from the following

MARK240	Marketing and Consumer Behaviour in East and South East Asia	6
MARK270	Services Marketing	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

COMMERCE SUBJECT DESCRIPTIONS

ACCY100 Accounting IA 6cp

Spring	Wollongong	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Wollongong	On Campus
Autumn	Moss Vale	On Campus
Spring	Dubai	On Campus

(Feb-May 03)

Summer Dubai On Campus

(June-Sept)

Autumn Dubai On Campus

(Sept03-Jan 04)

Autumn Bega Education On Campus
Access Centre

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop and 1 hour Computer Lab per week.

Assessment: See Subject Outline

Subject Description: Accounting IA is an introduction to the processes of accounting and financial management and is concerned with money, records of money, calculations of income and wealth; financial decision making; the information that can be provided by an accounting system as a basis for decision making and the techniques of processing such information.

Subject Objectives: On successful completion, students should be able to: 1. Describe the role of accounting information in decision making; 2. Analyse basic accounting issues and communicates ideas effectively to others both orally and in writing; 3. Use computer spreadsheets to solve simple accounting problems; 4. Explain the role of ethics in business decision making; 5. Use accounting information to assess profitability and financial strength of business organisations.

ACCY102 Accounting IB 6cp

Spring	Wollongong	On Campus
Spring	Batemans Bay	On Campus
Spring	Bega Education Access Centre	On Campus
Spring	Shoalhaven	On Campus
Spring	Moss Vale	On Campus
Spring	Dubai	On Campus

(Feb-May 03)

Autumn Dubai On Campus

(Sept03-Jan 04)

Summer Wollongong On Campus
2003/2004

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop and 1 hour Computer Lab per week.

Pre-requisites: ACCY100 Accounting IA

Assessment: See Subject Outline

Subject Description: Accounting IB builds on the understanding of accounting developed in Accounting 1IA. It examines financial measures of business activities and the systems that enable the measures to be recorded and then reported and communicated to the various stakeholders of entities such as owners (including partners and shareholders),

providers of credit (lenders and creditors), management as well as other interested parties.

Subject Objectives: On successful completion, students should be able to: 1. Use basic accounting concepts and techniques to analyse, record, process and present accounting information; 2. Use computer spreadsheets to solve simple accounting problems; 3. Use accounting information to assess profitability and financial strength of business organisations; 4. Design a simple accounting information system; 5. Identify the need for and then prepare internal and external accounting reports.

ACCY201 Financial Accounting IIB 6cp

Spring	Wollongong	On Campus
Spring	Batemans Bay	On Campus
Spring	Bega Education Access Centre	On Campus
Spring	Shoalhaven	On Campus
Spring	Moss Vale	On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop and 1 hour Computer Lab per week.

Pre-requisites: ACCY202

Assessment: See Subject Outline

Subject Description: Accounting standards are applied to companies and groups of companies in order to produce external financial reports. The subject contains three distinct but inter-related strands. First, there is a technical strand of knowledge and skills used in applying accounting standards to financial reports. Secondly, there is a contextual strand, which highlights the environment in which financial reporting takes place. Thirdly, there is a theoretical strand, where deeper issues relating to accounting practice will be explored. Lectures, tutorials, workshops and assessment tasks will provide opportunities to develop students' understanding of each of these three strands.

Subject Objectives: After having successfully completed this subject, students should be able to: 1. Access a knowledge base and demonstrate associated skills in the practical application of certain Australian Accounting standards in the preparation of financial reports; 2. Demonstrate an understanding of the context in which Australian companies prepare financial reports and the issues that currently impact the accounting profession; 3. Explain the sociological, political and economic dimensions of financial reporting.

ACCY202 Financial Accounting IIA 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Bega Education Access Centre	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Moss Vale	On Campus

Exclusions: ACCY292

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop per week.

Assessment: See Subject Outline

Subject Description: An introduction to accounting theory and critique, and the preparation of accounting statements to comply with accounting and statutory regulation.

Subject Descriptions

This subject also covers reporting requirements for economic groups consisting of multiple legal entities.

Subject Objectives: See Subject Outline

ACCY211 Management Accounting II 6cp

Autumn	Wollongong	On Campus
Summer 2003/2004	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Bega Education Access Centre	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Moss Vale	On Campus

Pre-requisites: ACCY101, ACCY190 or ACCY100 and ACCY102

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop per week.

Exclusions: ACCY212

Assessment: See Subject Outline

Subject Description: The design, production and use of accounting and other quantitative information in the planning and control of organisations, including management of the production function, decentralised organisations, derivation of cost relationships and statistical control of costs.

Subject Objectives: See Subject Outline.

ACCY228 Tax Planning 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221 and FIN251

Assessment: See Subject Outline

Subject Description: The subject provide an overview of the procedures and theory of planning for the optimum level of taxation for an individual and/or a business at different stages in life. Optimal tax planning changes from the intense early years where income is rising and investments are made through to retirement where income is minimal and investments start to be realised.

Subject Objectives: On successful completion, students should be able to: 1. Critically evaluate alternative tax planning strategies for optimal personal/business returns; 2. Develop a suitable set of tax management strategies for individuals at various life stages; 3. Develop a suitable set of tax management strategies for business; 4. Demonstrate a knowledge of relevant taxation legislation including an awareness of pending changes; 5. Demonstrate cognisance of the anti-avoidance provisions in legislation.

ACCY231 Information Systems in Accounting 6cp

Spring	Wollongong	On Campus
Spring	Bega Education Access Centre	On Campus
Spring	Batemans Bay	On Campus
Spring	Shoalhaven	On Campus
Spring	Moss Vale	On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: ACCY101, ACCY190, or ACCY100 and ACCY102

Assessment: See Subject Outline

Subject Description: Management information systems, including data collection and processing, internal control and internal reporting. System design and computer applications.

Subject Objectives: See Subject Outline

ACCY302 Financial Accounting III 12cp

Autumn	Wollongong	On Campus
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Contact Hours: 3 hour Lecture, 2 hour Tutorial, 1 hour Workshop per week.

Pre-requisites: ACCY201

Assessment: See Subject Outline

Subject Description: Advanced aspects of financial accounting and external reporting with particular reference to developments in accounting theory and professional standards, including critical evaluation and comparison of various financial accounting theories.

Subject Objectives: This subject has been developed to foster the attributes of a Wollongong graduate as expressed in the University's 'Towards 2000' document.

ACCY312 Management Accounting III 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY211

Assessment: See Subject Outline

Subject Description: An advanced treatment of management accounting theory and its relationship to decision theory, including model building and use, cost prediction, pricing decisions, and the behavioural dimensions of management accounting.

Subject Objectives: Upon completing this subject, students should be able to: 1. Understand and appreciate the conceptual foundations of management accounting; 2. Understand and apply a range of behavioural and operations research decision models; 3. Understand and explain the current developments in management accounting thought and practice, particularly the role of management accounting in the new technological environment; 4. Apply analytical skills to solving a variety of advanced management accounting problems; 5. Demonstrate computer dexterity in the use of both spreadsheets and specifically designed decision analysis software; 6. Demonstrate professional adaptability skills; 7. Present your views and arguments both orally and in written form.

ACCY332 Advanced Information Systems 6cp in Accounting

Autumn	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Computer Lab per week.

Pre-requisites: ACCY231

Assessment: See Subject Outline

Subject Description: Advanced aspects of communication and information theory, system evaluation, design, implementation and management, accounting and associated computer applications.

Subject Objectives: See Subject Outline

**ACCY335 Advanced Information Systems 6cp
in Accounting II**

Spring Wollongong On Campus
Contact Hours: 2 hour Lecture, 1 hour Computer Lab per week.

Pre-requisites: ACCY231 or BUSS211 and BUSS212

Assessment: See Subject Outline

Subject Description: To maintain competitiveness in the global electronic market-space organizations need to ensure that their information system and business strategies are aligned. The greatest impediment to this strategic alignment is the inability of technical and non-technical management to effectively communicate. Systems Analysis and Design in Accounting and Finance provides future business managers with the necessary skills to effectively communicate with Information Technology specialists. These skills are developed through the examination of the analysis and design techniques of Entity Relationship (ER) and Resource Event Agent (REA) modeling, in conjunction with an overview of Enterprise Resource Planning Systems (ERP) and Electronic Commerce (e-commerce) implementation issues. In addition to a generic examination of ERP, students will also work through a series of e-commerce computer exercises utilising SAP.

Subject Objectives: See Subject Outline

ACCY342 Advanced Auditing 6cp

Spring Wollongong On Campus
Contact Hours: 2 hour Lecture, 1 hour Tutorial per week. 1 Computer Lab per week

Pre-requisites: ACCY201

Assessment: See Subject Outline

Subject Description: Advanced auditing is a capstone subject for students undertaking an accountancy major. It integrates accounting standards, accounting systems, internal controls, and the auditing functions of obtaining and evaluating evidence, and reporting, all within an overview of auditing, and continues through the audit process with emphasis on financial statement audit under the Corporation Law. In addition, the program addresses issues related to electronic data interchange audit.

Subject Objectives: See Subject Outline

ACCY368 Insolvencies 6cp

Spring Wollongong On Campus
Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: Accounting and legal aspects of corporate and non-corporate insolvencies including liquidations & receiverships, alteration of capital, reconstruction, amalgamation and takeovers, and the use of insolvency procedures as a management strategy.

Subject Objectives: See Subject Outline

ACCY372 Topics in Accounting History 6cp

Spring Wollongong On Campus
Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, hour Tutorial per week.

Pre-requisites: ACCY201 or ACCY202

Assessment: See Subject Outline

Subject Description: Topics in the history and development of accounting thought.

Subject Objectives: See Subject Outline

ACCY380 Accounting For Information Technology 6cp

Autumn Wollongong On Campus
Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: IACT301, ITAC301

Exclusions: ACCY901, ACCY101, ACCY190 or ACCY100 and ACCY102

Assessment: See Subject Outline

Subject Description: An introduction to accounting with special emphasis on the design, interpretation and utilisation of the major types of reports and analyses prepared by accountants for the decision making process.

Subject Objectives: See Subject Outline

ACCY403 Theoretical Foundations of Research 6cp

Spring Wollongong On Campus
Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: The nature of theory, research and theory formation. A study of the methods used in theory formation, and of attempts to formulate theories of accounting and finance.

Subject Objectives: See Subject Outline

ACCY404 Financial Accounting 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Pre-requisites: ITAC301

Assessment: See Subject Outline

Subject Description: An in-depth study of the basis of external financial reporting, including asset valuation and periodic profit measurement. A study of the elements of financial accountancy and their communication in accounting reports.

Subject Objectives: See Subject Outline

ACCY405 International Accounting 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Pre-requisites: ITAC301

Assessment: See Subject Outline

Subject Description: Differences in accounting thought and standards between countries. Influence of national outlook and policies and of economic infra-structure on accounting practice. Uniform systems of accounting. Corporate growth and its impact on accounting and auditing. Comparative study of auditing and reporting standards, and international aspects of public accounting practice. The multi-national corporation. The effect of changing price levels on accounting for international operations.

Subject Objectives: See Subject Outline

Subject Descriptions

ACCY407 Empirical Research Methods 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: The subject provides an overview of the ways accounting and finance researchers identify, formulate and investigate empirical questions in accounting and finance. Subjects include the criteria adopted to select research projects, issues of experimental design, validity threats, measurement problems and statistical analysis. Selected published accounting and finance research will be used to illustrate established methods of empirical research.

Subject Objectives: See Subject Outline

ACCY408 Applied Financial Accounting 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Pre-requisites: ITAC301

Assessment: See Subject Outline

Subject Description: Advanced problems in external financial reporting, including accounting for groups of companies, price level accounting and reporting theory involving consideration of taxation and economic implications.

Subject Objectives: See Subject Outline

ACCY413 Management Accounting 6cp

Autumn Wollongong On Campus

Contact Hours: 2hour Seminar per week.

Assessment: See Subject Outline

Subject Description: The conceptual basis of management accounting and information systems. An examination of traditional and alternative theories and approaches shaping organisational and behavioural aspects of management accounting, including the contingency approach, the agency approach, control system theories, activity based accounting and critical accounting approaches.

Subject Objectives: See Subject Outline

ACCY414 Management Planning and Control Systems 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Assessment: See Subject Outline

Subject Description: An in-depth analysis of selected aspects of the design and evaluation of management accounting planning and control systems in both the private and public sectors.

ACCY418 Applied Management Accounting 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: An in-depth applied analysis of selected topics in management accounting. Topics chosen could include decision theory and analysis, financial model building, cost prediction and control techniques, pricing, management accounting systems design,

and the interrelationships between management and the management accounting system. Theoretical concepts developed in other management accounting subjects will be expanded as needed to support the complex applications being studied.

ACCY436 Management and Information Systems 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Assessment: See Subject Outline

Subject Description: The effective use and control of information systems, particularly computer-based information systems, and the likely impact of developments in this area on management functions and how managers carry out those functions.

Subject Objectives: See Subject Outline

ACCY444 Issues in Auditing 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: An in-depth examination of contemporary topics in auditing with emphasis on controversial and theoretical issues, including social and ethical issues, role of quantitative techniques in the audit function, continuous auditing concept, uncertainty reporting, audit performance evaluation, extension of attest function and public sector auditing.

ACCY468 Insolvencies 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Assessment: See Subject Outline

Subject Description: Accounting and legal aspects of corporate and non-corporate insolvencies including bankruptcies, liquidations, receivership, alteration of capitol, reconstruction, amalgamation and takeovers.

Subject Objectives: See Subject Outline

ACCY474 Accounting Regulation 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: An in-depth study of the regulation of accounting practice and procedures, the accounting profession and of measurement and disclosure in external financial reporting. This could include an examination of the consequences of regulation, alternative institutional arrangement for setting standards, the impact of accounting theory on standard setting, and a historical review of accounting regulation.

ACCY485 Special Topic in Accounting 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: A special topic to be selected from any area of financial accounting, management accounting, business finance, information systems or government accounting. The selection will be made by the Head of the School, taking into account the expertise of academic staff, including visiting staff, and the interest of students.

Subject Objectives: See Subject Outline

ACCY486 Special Topic in Accounting 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: A special topic to be selected from any area of financial accounting, management accounting, business finance, information systems or government accounting. The selection will be made by the Head of the School, taking into account the expertise of academic staff, including visiting staff, and the interest of students.

Subject Objectives: See Subject Outline

ACCY493 Research Essay 12cp

Annual Wollongong On Campus

Pre-requisites: ITAC301

Subject Description: An individual program determined in consultation with the Head of School.

ACCY495 Research Essay 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Subject Description: An individual program determined in consultation with the Head of School.

BUSS102 Computer Systems 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Assessment: Assignments, mid-session test and final examination.

Subject Description: As an introduction to the fundamentals of computers, this unit studies the principle of operation and the functional components of a modern computer system. It provides a framework to examine the interrelation between hardware and systems and application software, and the current trends in computer technology.

Subject Objectives: On successful completion of this subject students should be able to: understand the relationship between the fundamental hardware components in the computer; demonstrate a clear comprehension of the principles underlying the operation of the computer; distinguish between system software and application software; appreciate the present software technology in the business environment; and be familiar with the trends of advanced technology in the information-based society.

BUSS110 Introduction to Business Information Systems 6cp

Autumn Moss Vale On Campus

Spring Dubai On Campus

(Feb-May 03)

Session 1 INTI Subang Jaya On Campus
Kuala Lumpur

Summer Dubai On Campus

(June-Sept)

Autumn Dubai On Campus

(Sept03-Jan 04)

Autumn Dubai On Campus

(Sept03-Jan 04)

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega Education On Campus
Access Centre

Intake C Sydney Modular

Summer Wollongong On Campus

2003/2004

Co-requisites: Not to count with CSCI101.

Exclusions: Not to count with CSCI101

Assessment: Assignment, word processing test, spreadsheet test, database test, and final examination

Subject Description: This subject examines the roles of information systems in a modern organisation. Topics covered include: computer hardware, systems software and networks, operating systems/productivity tools, standard business systems, file/data management, processes and modelling techniques used in computer systems development, information systems for management and decision support, security and privacy issues. The practical component includes using the internet, word processing, spreadsheets and database systems.

Subject Objectives: On successful completion of this subject, students will have: an appreciation of the roles of information systems in modern organisations; a reasonable understanding of the functions and purposes of various business information systems; and a degree of competency in using productivity tools to support the information requirements of an organisation.

BUSS111 Business Programming I 6cp

Spring Wollongong On Campus

Summer Wollongong On Campus

2003/2004

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week Summer 2003/2004 TBA

Co-requisites: Not to count with CSCI111

Assessment: Assignments, programming tests, final examination

Subject Description: As an introduction to the fundamentals of programming, this subject aims to develop an understanding of the basic principles of programming, fundamental concepts of data types and simple data structures, as well as to develop skills in the design or well structured solution algorithms to a range of simple classical business computing problems.

Subject Descriptions

Subject Objectives: On successful completion of this subject, students should be able to: create and manipulate computer files; correctly design solution algorithms using structure charts and pseudocode; understand and apply the syntactic and semantic rules of a structured programming language; understand and apply tools and techniques for program testing; understand the use of programming standards, the concepts involved in compilation, linking and execution; understand and apply the concepts of data types and structures.

BUSS201 User-Centred Business Programming 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS111 or CSCI111

Assessment: Tutorial assignments; practical test; final examination.

Subject Description: The broad aim of this subject is to provide students with an in-depth knowledge of user-centered application design using various visual programming concepts and techniques. The subject will provide students with the opportunity to understand and use the principles of user-centered design and computer-user interface design with visual programming tools and techniques and to understand and use the techniques of Joint Application Development and Rapid Application Development for visual program design. Students will learn to program visually utilising appropriate techniques in a commonly available visual programming environment.

Subject Objectives: On successful completion of this subject students should be able to: understand and apply various visual programming concepts, tools and techniques as well as the principles of user-centered design and computer-user interface design; develop a Joint and Rapid Application Development project with visual programming tools and techniques.

BUSS211 Requirements Determination and Systems Analysis 6cp

DXB UG Autumn Dubai On Campus
(Sept03-Jan 04)

Autumn Wollongong On Campus

Pre-requisites: 6cp 100 level BUSS or CSCI

Assessment: Assignments; class test; final examination.

Subject Description: This subject aims to introduce the student to the techniques and technologies of structured systems analysis in the initial stages of the Systems Development Life Cycle. It examines the complementary roles of systems analysts, clients and users of the Systems Development Life Cycle and Object Oriented development methods. Process and Object methods and models are introduced and examined. The student will make use of a Computer Aided Software Engineering (CASE) tool to document solutions to the analysis of typical problems.

Subject Objectives: On successful completion of this subject, students should be able to: demonstrate an understanding of the origin and development of systems analysis methods; demonstrate an appreciation of the relationship between information strategy and organisational structure; demonstrate an understanding of information systems requirements and organisational objectives; demonstrate an understanding of the complementary roles of

clients, users and analysts in the development of computer based information systems; demonstrate an ability to analyse and present a system specification; demonstrate an appreciation of CASE tools as an aid to systems analysis.

BUSS212 Database Management Systems 6cp

Undergrad Dubai On Campus

Spring

(Feb-May 03)

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Computer Lab per week.

Pre-requisites: 6 credit points of BUSS100-level or CSCI100-level subjects

Assessment: class tests, assignments, final examination.

Subject Description: This subject aims to introduce students to the theory and practice of designing, implementing and using database management systems.

It examines conceptual data modeling using Entity-Relationship Diagrams, introduces the relational data model and discusses techniques for mapping conceptual data models into database designs and the refinement of such designs using normalization theory. Students should acquire skills in relational database querying, using both formal and implemented query languages and will be introduced to the principles of query processing and optimization as well as database file structures. While the subject concentrates on the relational data model, a brief introduction to the object-oriented and object-relational models will also be provided. Students will receive hands-on experience using a commercial tool.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate an understanding of entity relationship modelling and its role in systems development.

BUSS213 Multimedia in Organisations 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Co-requisites: BUSS111 or CSCI111

Assessment: Assignments, final examination.

Subject Description: The subject introduces students to a range of theoretical knowledge/ideas and practical skills associated with the planning, implementation, delivery and management of a small multimedia project. The subject aims to prepare students for involvement in such projects within organisations where the use of multimedia for a wide variety of purposes is steadily increasing. Students will obtain practical experience in using a range of appropriate software, using theoretical ideas to justify choices of representation within a context that involves some constraints. Students will also gain practical experience in project management in a team-based environment.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate a clear understanding of the theoretical and practical issues that can inform choices of how to structure/organise a piece of multimedia within an organisational setting for a specific purpose and audience within a constrained environment; demonstrate knowledge and skills in the use of appropriate computer hardware / software to produce a multimedia software product;

demonstrate knowledge and skills appropriate to the ongoing management of a team-based project involving students with widely different backgrounds and knowledge/skill sets.

BUSS214 Business Programming II 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS111 or CSCI111

Assessment: Assignments; class test and final examination.

Subject Description: The aims of this subject are to provide students with an introduction to a number of fundamental commercial programming techniques that are applicable to the solution of a wide range of typical commercial/business problems; introduction to structured programming; an overview of program quality issues, including design criteria for improving the structure and quality of commercial programs and an introduction to the use of structure charts and pseudocode as formal program design and documentation tools.

Subject Objectives: On successful completion of this subject, students should be able to: design solution algorithms for a selection of traditional commercial data processing problems using pseudocode and structure charts; code a working, well-structured program from the pseudocode and structure chart.

BUSS215 Business Programming III 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS214

Assessment: Assignments, mid session-test and final examination.

Subject Description: This is the second subject in commercial business programming which introduces the student to advanced programming techniques and requires the student to produce usable programming solutions to realistic business problems. Topics covered include advanced data file processing using sequential, indexed sequential and relative files, hash addressing, B-Tree indexing, sorting, merging, interactive processing, control break processing, character manipulation, subprograms, advanced report generation, embedded SQL, robustness and usability.

Subject Objectives: On successful completion of this subject, students should be able to: design and implement solutions to a selection of realistic commercial problems involving advanced file structures; make use of sub programming techniques for the implementation of modular programs; use advanced function and features such as advanced report generation and interactive debugging.

BUSS218 Systems Design and Architecture 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Computer Lab per week.

Pre-requisites: BUSS211

Assessment: Assignments, tutorial exercises and final examination.

Subject Description: This subject extends systems analysis and introduces the student to the techniques and technologies of structured systems design in the post-analysis stages of the Systems Development Life Cycle. It examines the complementary roles of systems analysts, designers, clients and users in traditional Systems Development Life Cycle and Object Oriented development methods. Process and Object methods and models are extended to cover systems design and implementation. Program design is placed in the context of systems design. The student will make use of a Computer Aided Software Engineering (CASE) tool to document design solutions to typical problems.

Subject Objectives: On successful completion of this subject, students should be able to: demonstrate an understanding of the origin and development of systems design methods; demonstrate an appreciation of the relationship between information strategy and organisational structure; demonstrate an understanding of information systems requirements and organisational objectives; demonstrate an understanding of the complementary roles of clients, users, analysts and designers in the development of computer based information systems; demonstrate an ability to design and present a system design specification; demonstrate an appreciation of CASE tools as an aid to systems development.

BUSS308 Computer Systems Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Tutorial per week.

Pre-requisites: 6 cp at 300 level.

Exclusions: Not to count with BUSS208.

Assessment: Develop evaluation grid, case study report, evaluation on case study and peer review reports, final examination.

Subject Description: Students will be introduced to the issues involved in the successful management of a medium sized computer installation in an organisation. Topics covered will include the role of strategic information systems planning; hardware/software specification; tendering procedures; system evaluation and selection; benchmarking; project management (including the management of people); operational management; quality control; system performance monitoring and testing and systems maintenance.

Subject Objectives: On successful completion of the subject, students should be able to: show an appreciation of the issues confronting information systems planning and development; demonstrate an understanding of the key IT trends and their implications, and relate the aspects of managing (socio-technical) information systems with people in the workplace.

BUSS311 Advanced Database Management 6cp Systems

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS212

Assessment: Assignments, major assignment and final examination.

Subject Descriptions

Subject Description: This subject provides an overview of the relational data model and relational database management systems followed by comprehensive coverage of some of the advanced topics related to data and database administration, CASE tools, post-relational database systems and recent developments in the areas of online analytical processing, data mining and the World Wide Web (WWW). Discussion of these relatively recent and advanced topics is expected to equip the student to meet the challenges in database management and advanced applications development in contemporary organisations. Students will be presented with opportunities to do hands-on work with appropriate commercial tools.

Subject Objectives: On successful completion of this subject, the student should be able to: develop a good understanding of the critical issues in data and database administration; demonstrate a good understanding of the scope and functionalities of object-relational and object-oriented database management systems; demonstrate an understanding of the role, features and limitations of CASE tools in system design and development; understand the key conceptual issues and be conversant with some of the practical tools in the emerging areas of database management.

BUSS312 Distributed Information Systems 6cp

Spring Dubai On Campus

(Feb-May 03)

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Computer Lab per week.

Pre-requisites: 6cp of 200 level BUSS subjects

Assessment: Assignments and final examination.

Subject Description: This subject examines distributed information systems and data communications technology and their support of organisational objectives, the design of networked computer systems, the selection of appropriate hardware and software platforms and the current and future trends in data communications.

Subject Objectives: At the completion of this subject, successful students should: understand in depth the underlying principles of data communications as they apply to distributed data processing; understand modern data communications technology and its related regulatory environment; appreciate the implications of current and future trends in data communication.

BUSS315 Knowledge-Based Information Systems 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Tutorial, 2 hour Computer Lab per week.

Co-requisites: 6 cps at 300-level

Assessment: In-class tests, project, final examination

Subject Description: This subject provides an introduction to the general nature of Knowledge-Based Systems (KBS), appropriate application environments, knowledge acquisition and representation for developing KBS, constraint programming, intelligent agents, web applications, managerial issues in designing KBS, and general methodologies for KBS development.

Students will also learn an application of a rule-based Expert System Shell and gain an understanding of the role knowledge-based systems play in business management.

Subject Objectives: On successful completion of this subject students should: have a clear understanding of the nature of Knowledge Based Systems, the appropriate business domains for KBS, the differences between traditional systems and KBS, inferencing processes of KBS, and the knowledge of designing rule-based KBS using shells.

BUSS316 Information Systems Development 6cp Methodologies

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS311 and BUSS214/Not to count with BUSS216

Assessment: Assignments; and final examination.

Subject Description: This subject provides an understanding of the systems development and modification process. It enables students to evaluate and choose an appropriate systems development methodology. It emphasises the factors for effective communication with users and team members and all those associated with development and maintenance of the system. It introduces and describes evolutionary systems development methodologies, and addresses the issues involved in project planning, documentation, management and monitoring of evolutionary development.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate: the ability to identify development circumstances which may benefit from the use of a particular development approach; the ability to use and tailor an appropriate methodology to suit the client's development circumstances; the ability to use the methodology within a Fourth Generation Environment, and use computer-based tools, to develop systems;

the ability to gather and analyse information during project development for documentation and management purposes, an understanding of how systems may need to evolve to match changing organisational circumstances.

BUSS317 Business Programming IV 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS214

Assessment: Assignments, major assignment and final examination.

Subject Description: This subject examines the principles, techniques and methodologies for the design of business software systems using visual programming tools and the object-oriented approach. This subject describes the concepts of inheritance, encapsulation, construction, access control and overloading. Students will be provided with both the framework and the building blocks with which they can define and implement objects of their own and use them in conjunction with a visual programming system.

Subject Objectives: On successful completion of the subject students should be able to: compare different programming paradigms such as 3GL, Visual, Object Oriented, Scripting, 4GL; make informed choices of appropriate programming languages and platforms in which to implement systems in the context of SDLC;

build systems which integrate several programming tools; be able to transfer programming concepts from a known language to a new one.

BUSS318 Information Systems Project 6cp

Spring Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hour Tutorial per week

Pre-requisites: BUSS214 and BUSS311

Assessment: Progress report; Project Diary; Final Report and Final examination.

Subject Description: This subject examines in detail the principles/techniques of project design and management and the factors to be considered such that a system can be planned, designed, implemented and managed successfully. Topics will include: project management, cost benefit analysis, hardware and software acquisition and systems implementation and maintenance. Students will be expected to utilise these techniques to analyse, design and plan for the implementation and maintenance of systems in a commercial environment. There is a requirement to undertake a group project.

Subject Objectives: On successful completion of this subject, students should be able to: understand and apply factors that need to be considered for successful systems design; work effectively in small groups to design a small commercial system; describe and carry out the processes involved in the acquisition of computer based information systems including cost-benefit and needs analysis, RFT design and evaluation, detailed planning for the maintenance of commercial systems; communicate effectively with clients, users and other development team members.

BUSS391 Special Topic in Information Systems 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Summer Wollongong On Campus

2003/2004

Contact Hours: 4 hrs contact (seminars)

Pre-requisites: BUSS211 and BUSS212

Co-requisites: 12 cp at BUSS300 level

Assessment: Assignments; Reports; Examination.

Subject Description: In this subject students will undertake a study of research methods or other topic of current interest in Information Systems. Its purpose is to give final year BComm(BIS) students an opportunity to explore in depth, a current and advanced topic in Business Information Systems.

Subject Objectives: At the completion of this subject students should demonstrate knowledge, understandings and skills in an advanced topic in Information Systems.

BUSS408 Business Information Systems Honours - Part 1 36cp

Annual Wollongong On Campus

Pre-requisites: Students must have approval from the Head of the Discipline of Information Systems in order to enrol in this subject

Assessment: Research Report; Assignments; Progress Reports.

Subject Description: This subject is specifically for those undertaking an honours program in Business Information Systems who wish to complete the program of study over 18 months. This subject would be followed by BUSS409 in the next Autumn session and together with BUSS409 is equivalent to BUSS410.

Subject Objectives: At the successful completion of this subject students should demonstrate detailed knowledge and skills in a specific information systems topic.

BUSS409 Business Information Systems Honours - Part 2 12cp

Autumn Wollongong On Campus

Pre-requisites: Students must have approval from the Head of the Discipline of Information Systems in order to enrol in this subject

Assessment: Research Report; Assignments; Progress Reports.

Subject Description: This subject follows BUSS408 for those who are undertaking over 18 months an honours program in Business Information Systems. This subject together with the subject BUSS408 is equivalent to BUSS410.

Subject Objectives: At the successful completion of this subject students should demonstrate detailed knowledge and skills in a specific information systems topic.

BUSS410 Business Information Systems Honours 48cp

Annual Wollongong On Campus

Pre-requisites: Students must have approval from the Head of the Discipline of Information Systems in order to enrol in this subject

Assessment: Research Report; Assignments; Progress Reports.

Subject Description: The minimum entry requirement to the honours program is the completion of a major study in Business Information Systems with results significantly above pass level. Students wishing to proceed to honours should consult the Head or Course Coordinator as soon as their interest in doing so is known. Students will be required to complete satisfactorily BUSS929 as part of the coursework component of their honours program.

Subject Objectives: At the successful completion of this subject students should demonstrate detailed knowledge and skills in a specific information systems topic.

BUSS450 Joint Honours in Business Information Systems 48cp

Annual Wollongong On Campus

Pre-requisites: Students must have approval from the relevant Heads of the relevant disciplines in order to enrol in this subject.

Assessment: Research Report; Progress Reports; Assignments.

Subject Description: The entry requirement to the Joint Honours program is similar to the Business Information Systems Honours program above, except that candidates will be permitted to undertake an honours program in Business Information Systems and in a cognate discipline offered by another academic unit/discipline of the University.

Subject Descriptions

The coursework component and thesis topic for research must be chosen in consultation with the Heads of both the academic units involved.

Subject Objectives: At the successful completion of this subject students should demonstrate detailed knowledge and skills in a specific topic involving information systems and another discipline area.

COMM100 Introduction to Employment Relations 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject is offered in two discrete sections. It introduces students to several approaches to understanding employment, the management of labour, and work. It draws on social sciences, behavioural sciences and business sciences, in particular various forms of industrial/employment relations, and human resource management. Section one investigates the importance of context for analysing the factors that determine or influence the nature and organisation of paid work and employment at managerial and non-managerial levels. Section two is an introduction of the key concepts and techniques of contemporary human resource management. Based on an open systems approach to understanding organisations, it examines how these concepts and techniques can be used to manage the processes of organisational entry, exit and job performance.

ECON101 Macroeconomic Essentials for Business 6cp

Autumn Dubai On Campus

(Sept03-Jan 04)

Spring Wollongong On Campus

Autumn Wollongong On Campus

Autumn Batemans Bay On Campus

Autumn Shoalhaven On Campus

Autumn Bega Education Access Centre On Campus

Autumn Moss Vale On Campus

Subject Description: Macroeconomics develops a student's knowledge of economic theory and the capacity to apply this knowledge to a range of important domestic and international issues. These issues could include taxation reform in Australia, national debt, trade and investment, economic development and growth.

Subject Objectives: This subject aims to introduce students to the Australian economy and to explain the functioning of the economy as a whole. The approach will be primarily analytical in nature, in order to show how economic principles can be used to analyse real world events and problems and to recommend appropriate economic policy. The subject commences with an introduction to important macroeconomic concepts and techniques. The measurement of real output as well as the development of a Keynesian macroeconomic model to examine the determinants of equilibrium real output is then conducted. An analysis of key issues such as inflation and unemployment is then emphasised, as well as the identification of appropriate policy responses such as in the form of monetary and fiscal policy.

The importance of analysing the functioning of the economy in the context of a global environment is also emphasised, through identification of the significant contribution of international trade to the Australian economy.

ECON111 Introductory Microeconomics 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Spring Session Master of Educ & Trg (METC) AIT-TAFE On Campus

Intake A Sydney Modular

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Moss Vale On Campus

Spring Bega Education Access Centre On Campus

Summer Dubai On Campus

(June-Sept)

Session 1 INTI Subang Jaya On Campus
Kuala Lumpur

Subject Description: An introduction to microeconomics and its application to contemporary social and economic problems. Elementary economic theory and the necessary institutional framework will be developed.

Subject Objectives: The aim of this course is to make the basic microeconomic concepts, elementary techniques, and simple microeconomic models and applications accessible and understandable to all students. Specifically, students who complete this subject successfully should know and be able to use the terminology and graphical techniques of basic microeconomics. know and be able to explain the basic theory of demand and supply, including nature and application of price, cross, and income elasticities. know and be able to explain the basic theory of production and costs. know and be able to explain the market behavior of firms operating in markets characterized by perfect competition, monopoly, monopolistic competition, and oligopoly. be able to use the theory of microeconomics to analyze social issues and policies in areas such as education, health care and the environment.

ECON121 Quantitative Methods I 6cp

Spring Moss Vale On Campus

Spring Dubai On Campus

(Feb-May 03)

Intake C Sydney Modular

Autumn Dubai On Campus

(Sept03-Jan 04)

Spring Batemans Bay On Campus

Spring Bega Education Access Centre Flexible

Spring Shoalhaven On Campus

Spring Wollongong On Campus

Autumn Wollongong On Campus

Summer Wollongong On Campus

2003/2004

Intake A Sydney On Campus

Intake A Sydney Modular

Subject Description: An introduction to quantitative techniques and their application to business economics. Emphasis will be on statistics and topics will include descriptive statistics, probability, sampling, confidence intervals and hypothesis testing, elementary correlation and regression analysis and the use of computer programs for estimation and analysis.

Subject Objectives: On successful completion of this subject students should be able to: understand the statistical techniques that are commonly used in the modern commercial world; apply the statistical techniques to improve the business decision-making process; interpret and explain solutions in non-technical way; and use and interpret appropriate output from statistical computer packages, particularly Minitab .

ECON122 Quantitative Methods II 6cp

Autumn Dubai On Campus

(Sept03-Jan 04)

Spring Wollongong On Campus

Subject Description: An introduction to mathematical techniques emphasising their application to business and economics. Topics will include algebraic functions, linear models and matrix algebra, index numbers, mathematics of finance, differential calculus, constrained optimisation and integral calculus.

Subject Objectives: The main objective of this course is to provide Commerce students with some of the tools required to understand the mathematical content of journal articles. This is particularly important given the rapid increase in this mathematical content in recent times. The course will also allow students a deeper understanding of second and third year Commerce subjects that on occasions use mathematical expositions. Students in this subject will also obtain a level of mathematical competency that is well in advance of that necessary for general use in society. Students should also be able to use some of the knowledge gained from this course in the business world by being able to set up models of economic and business phenomena, and allowing a more thorough interpretation and understanding of statistical analyses.

ECON205 Macroeconomic Theory and Policy 8cp

Spring Dubai On Campus

(Feb-May 03)

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: Wollongong: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This unit analyses the major factors which determine the behaviour of the macroeconomy including policy prescriptions. The effects of money and interest, consumption and investment behaviour, monetary and fiscal stabilisation policies and the balance of payments on aggregate demand are studied. Aggregate supply factors in the form of wages and prices, inflation and unemployment and other macroeconomic controversies are then considered.

Subject Objectives: The aim of the course is to analyse the major factors which determine economic behaviour in the aggregate and to evaluate how alternative macroeconomic policies may improve economic performance.

In doing so the course examines the major determinants of aggregate demand equilibrium, namely consumption and investment demands, international factors, money and interest. Monetary and fiscal policies are examined using this analytic structure to determine the effectiveness of these policies. Aggregate supply equilibrium is then analysed in terms of wages, prices and employment. The problems of inflation and unemployment are also considered along with possible wages policies. If time permits, longer term growth explanations of economic behaviour and associated policy prescriptions are briefly reviewed.

ECON207 Economic Policy 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject examines the justification for, and the role of, government policy in a market economy. Emphasis will be placed on the Australian government and economy with international comparisons. The issues and topics discussed will include: the economic rationale for government intervention in a market economy; the size of the government sector and its sources of funds; the fiscal relationships between federal, state and local governments; the trade off between economic efficiency and social equity; the economic and social consequences of alternative taxation policies; and the government role in promoting effective market competition.

Subject Objectives: At all times, the objective of this subject will be to seek answers to questions of contemporary public interest. Students who successfully complete Econ207 should have a much greater appreciation of the dilemmas facing economic policy formulators, and should be able to apply economic principles to the analysis of existing or proposed economic policies.

ECON208 Gender, Work and the Family 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject analyses the roles women and men play in the workforce and within the family. Topics will include: analysis of factors affecting recent trends in female and male labour force participation; gender differences in occupational patterns and earnings; the economics of discrimination;

the role of the family in providing education, health care and other goods and services for its members; and the economic determinants of marriage and fertility.

Subject Objectives: On completion of the subject, participants should be able to: recognise the long term trends in the labour force participation of women and men understand the supply and demand factors influencing trends in participation consider societal attitudes and practices influencing patterns of male and female participation for both paid and unpaid work evaluate alternative methods of measuring occupational segregation and crowding understand the long term trends in segregation and crowding evaluate the alternative theories of labour market discrimination understand the important role of the family in producing education, health care and other goods and services evaluate the alternative models for explaining marriage and fertility rates.

Subject Descriptions

ECON215 Microeconomic Theory and Policy 8cp

Autumn Dubai On Campus

(Sept03-Jan 04)

Autumn Wollongong On Campus

Spring Wollongong On Campus

Subject Description: The subject provides further development of topics covered in introductory micro-economics, as well as more advanced topics. Topics that are developed further are demand and supply analysis; consumer choice; theory of the firm; cost functions; market behaviour under alternative market conditions; factor markets, and externalities. New topics not covered in the introductory course include general equilibrium theory and choice under conditions of uncertainty.

Subject Objectives: Microeconomic Theory & Policy is a course in intermediate level microeconomic theory and analysis. This subject deepens and extends students' understanding of introductory microeconomics. The topics covered include (but they are not limited to) consumption and production theory, monopolistic competition, oligopoly, game theory and strategic behaviour, barriers to entry, and contestable markets. Needless to say, there is a trade-off between the quantity and quality of the topics to be developed in the lectures. The content of ECON215 has been reduced in quantity but increased in quality.

ECON216 International Trade Theory & Policy 8cp

Spring Dubai On Campus

(Feb-May 03)

Spring Wollongong On Campus

Contact Hours: Wollongong: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON111

Subject Description: This subject is an introduction to international trade theory and international trade policy. It will examine the theory, policies, practices and institutions of relevance to a country's trade with other nations. Special attention will be given to Australia in the international economy.

Subject Objectives: A student who completes this subject successfully should be able to address the above questions and otherwise demonstrate knowledge of the basic theory of international trade through both written and verbal argument. He or she should be able to recognize assertions about international economics, in the popular press and elsewhere, that are wrong and, more important, he or she should know why they are wrong.

The student should also be able to use the tools of analysis developed in the subject to solve specific problems relating to international trade theory and policy.

ECON221 Econometrics 8cp

Spring Wollongong On Campus

Contact Hours: DXB UG Autumn (Sept03-Jan 04)

Pre-requisites: ECON121 or STAT131 or STAT231

Subject Description: Students learn to use data to solve real-world problems by estimating economic parameters (such as elasticities, marginal values etc). Students acquire expertise in applying econometric methods, including regression analysis and its extensions, to various types of data.

Students learn how to use econometrics to test economic theory, analyse economic behaviour and assist in policy formation. The subject is application orientated and practical work is performed using Windows-based statistical software.

ECON227 The Creative Economy: Technology, Innovation and Policy A 6cp

Spring Wollongong On Campus

Summer Wollongong On Campus

2003/2004

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject provides economic conceptual frameworks in which to think systematically about the economy, technology, innovation and related policy issues. The course does not include theory for the theory's sake, but presents and uses theoretical tools as a means to the end of gaining better understanding of the role of innovation-related policy issues in the context of a creative economy. Although the concepts and tools developed are relevant to all countries, special attention will be given to Australia and other OECD economies.

Subject Objectives: To analyse real economic problems, and ones of immense importance; appreciate the utility of economic analysis in innovational contexts; use theory and evidence, and argue rigorously; think abstractly (ie about general principles rather than concrete examples); assess critically innovation policy debates.

ECON228 Quantitative Analysis For Decision Making 8cp

Spring Wollongong On Campus

Autumn Dubai On Campus

(Sept 03-Jan 04)

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Co-requisites: ECON121 or ECON 193

Exclusions: Not to count with ECON230

Subject Description: The role of quantitative analysis in the decision-making process. Problem-solving techniques will be studied with emphasis on their practical application. Topics may include: linear programming; integer programming; goal programming; network analysis; systems simulation; decision theory; and inventory and queueing models.

Subject Objectives: a. To introduce the students to quantitative techniques used for decision making in business and economics. b. To develop the students' managerial ability and decision making skills. c. To lay the foundation for advanced studies in quantitative techniques and methods of operations research.

ECON229 The Creative Economy: Technology, Innovation and Policy B 8cp

Spring Wollongong On Campus

Summer Wollongong On Campus

2003/2004

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week., Summer 2003/2004 TBA

Subject Description: This subject provides economic conceptual frameworks in which to think systematically about the economy, technology, innovation and related policy issues.

The course does not include theory for the theory's sake, but presents and uses theoretical tools as a means to the end of gaining better understanding of the role of innovation-related policy issues in the context of a creative economy. Although the concepts and tools developed are relevant to all countries, special attention will be given to Australia and other OECD economies.

Subject Objectives: To analyse real economic problems, and ones of immense importance; appreciate the utility of economic analysis in innovational contexts; use theory and evidence, and argue rigorously; think abstractly (ie about general principles rather than concrete examples); assess critically innovation policy debates.

ECON230 Quantitative Analysis For Decision Making 6cp

METC	Master of Educ & Trg (METC) AIT-TAFE	On Campus
Autumn Session		
Autumn	Dubai	On Campus
(Sept03-Jan 04)		
Autumn	Dubai	On Campus
(Sept03-Jan 04)		
Spring	Shoalhaven	On Campus
Spring	Batemans Bay	Flexible
Spring	Bega Education Access Centre	Flexible
Spring	Moss Vale	On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Exclusions: Not to count with ECON228

Subject Description: The role of quantitative analysis in the decision-making process. Problem-solving techniques will be studied with emphasis on their practical application. Topics may include: linear programming; integer programming; goal programming; network analysis; systems simulation; decision theory; and inventory and queueing models.

Subject Objectives: a. To introduce the students to quantitative techniques used for decision making in business and economics. b. To develop the students' managerial ability and decision making skills. c. To lay the foundation for advanced studies in quantitative techniques and methods of operations research.

ECON231 Business Statistics and Forecasting 8cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1hour Computer Lab per week.

Pre-requisites: ECON121 or a Statistics subject accepted by the Head of Department

Subject Description: This subject introduces students to the applications of multi-variate statistical analysis to problems in business and economics.

These techniques will include multiple regression, discriminant analysis, factor analysis and cluster analysis. The subject also deals with the application of forecasting techniques, including smoothing methods, time series decomposition, and the Box Jenkins approach to problems. The emphasis will be on the use of various relevant computer packages.

Subject Objectives: This subject introduces students to the applications of multi-variate statistical analysis to problems in business and economics. These techniques will include multiple regression, discriminant analysis, factor analysis and cluster analysis. The subject also deals with the application of forecasting techniques, including moving averages and exponential smoothing, time series decomposition, multiple regression techniques, and the Box Jenkins approach to problems in business and economics.

ECON251 Industry and Trade in East Asia 8cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject studies the growth of the major economies in East Asia. It examines Japan, Korea, China, Taiwan & Hong Kong and their history of industrialisation in the post-war period, industrial structure, macroeconomic trends and policies. It examines trade patterns and trade policy, and strategic trade theories and policies. Comparisons of growth paths and the role of government will be made. Trade and investment flows in the Asia-Pacific region are analysed and implications for Australia and the Asia-Pacific Region are emphasised.

Subject Objectives: This subject studies the growth of the major economies in East Asia. It examines Japan, South Korea, China, Taiwan and Hong Kong. The topics discussed in this subject include: a. Studies of the major economies in East Asia Brief history of industrialisation in the post-war period Industrial structure, Macroeconomic trends and policies Trade pattern and trade policy, strategic trade Comparison of growth paths, and the role of government b. Analysis of Trade & Investment flows in the Asian-Pacific region c. Implications for Australia and the Asia-Pacific Region

ECON301 Monetary Economics 8cp

Autumn	Dubai	On Campus
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(Sept03-Jan 04)

Autumn	Wollongong	On Campus
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Contact Hours: Wollongong: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject develops the analysis of macroeconomic policy and public finance begun in the second year. It aims to analyse the working and institutions of the Australian monetary and financial system and markets, and monetary/regulatory policy in the economy. Attention is given to the determination of the money supply and its impact on interest rates, the price level, and the exchange rate.

Subject Objectives: This subject is concerned with developing a thorough understanding of the major contemporary global economic transitions, including that of: the formerly centrally planned economic systems in Central and Eastern Europe and in East Asia as they move towards market oriented economies; the developed economies of Western Europe as they move towards ever more closer forms of trade, investment and financial integration; and the developing market economies of East Asia as they move towards a higher level of economic development.

Countries which will be given particular focus include those of Vietnam, China, the Czech Republic, Poland, Hungary, Indonesia, Thailand, and Korea.

Subject Descriptions

ECON302 Transition Economics 8cp

Spring Dubai On Campus

(Feb-May 03)

Spring Wollongong On Campus

Contact Hours: Wollongong: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: Emphasis will be placed upon transition issues arising from: the formerly centrally planned economies of Europe and Asia as they have moved towards market oriented economies;

developed market economies in Europe as existing and prospective members of the European Union move towards a more advanced stage of trade, investment, and financial integration; developing market economies in East Asia as they attempt to achieve a higher level of economic development.

Subject Objectives: This subject is concerned with developing a thorough understanding of the major contemporary global economic transitions, including that of: the formerly centrally planned economic systems in Central and Eastern Europe and in East Asia as they move towards market oriented economies; the developed economies of Western Europe as they move towards ever more closer forms of trade, investment and financial integration; and the developing market economies of East Asia as they move towards a higher level of economic development. Countries which will be given particular focus include those of Vietnam, China, the Czech Republic, Poland, Hungary, Indonesia, Thailand, and Korea.

ECON303 Economic Development Issues 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: Nation states have attempted to accelerate the rate and influence the pattern of economic growth and development with mixed results. Consequences of economic development have been enormous. Economic Development issues addressed are: relationship between economic growth and development; market and the state; savings, investments and technical change; infrastructure and public goods as well as the role of agriculture; industrialisation; international trade and economic co-operation, and population and human resource development.

Subject Objectives: On successful completion of the requirements of this subject students should be able to: 1. distinguish between economic growth and economic development and learn to measure them, 2. identify and examine the major issues involved in strategies of economic growth according to the structuralist and neoclassical schools of thought, 3. appreciate and understand the complex and dynamic relationship between market and the State in the process of economic growth.

ECON307 International Monetary Economics 8cp

Spring Dubai On Campus

(Feb-May 03)

Spring Wollongong On Campus

Contact Hours: Wollongong 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject is a study of monetary aspects of international economics. It comprises two parts. In Part A we examine theoretical approaches to the balance of payment and exchange-rate determination.

In Part B we analyse selected issues in international monetary economics of topical interest.

Subject Objectives: At the conclusion of this subject students should be able to: extend monetary analysis to an open economy framework; identify the various components of the balance of payments and explain the adjustment process of the balance of payments; evaluate the various approaches to the determination of exchange rates;

identify some of the current key issues in international monetary economics; evaluate and analyse the problems in these areas.

ECON308 Labour Economics 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: A study of the labour market and the factors influencing the supply and demand for labour will be the basis for the subject. Wages theory will be discussed as well as Australian practice. The effects of changes in technology on the workforce will be discussed as well as ways of accommodating such changes.

Subject Objectives: At the conclusion of this subject, students should be able to: identify and contrast the main schools of thought within labour economics analyse current labour market issues from the various perspectives select and use current labour market data for Australia and selected overseas countries demonstrate an understanding of the current labour market issues in Australia and selected overseas countries.

ECON309 Environmental Economics 8cp

Spring Wollongong On Campus

Not offered in 200 Not on offer in 20033

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON111

Subject Description: This subject will provide a comprehensive analysis of environmental issues using both the traditional theory of economic externalities and the newer analysis of ecologically sustainable development. Both approaches will be used to initially evaluate environmental policy in Australia and developing countries. In addition, a component of the course will deal with issues specific to the Illawarra/South Coast Region.

Subject Objectives: to develop a comprehension of the analytical techniques used in environmental economics. to develop an ability to apply economic techniques of analysis to environmental issues and to develop policy analysis skills to critically evaluate Australia's environmental policies and to assess the impact of alternative economic instruments on policy objectives. to take a comparative approach to world-wide environmental issues, focussing particularly on the Illawarra region and the Asia-Pacific region. to develop the skills of independent study, research, problem solving, report writing and debating through the presentation of seminar papers and group analysis of environmental economics and policy issues.

ECON310 Cost Benefit Analysis 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON215

Subject Description: The main objective is to develop theoretical foundations and applied skills in financial, economic, and social evaluation of large public and private sector projects involving priced and non-priced inputs and outputs. Examples from infrastructure, education, health, and conservation projects are used to illustrate the underlying theoretical foundations of cost-benefit analysis and related issues of microeconomics efficiency. Topics covered include: welfare foundations of cost-benefit analysis, the derivation of analytical criteria for investment appraisal; the identification of benefits and costs; shadow prices for imperfect product and factor markets; unpriced goods and services; measurement of externalities; and the incorporation of risk and uncertainty.

Subject Objectives: The nature of cost benefit analysis including the relevant theory of economic welfare; the application of CBA in a mixed-market economy; the identification and valuation of project benefits and costs; shadow pricing - concepts and measurement; social time preference and discount rates; discounting methods and project selection criteria; sensitivity analysis.

ECON311 Natural Resource Economics 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON111

Subject Description: The main objective of the subject is to develop skills in the economic analysis of natural resource problems. The course consists of two broad sections, namely: the generalisation of theoretical frameworks for the utilisation of natural resources; and the application of these theoretical frameworks to the management of specific natural resources and to the formulation of appropriate policies. The topics covered include: optimisation frameworks for renewable and non-renewable resources; models for optimal resource use over time; energy resources; mineral resources; water resources; forestry resources; natural environments; and issues concerning pollution.

Subject Objectives: On successfully completing this subject students should be: i. familiar with advanced analyses of the economics of natural resources; ii. familiar with the fundamental rules of efficient management and utilisation of renewable and exhaustible natural resources under various market structures; iii. familiar with the optimal control method and inter-temporal optimisation analysis; iv. able to evaluate the actual management and utilisation of natural resources.

ECON312 Industrial Economics 8cp

Autumn Wollongong On Campus

Not offered in 2003

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON111

Subject Description: A study of factors affecting production and productivity, with particular regard for industrial organisation in Australia. The emphasis will be on the industry, the economic sector, and the regional and national organisation of industry, as they affect decisions on prices, employment, investment, innovation, output and income distribution.

ECON315 Applied Economics

Contact Hours: Not on offer in 2003.

ECON316 History of Economic Thought 8cp

Contact Hours: Not on offer in 2003.

ECON317 Economics of Health Care 8cp

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Bega Education Access Centre On Campus

Autumn Batemans Bay On Campus

Autumn Moss Vale On Campus

Contact Hours: Wollongong: 2 hour Lecture, 1 hour Tutorial per week.

Exclusions: Not to count with ECON318

Subject Description: A survey of economic aspects of the Australian health-care system.

Topics covered will include the supply and demand for health services, health-care delivery systems, health insurance, program evaluation and medical decision-making. Government policies influencing all aspects of health care will be analysed and evaluated.

Subject Objectives: On completion of this subject, participants should be able to: recognise the special features of health care markets; identify the major reasons for the increase in health care expenditure and evaluate suggestions for containing or reducing expenditures; discuss the advantages and disadvantages of alternative health care delivery systems; appreciate the difficulties in trying to improve decision making in hospitals; identify the strengths and weaknesses of Medicare and the Pharmaceutical Benefits Scheme; understand the markets for health care professionals; and understand and be able to apply the appropriate methodology for the economic evaluation of a health care program.

ECON318 Economics of Health Care - A 6cp

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Bega Education Access Centre On Campus

Autumn Batemans Bay On Campus

Autumn Moss Vale On Campus

Exclusions: Not to count with ECON317

Subject Description: A survey of economic aspects of the Australian health-care system. Topics covered will include the supply and demand for health services, health-care delivery systems, health insurance, program evaluation and medical decision-making. Government policies influencing all aspects of health care will be analysed and evaluated.

Subject Objectives: On completion of this subject, participants should be able to: recognise the special features of health care markets; identify the major reasons for the increase in health care expenditure and evaluate suggestions for containing or reducing expenditures; discuss the advantages and disadvantages of alternative health care delivery systems; appreciate the difficulties in trying to improve decision making in hospitals; identify the strengths and weaknesses of Medicare and the Pharmaceutical Benefits Scheme; understand the markets for health care professionals; and understand and be able to apply the appropriate methodology for the economic evaluation of a health care program.

ECON319 Electronic Commerce and the Economics of Information 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject analyses the impact of electronic commerce on the markets for consumer goods and services and factors of production. Reasons for the dramatic increase in the use of electronic commerce and its effects on consumers, business firms and the wider community will be explored. Special attention will be given to the implications for small and medium-sized firms and the impact of electronic commerce on the globalisation of markets. The subject analyses electronic commerce in the context of the economics of information, technology and transaction costs and investigates the role and value of information in decision making.

Subject Objectives: On completion of this subject, participants should be able to: 1 recognise the types of products traded electronically. 2 evaluate the impact that electronic commerce has had on competition. 3 analyse how electronic commerce affects the pricing decisions of firms. 4 assess the impact of electronic commerce on small and medium-sized firms and their ability to penetrate international markets. 5 evaluates critically and analyses the impact that electronic commerce is having on household decision making, working conditions and industrial relations. 6 evaluates the role of information technology in promoting the dramatic increase in electronic commerce. 7 estimate the value of information, the costs of obtaining information and the benefits of information to the organisation. 8 explain the concepts of asymmetrical information, the efficient market hypothesis and adverse selection and to identify the problems and opportunities they generate.

ECON320 Economics of Small and Medium Enterprises 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The subject analyses the impact of entrepreneurs/small medium-sized enterprises (SMEs) on important areas of the economy such as innovation, employment creation, trade and investment. The formulation of appropriate public policies with respect to SMEs will also be examined. Recent developments in the economic theory of business enterprises, backed up by case studies of individual firms, industries and countries, will form the basis of the subject. Topics covered will represent a blend of the theory and practice of small business and enterprise development, and will include examining the links between firm size and performance, the distinct roles of different sized firms, and the relationship between firm size and innovation.

Subject Objectives: On completion of this subject, a student should be able to: 1. have a sufficiently profound understanding of entrepreneurship and small business, such that they should be able to explain and evaluate core theoretical concepts which clarify the centrality of the economic and business notions of entrepreneurship for SMEs 2. derive understanding of the processes of development of different sort of SMEs in different contexts, drawing on theoretical and empirical data 3. enhance individual capacity for linking theory and research through guided practical case study project

4. have sufficient understanding and confidence in their understanding of concepts and capacity to link theory and practice they should be able to discuss, debate and evaluate others' ideas on aspects of entrepreneurship and small business 5. to present a coherent argument confidently, lucidly and cogently, demonstrating capacity for integrating core economic concepts and their "practical" implications.

ECON322 Mathematical Economics 8cp

Spring Wollongong On Campus

Not offered in 2003

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON122 or MATH141 or MATH187 or equivalent

Subject Description: This subject is a study of mathematical aspects of microeconomics and macroeconomics. The topics include consumer demand theory, compensated demand functions, production theory, cost functions, market demand and supply functions, models or market structure and macroeconomics of open economy. Mathematical techniques include linear algebra, optimisation, differential and integral calculus. Particular attention will be given to economic policy analysis using mathematical models.

Subject Objectives: On successful completion of the subject, students should: understand the use of mathematical techniques in economics; be able to apply mathematical techniques to understand the fundamental principals behind economic concepts and to economic policy analysis and formulation; be able to develop various economic models in microeconomics and macroeconomics.

ECON327 Advanced Econometrics 8cp

Autumn Wollongong On Campus

Contact Hours: Not on offer in 2003.

Pre-requisites: ECON221 or ECON231 or MARK239

Subject Description: This subject introduces the student to three areas widely used in applied microeconomics and applied macroeconomics: (1) limited dependent and qualitative variables in econometric models and the use of panel data in modelling economic behaviour;

ECON331 Financial Economics 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON121 and ECON215

Subject Description: This subject deals with investment in production capacity, portfolio analysis, debt accumulation, insolvency and liquidation. Optimal control methods are used for analysing the efficient trajectories of capital investment and borrowing. Portfolio choice and producers' choices of activity sets are analysed within a mean-variance expected utility maximisation framework incorporating the concepts of risk aversion, costs of risk bearing and diversification.

Subject Objectives: On successfully completing this subject students will be: i. familiar with the no-arbitrage rules of efficient saving, borrowing and investing in production capital; ii. familiar with static and inter-temporal optimisation methods and their applications in saving, investment and portfolio analyses; and iii. familiar with economic and financial causes of insolvency and bankruptcy and with external-debt problems.

**ECON332 Managerial Economics & Operations 8cp
Research****Contact Hours:** Not on offer in 2003.**ECON333 Conflict and Co-Operation 8cp****Spring** Wollongong On Campus**Contact Hours:** Not on offer in 2003.**Pre-requisites:** HSC 3U Maths or equivalent or permission from Head of the Discipline of Economics

Subject Description: The subject will introduce students to the study of game theory as a tool for analysing a wide range of situations, particularly in the social sciences. The subject will focus on the application of basic game-theoretic concepts to analyse these situations, and will cover both noncooperative and cooperative games. The latter will include the examination of issues in communitarian economics (such as the economics of organisations like the WTO, the IMF, World Bank, and other NGOs). Students will participate in simple game-playing exercises designed to reinforce and further their understanding of the concepts.

Subject Objectives: At the conclusion of this subject, students should be able to: identify the basic concepts used in the theory of games; apply these concepts in the analysis of situations with strategic aspects; evaluate the strengths and shortcomings of the solution concepts.

ECON334 Global Economics 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON101 or ECON111 or ECON190

Subject Description: This subject introduces students to major contemporary global economic issues such as global economic growth and percapita income: the external debt crisis: integrated international capital-markets; European monetary unification and its potential; free-trade negotiations and the formation of free-trade zones; the transition of centrally planned economies to market economies; and the economic implications of global environmental and resource degradation and the need for international co-ordination and co-operation.

Subject Objectives: 1. To provide students a basic knowledge of the major contemporary and global economic issues. 2. To provide students adequate information for choosing specialised third-year subjects.

ECON421 Honours Economics 48cp**Annual** Wollongong On Campus

Subject Description: The coursework comprises: advanced macroeconomic theory; advanced micro-economic theory; and the history of economic thought and methodology. The thesis must be a piece of original research and is evaluated by internal and external examiners.

ECON423 Honours Econometrics 48cp**Annual** Wollongong On Campus**Pre-requisites:** ECON221 ECON327

Subject Description: The course work comprises: advanced macroeconomic theory; advanced micro-economic theory; methodology; and econometric theory.

The thesis must be a piece of original research on theoretical or applied econometrics and is evaluated by internal and external examiners.

ECON451 Joint Honours Economics 24cp**Annual** Wollongong On Campus**Pre-requisites:** ECON221 ECON327

Subject Description: The course work consists of components chosen by the Head of the Discipline of Economics from those required of students enrolled in ECON421 Honours Economics, to the value of 24 credit points. The other 24 credit points in another discipline must be in 400-level subjects approved by the relevant Head.

FIN 221 Business Finance I 6cp**Autumn** Wollongong On Campus**Autumn** Shoalhaven On Campus**Autumn** Bega Education On Campus
Access Centre**Autumn** Batemans Bay On Campus**Summer** Wollongong On Campus**2003/2004****Contact Hours:** 2 hour Lecture, 1 hour Tutorial 1 hour Workshop per week.**Pre-requisites:** ACCY101, ACCY190, or ACCY100 and ACCY102**Exclusions:** Not to count with ACCY221 and ACCY241 or FIN241**Assessment:** See Subject Outline

Subject Description: An introduction to financial markets and corporate valuation, and a critical examination of the theory and practice of corporate financial management, including the capital structure decision, the capital acquisition/disbursement decision, and the investment decision.

Subject Objectives: Upon completion of this subject, students should be able to: 1. Value projected cash flow streams such as loans, debentures, equity investments, leases and other contracts; 2. Model and solve short-term and long-term capital investment decision problems; 3. Identify and make allowance for the relationship exhibited by financial markets between risk and return; 4. Identify and measure the costs to the firm of different forms of debt and equity capital; 5. Evaluate the dividend and financial leverage policies of individual firms; 6. Build and operate financial models using computer spreadsheets; 7. Explain lucidly and succinctly selected concepts and tools of corporate finance.

FIN 223 Investments I 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ACCY221 or FIN221**Exclusions:** Not to count with ACCY223

Subject Description: An introduction to modern portfolio theory and capital asset pricing. The first part of the course develops asset pricing and investment market behaviour models. It then examines the relevant empirical tests and applies the models to the problem of measuring risk, market efficiency and portfolio performance; followed by a study of investment management in the social and economic contexts. This part emphasises the role of capital asset markets, interest rates and bonds in financial management.

Subject Descriptions

Subject Objectives: Upon completion of this subject, students should have sufficient theoretical understanding to:

1. Identify, formulate and solve the main decisions facing the investor in constructing a portfolio of assets;
2. Explain, evaluate and discuss the organisation and functioning of alternative financial asset markets, including main recent trends and product developments;
3. Formulate and calculate the pricing of the major financial and capital assets and derivative products;
4. Recognise and discuss the measures used to evaluate investment performance;
5. Recognise and explain the terminology, concepts and characteristics of derivatives markets and their operation, especially in relation to hedging portfolios;
6. Define portfolio management strategies and the fundamental issues and decisions involved

FIN 226 Financial Institutions 6cp

Spring Wollongong On Campus
Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.
Pre-requisites: ACCY221 or FIN221 and ECON111
Exclusions: Not to count with ACCY226

Subject Description: This subject covers the history and development of financial institutions and their current role in national and global financial markets. A distinction is made between financial intermediaries and financial agents. The subject is presented with an Australian/Asian focus.

It emphasises an analysis of the interaction between financial institutions within the two regions.

Subject Objectives: To acquaint students with the nature, role and significance of financial institutions, instruments and markets in national and international economic development. On completion of this subject students should be able to identify the most significant features of the Australian capital market, understand the technical operation of institutions within markets and appreciate their importance and role in an international context.

FIN 227 Finance in Small Business 6cp

Spring Wollongong On Campus
Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.
Pre-requisites: ACCY221 or FIN221
Exclusions: Not to count with ACCY227
Assessment: See Subject Outline

Subject Description: The focus of this subject is financial management in small firms in an environment of market imperfections which may adversely affect such organisations. Issues to be discussed include valuation, performance measurement, the 'finance gap' and franchising. The need to modify traditional finance theory when applied to small firms is emphasised.

Subject Objectives: Upon completion of this subject students should be able to:

1. Identify fallacies in the application of traditional financial theory to the small and medium business environment;
2. Illustrate these fallacies with concrete examples and be able to offer some alternative approaches to such theoretical problems as determining firm value in the absence of a market measure of systematic risk;
3. Explain, orally and in writing, the reasons theory sometimes fails to be supported when applied in the small or medium sized firm environment.

FIN 241 International Financial Management 6cp

Autumn Wollongong On Campus
Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.
Pre-requisites: ACCY101, ACCY190, or ACCY100 & ACCY102

Exclusions: This subject is not to be attempted in parallel with ACCY221/FIN221 Business Finance I. Not to count with ACCY241

Assessment: See Subject Outline

Subject Description: International Financial Management is designed to give students an appreciation of and expertise in the use of financial tools in an international context. The subject will cover the techniques of finance and will then relate them to international financial institutions and practices. Throughout the course students will learn to evaluate risk and expected return from international investment markets.

Subject Objectives: On successful completion, students should be able to:

1. Identify and use appropriate financial tools and techniques for international financial management;
2. Explain the techniques for evaluating, and the ramifications of, risk/return in an international context;
3. Describe the sources of long term debt, and equity capital in the international markets.

FIN 251 Introduction to Financial Planning 6cp

Autumn Wollongong On Campus
Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.
Pre-requisites: ACCY100 & ACCY102

Assessment: See Subject Outline

Subject Description: This subject introduces students to the role of the financial planner. The material covered includes an overview of the financial products available to clients, methods to assess client needs and risk profiles. Financial planning in Australia is subject to particular codes of conduct. These industry standards and the regulatory environment that governs the operation of such advisory services are also presented.

Subject Objectives: On successful completion, students should be able to:

1. Describe the role of a financial planner and the methods employed by a financial planner to assess client needs;
2. Select from among the various financial instruments available, those most appropriate for inclusion in a personal financial portfolio for clients at differing stages in their life cycle;
3. Explain the differences between various asset classes from managed funds to real estate;
4. Outline the regulatory framework under which financial planners operate and demonstrate an understanding of the codes of conduct that apply in the industry;
5. Explain the rudiments of retirement and estate planning.

FIN 322 Business Finance II 6cp

Spring Wollongong On Campus
Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.
Pre-requisites: ACCY221 or FIN221
Exclusions: Not to count with ACCY322

Subject Description: Advanced aspects of financial management of corporate resource allocations with an emphasis on issues in financial planning and strategy.

Topics will include the impact of increasing complexity in the business environment upon financial decisions, the development and use of financial planning models, the costs and benefits of mergers / takeovers and aspects of international financial management.

Subject Objectives: Students undertaking this subject should develop the ability to make judgements concerning financial decision making under uncertainty. Students should also develop the capacity to articulate their judgements both orally and in writing.

FIN 323 Investments II 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY223 or FIN223

Exclusions: Not to count with ACCY323

Subject Description: This subject is at an advanced level. Students are presumed to have successfully completed ACCY221/FIN221 Business Finance I and ACCY223/FIN223 Investments I and to be knowledgeable in the material covered in those subjects. Building upon that base, advanced issues in modern investment management, portfolio theory, capital and derivative markets are discussed from a global perspective.

Subject Objectives: Upon completion of this subject, students should have sufficient theoretical understanding to:

1. Identify and explain a selection of key issues referred to in the modern investment management literature;
2. Evaluate important contributions from investment literature to the field of modern investment management;
3. Assess the implications of issues discussed in the literature on the practice of modern investment management. Students should also be able to select and apply the appropriate techniques to investment management in practice.

FIN 324 Financial Statement Analysis 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY324

Assessment: See Subject Outline

Subject Description: This subject develops knowledge and skills in the principles and techniques of analysis of accounting information contained in financial statements. The emphasis is on practical application of these skills at an advanced level. Students will undertake a major project which will utilise and extend the skills and knowledge gained during the course. The subject will involve an exploration of the many and varied sources of information used in developing financial analyses of firms (companies and other entities).

Subject Objectives: See Subject Outline

FIN 325 Banking Practice 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY325

Subject Description: Banking Practice is a comprehensive subject in banking that integrates with both the finance and accounting specialisations.

It combines information on management practices and operations of banks. The subject involves in depth discussions and analysis of banking practices within the Australian and international framework.

FIN 327 Risk and Insurance 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: FIN221 or ACCY221

Exclusions: Not to count with ACCY327

Assessment: See Subject Outline

Subject Description: The subject deals with the concepts and technical analysis of risk, risk attitudes and insurance. The content covers protection against portfolio, financial and corporate risk that are part of various types of investment decisions. The analysis covers risk insurance in relation to share portfolio protection, hedging against currency exchange rate movements and loan interest movements.

Subject Objectives: See Subject Outline

FIN 328 Retirement and Estate Planning 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221/FIN221 & FIN251

Exclusions: Not to count with ACCY328

Subject Description: The subject will provide an overview of the procedures and theory of retirement and estate planning. It will discuss the goals and objectives of retirement planning with a view to maximisation of the benefits accruing to the retiree. The subject will also provide a comprehensive overview of superannuation and the implications of superannuation strategies.

Subject Objectives: On successful completion of this subject, a student should be able to:

1. Critically evaluate the alternatives for retirement and estate planning;
2. Develop a suitable set of retirement strategies for individuals given varying socio-economic backgrounds, ages and desires;
3. Demonstrate an awareness of relevant legislation;
4. Be able to describe the alternatives available to individuals contemplating retirement.

FIN 329 Real Estate Planning 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221/FIN221 & FIN251

Exclusions: Not to count with ACCY329

Subject Description: Real estate planning focuses on the criteria involved in property planning. The subject entails comprehensive discussions on issues such as the financing (underwriting) of residential, commercial and income properties, proposed projects,

real estate capital markets and securities, legal aspects of real estate planning, the various types of mortgage available, residential financial analysis, the various types of risks involved and the disposition and renovation of real estate.

Subject Objectives: On successful completion of this subject, a student should be able to:

1. Discuss and illustrate the impact of real estate planning within the financial sector;
2. Display a knowledge of the legal considerations involved in real estate planning;

Subject Descriptions

3. List the types of financing available in real estate planning;
4. Be able to demonstrate an understanding of the residential financial analysis and various valuation methods involved in real estate planning;
5. Assess the various types of risks involved and the disposition and renovation of real estate;
6. Analyse new developments within the field of real estate;
7. Explain the implications of social, economic and political factors on real estate planning.

FIN 351 International Business Finance 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY351

Assessment: See Subject Outline

Subject Description: This subject analyses financial markets in the international sphere, concentrating on the Australian/Asian regions. The subject explores the concepts and relationships linking international financial markets within the region and the operation of Australian firms in those markets. An introduction to international finance markets theory covers such issues as de-regulation of Australian banking and the Eurofinance market, the pricing of foreign exchange, the international financing decision, foreign exchange and interest rate risk management.

Subject Objectives: Upon completion students should be able to: 1. Explain the international financial environment; 2. Describe how foreign exchange markets operate; 3. Discuss the management of different types of foreign exchange exposure; 4. Examine financial decisions facing firms in a global context; 5. Identify the role of international banking in multinational investment decisions; 6. Describe the strategic issues related to foreign investment decisions; 7. Discuss working capital management issues of multinational business.

FIN 352 Critical Perspectives in Finance 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221 and 12 additional cp from Schedule C-9

Exclusions: Not to count with ACCY352

Subject Description: This subject approaches finance unconstrained by the strict neo-classical economic assumptions. It examines the behavioural, social, critical, historical and philosophical aspects of finance. It approaches real world problems of finance in practice and theory. An interdisciplinary approach is adopted, drawing on concepts and work in those disciplines which directly bear on the behavioural and social environments.

Subject Objectives: To examine alternative perspectives on contemporary finance theory in order to determine whether such approaches are more fruitful in leading to an understanding of the management of financial resources and investment decision making.

FIN 353 Global Electronic Finance 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY353

Assessment: See Subject Outline

Subject Description: This subject will provide a hands-on practical training and development of some of the theoretical and professional issues of Internet based technologies that enable and support global electronic finance.

The focus will be on the application of leading edge Internet-based (client server) technologies in the design and implementation processes of Electronic Trading applications. Some of the leading implementations of Electronic Trading Systems, such as: the Australian Stock Exchange (ASX) and the New York Stock Exchange (NYSE) will be examined. The legal, control and security aspects of global electronic finance will be examined as well.

Subject Objectives: After successfully completing this subject, students should be able to: 1. Describe how internet-based technologies function in relation to finance processes in today's business environment, with insights into how they might function in the future; 2. Demonstrates the use of basic internet-based technology fundamentals relating to finance and electronic trading cycles; 3. Use a wide range of Information Technology technical skills in the analysis, design and management of internet-based electronic trading applications; 4. Explain the digital finance fundamentals relating to the digital economy and the knowledge economy where firms value chains are electronically interconnected; 5. Evaluate and use a variety of different viable finance models for electronic trading systems.

FIN 359 Selected Issues in Finance 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY359

Subject Description: The subject will examine selected topics in the areas of finance and/or investments. Subjects examined will be topical issues and problem areas in the disciplines and will change from year to year.

FIN 422 Investment Analysis 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY422

Subject Description: An in-depth study of capital investment decision analysis. The theoretical bases of net present value and internal rate of return selection criteria. The application of investment selection criteria under diverse conditions such as capital rationing, mutually exclusive choice situations, buy/lease decisions, fluctuating rates of output and inflation. The incorporation of risk into capital investment decision analysis, including the application of capital asset pricing models to investment evaluation.

Subject Objectives: See Subject Outline

FIN 423 Investment Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY423

Assessment: See Subject Outline

Subject Description: The subject examines some advanced topics in the modern theory of optimal investment decision-making, portfolio theory, capital and derivative markets. The subject will explore areas including; market efficiency models in valuing portfolios and securities, bond analysis, portfolio management and performance evaluation. The subject will provide a theoretical framework within which all derivative securities can be valued and hedged and also examine the way they are traded.

Subject Objectives: See Subject Outline

FIN 424 Corporate Financial Information 6cp Analysis

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY424

Subject Description: A survey of methods for the appraisal and prediction of corporate financial performance from such publicly available information as accounting numbers, industry and economic statistics, and stock market data. Equal emphasis is placed upon the development of theoretical constructs, and appraisal of the results of empirical research, especially Australian studies.

Subject Objectives: See Subject Outline

FIN 425 Banking Theory and Practice 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week..

Exclusions: Not to count with ACCY425

Subject Description: This subject focuses on accounting aspects of the practices and operations of banks and other financial institutions. It entails comprehensive discussions on issues that are commonly involved within the banking environment such as the regulatory structure, the cheque clearing system, risk management, lending issues, capital adequacy analysis, and the latest information technology within the banking world.

FIN 426 Studies in Business Finance 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY426

Assessment: See Subject Outline

Subject Description: Contemporary business finance theory, including option pricing theory, arbitrage pricing model, bond swapping and bond immunisation.

Subject Objectives: See Subject Outline

FIN 427 Small Business Finance 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY427

Assessment: See Subject Outline

Subject Description: Two major problems account for the majority of small business failures. These are managerial problems and financial limitations. Both are intertwined. The material in this subject covers the sources, uses and management of funds from pre-purchase to public listing.

For example, common errors in the financial management of small firms include a lack of adequate control systems for cash and inventory management, accounts receivable and payable, credit management etc. Financial decisions involve complex issues that have both theoretical and applied components that will be discussed in some detail.

Subject Objectives: Small Business Finance is not designed to train students in the management of small businesses. Instead, it is intended to enlighten potential advisors about the problems small business owner/managers face. By the end of the subject, successful students should be able to assess the reasons for client's difficulties and should be able to suggest and explain methods the client would be able to apply to overcome those difficulties. Therefore, the subject requires the development of both analytical skills and an ability to communicate both orally and in writing.

FIN 428 Multinational Financial Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY428

Subject Description: The role of multinationals in international investment; aspects of the international monetary system; Euromarkets; foreign exchange markets; internal and external exposure management techniques; currency futures and options; swaps; financing MNC investment; MNC investment decision making; political risk analysis; international taxation.

Subject Objectives: See Subject Outline

FIN 487 Special Topic in Finance 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY487

Subject Description: This subject provides an opportunity to study a topic of research interest within the theory and application of finance as it relates to (i) corporate finance and (ii) investments. The research will be completed under staff supervision and culminates in the production of a written report.

FIN 491 Honours Finance 48cp

Annual Wollongong On Campus

Exclusions: Not to count with ACCY491

Subject Description: The subject is designed around coursework and a research essay. There will be a core of coursework comprising accounting and finance theory, research methods and investment analysis. A Major research essay will report the results of a research study undertaken by candidates under supervision. In addition there will be some elective coursework study in a program approved by the subject co-ordinator or Head of School.

Subject Descriptions

MARK101 Introduction to Marketing 6cp

Spring	Moss Vale	On Campus
Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Spring	Shoalhaven	On Campus
Spring	Batemans Bay	On Campus
Spring	Bega	On Campus

Exclusions: Not to count with MARK213, MARK293 or MGMT213

Subject Description: The subject will include the following: concepts and tools for analysing marketing strategies; evaluating the marketplace for opportunities;

analysing the marketing environment; researching and selecting target markets; determining the consumer's needs; evaluating the marketing mix in terms of price, product, place and promotion. Aspects of international marketing, services marketing and social responsibility will also be taught.

Subject Objectives: On successful completion of this subject, students should be able to: 1 understand the broad concept of marketing. 2 identify and analyse opportunities in the marketing environment. 3 examine a wide array of market segments and consumer groups. 4 describe the

MARK213 Introduction to Marketing 6cp

Spring	Wollongong	On Campus
Autumn	Wollongong	On Campus

Exclusions: Not to count with MARK101

Subject Description: The subject examines marketing's role in the economy and the nature of marketing systems. After considering the role of the marketing function in the organisation, the marketing decision process is examined. The identification of market opportunities, the selection of target markets from market segmentation, and buyer behaviour is covered. Marketing mix decisions are dealt with in the context of the marketing program.

MARK217 Consumer Behaviour 6cp

Autumn	Shoalhaven	On Campus
Autumn	Wollongong	On Campus
Autumn	Batemans Bay	Flexible
Autumn	Bega	Flexible

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Consumer Behaviour involves gaining a greater understanding of the consumers as individuals by studying perception, learning and memory, motivation and values, personality, lifestyles, attitudes and attitude change. Additionally the content of this subject focuses upon consumers as decision makers, involving an examination of the entire purchase process.

Other areas of interest include household and organisational decision making, and the influence of culture on consumption.

Subject Objectives: Upon completion of the course, students should be capable of: 7 Understanding the main concepts and frameworks of consumer behaviour 7 Applying consumer behaviour theory to practice 7 Understanding academic and practitioner consumer behaviour research 7 Undertaking research using electronic databases and other similar research tools 7 Productively working in a group 7 Communicating your analysis and understanding of consumer behaviour in an effective manner through both written reports and oral presentations.

MARK239 Information For Marketing Decisions 6cp

Spring	Wollongong	On Campus
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Pre-requisites: ECON121 - may be waived for non-Commerce students

Exclusions: Not to count with ECON231

Subject Description: Four main topic areas will be covered: 1. Working with marketing-related information, i.e. data either resulting from marketing and sales activities or which can be obtained from other sources such as the World Wide Web; 2. The use of research to facilitate decision-making (an introduction to the market research process and methods); 3. The analysis of different types of quantitative marketing data (market analysis, forecasting, and introductory statistical analysis); 4. The use of computer programs to manage and analyze marketing information (i.e. databases, spreadsheets, and statistics packages).

Subject Objectives: This subject should provide students with a background to the methods which can be used to access, generate and analyze information to support marketing decisions. The subject will take an applied approach, and will draw its cases and examples specifically from the field of marketing. The overall aim will be to introduce research methods and quantitative analysis as they are applied in marketing, and so provide a foundation for the advanced Marketing subjects.

MARK240 Marketing and Consumer Behaviour in East and South East Asia 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Perhaps the most spectacular development and growth recently in international business is the shift in the world economy's focus to East and South-East Asia (ESEA). Given the importance of international marketing within this geographical region, the purpose of this subject is to present various concepts and tools for analysing marketing and consumer behaviour strategies in ESEA. Specifically, the focus of this subject will be on various ESEA countries or strategic locations, considering eight influencing factors on marketing and consumer behaviour: geographical forces; infrastructure development; the political system; the economic system; the social/cultural system; the education system; consumption patterns; and, the macro marketing mix.

Subject Objectives: On successful completion of the subject, students should be able to: 1. Identify marketing opportunities within the business environments in ESEA. 2. Explain marketing and consumer behaviour patterns within various ESEA countries. 3. Analyse cases, international business and government reports, and country briefs on various business problems/opportunities in ESEA. 4. Enhance problem-solving skills by analysing international marketing strategy at the corporate, regional and local levels. 5. Develop a comprehensive course of action for a business firm to market products/services in ESEA country(s). 6. Present final term project using both oral and written communications.

MARK270 Services Marketing 6cp

Autumn	Shoalhaven	On Campus
Autumn	Wollongong	On Campus
Autumn	Bega	Flexible
Autumn	Batemans Bay	Flexible
Autumn	Moss Vale	On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: This course is designed to provide an in-depth analysis of the problems facing services marketing managers. Through lectures, class discussion, readings and case analysis, students should develop insights concerning the unique characteristics of marketing in the services sector. Each week students will be required to present their solutions to the questions handed out at the end of the previous lecture. These questions will be based on readings from the required text and articles from leading services marketing journals.

Subject Objectives: The objective of the subject is to provide a theoretical and practical perspective to services marketing.

At the end of the subject, the student should understand the concepts in the text and be able to apply them.

MARK301 Marketing on the Internet 6cp

Spring Wollongong On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: This subject will include the following: general overview of the internet, nature of the internet, hypertext, markup language, transfer protocol, resource locators, sales over the internet, public relations over the internet, advertising over the internet, world wide web and demographics, value-added web sites, performance indicators of marketing effort, security and legal issues, development of home pages.

MARK317 Business to Business Marketing 6cp

Autumn Wollongong On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: This subject covers issues particular to the situation where one business markets a product or service to another business (rather than to an individual consumer). The objectives are to educate students regarding the major theoretical concepts and processes involved in business to business marketing, and the application of these concepts to real life situations through the use of case studies and 'real life' examples.

Subject Objectives: The specific course objectives are: 1. To build up student's knowledge of contemporary business marketing. 2. To lay out the differing process of analysing business markets in terms of demand estimation and sales forecasting. 3. Emphasise the unique nature of business marketing and the applicability of the marketing concept in such markets. 4. Exploring the need for distinctive marketing planning and strategy to compete in the complex and dynamic business markets. 5. To create a critical awareness in the minds of the students about the latest development of the subject through interactive class discussion, presentation, strategy analysis and recommendations.

MARK319 Applied Marketing Research 6cp

Autumn Wollongong On Campus

Pre-requisites: (MARK101 and MARK239) or (MARK213 and MARK239) or (MARK293 and MARK239)

Subject Description: This subject will focus on the practice of marketing research as it is applied within organizations, such as market research companies, and will build on the material introduced in MARK 239. The emphasis will be on research which is designed and conducted specifically to meet the information needs of clients. It will cover the market research process from initial client consultation through to the reporting of research findings.

The topics covered will include: an introduction to research methodology, the design of research studies to meet client needs, the use of secondary data sources, qualitative research methods (i.e. focus groups, in-depth interviewing, and projective techniques), experiments and market testing, the design and management of surveys (including practical sampling and questionnaire design), and the analysis of survey data.

Subject Objectives: On completion of this subject, students should be able to: 1. Demonstrate that they understand the nature of market research and the role that it plays in organisations; 2. Demonstrate that they understand the theory and practice of behavioural research methodology as it is applied to market research; 3. Develop an understanding of the proposal document development for a client, with a vision of winning the desired research project under competitive conditions; 4. Select appropriate market research methods in order to meet the information needs of clients; 5. Collect and analyse information using both qualitative and quantitative research methods; 6. Design, execute and report on a client-focused market research study.

MARK333 Advertising and Promotions Strategy 6cp

Spring Wollongong On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Marketing Communications focuses on the key elements of the marketing communications mix P Promotion, Advertising, Publicity, Personal Selling. The course will examine the various communication channels used by marketers and consumers, across the marketer controlled and non-marketer controlled dimensions.

Subject Objectives: To provide a theoretical and practical perspective to marketing communications. At the end of the subject, the student should be able to: 1. understand the advertising and promotions management concepts; and, 2. apply the concepts in integrated marketing communication programs.

MARK343 International Marketing 6cp

Spring Wollongong On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: The principal aim of the subject is to analyse the global marketing environment and develop appropriate international marketing strategies. The content will include: socio-economic, legal, political, financial and cultural factors affecting international marketing operations; analysing the profiles of selected regional markets and strategic options for entry and expansion in those markets; international marketing research methods and data analysis techniques; international marketing mix decisions; and contemporary issues in multinational marketing.

Subject Objectives: At the completion of this subject students should be able to: 1. Utilise cases, readings and international business reports to evaluate corporate problems/opportunities in an international environment. 2. Identify and analyse opportunities within international marketing environments using various strategic marketing management techniques. 3. Enhance problem-solving skills by analysing international marketing strategy at the corporate, regional and local levels. 4. Use financial and quantitative analysis to evaluate the current and projected performance of a company, and/or marketing opportunities;

Subject Descriptions

5. Develop a comprehensive course of action for a business firm using formal decision making processes.
6. Complete a final written project using skills acquired throughout the subject.

MARK344 Marketing Strategy 6cp

Spring	Shoalhaven	On Campus
Spring	Batemans Bay	Flexible
Spring	Bega	Flexible
Spring	Wollongong	On Campus

Pre-requisites: (MARK101 plus 3 Marketing subjects from the Commerce C-8 schedule) or (MARK213 plus 3 Marketing subjects from the Commerce C-8 schedule) or (MARK293 plus 3 Marketing subjects from the Commerce C-8 schedule)

Subject Description: This is the 'capstone' unit in the marketing major. As such it is designed to integrate skills and knowledge in a number of other business disciplines. It will draw heavily on the areas of not only marketing theory and market research methods but also economics, finance, managerial accounting and management theory. It is designed to develop analytical skills and diagnostic ability for the proposal, implementation and control of alternative marketing strategies and plans.

Subject Objectives: On completion of the course, the student should have gained: 1. An understanding of the strategic environment of Australian marketing, 2. An awareness of key strategic dimensions of the Australian and international marketplace, including organisational participants, stakeholders, underlying dynamics, forces and structures, 3. An integrated perspective of relevant prior learning on the BCom course, drawing the diversity of disciplines studied into a conceptual whole, 4. Literacy in the concepts of strategic marketing, acquired through the submission of several case analyses and a marketing plan.

MARK356 New Product Marketing 6cp

Autumn	Wollongong	On Campus
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Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: New Product Marketing covers issues related to the development and marketing of new products. Topics include: the role of new products in the success of organisations the new product development process marketing mix issues concerned with new products organisation and management of new product development processes diffusion of new products new service development functions of product managers

Subject Objectives: Upon completion of this subject, students should be able to: 1. Explain the various stages of the NPD process through from concept generation to product launch. 2. Explain the purpose and use of the various qualitative and quantitative methods associated with idea generation, concept testing, sales forecasting, product testing and market testing. 3. Develop a new product marketing strategy. 4. Demonstrate an understanding of the critical factors that can lead to the success or failure of a new product.

MARK359 Sales Management 6cp

Spring	Wollongong	On Campus
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Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: The subject addresses both personal selling and sales management, from an international perspective. The first part of the subject addresses the personal selling process: prospecting, planning, handling objections and closing the sale will all be given equal coverage. The next part deals with managing the salesforce, delving into the characteristics of leadership and supervision. The last section addresses hiring and training the salesforce, along with sales forecasting.

Subject Objectives: To develop a good understanding of the elements of sales management theory and practice in the areas of retail, field and industrial selling. To explore the personal selling concept and expose the students to the use of practical interpersonal skills in persuasive group presentations. To cover areas specific to designing, organising, controlling, coordinating, directing and motivating a sales force. To gain an understanding of those new issues in global selling and ethical issues related to sales management that are critical in managing the sales function effectively in the new millennium.

MARK393 Special Topic in Marketing 6cp

Spring	Wollongong	On Campus
Autumn	Wollongong	On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Selected issues in marketing. Enrolment is subject to approval by the Head of the School

MARK394 Special Topic in Marketing B 6cp

Spring	Wollongong	On Campus
Autumn	Wollongong	On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: A selected issue in Marketing, involving an individual case analysis or business project. Enrolment is subject to the approval of the Head of School. The subject is taken only under special circumstances as a substitute for an approved subject under the Marketing major or double major schedule.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Carry out a study and analysis of a selected issue in the Marketing field. 2. Undertake research on a Marketing topic. 3. Summarise their findings in the form of a report.

MARK395 Tourism Marketing 6cp

Autumn	Wollongong	On Campus
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Pre-requisites: MARK101

Subject Description: This subject introduces, discusses and analyses issues unique to the marketing of tourism products. The focus of this subject is the application of marketing principles and theory in the development of strategic marketing plans for tourism products. The application of strategic tourism marketing planning to the destination, accommodation and tour operator sectors of the tourism industry at the regional, national and international level are analysed. In addition, the subject identifies and discusses contemporary issues in tourism marketing including the impact of e-commerce, database marketing and environmental based tourism.

Subject Objectives: On completion of this subject, a student should be able to: 1. Discuss and explain the unique issues associated with marketing a tourism product.

2. Formulate a strategic marketing plan for a tourism product.
3. Critically evaluate the marketing efforts of regional, national or international tourism organisation in the destination, accommodation or tour operator sectors of the tourism industry.
4. Describe and assess the importance of the 'service encounter' to tourism marketing.
5. Analyse the likely future impact of technology and 'green consumerism' on tourism marketing.

MARK397 Retail Marketing Management 6cp

Spring Wollongong On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Retail Marketing Management will include a background to retailing, the scope of retailing, retailing strategies, merchandise and store management. Additionally topics such as location, non-store retailing, human resource management, logistics, promotion, pricing, customer service and store layout are also studied. Particular emphasis will be placed on case analysis in order to bring as much of the 'real world' as possible into the classroom.

Subject Objectives: Upon completion of this course, the student should be able to: 1. Appreciate the complexities of operating a retail business. 2. Understand the role of the retailer as a key link in the chain that connects the producer/wholesaler with the final customer. 3. Distinguish retailers and their activities from other mktg institutions. 4. Delineate the mktg channel of distribution and to discern the relationships between the retailer and other channel participants. 5. Understand the mktg and retailing concepts and to appreciate how these operating philosophies should direct the retailer's activities. 6. Discuss the retailer's problem of striking a balance between the customer's merchandising needs and the retailer's performance needs. 7. Explain what merchandising factors are involved with offering the right product, in the right quantities, in the right place, at the right time, at the right price, by the right appeal, with the right service.

MARK428 Honours Research Project 24cp

Annual Wollongong On Campus

Spring Wollongong On Campus

Pre-requisites: Normally a minimum of 50% of 200-300 level specialisation subjects achieved t credit level or higher plus no subject failures

Subject Description: A research topic undertaken by BCom(Hons) students, requiring the candidate to undertake a substantial piece of research in a theoretical and/or practical applicational area of marketing. The topic must be approved by the Head of the School..

MARK430 Advanced Topics in Marketing (Honours) 24cp

Annual Wollongong On Campus

Spring Wollongong On Campus

Pre-requisites: Normally a minimum of 50% of 200-300 level major subjects achieved at credit level or higher plus no subject failures

Subject Description: A course of study prescribed by the Head of School, consisting of 4x300/900-level subjects which reflect the student's area of research. This subject is available to BCom(Hons) students.

MARK450 Joint Honours in Marketing 48cp

Annual Wollongong On Campus

Pre-requisites: Bachelor degree with a major or joint major in Marketing, and approval of the Head of School, Management, Marketing and Employment Relations. Normally students will have achieved a credit level or higher in at least 50% of their 200/300 level specialisation subjects.

Subject Description: The Marketing component of the subject will consist of coursework and a research thesis in a particular area of Marketing, such as Marketing Strategy, Consumer Behaviour, Services Marketing, International Marketing, New Product Marketing, Electronic Commerce, Business to Business Marketing, Marketing Research, Retail or Sales Management. The other component to be determined by the relevant discipline within the Commerce Faculty.

Subject Objectives: On successful completion of this subject, students should be able to: 1 critically analyse an advanced Marketing topic plus one from the other relevant department. 2 discuss ethics and social responsibility in marketing. 3 perform original research

MGMT102 Business Communications 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The subject addresses, in turn, learning styles and learning processes; informal networks; ways of finding information in an organisation; diffusion of innovative ideas and practices; the context for communication formed by culture, sense of identity, and community membership; status, power, and persuasion strategies; culture and gender differences; communication between technical and nontechnical people; framing criticism and interpreting stories to promote learning in the organisation; facilitating teamwork and meetings; and integrating aspects of formal and informal communication to obtain a job or make a project work.

MGMT110 Introduction to Management 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Autumn Batemans Bay On Campus

Autumn Shoalhaven On Campus

Autumn Bega Education Access Centre On Campus

Autumn Moss Vale On Campus

Subject Description: The subject examines a range of topics relevant to managers including: teams, leadership, decision making, motivation, strategy, business ethics and interorganisational relations (eg networks and strategic alliances). A number of themes are addressed throughout the subject such as diversity (gender and cross-cultural influences), power and control, and organisational learning. Organisational learning is seen as one of the key challenges facing managers in the next millennium.

Subject Objectives: On completion of this subject, the student should be able to: 1. Outline the major debates across a range of management topics; 2. Describe and compare a range of major perspectives in management theory; 3. Explain the relevance of management theory to the everyday practice of management; 4. Explain the role management has to play in developing more competitive, productive, rewarding and enjoyable organisations;

Subject Descriptions

5. Demonstrate a critical and reflexive approach to the study of management; 6. Construct and compose an informed and well-reasoned argument in the form of an academic essay; 7. Apply theories of management to the analysis of particular management cases and situations.

MGMT140 Industrial Relations B: Wage Determination 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject examines wage determination principles and processes.

Special emphasis is placed on the development of the Australian arbitration system and the contemporary social and economic factors influencing wage determination.

Subject Objectives: By the end of this subject the successful student should be able to: 1. Identify and explain the major economic and social processes and institutions that shape wage determination. 2. Explain how the study of such processes and institutions can enable the student to become an informed and effective industrial relations analyst and practitioner. 3. Understand that the interpretation of events and processes in wage determination is influenced by individual and institutional interests and outlooks. 4. Have extended statistical and information literacy research skills.

MGMT142 Industrial Relations A 6cp

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega Education Access Centre On Campus

Subject Description: The employment relationship is studied in terms of the influence of social, economic, political and legal environment and the power resources of the actors and others who seek to influence employment. The organisation and policies of the major participants in the system are analysed in both historical and contemporary settings.

Subject Objectives: Students who successfully complete this subject should be able to: *understand the nature of the employment relationship and the ways in which all parties seek to control and administer the employment relationship; * recognise the nature, basis and underlying reasons for the changing structures and patterns in employment relations/ industrial relations with particular reference to globalisation; * be able to discuss the ways in which the power and the power resources of the parties are utilised to influence the control and administration of the employment relationship; *be able to communicate research outcomes in lucidly argued essays and projects *have extended statistical and information literacy research skills. *recognise that in social science research our interpretation of events and processes is determined 'by our frames of reference.

MGMT200 Management and Electronic Business 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: Must have completed a minimum of 48 credit points of subjects from the Commerce, Information Technology or Engineering schedules.

Subject Description: This subject identifies key management issues arising from the use of e-commerce in organisations and across organisations and in different industry sectors. It critically examines how e-commerce will impact across areas such as information and knowledge management, decision making, teamwork, communication, including the building of trust based relations across a complex array of organisational contexts. The subject will examine the different types of relationships, both internally and externally to the organisation, emerging from the e-commerce revolution. It will consider the 'new economy thesis' as it relates to e-commerce, and the managerial choices and strategies arising from such developments.

Subject Objectives: On satisfactory completion of this subject, students should be able to: 1. Appreciate the role of e-commerce in today's economy, the risks and opportunities associated with it, and its potential for the future; 2. Understand the impact of e-commerce across areas such as information and knowledge management, teamwork, supply chain management, marketing and customer relations. 3. Identify different types of e-commerce and the strategies, stakeholders, technological and managerial issues that are relevant to each. 4. Understand the processes involved in establishing and maintaining a business enterprise based on e-commerce.

MGMT201 Organisational Behaviour 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MGMT101 or MGMT110 or PSYC351

Subject Description: The subject examines aspects of the Behavioural Sciences which are relevant to an understanding of human behaviour in work organisations. These will include: topics relevant to the understanding of the behaviour of individuals within work settings; topics relevant to the understanding of large organisations in their totality and studies of the behaviour of individuals and groups within complex organisations combining insights from conflict, co-operation, competition, power, leadership and organisational culture and change.

MGMT202 Management of Change 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week

Pre-requisites: MGMT101 or MGMT110 or PSYC351

Subject Description: This subject identifies sources of change, barriers to change and effective ways of overcoming these. Managing change and forces for change; initiating change. Implementing change and overcoming resistance. Communication, participation, negotiation and support / sponsorship.

Subject Objectives: 1. To impart to the student an overview of the concepts, theories and research findings in the field of change management. 2. To demonstrate to the student how change management is applied in practice in relation to individuals, groups and the overall organisation.

3. To adopt an integrative, multi-disciplinary approach to the teaching of change management. 4. To focus on the case study approach in order to bring alive the context and reality of change within business organisations and as a vehicle for the application of theory.

MGMT205 Recruitment & Selection 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT206 or MGMT398

Subject Description: This subject examines the environment and process of recruitment and selection. Recruitment strategies are described and assessed from the perspective of the organisation and the individual.

In particular, a range of personnel selection techniques are examined in relation to reliability, validity, fairness and applicability. Also a range of practical skills in designing personnel selection techniques are developed.

Subject Objectives: On completion of this subject students should be able to: 1. Outline the main features of the three phases of organisational entry; 2. Identify concepts and techniques from contemporary human resource management that can be used to manage the process of organisational entry; 3. Describe the challenges and issues associated with managing the trade-offs between recruitment, selection and socialisation; 4. Identify, critically evaluate and wherever possible, propose potential solutions to current problems and issues concerning organisational entry; 5. Advance and substantiate reasoned arguments in relation to organisational entry through written assignments and examination essays.

MGMT206 Managing Human Resources 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT110**Exclusions:** MGMT398

Subject Description: The subject is concerned with the concepts, techniques and activities involved in managing the flow of people through work organisations. The subject focuses on facilitating the acquisition and development of staff, positively influencing their job performance, and monitoring and managing the processes of staff retention and turnover. Consideration is given to the institutional aspects of the external environment in which human resource management is located. Topics include: recruitment and selection, performance appraisal, job analysis and design, training and development, employee compensation, staff turnover, HRM and the law, industrial relations, EEO/AA, and international HRM.

Subject Objectives: On completion of this subject students should be able to: outline key concepts and techniques of contemporary HRM; explain how these concepts and techniques can be used to manage the processes of staff acquisition, staff retention and turnover, and job performance; describe the challenges and issues associated with managing people effectively through each phase of the employment relationship; identify, critically evaluate and wherever possible, propose potential solutions to current HRM problems and issues; advance and substantiate reasoned arguments in the area of HRM through written assignments and examination essays.

MGMT215 Small Business Management 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ACCY101 or ACCY100 & ACCY102

Subject Description: The Small to Medium Enterprise (SME) is becoming increasingly important to the Australian economy.

Working in, starting and operating a SME will probably become a reality for many students in the future. Hence, this subject has a practical focus by giving students an opportunity to develop an awareness and understanding of the key factors involved in successfully starting, operating and growing a SME. An investigation of the major growth area of Franchising is included.

Subject Objectives: Upon satisfactory completion of this subject students should be able to: 1. Identify and evaluate the options for starting up a new Small Business. 2. Identify the key success and failure factors for Small Businesses. 3. Identify and analyse the important functional areas of a Small Business.

MGMT216 Operations Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON121 and ECON111

Subject Description: A study of the different types of production and operations and their implications for management - including an overview of capacity, facility and layout planning, problems of job design and work measurement, production scheduling, inventory and quality control and management of the conversion process in a time of change.

Subject Objectives: After satisfactory completion of MGMT216 the student should be able to: describe the role of the P/OM function in an organisation in relation to other major functions within the organisation;

describe the major issues involved in introducing new manufactured products or services, including issues of ethics, process design and technology management; explain how modern quality management differs from traditional approaches based on inspection of finished products; describe the key aspects of job design and work measurement, including the use of learning curves; explain the methodology of capacity management; solve simple problems in location planning and facilities layout.

MGMT218 Competitive Analysis 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON111

Subject Description: This subject develops models and techniques for measuring and understanding the complexity of competition. Case studies and empirical analysis are used to show how firms can analyse its industry, understand its competitors and its own position, and how this might influence its business strategy. Topics include: Structural analysis of industries; Competitive strategies/framework for analysis; Development of generic strategies; Strategy towards buyers/suppliers; Strategy in different industrial environments; Strategic decisions/competitor analysis; Strategy in a multinational competitive environment.

Subject Objectives: At the conclusion of this subject students should be able to: 1. Identify, explain and apply the criteria by which the strengths and weaknesses of enterprises are judged. 2. Evaluate the opportunities and threats in an enterprise's environment with particular reference to the analysis of demand and rivalry in downstream consumer markets, and relationships with suppliers in upstream industrial markets.

Subject Descriptions

3. Explain the characteristics that qualify enterprise-specific capabilities as sources of sustainable competitive advantage. 4. Explain how the major structural elements of markets and industries affect the strategies and profit potential of an enterprise. 5. Explain the competitive circumstances which are appropriate to the choice and implementation of generic strategies. 6. Analyse industries in terms of sets of vertically related markets and explain how the structures of vertically related markets influence the distribution of profits across an industry. 7. Analyse strategy in different types of industry environments within the key dimensions of industry concentration; state of industry maturity; and exposure to international competition. 8. Analyse how firms may actively work to develop demand for products, especially in innovative situations.

MGMT220 Organisational Studies 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MGMT101 or MGMT110 or PSYC351

Subject Description: This subject examines the structural characteristics of organisations in their environments and the different perspective's from which structures and environments can be understood to affect organisations members and organisational performance. Topics include: Organisational Design-Modern and future forms; Organisational Structure; Organisational Strategy and Size; Technology and Environment-Organisation, Technology and Control; Organisation, Technology and Design; Modern Organisation-Bureaucracy; Managing Culture and Subculture-Organisational Conflict-Power and Politics; Evolution, Growth and Decline.

Subject Objectives:

On successful completion of this subject you should be able to: 1. Identify and understand complementary and conflicting concepts and theories associated with the different topics included in organisational analysis; 2. Appreciate the organisational, business and social realities these concepts and theories have been designed to describe; 3. Make decisions about - by critically assessing and organising an array of evidence about organisational life - the utility, persuasiveness and plausibility of different concepts and theories in different organisational, business and social contexts; 4. Put forward reasoned arguments in the area of organisational analysis through individual written assignments, discussion and examination essays; 5. Appreciate how your own membership of organisations involves reference to choices and decisions of an ethical/moral nature, as well as the more practical.

MGMT240 Industrial Relations B: Wage Determination 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Exclusions: Not to count with ECON140, MGMT140 or ECON240

Subject Description: This subject examines principles and processes of wage determination. Special emphasis is placed on the development of the Australian arbitration system and contemporary social and economic factors influencing wage determination.

Subject Objectives: By the end of this subject, the student should be able to: Identify and explain the major economic and social processes and institutions that shape wage determination. Explain how the study of such processes and institutions can enable the student to become an informed and effective industrial relations analyst and practitioner. Understand that the interpretation of events and processes in wage determination is influenced by individual and institutional interests and outlooks. Have extended statistical and information literacy research skills. Communicate research findings, both orally and in writing, in a clear and logical manner.

MGMT242 Industrial Relations A 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Exclusions: GENE240 or ECON142 or POL241 or MGMT142 or ECON242

Subject Description: The employment relationship is studied in terms of the influence of social, economic, political and legal environment and the power resources of the actors and others who seek to influence employment. The organisation and policies of the major participants in the system are analysed in both historical and contemporary settings.

Subject Objectives: By the end of this subject the student should be able to: 1. Understand the nature of the employment relationship and the ways in which all parties seek to control and administer the employment relationship; 2. Recognise the nature, basis and underlying reasons for the changing structures and patterns in employment relations / industrial relations with particular reference to globalisation; 3. Discuss the ways in which the power and the power resources of the parties are utilised to influence the control and administration of the employment relationship; 4. Communicate research outcomes in lucidly argued essays and projects; 5. Display extended statistical and information literacy research skills; 6. Recognise that in social science research our interpretation of events and processes is determined 'by our frames of reference.

MGMT243 Work and Employment Relations 8cp

Autumn Wollongong On Campus

Exclusions: Not to count with ECON243

Subject Description: This subject will reflect the widening perceptions of industrial relations and human resource management by introducing students to the field of Employment Relations by which is meant the study of how the conflictual relationship between employers and employees, the development of human resource policies and the influence of law all inter-act to shape relations between management and labour.

Subject Objectives: To extend students knowledge of the relationships between industrial relations and human resource management in practice. To extend students knowledge of the relationships between industrial relations and human resource management in the academic literature. For students to demonstrate knowledge of employment relations using perspectives from both industrial relations and human resource management. For students to become familiar with the main content of employment relations, both in theoretical discourse and in the practice of employment relations. To improve student skills in presentation, analysis, research, argument, and oral and written communication.

To heighten students appreciation of the importance of gender, race, age, class and state in the conduct and study of employment relations.

MGMT255 Inventory Management 6 cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: 12 credit points at 100 level

Subject Description: This subject focuses on models and techniques that operations managers use to diagnose and evaluate operational performance, and make short-term and long-term decisions. Introduces, through lectures, computer exercises, and case discussions, various descriptive and decision-support models for inventory management, construction and analysis of mathematical models used in the design and analysis of inventory systems, as well as, deterministic and stochastic demands and lead times, and optimality of (s, S) policies for multiproduct and multi-echelon systems are also covered.

Subject Objectives: On successful completion of this subject, students should be able to explain the functions of inventory in an organisation; describe the methods of demand forecasting used for inventory management; use a number of different methods for calculating optimum purchase order quantities and manufacturing lot sizes; explain how computer simulation can be used in the development of inventory management systems.

MGMT300 Innovation and Electronic Commerce 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Exclusions: Not to count with COMM300

Subject Description: The subject will provide training and development on some of the theoretical and professional issues involved in using the Internet for product and process innovation. The focus will be on the strategic implications for electronic commerce as a source of competitive advantage. The application will concentrate on the use of the Internet as a strategic marketing tool but will also examine it as a source of information which may be exploited for both product and process innovation. The subject content will have an international focus by exploring the use of the Internet as a source of competitive advantage within the international business context.

MGMT301 Managing Across Cultures 6cp

Autumn Wollongong On Campus

Subject Description: This subject examines how to manage effectively across cultures in international business. It seeks to integrate theory with practical application through an interactive teaching delivery achieved through active class participation, role-plays and simulated business situations. The subject will focus on the challenges presented by culture in international business and how to manage them. On successful completion of this subject, students should have an appreciation and knowledge of managing across cultural boundaries in international business.

Subject Objectives:

At the conclusion of this subject, students should be able to:

1. Appreciate various theoretical perspectives and practical approaches to understanding culture, cultural difference and cultural change, and their implications for international business.
2. Understand management practices (eg. strategy,

human resources, organisational design, leadership, management & negotiation) in different cultural environments.

3. Begin to develop ways to manage challenges posed by culture in an international business context.
4. Have a deeper understanding of culture and how to use this to build more effective relationships with people from other countries in a business context.

MGMT302 Business In Europe 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The business environment in Europe; Europe in the world; European markets: problems and prospects; The development and importance of the EU; Eastern Europe and the enlargement of the EU: opportunities and constraints.

The EU, the manager and the firm: entering EU markets; competition policy in Europe: implications for the firm and the manager; the common agricultural policy: implications for the firm and the manager; human resource issues in the European context; corporate strategy in the European context.

Subject Objectives: At the completion of this unit students should be able to: 1. Understand the role and importance of Europe in the world economy. 2. Assess the impact of the European Union upon business. 3. Describe and assess the major features of the business environment in Europe. 4. Describe and assess the development of the EU and the role of business in that development. 5. Evaluate the opportunities and constraints posed by developments in Eastern Europe. 6. Describe and evaluate major issues in relation to firms entering EU markets. 7. Understand the product standard requirements of the EU. 8. Understand the nature and issues of the Pharmaceutical industry in the EU. 9. Understand the nature and impact on the firm of EU competition policy. 10. Describe and evaluate the significance of the Common Agricultural Policy for firms. 11. Understand a selected range of Human Resource issues in relation to EU markets. 12. Understand environmental issues faced by companies in Europe.

MGMT303 Development of Modern Business 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: MGMT110 or ECON111

Subject Description: The subject traces the evolution of modern business enterprises, particularly in the twentieth century. Emphasis is placed on a comparison of the dynamics of capitalist corporate development in Australia, the United States, Japan and the United Kingdom. Major topics include the effects of external institutional and technological environments on corporate change; changing forms of firm organisation; the role of corporations in an evolving international economy; developing corporate strategy; inter-organisational relationships; and the role of corporations in modern society.

MGMT306 Business In Australia 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject provides students with an introduction to conducting business in Australia. It examines the nature of business in Australia at the government, industry, firm and individual levels.

Subject Descriptions

It explores the political, legal, economic, and socio-cultural aspects of business in Australia. It also examines the strategy and operations of several leading local and overseas firms operating in Australia. It aims to provide students with an interesting and practical understanding of Australian business and is also a good introduction to the realities of business.

Subject Objectives: The subject provides for a holistic examination of business studying issues such as: Australian history and culture as it impacts on business; Macro-environment factors impacting on businesses; The nature and impact of government on the conduct of business in Australia; Business planning and strategic considerations for start-up firms and more mature firms in different industries; Operational issues in running businesses in regard to local and overseas markets; Current issues affecting business generally in Australia. Some thoughts on developing business relationships in Australia.

MGMT308 Introduction to Management For Professionals A 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Restrictions: This subject is not available to Commerce students. Students from other Faculties other than Science require approval of the subject coordinator.

Subject Description: This subject gives an introduction to the environment of the business enterprise and key managerial concepts and techniques. Topics to be introduced include: the environment and the business enterprise, managerial decision-making, planning finance and costs, markets and marketing, technology management; competitive strategy; operations management and project management.

MGMT309 Supply Chain Management 6 cp

Contact Hours: Not offered in 2003

Pre-requisites: 12 credit points at 200 level

Subject Description: This subject provides an overview of key logistics and supply chain management concepts. Emphasis is given to such areas as systems analysis, trade-off analysis, inventory management, transportation management, warehousing and storage, third-party logistics providers, and general theoretical underpinning of supply chain.

Subject Objectives: On successful completion of this subject, students should be able to: understand the impact of supply chain management on the success and profitability of today's business organisation; explain the influence of integrated supply chain management on major functional activities, including purchasing, product design, information systems, manufacturing planning, forecasting, sales, quality management and marketing; and identify and assess the major challenges faced in implementing an integrated supply chain management strategy, as well as designing approaches for meeting these challenges.

MGMT310 Introduction to Management For Professionals B 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Restrictions: This subject is not available to Commerce Students

Subject Description: Same course content as MGMT308, but with additional coursework, case studies and assignments.

Subject Objectives: After satisfactory completion of this subject, the student should be able to: 1. Discuss and debate the definition of engineering and management work and the role of engineers in organizations. 2. Understand the concepts of cost, revenue, profit, demand and supply relationships. Discuss and describe decision analysis and apply such to business decisions. 3. Understand the way individuals can interact in group behaviour and decision making. 4. Identify and discuss the major issues involved in managing human resources in an enterprise. 5. Understand the strategic management factors which influence the success of organizations. 6. Understand basic accounting frameworks and financial management. Describe the concept of 'time value of money' and show how it relates to evaluating alternative investment options. 7. Describe the role of the marketing function of an organisation and show how it relates to other business functions. 8. Describe the role of the production and operations function of a business enterprise.

9. Show why innovation is important for a technical enterprise and identify the key factors in the management of innovation. 10. Define the structure of the law and the legal system and describe the nature and purpose of contracts. 11. Describe the key issues associated with managing industrial and employee relations. 12. Identify the key factors in the management of technical projects and describe the methodology of project management. 13. Understand the key phases and key challenges of managing technological innovation.

MGMT314 Strategic Management 6cp

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Bega Education Access Centre On Campus

Autumn Moss Vale On Campus

Autumn Batemans Bay On Campus

Pre-requisites: MGMT101 or MGMT110 or PSYC351 plus MARK213 or MARK101 or MGMT218 or MGMT220

Subject Description: The subject deals with policy formulation and planning functions in the business enterprise. Topics include: Business mission; Customer and competitor analysis; Industry analysis; Environmental analysis; Strategy and organisation; Alternative business strategies. Stress will be laid on the process by which opportunities and threats to the business enterprise are recognised and evaluated, and on the strategies required to meet these.

Subject Objectives: On completion of this course, students should be able to: understand how business strategies are formulated and the impact of strategic management on the success of the enterprise; understand and apply key concepts in analysing and developing business strategies; put forward and justify reasoned arguments in the area of strategic management through written assignments, case presentations, discussion groups and examination essays; using a small team format, critically evaluate, present and defend strategic management issues/problems and potential solutions through case studies.

MGMT321 Occupational Health and Safety Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT398 or MGMT206 or PSYC351

Subject Description: This subject provides students with an understanding of key concepts and their application in the management of occupational health, safety and rehabilitation. Topics include: nature of occupational injury and disease, technical and motivational controls, role of specialists, impact of the legal-political context, benefit-cost analysis, risk assessment,

emergency and disaster management, mobilisation of networks, design of accident investigation, hazard assessment and reporting systems and impact of work organisation.

Subject Objectives: On successful completion of this subject the student should be able to: identify and understand key concepts associated with the management of occupational health and safety; appreciate how these concepts are variously applied in organisations put forward and justify reasoned arguments in the area of contemporary occupational health and safety management; discussion groups; explain, critically evaluate and wherever possible, propose potential solutions to current occupational health and safety management problems / issues.

MGMT322 Training & Development 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT398 or MGMT206 or PSYC351

Subject Description: This subject provides students with an understanding of key concepts and practical approaches to the development of people in organisations. Topics include: theories and models of learning; job analysis; identification of training needs; training delivery forms and their selection; skills development and training; multi-skilling and flexibility; management development; succession planning; national and international frameworks of training; competence-based approaches; organisational learning and the learning organisation; organisational development; evaluation of training and development.

Subject Objectives: On successful completion of this subject, students should have developed a coherent and extensive knowledge of human resource development issues and be able to: outline key concepts and techniques in adult learning and development; explain how these concepts and techniques can be used to manage the processes of strategic human resource development for competitive advantage; explain, critically evaluate and wherever possible, propose potential solutions to an organisation's HR development needs, using a small team format; design and deliver training sessions based on learner needs and learning theories; demonstrate competence in micro skills such as interviewing, active listening, facilitating discussions and the use of training technologies; evaluate the effectiveness of human resource development strategies and training sessions from different levels and perspectives.

MGMT328 Transport Logistics Management 6 cp

Spring Wollongong On Campus

MGMT332 Enterprise and Innovation 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ACCY101 or ACCY100 & ACCY102 plus MARK213 or MARK101

Subject Description: True Entrepreneurship and Innovation are key to the future economic development of Australia. The innovation and entrepreneurial processes are important for Small to Medium Enterprises (SMEs) and large organisations. Students will learn how to differentiate between a good idea and a real business opportunity. A key part of this subject is the development of a realistic written business plan for an innovative business opportunity and its presentation via an action learning process utilising teams.

Subject Objectives: Upon satisfactory completion of this subject students should be able: 1. To develop a profile of the 'Entrepreneur' and determine the fit of their personal characteristics with this profile. 2. To identify and source an innovative business opportunity. 3. To develop the skills to write and present a business plan for an enterprise based on the identified opportunity.

MGMT341 International and Comparative Employment Relations 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Exclusions:** Not to Count for credit with ECON340 and COMM341

Subject Description: This subject integrates the traditional industrial relations and human resource management approaches, to focus on the 'global shifts' in industry that are transforming employment relations structures and practices in many countries. It reviews the debates linking these with national competitiveness.

Subject Objectives: On successful completion of this subject you should be able to: Identify and understand the major variables in the functioning of industrial relations systems and HR policies; Appreciate how different mixes of these variables produce different outcomes; Apply comparative perspectives to debates concerning reform of industrial relations systems and HR policies; Critically evaluate industrial relations policies at the macro level and HR policies at the firm level, and the interactions between the two.

MGMT340 Comparative Studies in Industrial Relations 8cp**Contact Hours:** Not on offer in 2003**Exclusions:** Not to count with ECON340**MGMT348 Employers and Industrial Relations 8cp**

Spring Shoalhaven On Campus

Spring Bega Education Access Centre On Campus

Spring Batemans Bay On Campus

Spring Wollongong On Campus

Exclusions: Not to count with ECON348

Subject Descriptions

Subject Description: The objective of this subject is to develop an understanding of the pressures and constraints on employers/managers, and the way these influence strategies in the control and administration of the employment relationship. This requires a critical analysis of various theories and styles, as well as practical exercises and evaluation of current trends. The influence of product, labour and financial markets on the strategies and choices will be examined.

Subject Objectives: By the end of this subject, the successful student should be able to identify, analyse & discuss: The imperatives of employers in the employment relationship in current and historical contexts; The methods which organisations and their managers use to implement to meet their objectives / imperatives; The changing links between external goals of the organisation and internal processes and strategies; The links between theoretical approaches and practical aspects of the management of the employment relationship at workplace and enterprise level and beyond. As well the successful students should: Be competent in advanced library research skills; Have extended their capacity to read and analyse primary documents pertaining to industrial relations; Have extended their capacity to present and communicate ideas and concepts in written work and verbally.

MGMT350 Total Quality Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MGMT101 or MGMT110 plus ECON121

Subject Description: This subject includes topics covering Total Quality Management practices, TQM as a part of Corporate Strategy, Quality Circles, Statistical tools and controls for TQM, TQ in service and manufacturing environments; applications, implementation and auditing of TQM.

Subject Objectives: At the completion of this subject, the student should be able to: 1. Describe the various definitions of quality, and quality philosophies. 2. Describe Total Quality Management and its impact in manufacturing and service operations. 3. Describe the numerous management issues associated with quality management. 4. Demonstrate an understanding of the seven management and planning tools and, the seven statistical tools used in process improvement. 5. Explain the 'cost of quality' and the importance of quality performance measures. 6. Explain quality assurance and process capability. 7. Describe the fundamentals of statistical process control. 8. Describe the best practices of a quality organisation and, the international standards which provide the framework for designing a Total Quality infrastructure.

MGMT351 Business Ethics 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 72 cp

Subject Description: An examination of the central issues in business ethics, covering topics such as the concept of social responsibility, individual and corporate values, models for making ethical decisions, ethics for the employee, the customer, the environment, the community, the government and the multinational context. Class consists primarily of student-centred discussion and experiential activities. Semester is arranged to take students through a reflective, unlearning process.

Subject Objectives: On successful completion of the course students should be able to: 1. Challenge assumptions, develop reasoned arguments and demonstrate critical thinking with respect to business ethics. 2. Identify, understand and critically evaluate a range of theoretical approaches to ethical issues in business and management. 3. Apply theoretical perspectives to practical situations. 4. Reflect upon, and discuss, the ethical dimensions of a range of 'real life' situations involving multiple stake holders – recognising individual rights and duties, and demonstrating social responsibility. 5. Engage effectively in discussion by listening to different viewpoints, developing responses and taking risks. 6. Work productively in a group by coordinating activities, allocating tasks and synthesising different material and viewpoints. 7. Display multicultural sensitivity and an appreciation of varied cultural perspectives relevant to management practice. 8. Practice a broad range of information acquisition skills through engagement with multiple forms of media. 9. More effectively identify and employ written and oral communication relevant to your audience. 10. Initiate and implement procedures for ongoing morally relevant learning, enquiry and deliberation with regard to unique business contexts.

MGMT352 Negotiation, Advocacy & Bargaining 8cp

Autumn Wollongong On Campus

Exclusions: Not to count with ECON352

Subject Description: Introduces students to theories, concepts and techniques for developing and evaluating strategies and tactics for advocacy before industrial tribunals and negotiation at the workplace. Students will be assisted to develop a range of practical skills and familiarity with procedures through case studies and role playing, as well as a conceptual framework in which to analyse the role of different advocacy and negotiating strategies.

Subject Objectives: The primary objective of ECON352 is to develop students' knowledge and practice of the processes of Industrial Relations, including negotiation, bargaining and advocacy. On successful completion of this subject students should have: developed practical skills of negotiation and advocacy in a context of critical assessment, developed an understanding of the place of negotiation and advocacy in the conduct of Australian Industrial Relations, extended their knowledge of the current Australian Industrial Relations legislation.

Subject Objectives: On successful completion of this subject, students should have the skills to: 1. Identify international business related management problems. 2. Gather information – internal and external to the firm – necessary for resolving management problems. 3. Apply relevant theoretical frameworks and models to analyse business problems. 4. Develop management consulting skills, i.e. proposal design, selling, project management, client care, report writing, and presentation.

MGMT389 International Business Management 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MGMT110 AND MARK213 or MARK101 OR MGMT218

Subject Description: This subject deals with the international business environment and the key issues involved in operating in international and global markets.

The international and global business environment, entry modes, global strategies, functional strategies and the management and control of international/global operations are covered. On completion of this subject, students should have an understanding of international business and be able to apply key concepts in analysing and developing international business strategies.

MGMT392 Case Study 12cp

Annual Wollongong On Campus

Pre-requisites: MGMT398 & MGMT218

Subject Description: A study of a management problem arising from the experience of an organisation. Enrolment is subject to the approval of the subject coordinator.

MGMT393 Special Topics A 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Pre-requisites: 12 cp from 100/200 level MGMT subjects

Subject Description: Enrolment is subject to the approval of the subject Coordinator. Selected issues in general management and in the various functional areas of management.

MGMT398 Human Resource Management 6cp

Annual Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega Education Access Centre On Campus

Spring Moss Vale On Campus

Pre-requisites: MGMT101 or MGMT110

Exclusions: MGMT206

Subject Description: This subject is concerned with concepts, techniques and activities involved in the managing the flow of human resources through organisations. Emphasis is placed on understanding the techniques of contemporary HRM that can be applied in organisations to facilitate the acquisition and development of staff, to influence positively their job performance, and to manage the processes of staff turnover and retention. The theoretical foundations and practical application of these techniques is emphasised.

Subject Objectives: On completion of this subject students should be able to: outline key concepts and techniques of contemporary HRM; explain how these concepts and techniques can be used to manage the processes of staff acquisition, staff retention and turnover, and job performance; describe the challenges and issues associated with managing people effectively through each phase of the employment relationship; identify, critically evaluate and wherever possible, propose potential solutions to current HRM problems and issues;

advance and substantiate reasoned arguments in the area of HRM through written assignments and examination essays.

MGMT404 Honours International Business 48cp

Annual Wollongong On Campus

Pre-requisites: Normally a credit level average of 200 and 300 level subjects.

Subject Description: This subject comprises coursework, as approved by the Head of School of Management, Marketing, & Employment and a thesis. This thesis must be a piece of original international business research which will be examined by internal and external and external examiners.

MGMT405 Joint Honours in Management 48cp

Annual Wollongong On Campus

Pre-requisites: Normally a credit level average of 200 and 300 level subjects.

Subject Description: This subject comprises coursework, and a thesis in management and another cognate discipline (as approved by the Heads of both the academic unit/disciplines involved). The thesis must be a piece of original research which will be examined by internal and external examiners.

MGMT406 Honours Human Resource Management 48cp

Annual Wollongong On Campus

Pre-requisites: Normally a credit level average of 200 and 300 level subjects.

Subject Description: This subject comprises coursework, as approved by the Course Coordinator in the School of Management, Marketing & Employment Relations and a thesis. This thesis must be a piece of original human resource management which will be examined by internal and external and external examiners.

MGMT407 Joint Honours in Human Resource Management 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: Normally a credit average of 200 and 300 level subjects

Subject Description: This subject comprises coursework and a thesis in human resource management and another cognate discipline (as approved by the Course Coordinator of both the academic units/disciplines involved). The thesis must be a piece of original research, which will be examined by internal and external examiners.

MGMT422 Honours Industrial Relations 48cp

Annual Wollongong On Campus

Subject Description: The subject comprises coursework, as prescribed by the Head of the School of Management, Marketing and Employment Relations, and thesis. The thesis must be a piece of original research and is evaluated by internal and external examiners.

MGMT428 Honours Research Project 24cp

Annual Wollongong On Campus

Pre-requisites: As for MGMT429

Subject Description: A research topic agreed with by the Head of the School in any field of management study.

Subject Descriptions

**MGMT429 Advanced Topics in Management 24cp
(Honours)**

Annual Wollongong On Campus

Pre-requisites: Normally a minimum of 50% of 200-/300-level subjects in a major, achieved at credit level or higher plus no subject failures

Subject Description: A course of study prescribed by the Head of School for honours students in one or more of the following areas: Strategy, HRM (including International HRM), Organisation, Enterprise Development, Operations Management and International Business Operations.

**MGMT342 Research Topics in Industrial 8cp
Relations.**

Contact Hours: Not on offer in 2003

Restrictions: Not to count with ECON342

MGMT450 Honours Employment Relations 48cp

Annual Wollongong On Campus

Pre-requisites: Normally a credit level average of 200- and 300-level subjects

Subject Description: This subject comprises course work, as approved by the Head of the School of Management, Marketing and Employment Relations, and a thesis. The thesis must be a piece of original employment relations research which will be evaluated by internal and external examiners.

**MGMT452 Joint Honours in Industrial 24cp
Relations**

Annual Wollongong On Campus

Subject Description: The course work consists of components chosen by the Head of School of Management, Marketing and Employment Relations from those required of students in MGMT422 Industrial Relations. The other 24 credit points in another discipline must be in 400-level subjects approved by the relevant Head of School. The thesis must be a piece of original research and is evaluated by internal and external examiners.

Faculty of Creative Arts

Degrees Offered

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Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Creative Arts

Students enrolling in the BCA and BCA double degrees are required to complete:

1. Major Area of Study in the BCA

A major study is comprised of compulsory subjects which focus on practice in conjunction with a study in the history and theory of the discipline.

For students enrolled in a BCA double degree only:

A major area of study in the second degree (for information, please refer to the other Faculty from which the second degree will be taken).

2. Elective Subjects

In addition to subjects required for their major study area/s (excluding the fully-prescribed majors in Visual Arts & Graphic Design or in Visual Arts & New Media), students choose elective subjects which make up the total credit point requirement for the degree/s. A limited range of electives are offered by the Faculty of Creative Arts. However, students are encouraged to take advantage of the full range of subjects offered within the University. Please note that elective subjects may be limited in double degree programs.

Degree Structure

Each subject is allocated a credit point value. Generally, subjects that take a full year to complete (annual subjects) are valued at 12 credit points, while subjects undertaken for one session (sessional subjects) are, on average, valued at 6 credit points. Normally a full-time student undertakes 48 credit points per year. Thus a degree requiring 144 credit points, such as the BCA, will normally take three years to complete (3 x 48 credit points).

Creative Writing

Course Description

A major in this area offers both practical and theoretical training in creative writing. Following an introductory subject on writing fundamentals, students specialise in one or more of the following areas: poetry, prose fiction, and scripting for either film and television or for the theatre. From second year, additional subjects are offered in non-fiction forms, in editing, in writing for the internet, in writing performance, in scripting/scoring sound texts and in hypertexts and electronic writing. Third year subjects are geared towards the refinement of writing technique and allow for the development of larger scale writing projects. Throughout the course students are involved in the critical examination of developments in the poetics of writing and writing theory. In general, class activities are based around a combination of lectures, intensive workshops, writing exercises, group discussions and individual student presentations. The course regularly makes use of various writer-in-residence schemes.

Students are encouraged to participate in public readings and performances of their work as well as in the active pursuit of publication. For outstanding students, a fourth year is available at honours level.

It is expected that applicants for a major study in Creative Writing will have developed a body of work in either prose fiction (short story or novel), poetry or some form of dramatic writing, and be able to demonstrate an ongoing and independent commitment to writing.

Below is a sample course structure (totalling 108 credit points) for a major study in Creative Writing:

First Year

24 credit points of Writing Forms and Techniques:

Fiction, Poetry, Scriptwriting

WRIT111	Writing Overview	6
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and any 3 of the following

WRIT121	Writing for Stage and Screen	6
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WRIT122	Writing Prose Fiction 100	6
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WRIT123	Poetry 100: Introduction to Writing Poetry	6
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ENGL—	Any 100 level English subject	6
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12 credit points of Theory for Practising Writers

WRIT119	Theory for Practising Writers: Classicism to the Gothic	6
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WRIT129	Theory for Practising Writers	6
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Second Year

24 credit points of Writing Forms and Techniques:

Fiction, Poetry, Sound, Theatre, Film and TV, Performance, Internet, Arts Journalism

Any 4 of the following

WRIT210	Writing for the Internet	6
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WRIT211	Writing/Performing	6
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WRIT212	Writing Prose Fiction 200	6
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WRIT213	Poetry 200: Poetic Forms	6
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WRIT214	Writing for Theatre 200	6
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WRIT215	Writing for Film and Television 200	6
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WRIT216	Editing Practice for Creative Writers	6
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WRIT222	Writing Extended Prose Fiction	6
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WRIT228	Writing for Sound 200	6
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12 credit points of Theory for Practising Writers

WRIT219	Writing theory: Modernism	6
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WRIT229	Writing Theory: Modernist Avant-Gardes	6
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Third Year

24 credit points of Writing Forms and Techniques:

Specialist Writing Techniques

Any 4 of the following

WRIT312	Advanced Prose Fiction A	6
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WRIT313	Advanced Poetry A	6
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WRIT314	Writing for Theatre 300	6
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WRIT315	Writing for Film and Television 300	6
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WRIT316	Editing 300	6
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WRIT317	Writing: The Author and the Media	6
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WRIT322	Advanced Prose Fiction B	6
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WRIT323	Advanced Poetry B	6
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WRIT328	Writing for Sound 300 - Scoring and Production	6
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12 credit points of Theory for Practising Writers

WRIT319	Writing theory: Structuralism to the Postmodern	6
WRIT329	Contemporary Theory and the Practising Writer	6

Note: check subject details for session on offer and pre-requisites and co-requisites.

Single degree BCA students must also include 36 credit points of electives in their degree of which no more than 18 credit points should be at 100 level.

Graphic Design and New Media**Course Description**

The Graphic Design and New Media major in the Bachelor of Creative Arts (BCA) degree at the University of Wollongong is made up of a combination of theory and laboratory production components. Students are introduced to a range of graphic and digital imaging techniques and practices across a number of industrial contexts including graphic design, web and interactive multimedia design. The Graphic Design and New Media major encourages an interdisciplinary approach to the study and practice of creative print and screen-based design. Student work is shown throughout the year in one of five gallery spaces in the Faculty.

The first year of the course covers both an introduction to graphic design and to theories of visual and graphic arts. Students are encouraged to carry out research historical and contemporary designers and cultural trends, then experiment with a range of production techniques, computer software and hardware skills and creative solutions. Students gain a solid grounding in visual art methods of drawing and constructing images, both analogue and digital.

Throughout year two, specific subjects in typography, campaign graphics and editorial design, web design and design theory are introduced to the course. Students will be more independent in their motivations and research focus. Increasingly, student projects are concerned with real clients and job briefs. Theory and production subjects run in parallel throughout the year.

In third year advanced design theory and production subjects introduce the student to professional practice methods and techniques. The emphasis is on developing a range of critical and practical skills in the rapidly expanding fields of graphic and digital design. Interactive multimedia and new media theory form a focus for end of degree students. Major projects are developed for real clients. An end of year exhibition of final session work is held in one or more of the Faculty galleries. An on-line gallery is also available for students to show their work. For outstanding students a fourth year is available at honours level.

Below is a sample course structure (totalling 108 credit points) for a major study in Graphic Design and New Media:

First Year**24 credit points of Studio Practice including:**

- *Principles and Elements of Graphic Design*
- *Visual Identity, Logo Design*
- *Signage Systems and Information Design*

DES101	Introduction to Graphic Design	6
DES102	Design for Visual Communications	6
VIS101	Visual Investigations A	6
VIS102	Visual Investigations B	6

12 credit points of Theory

VIS121	Introduction to theories of Visual Culture	6
VIS122	Perspectives in Modernism	6

Second Year**24 credit points of Studio Practice including:**

- *Web Design*
- *Typography*
- *Editorial Design*

DES201	Typography, Text and Illustration	6
DES202	Campaign Graphics and Editorial Design	6
DES211	Introduction to Web Design	6
DES212	Advanced Web Design	6

12 credit points of Theory

VIS221	The Object in Contemporary Material Culture	6
DES222	Design Theory	6

Third Year**24 credit points of Studio Practice including:**

- *Advanced Web Design*
- *Advanced Design Project*
- *Commercial Practice*

DES301	Commercial Graphic Design Practice A	6
DES302	Commercial Graphic Design Practice B	6
DES311	Interactive Multimedia Design	6
DES312	Advanced Design Project	6

12 credit points of Theory

DES321	New Media Theory	6
DES322	Advanced Graphic Design Theory	6

Note: check subject details for session on offer and pre-requisites and co-requisites.

Single degree BCA students must also include 36 credit points of electives in their degree of which no more than 18 credit points should be at 100 level.

Performance (Music and Theatre)

The Performance major offers subjects progressively leading to a high level of achievement in on-stage performance. Students accepted into Performance are provided with studies in:

- Vocal performance: singing and speech
- Physical performance: movement and dance
- Dramaturgy, history and theory
- Text interpretation
- Devised performance techniques through improvisation
- Tuition in production skills is available to students showing aptitude in Performance Technology

Seminars will provide students with the opportunity to perform for their peers and to work with visiting professional artists in masterclass and workshop situations.

For outstanding students a fourth year is available at honours level. It may also be possible for such students to undertake a secondment within the industry.

In first year the focus is on the ensemble. Students undertake core technique subjects that provide a broad appreciation of performance history and culture. There are many opportunities for performance within the Faculty and the University.

The second year focuses on on-stage interaction and students continue technique classes and perform in limited-access performances. (Black Box projects are based on script work, music projects or devised workshops). Students are encouraged to engage in key creative production roles for third year performances.

Third year studies include Individualism in Performance. Students continue technique classes and perform to a wider audience at one of the theatres on campus or at performance venues off campus. Towards the end of their training students are introduced to the industry, either at the University or at a venue in Sydney, where they perform from a repertoire of selected works developed over the course of their degree.

Below is a sample course structure (totalling 108 credit points) for a major study in Performance:

First Year

24 credit points of Studio Practice and Skills

The Ensemble

PERF102	Studio Practice A	6
PERF103	Studio Practice B	6
PERF120	Performance Skills A	6
PERF121	Performance Skills B	6

12 credit points of Theory

PERF116	Dramaturgy A	6
PERF117	Dramaturgy B	6

Second Year

24 credit points of Studio Practice and Skills

On-stage interaction

PERF204	Interpretation 1	6
or		
PERF206	Devised 1	6
and		
PERF205	Interpretation 2	6
or		
PERF207	Devised 2	6
and		
PERF220	Performance Skills C	6
PERF221	Performance Skills D	6

12 credit points of Theory

PERF216	Dramaturgy C	6
PERF217	Dramaturgy D	6

Third Year

24 credit points of Studio and Practice Skills

Individualism in Performance

PERF304	Interpretation 3	6
or		
PERF306	Devised 3	6
and		
PERF305	Interpretation 4	6
or		
PERF307	Devised 4	6
and		
PERF320	Performance Skills E	6
PERF321	Performance Skills F	6

12 credit points of Theory

PERF316	Dramaturgy E	6
PERF317	Dramaturgy F	6

Single degree BCA students must also include 36 credit points of electives in their degree of which no more than 18 credit points should be at 100 level.

Sound - Composition and Production

The Faculty of Creative Arts has developed a comprehensive theory and practice-based major study in Sound - Composition and Production. The course explores the major facets of Music Composition, Digital Sound Studies and Sound Production.

Course Description

This course investigates the creation and manipulation of sound, in particular through the use of digital technologies. It will be suitable for students from a traditional music background as well as those who have developed an interest in sound design and music composition through computer-based technologies. The design of sound for multi-media and web-based applications will form a significant component of the major.

Students' creativity will be extended through studies in:

- Theory of sound
- Composition (electronic media/ improvisational and traditional)
- Computer music applications
- Critical listening skills

Seminars addressing all aspects of sound studies will give students the opportunity to interact with their peers and with visiting professional sound artists. For outstanding students a fourth year is available at honours level.

The following is a brief example of how the course will be structured.

First Year

36 credit points including:

SCMP101	Investigations in Sound1	6
SCMP102	Investigations in Sound 2	6
SCMP111	Issues in Sound Design 1	6
SCMP112	Issues in Sound Design 2	6
SCMP121	Sound Studies 1	6
SCMP122	Sound Studies 2	6

Second Year

36 credit points including

SCMP201	Investigations in Sound 3	6
SCMP202	Investigations in Sound 4	6
SCMP211	Issues in Sound Design 3	6
SCMP212	Issues in Sound Design 4	6
SCMP221	Sound Studies 3	6
SCMP222	Sound Studies 4	6

Third Year

36 credit points including

SCMP301	Investigations in Sound 5	6
SCMP302	Investigations in Sound 6	6
SCMP311	Issues in Sound Design 5	6
SCMP312	Issues in Sound Design 6	6
SCMP321	Sound Studies 5	6
SCMP322	Sound Studies 6	6

Single degree BCA students must also include 36 credit points of electives in their degree of which no more than 18 credit points should be at 100 level.

Visual Arts

Course Description

The Visual Arts major in the Bachelor of Creative Arts (BCA) degree at the University of Wollongong is based on studio practice and related theory and history studies. The studio processes available include drawing, digital image making, painting, photography, printmaking media, sculpture and textiles. Student work is shown throughout the year in one of the gallery spaces in the Faculty. In first year, studio subjects introduce students to a range of media and processes. Studio skills are taught and a critical approach to their use is fostered in weekly seminars, which study the histories of each art and craft discipline.

In second year, studio subjects build on these basic techniques and skills. Increased emphasis is placed on the students' ability to achieve independence in ideas, technical skills and work practices. Students are encouraged to contextualise their artwork in contemporary practice by developing research processes, attending exhibitions and participating in the wider artistic community. In third year studio subjects, students are expected to explore and develop personal themes and ideas to a greater depth. Professional practice as a visual artist is introduced. This includes skills in visual presentation appropriate to the medium, gallery practice and compiling a professional portfolio. The focus is on the completion of a body of work for exhibition in the final year graduating exhibition.

Visual Arts Theory and History which is compulsory for all Visual Arts majors compliments the work in studio practice. In their first year, students are given a foundation in 19th century European, Colonial, indigenous Australian and early modern art as a background to their second-year study of 20th century movements and theories in art and design. Contemporary theoretical perspectives are introduced gradually. By third year the focus is on contemporary visual arts practice - along with the attendant issues and debates - in Australia and overseas. For outstanding students a fourth year is available at honours level.

Below is a sample course structure (totalling 108 credit points) for a major study in Visual Arts:

First Year

12 credit points of Studio Practice including:

- *Introduction to a range of media and processes*
- *Histories of given art and design disciplines*

VIS103	Introduction to Visual Arts Studio A	6
VIS104	Introduction to Visual Arts Studio B	6

12 credit points of Visual Investigations (complements the work in studio practice)

VIS101	Visual Investigations A	6
VIS102	Visual Investigations B	6

12 credit points of Theory

19th Century European, Colonial, indigenous Australian and early modern art

VIS121	Introduction to Theories of Visual Culture	6
VIS122	Perspectives on Modernism	6

Second Year

12 credit points of Studio Practice including:

- *Techniques and skills to achieve technical competence*
- *Independence in ideas, technical skills and work practices*

VIS203	Visual Arts Studio C	6
VIS204	Visual Arts Studio D	6

12 credit points of Visual Investigations

VIS201	Visual Investigations C	6
VIS202	Visual Investigations D	6

Course Structures

12 credit points of Theory

- *20th Century movements and theories in art and design*

VIS221	The Object in Contemporary Material Culture	6
VIS222	The Artist in Contemporary Culture	6

Third Year

12 credit points of Studio Practice including:

- *Exploration and development of personal themes and ideas*
- *Professional practice*

VIS303	Advanced Visual Arts Studio E	6
VIS304	Advanced Visual Arts Studio F	6

12 credit points of Visual Investigations

VIS301	Visual Investigations E	6
VIS302	Visual Investigations F	6

12 credit points of Theory

- *Current visual arts practice*
- *Attendant issues and debates in Australia and overseas*

VIS321	Introduction to Indigenous Art and Visual Culture	6
VIS322	Representation and Space in Post Colonial World	6

Note: check subject details for session on offer and pre-requisites and co-requisites.

Single degree BCA students must also include 36 credit points of electives in their degree of which no more than 18 credit points should be at 100 level.

Visual Arts & Graphic Design

This major is designed for those who have strong interests in both visual arts practice and in aspects of graphic design. It allows visual artists, who wish to broaden their career options, to develop skills which have commercial application. The graphic design emphasis in this major is towards design for print media, using both manual and digital technologies. Studio subjects are supported by design theory and visual arts theory subjects.

Note: this is a fully prescribed major (ie, 144 credit points)

First Year

48 credit points

VIS101	Visual Investigations A	6
VIS103	Introduction to Visual Arts Studio A	6
DES101	Introduction to Graphic Design	6
VIS102	Visual Investigations B	6
VIS104	Introduction to Visual Arts Studio B	6
DES102	Design for Visual Communication	6
VIS121	Introduction to Theories of Visual Culture	6
VIS122	Perspectives on Modernism	6

or

VIS123	Introduction to Aboriginal Arts in Society	6
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Second Year

48 credit points

DES201	Typography, text and Illustration	6
VIS221	The Object in Contemporary Material Culture	6
VIS201	Visual Investigations C	6
VIS203	Visual Arts Studio C	6
DES202	Campaign Graphics and Editorial Design	6
DES222	Design Theory	6
VIS202	Visual Investigations D	6

or

VIS204	Visual Arts Studio D	6
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and

VIS222	The Artist in Contemporary Culture	6
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or

VIS223	Aboriginal Art and Land	6
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Third Year

48 credit points

DES301	Commercial Graphic Design Practice A	6
VIS321	Visual Arts Theory 3	6
VIS301	Visual Investigations E	6
VIS303	Advanced Visual Arts Studio E	6
DES302	Commercial Graphic Design Practice B	6
VIS322	Representation and Space in Post Colonial World	6
DES322	Advanced Graphic Design Theory	6
VIS302	Visual Investigations F	6

or

VIS304	Advanced Visual Arts Studio F	6
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Visual Arts & New Media

This major is designed for those with aptitude and interest in combining visual arts with interactive technologies. As well as engaging in traditional visual art studio disciplines, students are also introduced to design fundamentals, creative website design and interactive multimedia art and design. Interactive multimedia requires students to produce work which contains digital video, sound and interface design.

Note: this is a fully prescribed major (ie, 144 credit points)

First Year

48 credit points

DES101	Introduction to Graphic Design	6
DES102	Design for Visual Communication	6
VIS101	Visual Investigations A	6
VIS102	Visual Investigations B	6
VIS103	Introduction to Visual Arts Studio A	6
VIS104	Introduction to Visual Arts Studio B	6
VIS121	Introduction to Theories of Visual Culture	6
VIS122	Perspectives on Modernism	6

or

VIS123	Introduction to Aboriginal Arts in Society	6
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Second Year**48 credit points**

DES211	Introduction to Web Design	6
DES212	Advanced Web Design	6
DES222	Design Theory	6
VIS201	The Object in Contemporary Material Culture	6
VIS203	Visual Arts Studio C	6
VIS221	Visual Arts Studio D	6
VIS222	The Artist in Contemporary Culture	6
VIS202	Visual Investigations D	6
or		
VIS204	Visual Investigations C	6

Third Year**48 credit points**

DES311	Interactive Multimedia Design	6
DES312	Advanced Design Project	6
DES321	New Media Theory	6
VIS302	Visual Investigations F	6
VIS304	Advanced Visual Arts Studio F	6
VIS321	Introduction to Indigenous Art and Visual Culture	6
and		
VIS301	Visual Investigations E	6
Or		
VIS303	Advanced Visual Arts Studio E	6
and		
VIS322	Representation of Space in Post Colonial World	6
or		
DES322	Advanced Graphic Design Theory	6

Double Degrees

To qualify for the award of a double degree a candidate is required to complete the following:

- i) a major study for the Bachelor of Creative Arts comprising 108 credit points of compulsory subjects as listed in the Creative Arts course structure
- ii) subjects from the relevant Faculty's schedule of subjects, including subjects to satisfy the requirements of one of the majors within that Faculty
- iii) where necessary, elective subjects to ensure a total of 216 credit points have been completed.

Note: Students must seek advice and approval from both Faculties before enrolment.

Bachelor of Creative Arts - Bachelor of Arts**Bachelor of Creative Arts - Bachelor of Commerce****Bachelor of Creative Arts - Bachelor of Computer Science****Bachelor of Creative Arts - Bachelor of Science**

(Refer to the Faculty of Engineering for details of the Bachelor of Science (Physics) program)

Bachelor of Creative Arts - Bachelor of Laws

Refer to the Faculty of Law section for details of this double degree program.

CREATIVE ARTS SUBJECT DESCRIPTIONS

Note: Except where shown below, all Creative Arts Subject Objectives are provided with Subject Outlines made available to enrolled students.

CREA102 Professional Practices 1 6cp

Spring Wollongong On Campus

Assessment: 1 report 2000 words 50%; 1 seminar paper 1500 words 40%; seminar participation 10%.

Subject Description: This subject provides an introduction to the important area of (a) The Arts and Cultural Industries, (b) Policies and Funding in the Cultural Industries and (c) Service Organisations, Agencies, Advocates and Professional Associations. Within these areas students will deal with such issues as: ways of being an artist, employment and career paths in the arts, funding and policies on the federal, state and local government levels, and the roles of unions and arts associations.

CREA202 Professional Practices 2 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lecture/tutorial per week.

Pre-requisites: 24 credit points at 100 level

Assessment: Participation 10%; class presentation 20%; research project 70%.

Subject Description: This subject will be offered as a project-based course. Students will be expected to devise, develop and carry out Research Projects into professional practice activities in the arts industry. The class will meet regularly for consultation and for student presentations.

CREA401 Minor Thesis in Creative Arts 24cp

Annual Wollongong On Campus

Pre-requisites: Entry to the Honours year shall be determined by the Dean.

Assessment: Minor thesis of 10,000-15,000 words. Research seminar exercises.

Subject Description: The presentation of a minor thesis in the area of a candidate's major study. Candidates shall select an appropriate Creative Arts topic for research, approved by the Dean, and subject to staff availability for supervision and assessment, and the accessibility of relevant literature. The work will include a critical survey of available literature. Students will attend a seminar series on research methods.

CREA402 Creative Arts Presentation 24cp

Annual Wollongong On Campus

Pre-requisites: Entry to the Honours year shall be determined by the Dean.

Assessment: Submission of a major presentation of creative work.

Subject Description: The presentation of a major exhibition, performance, composition or written folio built on professional competence in the area of a candidate's major study. A proposal outlining the topic, its scope, methods of implementation and presentation shall be submitted for approval by the Dean, and is subject to staff availability for supervision and assessment, and the accessibility of relevant resources.

DESN101 Introduction to Graphic Design 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: Folio of Work

Co-requisites: VISA121

Exclusions: DESN190

Assessment: Electronic submission and hard copy presentation of two major projects as specified. Project A 30%; Project B 50%; Case study/research report 20%.

Subject Description: Introduction to graphic design history and the principles and elements of design. Introductory level digital page design, image scanning and image editing for printed media. Emphasis is given to design fundamentals, computer literacy and formal composition.

DESN102 Design for Visual Communications 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours classes per week.

Pre-requisites: DESN101

Co-requisites: VISA122

Assessment: Electronic submission and hard copy presentation of two major projects as specified. Project A 30%; Project B 40%; Case study and class presentation 30%

Subject Description: This subject focuses on the field of visual identity and branding, logos and logotype, and their application to stationery, signage and corporate identity systems. Emphasis is given to design fundamentals, design solutions and computer literacy.

DESN108 Screen Production A: Documentary 6cp

Summer Wollongong On Campus

2003/2004

Contact Hours: 4 hours per week or maybe offered in a block.

Assessment: Practical assignment 75%; written tests 10%; class and workshop participation 15%.

Subject Description: This subject aims to familiarise students with the fundamentals of the language of the screen and to examine how these stylistic techniques shape meaning and guide audience expectations and responses. Students will be provided with basic theoretical and practical knowledge of single camera video production. Practical assignments provide experience in the operation of camera and editing equipment and working in a production crew environment. Project focus is on producing a short documentary.

DESN129 Creative Industries Design for Interactive Multimedia 6cp

Summer Wollongong On Campus

2003/2004

Contact Hours: 3 hours/week or may be offered in a block.

Assessment: Case study 30%; Process journal 10%; Major design project 60%.

Subject Description: Through a survey of historical and contemporary case studies this subject examines the partnership between creative innovation and commercial application.

Subject Descriptions

Within a framework of weekly lectures students will be required to undertake case study research into interactive multimedia and Internet design.

Subject Objectives: On successful completion of this subject students should be able to: Create design for interactive multimedia; appreciate the significance of contemporary design, visual and sound culture on the evolution of interactive multimedia; present collaborative interactive screen based design solutions and use digital media content creation and problem solving skills.

DESN190 Introduction to Digital Imagemaking 6cp

Summer Wollongong On Campus
2003/2004

Contact Hours: 4 hours per week.

Exclusions: Not to count with DES101

Assessment: Major project (as specified in design brief) 70%. Case study and class presentation 30%.

Subject Description: This subject introduces students to visual design fundamentals: composition, colour, line and type and the application of these fundamentals and design techniques in digital imagemaking. Students will use Adobe Photoshop and Adobe Illustrator to create their work.

DESN201 Typography and Type Design 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: DESN102

Co-requisites: VISA221

Assessment: Electronic submission and hard copy presentation of two major projects as specified. Project A 40%; Project B 40%; Case study 20%.

Subject Description: This unit introduces creative typography, type design and the function of type in graphic design. This subject examines the history of typography and type design and looks at current trends and design applications.

DESN202 Editorial Illustration and Publication Design 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: DESN201

Co-requisites: DESN222

Assessment: Electronic submission and hard copy presentation of two major projects as specified. Project A 40%; Project B 40%; Case study and class presentation 20%.

Subject Description: This unit examines the use of illustration, imagery, type and page design in editorial design for print media. Introduces print production techniques and roles within the design studio.

DESN211 Introduction to Web Design 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: DESN102 or DESN129

Co-requisites: DESN201

Assessment: Electronic submission and hard copy presentation of two major projects as specified.

Project A [In-class exercises, planning, story boards and flowchart] 40%; Project B [website] 40%; Case study 20%.

Subject Description: This unit is an introduction to web design and production.

The focus is on developing design skills for online projects using Adobe Photoshop, Imageready, and Macromedia Dreamweaver software. Topics to be covered include: planning; story boards and flow chart; interface and interactive design; working with graphics for the web; type and colour on the web; the internet industry; industry practice and practitioners.

DESN212 Advanced Web Design 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: DESN211

Assessment: Electronic submission and hard copy presentation of two major projects as specified. Project A [planning, story boards and flowchart] 30%; In-class exercises 20%; Project B [website] 50%.

Subject Description: This unit provides students with further critical, conceptual and practical skills in design for the Web. Students are expected to demonstrate high levels of software competency and more advanced site building skills. Topics to be covered include: interface and interactive design, content management, design conventions and advanced site formatting controls

DESN222 Design Theory 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: VISA221

Assessment: Tutorial Presentation 30%; Tutorial Written Report 20%; Major essay 50%.

Subject Description: This subject introduces students to theories and critical writings on design and communication. The theories of modernism and postmodernism; and critical studies of design, film and animation will be covered.

DESN301 Commercial Graphic Design Practice A 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: DESN202

Co-requisites: DESN321

Assessment: Industry Research Report 30%; Team project: Individual Contribution [documentation required] 40%; Team work 30%.

Subject Description: This unit uses a Design Studio Team model, with students assigned the roles which operate within a design studio. Students are assigned commercial job briefs under the art direction of the lecturer. Clients are selected by the lecturer and students are expected to work within publishing budgets and meet strict production deadlines. Students undertaking this subject will be required to work additional hours outside the subject timetable in order to undertake liaison with clients and coordinate services of commercial printers, pre-press, copywriting and photographic and other production services.

DESN302 Commercial Graphic Design Practice B 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week.**Pre-requisites:** DESN301**Co-requisites:** DESN322**Assessment:** Major project: Portfolio; Exhibition role or Commercial Work, as allocated Planning and documentation 25%; Execution 50%; Employment Report 25%.**Subject Description:** This unit prepares students for a role in the commercial design industry in print and/or web, multimedia sectors; it enables students to develop an understanding of the employment options within and around design; build a relevant portfolio [hardcopy and electronic] and research employment options.**DESN311 Interactive Multimedia Design 6cp**

Autumn Wollongong On Campus

Contact Hours: 4 hours per week.**Pre-requisites:** DESN212 or DESN202**Co-requisites:** DESN301 or DESN321**Assessment:** Four set exercises: Interface; Interactivity; Audio; Image 30% [individual]. Team-based Major Project 30% [team mark]. Individual contribution to team-based project 20% [individual]. Research report 20% [individual].**Subject Description:** This unit is an introduction to interactive multimedia design and production. The focus is on developing CD-rom projects using animation, sound, video and photographic manipulation software programs as appropriate. Topics covered include planning and concept development; interface design, working with graphics, animations, text, sound and video; integrated online and CD project development; The focus is on professional practice and software skills and innovative design strategies and solutions.**DESN312 Advanced Design Project 6cp**

Spring Wollongong On Campus

Contact Hours: 4 hours per week.**Pre-requisites:** DESN311**Co-requisites:** DESN302 or DESN322**Assessment:** Brief development documentation 30%; Major Project: Self-directed design project: Planning 20%; Final project 50%.**Subject Description:** This subject aims to provide students with self-directed skills and strategies for successful design, production and project management; and an understanding of the technical processes and design practice; a knowledge of the industry and industry-standard practice. Students are encouraged to produce risk-taking, experimental work to demonstrate a high level of creative design skills.**DESN321 New Media Theory 6cp**

Autumn Wollongong On Campus

Contact Hours: 4 hours per week.**Pre-requisites:** DESN222 or VISA222**Assessment:** Tutorial Presentation 30%; Tutorial Written Report 20%; Major essay 50%.**Subject Description:** This unit introduces students to theories of new media design (web and interactive multimedia) and how they can be utilised in the creative production process.

Students are introduced to historical and current critical thinking and research resources. Topics covered include: historical trends in digital imaging in new media ; postmodernism and digital design; sound and music issues in digital design; philosophical influences and analytical methods of investigating design products in their social, historical, cultural and political contexts; digital design movements and major theorists; critical writings on web and multimedia design; the relationship of new media design to art practice.

DESN322 Advanced Graphic Design Theory 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week.**Pre-requisites:** DESN321**Assessment:** Tutorial Presentation 30%; Tutorial Written Report 20%; Major Essay 50%.**Subject Description:** This subject provides further critical and theoretical analysis of graphic and new media design issues. Students are encouraged to apply this critical and theoretical framework to their own design practice. Topics covered include: theories of late modernism, postmodernism, the body, fashion and gender and the city.**JOUR201 Print Media Reporting 8cp**

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture and 2 hours tutorial per week.**Pre-requisites:** PHIL106 and either SOC110 or POL121 or any 36 cp WRIT subject (WAM of 75 or above)**Assessment:** In class news writing exercises (6 exercises @ 5% each) 30%. Off-campus news assignments (5 stories @ 10% each) 50%. Final examination (20%).**Subject Description:** The subject focuses on a generic approach to reporting of straight news for the print media. Topics covered are: summary leads; advanced leads; spot news reporting; reporting from news releases; and copy editing. Students submit one story each week on an assigned off-campus topic or based on information sheets handed out during tutorials. Tutorials will focus on news writing and remedial writing exercises, and copy editing. The subject has a final examination to test students' ability to apply basic news writing techniques.**Subject Objectives:** On successful completion of this subject, students should be able to: 1. Identify news worthy events. 2. Write clear and concise news leads. 3. Construct a news story in the inverted pyramid structure. 4. Edit straight news stories.**JOUR202 Feature Writing 8cp**

Spring Wollongong On Campus

Contact Hours: 1 hour lecture and 2 hours tutorial per week.**Pre-requisites:** JOUR201**Co-requisites:** NIL**Assessment:** Analysis of investigative stories, case studies (20%). 4 investigative feature writing assignments. Each assignment worth 15% (total 80%).**Subject Description:** This subject focuses on story telling techniques for the print media. Topics covered include: feature story introductions; feature story structures; dialogue and characterisation; scene descriptions; feature length interviews; online and conventional research; developing concepts and marketing of stories. This subject does not have a final examination.

Subject Descriptions

The semester's work comprises submission of 5 features of 800 to 1000 words each on assigned off-campus topics.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Understand the basic principles of writing feature length stories. 2. Identify feature-oriented stories in news events/issues. 3. Write feature leads. 4. Present a feature story which appeals to general readership.

JOUR299 Desktop Publishing 8cp

Summer Wollongong On Campus
2003/2004

Contact Hours: 2003/2004 1 hour lecture and two hours tutorial per week or may be offered in a block.

Pre-requisites: 24 cp subjects at 100 level in Bachelor of Communications and Media Studies degree or 36 cp of any Bachelor of Creative Arts specialisation at 200 level.

Assessment: Story output (40%). Final publication – design concepts, organisational skills, commitment to deadlines, DTP software application (60%).

Subject Description: The subject focuses on the application of computer-based layout and typographic systems used in editorial publishing. PageMaker/Quark Express and Adobe Photoshop will be used as the teaching software. The course covers the role of desktop publishing computers in independent publishing of newsletters, publicity brochures and magazines; layout and design.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Apply desktop publishing skills in producing independent publications. 2. Produce stories appropriate for targeted audience. 2. Present their written work in a marketable format.

MUS 301 Styles and Structures in Music 5 6cp

Spring Wollongong On Campus
Autumn Wollongong On Campus

Contact Hours: 3hrs lect/semin. pw.

Pre-requisites: MUS202

Assessment: Assignments 80%; examination 20%.

Subject Description: Studies in analytical methods and compositional techniques with reference to twentieth century music. Aural skills are further developed in the context of this literature.

MUS 303 Music Composition 5 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour seminar/1 hour tutorial per week.

Pre-requisites: MUS203

Co-requisites: (MUS301) or (MUS312)

Assessment: Progressive folio.

Subject Description: Studies in advanced contemporary compositional techniques. Students are required to produce a folio of large scale works for vocal, instrumental or electro-acoustic resources demonstrating mastery of these techniques and showing evidence of original creative thought.

MUS 304 Music Composition 6 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour seminar /individual tutorial 1 hour per week.

Pre-requisites: MUS303

Co-requisites: (MUS312) or (MUS301)

Assessment: Progressive folio.

Subject Description: A continuation of the studies begun in MUS303, leading to a folio including at least one major work of at least ten minutes duration for a large ensemble. Then presentation of the folio should be of a professional standard.

MUS 305 Music Performance 5 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour seminar, 1 hour tutorial per week.

Pre-requisites: MUS206

Co-requisites: (MUS312) or (MUS301)

Assessment: Recitals 90%; Assignments 10%.

Subject Description: Continues from MUS206 in the development of technique and repertoire to an advanced level. Performance presentation is addressed through specific seminars and classes.

MUS 306 Music Performance 6 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour seminar, 1 hour tutorial per week.

Pre-requisites: MUS305

Co-requisites: (MUS312) or (MUS301)

Assessment: Recitals 90%; Assignments 10%

Subject Description: As for MUS305, with an emphasis placed on meeting the needs of a professional performing career in music.

MUS 311 Musicology Research Project 12cp

Annual Wollongong On Campus

Contact Hours: Not on offer 2003

MUS 312 Australian Music 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Contact Hours: 2 hour lecture/1 hour tutorial per week.

Pre-requisites: 24 credit points at 200 level.

Assessment: Major essay 50%; tutorial papers 35%; listening examination 15%.

Subject Description: Examines Australian musical culture, and will consider Aboriginal, Western and Asian music as it has shaped the current identity of Australian composition.

MUS 320 Music Skills 5 6cp

Autumn Wollongong On Campus

Contact Hours: 3 x 2 hour classes per week.

Pre-requisites: MUS221

Co-requisites: (MUS303) or (MUS305)

Assessment: Progressive 100%. Work will only be marked at either pass or fail level.

Subject Description: Provides students majoring in music with ancillary skills relevant to their specialisation. Students choose from a variety of units offered within the Performance discipline.

Topics covered may include, according to availability, languages, chamber music, orchestration, electro-acoustic music and notation, accompaniment, musical pedagogy, stage skills, movement and dance. Students may also draw on skill-based classes offered under THEA320.

MUS 321 Music Skills 6 6cp

Spring Wollongong On Campus

Contact Hours: 3 x 2 hour classes per week.

Pre-requisites: MUS320

Co-requisites: (MUS304) or (MUS306)

Assessment: Progressive 100%. Work will only be marked at pass or fail level.

Subject Description: Provides students majoring in music with ancillary skills relevant to their specialisation. Students choose from a variety of units offered within the Performance discipline. Topics covered may include, according to availability, languages, chamber music, orchestration, electro-acoustic music and notation, accompaniment, musical pedagogy, stage skills, movement and dance. Students may also draw on skill-based classes offered under THEA320.

PERF102 Studio Practice A 6cp

Autumn Wollongong On Campus

Pre-requisites: Audition and/or interview

Co-requisites: PERF120 and PERF116

Assessment: Ongoing class exercises - 60% Perform in text based or experimental exercises - 40%

Subject Description: Studio practice A will introduce students to concepts and processes of stage performance and production using techniques developed by performing arts practitioners. Students will examine the Methodology of the rehearsal process, using genre studied in PERF116 Dramaturgy A as a guide, and will engage in the practice of ensemble performance. The relationship between genre and performance will be explored using techniques developed in PERF120 Performance Skills A. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

PERF103 Studio Practice B 6cp

Spring Wollongong On Campus

Pre-requisites: PERF102 and PERF116 and PERF120

Co-requisites: PERF117 and PERF121

Assessment: Ongoing class exercises - 60% Perform in text based or experimental exercises - 40%

Subject Description: In conjunction with work developed in PERF117 Dramaturgy B, PERF102 Studio Practice A and self-initiated projects this subject continues to investigate the process of performance techniques with particular reference to the group as chorus. Students will work in collaborative groups to develop performance material appropriately staged and managed.

PERF116 Dramaturgy A: Text and Performance 6cp

Autumn Wollongong On Campus

Assessment: Performance analysis/response - 30% Literary analysis tutorial - 30% Essay - 40%

Subject Description: Text and Performance: Dramaturgy A introduces the Performance student to the fundamental concepts of text.

Particular attention will be paid to editorial theory (authorial intention) as well as the ramifications of contemporary literary theory s adjustment to the way in which we read texts (Post-colonial, Feminist and Queer readings). These issues will be exercised using the genres of Melodrama and Tragedy and to further explore the influence of music on the mis en scene and the evolution of Performance Theory.

PERF117 Dramaturgy B: Introduction to Genre and Style 6cp

Spring Wollongong On Campus

Pre-requisites: PERF116 or English program equivalent

Assessment: Performance analysis/response - 30% Literary analysis tutorial - 30% Essay - 40%

Subject Description: Using a range of texts from the Romantic Movement and the development of the Epic tradition, Dramaturgy 2 pursues the specifics of generic differentiation. In doing so the parameters of style in performance are examined using both dramatic and musical examples.

PERF120 Performance Skills A 6cp

Autumn Wollongong On Campus

Pre-requisites: Audition and/or interview

Co-requisites: PERF102 and PERF117

Assessment: Ongoing class exercises will be assessed satisfactory or unsatisfactory. Practical Assessments - vocal exercises; physical exercises; production techniques. Satisfactory or unsatisfactory.

Subject Description: Together with Studio Practice and Dramaturgy this subject forms part of an essential core in the Performance course with specific reference to vocal, physical and production techniques. Students are required to take a minimum of three (3) performance skill-based study areas offered by the faculty. Specialist performance techniques will be taught in order to access a necessary style in relation to performances or projects developed in Studio Practice. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

PERF121 Performance Skills B 6cp

Spring Wollongong On Campus

Pre-requisites: PERF120 and PERF102 and PERF116

Co-requisites: PERF103 and PERF117

Assessment: Ongoing class exercises will be assessed satisfactory or unsatisfactory. Practical Assessments - vocal exercises; physical exercises; production techniques. Satisfactory or unsatisfactory.

Subject Description: Students will be expected to build on the techniques and skills developed in PERF120 Performance Skills A. Students are required to take a minimum of three (3) performance skill-based study areas offered by the faculty with specific reference to vocal, physical and production techniques. Specialist performance techniques will be taught in order to access a necessary style in relation to performances or projects developed in Studio Practice.

Together with Studio Practice and Dramaturgy this subject forms part of an essential core in the Performance course. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

PERF204 Interpretation 1. Studio Practice C 6cp

Autumn Wollongong On Campus

Contact Hours: 8 (averaged over session).**Pre-requisites:** PERF103 AND PERF121 AND PERF117**Co-requisites:** PERF220 AND PERF216**Assessment:** Ongoing proficiency by participating in the rehearsal process - 60% Proficiency in performance techniques - 40%**Subject Description:** Exploring late 18th century texts (scripts and scores), this subject develops on-stage interaction, in the investigation of on making meaning, based on techniques developed in PERF103 Studio Practice B, with particular reference to relationship development. A continuation of improvisation and acting exercises will further develop the notion of performance. Production techniques will continue as a major area of study.**PERF205 Interpretation 2. Studio Practice D 6cp**

Spring Wollongong On Campus

Contact Hours: 8 (averaged over session).**Pre-requisites:** (PERF204) or (PERF206) and PERF220 and PERF216**Co-requisites:** PERF221 and PERF217**Assessment:** Ongoing proficiency by participating in the rehearsal process - 60% Proficiency in performance techniques - 40%**Subject Description:** By a practical exploration of modernist text (scripts and scores) this subject will continue to develop on-stage interaction with particular reference to naturalism, in the investigation of making meaning. A continuation of improvisation and acting exercises will further develop the notion of performance. Production techniques will continue as a major area of study.**PERF206 Devised 1: Ensemble. Studio Practice E 6cp**

Autumn Wollongong On Campus

Contact Hours: 8 (averaged over session).**Pre-requisites:** PERF103 and PERF121 and PERF117**Co-requisites:** PERF220 and PERF216**Assessment:** Performance Journal/analysis - 45% Structure and production of new performance material - 55%**Subject Description:** This subject provides a development in the practice and theory of devised performance. Students will work in collaborative groups to construct new performance material developed through improvisation and technical studies. Groups will have the responsibility of researching, structuring, managing and producing specifically devised projects with effective production values. Critical assessments of the development of each event will form an integral part of the creative process. The ensemble or chorus as a performative presence will form a particular point of focus within the course.**PERF207 Devised 2: Ritual. Studio Practice F. 6cp**

Spring Wollongong On Campus

Contact Hours: 8 (averaged over session).**Pre-requisites:** PERF206 and PERF205 and PERF220 and PERF216**Co-requisites:** PERF221 and PERF217**Assessment:** Performance Journal/analysis - 45% Structure and production of new performance material - 55%**Subject Description:** This subject provides a development in the practice and theory of devised performance. This subject will emphasise the use of performance techniques and elements derived from ritual practices. The influence of ritual in contemporary performance practice will be investigated and incorporated in new material via performance skills such as mime, mask, dance and song. Students will work in collaborative groups to develop new performance material. Groups will have the responsibility of researching, structuring, managing and producing specifically devised projects with effective production values. Critical assessments of the development of each event will form an integral part of the creative process.**PERF216 Dramaturgy C: European Modernism and Performance 6cp**

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.**Pre-requisites:** PERF117 or English Program equivalent**Assessment:** Performance analysis/response - 30% Literary analysis tutorial - 30% Essay - 40%**Subject Description:** The responses to modernism, by playwrights, composers and performers working in the highly charged nationalistic circumstances in Europe, are detailed to give students an extensive appreciation of the provocative and evolving performance modes of twentieth century theatre practice: realism, naturalism and verism, expressionism, symbolism and the many subsequent permutations. The incorporation of incidental music into drama and the development of verismo opera, operetta and the musical will be explored while detailing the phenomenon and rise of the director.**PERF217 Dramaturgy D: Australasian Modernism and Performance 6cp**

Spring Wollongong On Campus

Contact Hours: 3 hours per week.**Pre-requisites:** PERF216 or English Program equivalent**Assessment:** Performance analysis/response - 30% Literary analysis tutorial - 30% Essay - 40%**Subject Description:** The responses to modernism, by playwrights, composers and performers working in Australasia are detailed to give students an extensive appreciation of the provocative and evolving modes of twentieth century theatre and performance practice. In this context, particular attention is given to contemporary trends towards music theatre, physical and non-verbal performance styles as well as an appreciation of the significant European, American, Asian and indigenous Aboriginal influences on the development of Australian dramaturgy and performance.**PERF220 Performance Skills C 6cp**

Autumn Wollongong On Campus

Contact Hours: 10 hours per week.**Pre-requisites:** PERF121 and PERF103 and PERF117**Co-requisites:** PERF204 OR PERF206 and PERF216**Assessment:** Ongoing class exercises will be assessed satisfactory or unsatisfactory. Practical assessments: Physical studies; Vocal studies; Production techniques.

Subject Description: Students will be expected to build on the techniques and skills developed in PERF121 Performance Skills B. Students are required to take a minimum of three (3) performance skill-based study areas offered by the faculty with specific reference to vocal, physical and production techniques. Specialist performance techniques may be taught in order to access a necessary style in relation to performances or projects developed in Interpretation 1 or Devised 1. Together with Interpretation OR Devised and Dramaturgy this subject forms part of an essential core in the Performance course. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

PERF221 Performance Skills D 6cp

Spring Wollongong On Campus

Contact Hours: 10 hours per week.

Pre-requisites: PERF220 and PERF204 ORd PERF206 and PERF216

Co-requisites: PERF205 OR PERF207 and PERF217.

Assessment: Ongoing class exercises will be assessed satisfactory or unsatisfactory. Practical assessments: Physical itudes; Vocal itudes; Production techniques in relation to text.

Subject Description: Students will be expected to build on the techniques and skills developed in PERF220 Performance Skills C. Students are required to take a minimum of three (3) performance skill-based study areas offered by the faculty with specific reference to vocal, physical and production techniques. Specialist performance techniques may be taught in order to access a necessary style in relation to performances or projects developed in Interpretation 2 or Devised 2. Together with Interpretation OR Devised and Dramaturgy this subject forms part of an essential core in the Performance course. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

PERF316 Dramaturgy E: Comic Traditions and Modes of Performance 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture; 1 hour tutorial.

Pre-requisites: PERF217 or English Program equivalent

Assessment: Ongoing proficiency by participating in the rehearsal process - 60% Proficiency in performance techniques - 40%

Subject Description: A historic, literary and dramaturgical analysis of the concept and genre of comedy. A survey of the Greek and Roman traditions through the commedia dell'arte, to Shakespearean romantic comedy, Restoration comedy, opera buffa and the multifarious twentieth century derivations including the distinctive intentions and qualities of musical comedy - will demonstrate the characteristics, parameters and discipline of the genre.

SCMP101 Investigations in Sound 1 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: Interview

Co-requisites: SMP121

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: SCMP101: Investigations in Sound 1: Students will be expected to produce project and folio-based work including, as appropriate, composing music for small chamber ensemble or solo instruments, recording projects, html scripting and projects, and internet publishing projects. These projects will be both individual and collaborative and the subject will be collaboratively taught and assessed.

SCMP102 Investigations in Sound 2 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SMP101

Co-requisites: SMP122

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: SCMP102: Investigations in Sound 2: Students will be expected to complete project and folio based work including, as appropriate, composing music for chamber ensemble, recording and editing projects, xml and java scripting and projects, and providing and managing sound and/or original music for theatre productions. These projects will be both individual and collaborative and the subject will be collaboratively taught and assessed.

SCMP111 Issues in Sound 1 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: Interview

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: SCMP111: Issues in Sound 1: This subject explores contemporary issues in Sound, including basic acoustics.

SCMP112 Issues in Sound 2 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SMP111

Assessment: Research essay - 35% Presentations - 35% Examination - 30%

Subject Description: SCMP112: Issues in Sound 2: This subject further explores contemporary issues, continues the development of analytical listening skills and introduces students to different styles of musical notation.

SCMP121 Sound Studies 1 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: Interview

Co-requisites: SMP101

Assessment: Essays Assignments Examination

Subject Description: SCMP121: Sound Studies 1: This subject allows students to study methodologies of improvisation and listening skills.

Subject Descriptions

SCMP122 Sound Studies 2 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SMP121

Co-requisites: SMP102

Assessment: Essays - 35% Assignments - 35% Examination - 30%

Subject Description: SCMP122: Sound Studies 2: Further studies will be undertaken in improvisation, with particular reference to cross disciplinary and multimedia activities.

SCMP201 Investigations in Sound 3 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SCMP102

Co-requisites: SCMP221

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: SCMP201: Investigations in Sound 3: This subject focuses on composing sound pieces using digital and analogue technology.

SCMP202 Investigations in Sound 4 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SCMP201

Co-requisites: SCMP222

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: This subject will continue to focus on composing music for larger forces. Students will be expected to explore the potential of Pro Tools software and acoustic instruments. Projects will be both individual and collaborative and the subject will be collaboratively taught and assessed.

SCMP211 Issues in Sound 3 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SCMP112

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: This subject explores further issues in acoustics and begins the study of theoretical issues in sound recording.

SCMP212 Issues in Sound 4 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SCMP211

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: This subject provides opportunity to further explore music theoretical and listening skills, with emphasis on chordal vocabulary.

SCMP221 Sound Studies 3 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SCMP122

Co-requisites: SCMP201

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: SCMP221: This subject will explore the history of music in the 20th century, with particular reference to the contextualising of Australian music.

SCMP222 Sound Studies 4 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: SCMP221

Co-requisites: SCMP202

Assessment: Folio of projects - 50% Assignments - 50%

Subject Description: SCMP222: This subject will examine the history and influence of the recording industry and develop student's discography skills.

THEA303 Interpretation 5: Advanced Characterisation 6cp

Spring Wollongong On Campus

Contact Hours: 2 X 2 hour workshop per week (rehearsals as called).

Pre-requisites: (THEA316) and (THEA302) or (THEA318)

Co-requisites: (THEA317) and (THEA321)

Assessment: Progressive 60%; practical 40%.

Subject Description: By a practical exploration of text studied in THEA316 and THEA317 this subject will explore characterisation in performance in the investigation of making meaning based on techniques developed in THEA302 or THEA318. Techniques required for character development involving the unification of physical and vocal work and character intention will continue. Exploration of this notion will also be further advanced in association with on-stage interaction in performance. A continuation of improvisation and text based exercises will underpin the notion of performance based on the acting methods of recognised practitioners and theorists including Carey, Benedetti, Cohen and Stanislavski.

THEA316 Dramaturgy 5: Comic Traditions 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture/1 hour tutorial per week.

Pre-requisites: (THEA217) or (an approved subject at 200-level or equivalent)

Assessment: Tutorial paper 30%; practical research paper 30%; essay 40%.

Subject Description: An historic, literary and dramaturgical analysis of the concept and genre of comedy. A survey of the Greek and Roman traditions through the commedia dell'arte, to Shakespearean romantic comedy, Restoration comedy, opera buffa and the multifarious twentieth century derivations including the distinctive intentions and qualities of musical comedy - will demonstrate the characteristics, parameters and discipline of the genre.

THEA317 Dramaturgy 6: Alternative Theatre and the Avante-garde 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture/1 hour tutorial per week.

Pre-requisites: (THEA316) or (an approved subject at 300-level or equivalent)

Assessment: Tutorial paper 30%; practical research paper 30%; essay 40%.

Subject Description: The fundamentals of dramaturgical analysis will be applied to a variety of contemporary theatrical practice (including physical theatre; multimedia, film and television; performance art) to facilitate an appreciation of growing and diverse performance trends.

THEA318 Devised Theatre 4: Political Theatre 6cp

Autumn Wollongong On Campus

Contact Hours: 1.30-5.30 Mon-Fri.

Pre-requisites: (THEA217) and (THEA203) or (THEA219)

Co-requisites: (THEA316) and (THEA320)

Assessment: Progressive 60%; Practical 40%

Subject Description: This subject provides a continuation of the development of devised theatre, with specific reference to popular, political theatre techniques. Students will work collaboratively to develop specific theatrical political projects in negotiation with Wollongong community based groups. This subject highlights the ability to creatively interpret and facilitate the theatrical needs of an independent entrepreneurial body. A critical assessment of the development of the event will form an integral part of the creative process.

THEA320 Theatre Skills 5 6cp

Autumn Wollongong On Campus

Contact Hours: 3 x 2 hour practical per week.

Pre-requisites: (THEA217) and (THEA203) or (THEA219)

Co-requisites: (THEA302) and (THEA316)

Assessment: Satisfactory or Unsatisfactory in each subject component

Subject Description: Students are required to take three (3) performance skills-based study areas. Students may also draw on skill-based classes offered under MUS320.

THEA321 Theatre Skills 6 6cp

Spring Wollongong On Campus

Contact Hours: 3 x 2 hour practical per week.

Pre-requisites: (THEA320) and (THEA302) or (THEA318)

Co-requisites: (THEA303) and (THEA317)

Assessment: Satisfactory or unsatisfactory in each component.

Subject Description: Students are required to take three (3) performance skills-based study areas. Students may also draw on skill-based classes offered under MUS321.

VISA101 Visual Investigations A 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: Folio of Work

Restrictions: Quota applies.

Assessment: 40% Journal/research report and process work up to week 6; remaining weeks Journal and Folio 60%.

Subject Description: An introduction to the language of visual art and design through workshops, practical exercises and concept-based projects in which students will explore a range of graphic and visual art media. Field trips to relevant exhibitions and exposure to art and design history and theory will contextualise these studies. Emphasis will be placed on developing observational drawing skills.

VISA102 Visual Investigations B 6cp

Spring Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: Folio of Work

Restrictions: Quota applies.

Assessment: 40% Journal/research report and process work up to week 6; remaining weeks Journal and Folio 60%.

Subject Description: Further studies in the language of visual art and design through workshops, practical exercises and concept-based projects in which students will explore a range of graphic and visual art media. Field trips, exhibition visits and exposure to art and design history and theory will contextualise these studies. Emphasis will be placed on developing observational drawing skills.

VISA103 Introduction to Visual Arts Studio A 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: Folio of Work

Co-requisites: VISA121

Assessment: 40% Journal/research report and process work up to week 6; remaining weeks Journal and Folio 60%.

Subject Description: An introduction to concepts, processes and media within the areas of painting, printmaking, textiles and sculpture. The subject will include studio theory, introduction to the use of appropriate media and equipment, set class exercises, self-initiated projects and gallery visits. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

VISA104 Introduction to Visual Arts Studio B 6cp

Spring Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: Folio of Work

Co-requisites: VISA122

Assessment: Folio and Journal 60%; Process Journal/Research 40%

Subject Description: An extension of work covered in VIS103 Visual Arts Studio A in concepts and media drawing from the basic areas of painting, printmaking, photography, sculpture and textiles. The subject will include studio theory, and appropriate use of media and equipment, class exercises, self-initiated exercises and gallery visits. Practical work will be assessed on effort, imagination and experimentation in the work practice.

VISA121 Introduction to Theories of Visual Culture 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Restrictions: Quota applies

Assessment: Research project 55%; Major essay 45%.

Subject Description: Objects and images, whether originating in the fields of art, craft or design, whether unique or mass-produced, for private or public consumption, will encode the values, tastes and ideologies of their culture. Within three broad themes, we look at our visual culture of objects and images, their production, their social and aesthetic frameworks, their shared symbolic languages and the theories that attempt to elucidate them.

Subject Descriptions

Examples from design, architecture, art, craft and the broader field of public art and design will be presented for further research and analysis. Contained in subject outline.

VISA122 Perspectives on Modernism 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: VISA121

Restrictions: Quota applies.

Assessment: Research Project 55%; Major Essay 45%.

Subject Description: This subject brings a contemporary perspective to some of the key innovations, ideas and values of C19th and C20th modernism. With recent post-modern critiques distancing us from the heroic narratives of earlier art history writing, we try to identify the meanings and continuing value of modern art and design for our contemporary practice. The assessment tasks are designed to develop your skills in looking, analysing and thinking through writing and, to this end, you will be asked to research topics and make connections from a wide range of sources.

VISA124 Introduction to Photography 6cp

Summer Wollongong On Campus

2003/2004

Restrictions: Quota applies.

Assessment: Folio 1 - 25%; Folio 2 - 25%; Process 1 - 25%; Process 2 - 25%.

Subject Description: This subject is designed as a service to artists for skills acquisition in photography. An introduction to the camera, basic camera techniques, and the handling of natural light. Instruction in film processing and print making in black and white. Introduction to the essential photographic materials, ie. film, paper, chemicals etc. Print finishing, presentation and criticism.

VISA201 Visual Investigations C 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: VISA102

Assessment: Folio of work and/or contracted projects 60%; process journals and individual research 30%; research paper 10%.

Subject Description: This subject further develops students' technical, visual and conceptual skills in graphic and drawing media. Classwork will be thematic with reference to contemporary issues, ideas and art practice. Emphasis will be placed on the development of independent ideas and visual language in each student. Students will elect from one of the following workshops (as available) - drawing, printmaking, photography. Classes will be supported by regular lectures, seminars, reviews and fieldwork.

VISA202 Visual Investigations D 6cp

Spring Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: VISA201

Assessment: Folio of Projects and Process work, including Journal and Research Topics. Two modules worth 40% and 60% respectively. One module 60% One module 40%

Subject Description: This subject further develops students' technical, visual and conceptual skills in graphic drawing and photographic media. Classwork will be thematic with reference to contemporary issues, ideas and art practice. Emphasis will be placed on the development of independent ideas and visual language. Students will elect from one of the following workshops (as available) - drawing, printmaking, photography. Classes will be supported by regular lectures, seminars, reviews and fieldwork.

VISA203 Visual Arts Studio C 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: (VISA103) and (VISA104)

Co-requisites: VISA221

Assessment: Process journals 20%; research 20%; class work and set projects 60%;

Subject Description: Students will be expected to build on the concepts, techniques and skills acquired in 100 level studies. Students will have the opportunity to choose studio areas from painting, printmaking, textiles (surface design or constructed) and sculpture, developing their practice through set exercises, gallery visits and self-initiated work.

VISA204 Visual Arts Studio D 6cp

Spring Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: VISA203

Co-requisites: VISA222

Assessment: Process journals 20%; research paper 20%; class work and set projects 60%.

Subject Description: Students will be encouraged to develop further understanding of studio practice and contemporary practice through set exercises, gallery visits and self-initiated work. Students will have the opportunity to choose studio areas from painting, printmaking, sculpture or textiles (constructed or surface design).

VISA221 Early Visual Arts and Design in Australia 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: (VISA121) or (VISA122)

Restrictions: Available BCA Majors only.

Assessment: Essay 40%; tutorial paper 30%; case study 30%.

Subject Description: This subject surveys art and design movements in Australia since European settlement. These histories are discussed with reference to individual artists and the social and cultural contexts of exploration and colonialism. Students are introduced to key concepts underpinning early modernism in visual art and design.

VISA222 The Artist in Contemporary Culture 6cp

Autumn Wollongong On Campus

Pre-requisites: VISA221

Assessment: Tutorial paper 40%; essay 40%; case study 30%.

Subject Description: This subject examines the role of the artist in relation to contemporary cultures, in Australia and other countries.

The subject emphasises the relationship of current theoretical issues to practice, exhibition and installation in the visual arts and crafts. Students will research an area of arts practice or an artist which relates to their major study, both through textual and visual research.

VISA241 The Experimental Book 6cp

Spring Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: (VISA102) or (VISA104)

Assessment: Folio of preparatory works and process journal 20%; completed works 60%; research topic (1000 words) 20%

Subject Description: What is an artist book? What is a livre d'artist? This subject is designed to allow students with an interest in writing and image making to become familiar with this art form through slides, discussion, visits and the making of work. Papermaking and simple book structures will be part of the course and their appropriate use discussed leading up to the making of final works.

VISA301 Visual Investigations E 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: VISA202

Assessment: Process Journal and class projects 40%; Major Project 60%.

Subject Description: In a range of visual media (manual, digital and photographic) and formats (including performance and installation) students will investigate areas of visual communication in ways that complement or diversify the concerns of their major studio practice. Individual project proposals will be agreed to in consultation with the appropriate lecturer.

VISA302 Visual Investigations F 6cp

Spring Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: VISA301

Co-requisites: (VISA304) and (VISA322)

Assessment: Folio of works - 60%, Process journal - 20%; Research topic - 20%

Subject Description: In a range of visual media (manual, digital and photographic) and formats (including performance and installation) students are able to investigate areas of visual communication in ways that complement or diversify the concerns of their major studio practice. Individual project proposals will be agreed to in consultation with the appropriate lecturer.

VISA303 Advanced Visual Arts Studio E 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: VISA204

Co-requisites: (VISA301) and (VISA321)

Assessment: Research 40%; Major Project 60%.

Subject Description: Students may choose to specialise or combine visual arts media. Interdisciplinary work will be encouraged. A self-initiated major project will be developed in consultation with the lecturer and appropriate research undertaken.

Students will document their work processes and research, present their work for review on a regular basis and take active part in class reviews, seminars and excursions. Emphasis will be placed on individual development, self-management and awareness of contemporary visual arts issues.

VISA304 Advanced Visual Arts Studio F 6cp

Spring Wollongong On Campus

Contact Hours: 4 hour classes per week.

Pre-requisites: VISA303

Co-requisites: (VISA302) and (VISA322)

Assessment: Research 40%; Major Project 60%.

Subject Description: Students may choose to specialise or combine visual arts media. Interdisciplinary work will be encouraged. A self-initiated major project will be developed in consultation with the lecturer and appropriate research undertaken. Students will document their work processes and research, present their work for review on a regular basis and take active part in class reviews, seminars and excursions. Emphasis will be placed on individual development, self-management and awareness of contemporary visual arts issues.

VISA321 Introduction to Indigenous Art and Visual Culture 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: VISA222

Restrictions: Quota applies

Assessment: 1 essay 3000 words 45%; 1 tutorial paper 1500 words 30%; 1 short review 500 words 15%; tutorial participation 10%.

Subject Description: The subject introduces traditional Aboriginal culture focussing on contemporary Aboriginal arts and artists and the contexts in which Aboriginal artists practice.

VISA322 Representation and Space in Post Colonial World 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: VISA321

Restrictions: Quota applies.

Assessment: 1 research proposal (600 words) 15%; 1 seminar presentation and tutorial paper of 2,000 words 30%; 1 major essay of 3,000 words 45%; participation 10%.

Subject Description: This subject surveys contemporary arts practices, with a focus on Australian arts. There is an emphasis on reviewing current exhibitions and the use of theoretical perspectives and critical practices appropriate to recent art debates, exhibitions and studio practices.

VISA341 Bookworks 6cp

Summer Wollongong On Campus

2003/2004

Pre-requisites: VISA241

Assessment: Folio of preparatory works, source materials and documentation 30%; completed works 60%. Research paper 1000 words 10%.

Subject Descriptions

Subject Description: This subject continues the process begun in VIS241 and allows students to engage with the process of building books around ideas or text. More complicated book forms will be examined and the use of alternative materials encouraged. Presentation of the work will be an important part of the final assessment. Visiting artists will be involved in the program and visits will be made to museum collections and exhibitions related to the book form.

VISA350 Introduction to Curatorial Practices 6cp

Autumn Wollongong On Campus
Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: (VISA204) and (VISA222) both passed at distinction level or better OR (DES202) and (DES222) both passed at distinction level or better

Co-requisites: (VISA321) or (VISA322) OR (DESN321) and (DESN322)

Assessment: Administrative report 50%; exhibition curation 50%.

Subject Description: This subject will give students expertise in all aspects of exhibition curation and gallery administration, including preparation of a catalogue essay, a press-release, a complete list of works and a photographic documentation of the works on completion. Each student will be given principal responsibility for one Long Gallery exhibition.

WRIT101 Introduction to Creative Writing 6cp

Autumn Wollongong On Campus
Summer Wollongong On Campus

2003/2004

Restrictions: Quota applies

Exclusions: WRIT111

Assessment: Portfolios 90%; participation 10%.

Subject Description: This subject provides an introduction to the creative writing process for students without a strong background in writing. Students will explore topics such as: finding ideas for writing; language and the writer; the drafting process; the workshop process; editing and marketing. Major forms of contemporary writing are explored, including prose fiction, poetry, scriptwriting.

WRIT111 Writing Overview 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: Folio of work, interview

Co-requisites: WRIT119

Restrictions: Only available to BCA Writing majors

Exclusions: WRIT101

Assessment: Folio 1 40%; Folio 2 50%; Participation 10%

Subject Description: This subject provides an introduction to the creative writing process. Topics include: exploring sources of ideas for writers; language and the writer; the drafting process; the workshop process; editing and marketing. The major forms of contemporary writing are explored, including prose fiction, poetry and scriptwriting.

WRIT119 Writing Theory: Classicism to Romanticism 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Co-requisites: WRIT111

Restrictions: Only available to BCA Writing majors

Assessment: Essay 50%; tutorial paper 30%; assignment 10%; participation 10%.

Subject Description: The tradition of writing theory and its applicability to contemporary writing practice. The subject concentrates on a number of key texts in poetics from Classicism to Romanticism and examines various works (in poetry, prose and drama) which may be seen to exemplify, modify, or challenge these poetics. Students are required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.

WRIT121 Writing For Stage and Screen 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT111

Co-requisites: WRIT129. Co-requisite waived for BA students specialising in Communication and Cultural Studies who have completed WRIT101

Assessment: Major project 70% (made up of draft 30%; final script 40%); workshop presentation 20%; participation 10%.

Subject Description: Examines the creative use of language in performance, with particular reference to film, television and stage. Through lectures, script workshoping, class discussion and student papers the basic principles of writing for performance are studied and applied. By the end of this subject students will be ready to undertake further specialised studies in writing for stage or screen.

WRIT122 Writing Prose Fiction 100 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT111

Co-requisites: WRIT129

Assessment: Folios 60%; class exercises 30%; participation 10%.

Subject Description: An introduction to the writing of prose fiction concentrating on short fiction texts. This subject will consider the options available to an author in the areas of voice and tense and examine various strategies which may be employed in the uses of description, character and dialogue in both realist and non-realist modes. Attention will be paid to conventional and alternative structures. An intensive workshoping of participants' work will operate throughout the subject.

WRIT123 Poetry 100: Introduction to Writing Poetry 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT111

Co-requisites: WRIT129

Assessment: Portfolios 70%; exercises 20%; annotated anthology and class participation 10%.

Subject Description: This subject introduces the writing of poetry, exploring those features that make poetry distinctive from other forms of writing. Emphasis will be on both the student's own writing and the work of a wide range of poets, mainly though not exclusively modern.

WRIT129 Theory for Practising Writers: Realism to Modernism 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT119

Co-requisites: 6 credit points of any WRIT subject

Assessment: Essays 50%; tutorial papers 30%; assignment 10%; participation 10%.

Subject Description: The tradition of writing theory and its applicability to contemporary writing practice. The subject concentrates on a number of key texts in poetics from the Modernist period and examines various works (in poetry, prose and drama) which may be seen to exemplify, modify or challenge these poetics. Students will be required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.

WRIT210 Writing for the Internet 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT 111

Co-requisites: WRIT219

Assessment: Non collaborative project 30%; Collaborative project 30%; Exercises 40%.

Subject Description: A subject in writing for the internet, focussing primarily on the use of language - in its narrative and metaphorical aspects - but also exploring how graphic and sound input can relate to overall site design. Students will research internet writing strategies and methodologies in theory and practice, applying their findings in a review of existing web sites, and will develop a web page using their own creative writing .

WRIT212 Writing Prose Fiction 200 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT122

Co-requisites: WRIT219

Assessment: Portfolio 60%; exercises on prose techniques 30%; participation 10%.

Subject Description: The development of prose fiction writing in both short and extended forms. An examination of writing strategies in a range of modes, from realism to metafiction and various de-metaphorising texts. An intensive workshopping of participants' work will operate throughout the subject.

WRIT213 Poetry 200: Poetic Forms 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT123

Co-requisites: WRIT229

Assessment: Portfolios 90%; annotated anthology and class participation 10%.

Subject Description: This subject centres on a wide variety of verse forms (with accompanying metres, word games and devices) both in the student's own work and through looking at poems in English from the 16th Century to the present day. Each class will centre on examples from the above ranging from the most traditional to the most avant-garde. All class members are expected to attempt a variety of these verse forms.

WRIT214 Writing For Theatre 200 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT121

Co-requisites: WRIT219

Assessment: Script (draft) 30%; script 50%; presentations 20%; participation 10%.

Subject Description: Students undertake an investigation of the techniques and theory of writing for the stage and for performance. Linear and non-linear traditions, characterisation, dialogue, and a variety of structures including climactic, episodic, situational, vertical and reflexive are examined. Students complete a script and undertake theoretical studies relevant to practice. Students are encouraged to master, but also challenge, conventions, and to explore collective modes of writing.

WRIT215 Writing For Film and Television 200 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT121

Co-requisites: WRIT229

Assessment: Pitch 12%; outline 5%; treatment 10%; first draft screenplay 15%; second draft screenplay 50%; participation 8%

Subject Description: This subject prepares students to write scripts at professional standard for the screen. Lectures, workshopping, tutorial papers and guided discussion develop students' knowledge, skill and theory in such areas as structure, characterisation, dialogue, adaptation, genre, and visualisation. Students will write a script for the screen and will be introduced to alternative dramatic structures for screen writing, as well as learning how to write critically about screenwriting.

WRIT216 Editing Practice for Creative Writers 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: 30 cp of WRIT subjects at 100 level

Co-requisites: WRIT219

Assessment: Exercises 55%; Major Paper 35%; Participation 10%

Subject Description: This subject focusses on the principles and practice of editing including proof reading, desktop publishing, layout and sub-editing.

WRIT219 Writing Theory: Modernism 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT129

Co-requisites: Any WRIT subject

Assessment: Essays 50%; tutorial papers 30%; assignment 10%; participation 10%.

Subject Descriptions

Subject Description: The tradition of writing theory and its applicability to contemporary writing practice. The subject concentrates on a number of key texts in poetics from the Modernist period and examines various works (in poetry, prose and drama) which may be seen to exemplify, modify or challenge these poetics. Students are required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.

WRIT222 Writing Extended Prose Fiction 6cp

Spring Wollongong On Campus

Pre-requisites: WRIT 212

Co-requisites: WRIT229

Assessment: Extract from extended prose text 60%; seminar presentation 30%; participation 10%.

Subject Description: This unit seeks to identify a range of structural variants in extended prose works - specifically that of the novella - and to articulate appropriate writing strategies in a spectrum of modes. The first part of the unit will analyse a number of exemplary texts in order to provide a variety of possible models and instruction will be given in specific techniques for originating and developing material appropriate to the novella form. The latter part of the unit will be spent in intensive workshopping of participants' original work. Upon entry to the unit, participants will be required to submit a plan for an extended prose work. Programs of development will be set in place to meet the particular needs of each project.

WRIT228 Writing For Sound 200 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT121

Co-requisites: WRIT 219

Assessment: Treatment or interim score 25%; script or score with a statement of poetics 60%; short exercises 5% and participation 10%.

Subject Description: The fundamentals of scriptwriting or scoring for sound in both conventional and experimental modes. The subject will examine the creative use of the sound medium in radio drama, documentary and other audio art texts. An intensive workshopping of participants' work will operate in the second part of the subject.

WRIT229 Writing Theory:Modernist Avant Gardes 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT219

Co-requisites: Any WRIT subject

Assessment: Essays 50%; tutorial paper 30%; assignment 10%; participation 10%.

Subject Description: The tradition of writing theory and its applicability to contemporary writing practice. The unit concentrates on a number of key texts in poetics from the Modernist period, and examines various works (in poetry, prose, drama and film) which may be seen to exemplify, modify or challenge these poetics. Students will be required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.

WRIT312 Advanced Prose Fiction A 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT212 or WRIT222

Co-requisites: WRIT319

Assessment: Portfolios 60%; exercises 30%; participation 10%.

Subject Description: This subject will concentrate on some of the alternative structures and approaches available to contemporary writers such as magic realism, documentary and biographical fiction, ficto-criticism, the poetic novel. The subject will examine the work of a range of contemporary writers working in a variety of styles and modes. There will be extensive workshopping of students' work. Students may engage in longer fictional forms (novella, novel) developing their work over this subject and WRIT322.

WRIT313 Advanced Poetry A 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: WRIT213

Co-requisites: WRIT329

Assessment: Folio 55%; seminar paper 25%; notebook & workshops 15%; exercise 5%

Subject Description: This subject explores myth, discourses on language, politics and performance in poetry writing. Students experiment with various themes, poetic forms and techniques, and examine their personal poetics in relation to those of established poets and the poetic tradition. Writing on and with myths, re-inventing/contemporising traditional mythologies and personal mythmaking will be given special attention.

WRIT314 Writing For Theatre 300 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT214

Co-requisites: WRIT329

Assessment: Script (draft) 25%; Script (final) 45%; presentation 25%; participation 10%

Subject Description: This subject is conducted primarily through the development of a full-length script for the stage. Students will also study the practical application of dramatic theory. Workshopping, lectures, tutorial papers and guided discussion will develop skills in conjunction with practical theory, so that students may achieve professional standards. Links with the theatre industry will be encouraged.

WRIT315 Writing For Film and Television 300 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT215

Co-requisites: WRIT319

Assessment: Script 60%; tutorial paper 30%; participation 10%.

Subject Description: This subject prepares students to write scripts at professional standard for the screen and is conducted primarily through the development of a full-length script for the screen.

Students will be introduced to alternative dramatic structures for screen writing and will study the practical application of screenwriting theory.

WRIT316 Editing Theory for Creative Writers 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: WRIT216

Co-requisites: WRIT329

Restrictions: Quota applies

Assessment: Exercises 55%; seminar 35%; participation 10%

Subject Description: This subject will analyse a number of methods and styles of approaches which are used in contemporary literary publishing. The unit will commence with the premise that the concerns of the literary editor ought to entail less simple editorial doctoring of texts and more attention to: subject analysis; current and past theory; peer assessment and consideration; market forces, and a range of other external factors. The rudimentary elements of a field approach to editing will be applied in order to help develop a more critical-analytical approach to editorial policy and literary publishing.

WRIT317 Writing: The Author and the Media 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: 72 cp of WRIT subjects

Co-requisites: WRIT319

Assessment: Oral presentation and paper (55%); seminar paper (35%); participation (10%)

Subject Description: This subject aims to develop a range of skills necessary for developing writing at a professional level. Issues to be covered include: writing for the media, dealing with agents and publishing houses, grant applications, participation in writing festivals (as panelist, as featured writer, as reader) the role of writers' centers and professional organisations.

WRIT319 Writing Theory: Structuralism to the Postmodern 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT229

Co-requisites: Any WRIT subject

Assessment: Essays 60%; seminar papers 30%; class participation 10%.

Subject Description: The tradition of writing theory and its applicability to contemporary writing practice. The unit concentrates on a number of key texts in poetics from Structuralism to the Postmodern and examines various works (in poetry, prose and drama) which may be seen to exemplify, modify or challenge these poetics. Students are required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.

WRIT322 Advanced Prose Fiction B 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT212 or WRIT222

Co-requisites: WRIT329

Assessment: Portfolios 70%; exercise 20%; participation 10%.

Subject Description: This subject will be based around a series of seminars centering on issues such as the uses of history and (auto) biography in fictional texts; inter-textuality and forms of pastiche; lyric subversion; self-referentiality; scriptural realism; the 'writing-over' of existing texts and the process of adaptation. Three will be extensive workshopping of students' work.

WRIT323 Advanced Poetry B 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT213

Co-requisites: WRIT329

Assessment: Long narrative poem or a narrative sequence together with some drafts 70%; written exercises 20%; participation 10%.

Subject Description: This subject is concerned with narrative poetry: ballads, sequences, dramatic monologues, epics, with the workshopping involving the narratives and/or sequences of the class members.

WRIT329 Contemporary Theory and the Practising Writer 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour classes per week.

Pre-requisites: WRIT319

Co-requisites: Any WRIT subject

Assessment: Statement of poetics 30%; case study 50%; assignment 10%; class participation 10%.

Subject Description: This subject involves case studies of current writers specifically examining the inter-relationship between theory and practice in their work. Students will be required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts and to construct a detailed positioning of their own work.

Faculty of Education

Degrees Offered

	Page No.
Bachelor of Teaching (Early Childhood Education) (3 years full time study) - 881	174
Bachelor of Teaching (Primary Education) (3 years full time study) - 880	175
Bachelor of Education (Primary Education) (4 years full time study) – 871	176
Bachelor of Education (Physical and Health Education) (4 years full time study) – 804	177
Bachelor of Mathematics Education -886	178
Bachelor of Science Education - 887	179
Bachelor of Arts (Education) – 702	180

The Faculty of Education offers a wide variety of subjects which are studied in one or more of the various Bachelor of Teaching and Bachelor of Education Degree Courses, Some of these subjects may be undertaken as part of the Bachelor of Arts Degree. .

All subjects offered by the Faculty of Education are subject to adequate enrolments.

Honours Programs

Students who have attained an approved standard of achievement during the second and third year of their course may enter a program which leads to the award of the Bachelor of Education with Honours. Honours is awarded at the end of the course on the basis of the criteria set out following each of the relevant course structures.

Bachelor of Education in Early Childhood Education (Honours) - 883	174
Bachelor of Education in Primary Education (Honours) – 870	177
Bachelor of Education in Physical and Health Education (Honours) – 872	178

Graduate Diploma in Education

A one year Graduate Diploma in Education program which provides a professional teaching qualification for either primary or secondary education is available to students with a recognised undergraduate degree.

Acceptance into this program is not only dependent on completion of the undergraduate degree, but consideration will be given to the pattern of study completed. That is, preference will be given to those students who comply with New South Wales Department of Education and Training requirements for employment as a teacher in New South Wales. Students are reminded that requirements have recently changed and should check with the Faculty of Education prior to the completion of their undergraduate studies.

Graduate School of Education

Subjects offered by the Graduate School of Education have been extensively restructured to offer a series of articulated courses progressing from Graduate Certificate to Doctoral level. Candidates without the teacher training background of many of our traditional graduate students can enter postgraduate study at either Graduate Certificate or Graduate Diploma level, and then proceed through the higher degree structure in their area of interest. A range of Graduate Certificates have been introduced to provide access to graduate study in educational settings to holders of degrees in other disciplines and working in non-school areas.

Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Teaching (Early Childhood Education) - 881

The Bachelor of Teaching in Early Childhood Education program focuses upon developing early childhood teachers as critically reflective teachers and managers who can work with children across the age range 0-8 years in a variety of early childhood settings. Course content covers: Foundations of Education (psychology, history, sociology, and philosophy of early childhood education); Curriculum Studies (e.g. Mathematics, Science, Language, Creative Arts, in early childhood education); Managing Early Childhood Learning Environments; and Child Development and Care. Field work is an ongoing component throughout the course, and students are expected to conduct independent and collaborative inquiry in the field as part of their learning and assessment tasks.

Approaches to course delivery emphasise students' autonomy and critical reflection in their learning.

Students are involved in problem-solving; field and library research, which is conducted in teams, and follows from input provided by lecturing staff. A teamwork approach is also used to promote students' interpersonal skills, which is seen to be an identifiable requirement for early childhood practitioners. A three-stage framework that provides a scaffolding which is systematically released over the three years of the course, further aims to develop skills in self-directing team work.

Students enrolled in the Bachelor of Teaching in Early Childhood Education are required to undertake a teaching practicum in each year. Practicum experiences include 5-8 year-olds in K-2 classrooms; 3-5 year olds in preschool and long day care settings; and a six week extended teaching practicum in either location.

Appropriate arrangements are made to cater for the needs of students not proceeding through the program at the normal rate, as defined in the schedule below. Such students will need to consult with the Early Childhood Education Course Director, at enrolment.

Year 1 - Autumn Session

EDUF111	Education I	6
EDUT121	Curriculum and Pedagogy I Early Childhood	6
EDUL101	Language and Literacy Education I	6
EDUA111	Creative and Expressive Arts in Early Childhood Education	6

Year 1 - Spring Session

EDIT102	Information Technology for Learning	6
EDUS122	Science and Mathematics in Early Childhood I	6
EDUF104	Early Childhood Learning Environment I	6
EDUF106	Child Development and Care I	6

Year 2 - Autumn Session

EDUF201	Early Childhood Learning Environment II	6
EDUP201	Personal Development Health and Physical Education	6
EDUS203	Human Society and Its Environment	6

EDUS213	Science and Mathematics in Early Childhood II	6
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Year 2 - Spring Session

EDUF204	Learners with Exceptional Needs	6
EDUF212	Education II	6
EDUF232	Early Intervention and Children with Special Needs	6
EDUF252	Child Development and Care II	6

Year 3 - Autumn Session

EDUF303	Early Childhood Learning Environment III	6
EDUF313	Historical and Philosophical Perspectives of Early Childhood	6
EDUL301	Language and Literacy Studies in Early Childhood	6
EDUF353	Management of Early Childhood Services	6

Year 3 - Spring Session

EDUF304	Early Childhood Curriculum	12
EDUT312	Early Childhood Extended Practicum	12

Bachelor of Education (Early Childhood Education) with Honours - 883

Students admitted to the Honours program will be expected to study over two sessions for a total of 48 credit points. The program requires the completion of a 24 credit point thesis, EDUT496 - Honours Thesis in Early Childhood, an annual subject, plus EDUT495 - Selected Topics in Early Childhood Education, plus one of the 400-level elective subjects from the Bachelor of Education Primary course structure. Students from other institutions who have not completed equivalent subjects in their previous studies may be required to enrol in an approved Research Methods subject.

The grade of Honours awarded will be determined by the calculation of a weighted average of merit points achieved at the first attempt in the 400-level subjects only using the formula:

$$\text{weighted average mark} = \frac{\sum mlc}{\sum lc}$$

(for further detail refer to the Course Rules).

The Class of Honours will be based upon the weighted average mark achieved according to the following scale:

Class I: 85 - 100% of merit points

Class II Division 1: 75 - 84% of merit points

Class II Division 2: 65 - 74% of merit points

Students who enter the Honours program and fail to achieve the appropriate level of merit points may be eligible for a Bachelor of Education Pass degree.

Bachelor of Teaching (Primary Education) - 880

The Bachelor of Teaching in Primary Education is a three year full-time course aimed at developing reflective, professional teachers who, at graduation, can work effectively in a variety of educational settings including primary schools in both the public and private sectors. The course involves both academic studies and practical teaching experiences in each year. The details relating to practice teaching requirements are noted in the subject descriptions for Curriculum and Pedagogy I, Curriculum and Pedagogy II and Curriculum and Pedagogy III.

The academic subjects studied in the course are drawn from four strands: Education Foundation Studies, Studies in the Key Learning Areas, Studies in Curriculum and Pedagogy and Elective Studies. Elective choices are available from both within the Faculty and from the schedules of subjects offered by other Faculties. Year one of the course requires students to complete 12 credit points of elective studies outside the Faculty of Education.

The structure below shows the normal rate of progress through the course. While it is possible to complete the course on a part-time basis, students need to be aware that there could be timetable difficulties. Students intending to attempt the degree part-time should consult with the Director of Primary Education at enrolment.

Year 1 - Autumn Session

EDUF111	Education I	6
EDUL101	Language and Literacy Education I	6
EDUT111	Curriculum and Pedagogy I	6

Plus one 6 credit point subject chosen from those subjects on offer in any Faculty other than the Faculty of Education in which the students enrolment is accepted. Refer to the General Schedule.

Year 1 - Spring Session

EDIT102	Information Technology for Learning	6
EDUS102	Science and Technology Education	6
EDUS104	Human Society and Its Environment	6

Plus one 6 credit point subject chosen from those subjects on offer in any Faculty other than the Faculty of Education. Refer to the General Schedule.

Year 2 - Autumn Session

EDUA201	Creative Arts Education	6
EDUP201	Personal Development, Health and Physical Education	6
EDUM201	Mathematics Education	6
EDUT211	Curriculum and Pedagogy II	6

Year 2 - Spring Session

EDUF204	Learners with Exceptional Needs	6
EDUL202	Language and Literacy Education II	6
EDUF212	Education II	6

Plus one of the following Key Learning Area Elective Studies. Enrolment quotas apply to these subjects.

EDUA224	Creative Arts Key Learning Area Elective I	6
EDUL224	Language Education Key Learning Area Elective I	6
EDUM224	Mathematics Education Key Learning Area Elective I	6

EDUP226	Personal Development, Health and Physical Education Key Learning Area Elective I	6
EDUS224	Science and Technology Education Key Learning Area Elective I	6
EDUS226	Human Society and Its Environment Key Learning Area Elective I	6

Year 3 - Autumn Session

EDUF311	Education III	6
EDUT301	Research Methods	6

Plus one of the following Key Learning Area Elective Studies. Enrolment quotas apply to these subjects.

EDUA331	Creative Arts Key Learning Area Elective II	6
EDUL335	Language Education Key Learning Area Elective II	6
EDUM333	Mathematics Education Key Learning Area Elective II	6
EDUP335	Personal Development, Health and Physical Education Key Learning Area Elective II	6
EDUS333	Science and Technology Education (K-6) Key Learning Area Elective II	6
EDUS335	Human Society and Its Environment Key Learning Area Elective II	6

Plus one Elective Studies subject to be chosen from the list below or from 200/300 level subjects in the General Schedule. Enrolment quotas apply to these subjects. Subjects that do not have sufficient enrolments will not run.

EDUE301	Issues in Aboriginal Education (Not to count with ABST361)	6
EDUE303	Teaching Language and Literacy Through Literature in Early Childhood	6
EDUE305	Design and Assessment of Learning Experiences for Adults	6
EDUE307	Physical Education: Coaching and Sports Administration	6
EDUE313	Interactive Multimedia by Design	6
EDUE315	Environmental Education - The Natural Environment	6
EDUE317	English Language: Examining Learners Problems	6
EDUE319	Programming and Methodology in Second Language Teaching	6
EDUE320	Behaviour Management (Not to count with EDUE311)	6
EDUE321	Reading Difficulties (Not to count with EDUE312)	6
EDUL330	Practicum or Project in Second Language Teaching	6

Year 3 - Spring Session

EDUT302	Curriculum & Pedagogy III	12
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Plus one of the following Key Learning Area Elective Studies. Enrolment quotas apply to these subjects

EDUA224	Creative Arts Key Learning Area Elective I	6
EDUL224	Language Education Key Learning Area Elective I	6
EDUM224	Mathematics Education Key Learning Area Elective I	6
EDUP226	Personal Development Health and Physical Education Key Learning Area Elective I	6
EDUS224	Science and Technology Education Key Learning Area Elective I	6
EDUS226	Human Society and Its Environment Key Learning Area Elective I	6

Course Structures

Plus one Elective Studies subject to be chosen from the list below or from 200/300 level subjects in the General Schedule. Enrolment quotas apply to these subjects. Subjects that do not have sufficient enrolments will not run.

EDUE302	Aboriginal Pedagogy (Not to count with ABST 362)	6
EDUE304	Teaching Language Through Literature in the Primary and Middle Years	6
EDUE306	Learning Strategies and Communication in Adult Education	6
EDUE308	PDHPE: Health Promotion	6
EDUE314	Interactivity and the Web (Designing Hypertext Multimedia)	6
EDUE316	Environmental Education - The Built Environment	6
EDUE320	Behaviour Management (Not to count with EDUE311)	6
EDUE321	Reading Difficulties (Not to count with EDUE312)	6
EDUL240	Materials and Technology in Second Language Teaching	6
EDUL330	Practicum or Project in Second Language Teaching	6

Summer Session

EDUF111	Education I	6
EDUE333	International Teaching Project	6

Knowledge Building Community (KBC) - Mentor Program

It is possible for students to participate in an innovative approach to teacher training, the KBC - Mentor Program. Students who participate in the KBC - Mentor Program complete the requirement of Bachelor of Teaching in Primary Education by engaging in collaborative problem solving under the guidance of mentoring lectures who have expertise in problem based learning. Students requiring information concerning the KBC should consult with the Director of Primary Education.

Bachelor of Education (Primary Education) - 871

The Bachelor of Education in Primary Education requires, as a pre-requisite, the successful completion of a Bachelor of Teaching in Primary Education or its equivalent. The course is designed to develop further the knowledge and skills acquired in the Bachelor of Teaching course. Completion of this program requires one year of full-time study or the equivalent of part time study (2 years). Some subjects will be offered after 4.30 pm to allow for students who are working during the day to take some of their course after school hours. Students who wish to attend university only in the evenings will need to enrol in the part-time mode.

Year 4 - Autumn Session

Either		
EDUF421	Leadership and International Perspectives In Education	6

or

EDUT422	Reflective Practice	6
Plus one elective from any part of the Primary program including KLA electives, Discipline electives or a 200 or higher level subject chosen from those on offer in any Faculty as well as the Faculty of Education in which the student's enrolment is accepted. Plus either two subjects selected from the following Key Learning Area Elective Studies subjects.		
EDUA441	Creative Arts Key Learning Area Elective III	6
EDUL441	Language Education Key Learning Area Elective III	6
EDUM441	Mathematics Education Key Learning Area Elective III	6
EDUP444	Personal Development Health and Physical Education Key Learning Area Elective IV	6
EDUS411	Science and Technology Education Key Learning Area Elective III	6
EDUS441	Human Society and its Environment Key Learning Area Elective III	6

Or one subject selected from the Key Learning Area Elective Studies subjects set out above plus one subject selected from the Elective Studies subjects listed below.

EDUE401	Issues In Aboriginal Education (Not to count with EDUE301/ABST361)	6
EDUE405	Assessing Performance in Adult Training	6
EDUE407	Inquiry Project in Physical and Health Education	6
EDUE408	Placement in Physical and Health Education	6
EDUE411	Disability Issues Across the Lifespan	6
EDUE413	Managing Multimedia Resources	6
EDUE415	School and Community Based Sustainable Development Practices	6
EDUE317	English Language Examining Learners' Problems	6
EDUE319	Programming and Methodology in Second Language Teaching	6
EDUT432	Project in Education	6

Year 4 - Spring Session

Either		
EDUT422	Reflective Practice	6
or		
EDUF421	Leadership and International Perspectives In Education	6

Plus one elective from any part of the Primary program including KLA electives, Discipline electives or a 200 or higher level subject chosen from those on offer in any Faculty as well as the Faculty of Education in which the student's enrolment is accepted.

Plus either two subjects selected from the following Key Learning Area Elective Studies subjects

EDUA442	Creative Arts Key Learning Area Elective IV	6
EDUL442	Language Education Key Learning Area Elective IV	6
EDUM442	Mathematics Education Key Learning Area Elective IV	6
EDUP441	Personal Development Health and Physical Education Key Learning Area Elective III	6
EDUS414	Science and Technology Education Key Learning Area Elective IV	6

EDUS444	Human Society and Its Environment Key Learning Area Elective IV	6
Or one subject selected from the Key Learning Area Elective Studies subjects set out above plus one subject selected from the Elective Studies subjects listed below.		
EDUE402	Aboriginal Pedagogy (Not to count with EDUE302/ABST362)	6
EDUE406	Theories of Adult Learning	6
EDUE407	Inquiry Project in Physical and Health Education	6
EDUE408	Placement in Physical and Health Education	6
EDUE412	Programming for Individuals with Moderate to Severe Disabilities	6
EDUE414	Cognition, Interface and Interactivity	6
EDUE416	Environmental Education - Through Information Technology	6
EDUL240	Materials and Technology in Second Language Teaching	6
EDUT432	Project in Education	6

Bachelor of Education (Primary Education) with Honours - 870

Students admitted to the Honours program must enrol in EDUT 403 - Research Methods In Education in Autumn Session plus a 24 credit point thesis, EDUT 493 - Thesis (annual) plus 3 subjects chosen from 400 level subjects offered in the Bachelor of Education course structure.

The grade of Honours awarded will be determined by the calculation of a weighted average of merit points achieved at the first attempt in the 400-level subjects only using the

$$\text{formula: weighted average mark} = \frac{\sum mlc}{\sum lc}$$

(see regulations listed in the Course Rules).

The Class of Honours will be based upon the weighted average mark achieved according to the following scale:

CLASS I: 85 -100% of merit points

CLASS II Division 1: 75 - 84% of merit points

CLASS II Division 2: 65 - 74% of merit points

Students who enter the Honours program and fail to achieve the appropriate level of merit points may be eligible for a Bachelor of Education Pass degree.

Bachelor of Education (Physical & Health Education) - 804

This course is intended to provide a sound academic and professional training for teachers who wish to be employed in the areas of Physical Education, Health Education and Personal Development.

The course normally extends over a minimum period of four years, and offers specialist studies in the physical and behavioural sciences and socio-cultural foundations of human movement and their application to physical education in schools. Extensive studies in health education and personal development are offered in the course. The specialist subjects in the program are complemented by studies in dance, games, gymnastics, aquatics and track and field, together with fieldwork and practice teaching experience.

The course requires the aggregation of at least 192 credit points with 48 credit points normally being undertaken in each year of full time study.

The course contains core subjects, the study of which is mandatory, and elective subjects which allow an element of choice for the student.

The general pattern of subjects is displayed below.

It should be noted that:

1. In each of the four years a period of mandatory practical teaching experience in schools is required.
2. Attendance is mandatory at tutorials, laboratory classes and excursions unless given specific exemption by the Program Director.

Year 1 - Autumn Session

EDUF111	Education I	6
EDUP123	Movement Concepts and Practices	6
EDUP131	Systemic Anatomy	6
EDUP153	Foundations of Personal Development, Health and Physical Education	6

Year 1 - Spring Session

EDIT102	Information Technology for Learning	6
EDUP124	Skill Analysis and Performance I	6
EDUP132	Physiology	6
EDUP144	Health and Health Behaviour	6

Year 2 - Autumn Session

EDUP223	Skill Analysis and Performance II	6
EDUP235	Biomechanics for Educators	6
EDUP243	Exploring Emotional Well-being	6
EDUP255	Teaching Physical Education	6

Year 2 - Spring Session

EDUP224	Skill Analysis and Performance III	6
EDUP234	Exercise Physiology	6
EDUP246	Risktaking and Young People	6
EDUP256	Teaching Health Education	6

Year 3 - Autumn Session

EDUP323	Advanced Skill Analysis I	6
EDUP333	Motor Learning	6
EDUP355	Curriculum Perspectives and Issues in Personal Development, Health and Physical Education	6
EDUP391	Research and Evaluation in Physical and Health Education	6

Year 3 - Spring Session

EDUP324	Advanced Skill Analysis II	6
EDUP346	Sexuality, Identity and Relationships	6
EDUP392	Social and Cultural Perspectives of Physical Activity and Physical Education	6

Course Structures

Plus any 6cp elective subject chosen from either the list of electives for the Bachelor of Education (Physical and Health Education), or any Education KLA or Discipline elective or a subject chosen from those on offer in any other Faculty in which the student's enrolment is accepted.

Year 4 - Autumn Session

EDUP453	Professional Studies in Personal Development, Health and Physical Education	6
EDUP435	First Aid and Sports Medicine	6
EDUP491	Theory and Application of Special Education in Physical and Health Education	6

Plus any 6cp elective subject chosen from the list of electives for the Bachelor of Education (Physical and Health Education), or any Education KLA or Discipline elective or a subject chosen from those on offer in any other Faculty in which the student's enrolment is accepted.

Year 4 - Spring Session

EDUP446	Contemporary Health Issues	6
EDUP454	Physical and Health Education Extended Practicum	6
EDUP492	Leadership and Management in Physical and Health Education	6

Plus any 6cp elective subject chosen from the list of electives for the Bachelor of Education (Physical and Health Education), or any Education KLA or Discipline elective or a subject chosen from those on offer in any other Faculty in which the student's enrolment is accepted.

Year 4 Honours - Autumn & Spring Session

EDUP430	Project in Physical and Health Education	12
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Electives for Bachelor of Education (Physical & Health Education)

EDUP311	Principles and Practices of Coaching	6
EDUP312	Coaching Practicum	6
EDUP313	Advanced Coaching and Administration (Not on offer in 2002)	6
EDUP361	Progress and Issues in Health and Health Promotion (Not on offer in 2002)	6
EDUP362	Issues in Drug Education	6
EDUP363	Stress Management	6
EDUP381	Outdoor Education	6
EDUP382	Leadership and Management Skills in Outdoor Education	6
EDUP368	Fitness Assessment and Exercise Prescription for Children	6
EDUP367	Sport Studies II	6
EDUP366	Independent Project in Physical and Health Education	6
EDUP447	Sport Studies I	6

Bachelor of Education (Physical & Health Education) with Honours - 872

The grade of Honours is determined by the weighted average of the merit points achieved at the first attempt in all 200, 300 and 400-level subjects using the formula:

$$\text{weighted average mark} = \frac{\sum m_i c_i}{\sum c_i}$$

(see regulations listed in the Course Rules)

In calculating the above average, the final year thesis shall have a weight of 4. The Class of Honours will be based upon the weighted average mark achieved according to the following scale:

CLASS I: 75.5 -100% of merit points

CLASS II Division 1: 72.5 - 75.4 % of merit points

CLASS II Division 2: 67.5 - 72.4% of merit points

The pattern of progression for the Honours degree conforms to the normal pattern of progression for the Pass degree except that in the Honours degree, EDUP366 replaces an elective in the third year of the course and EDUP430 replaces two electives in the fourth year.

Students who enter the Honours program and fail to achieve the appropriate level of merit points may be eligible for a Bachelor of Education Pass degree.

Bachelor of Mathematics Education

The Bachelor of Mathematics Education course is directed towards providing pre-service educational training for teachers. The degree focuses on developing secondary school teachers as critical reflective practitioners with a sound basis of practical teaching skills. In addition, this degree also develops mathematical concepts in a broad range of areas to provide a full Mathematics major in a specialisation of their choice that can be utilised in other community settings. The degree is an innovative approach in providing students both the mathematical knowledge/training and the teaching/educational training in an integrated fashion.

Students accepted into the program will study the following areas:

- Educational Foundation Studies
- Curriculum & Pedagogy
- Discipline Studies in Mathematics
- Teaching & Learning in Mathematics

The degree is structured to allow the integration of university and classroom throughout the course. Degree delivery includes lectures, tutorials, seminars and school-based workshops using alternative modes of delivery.

Year 1 - Autumn Session

EDUF111	Education I	6
MATH187	Mathematics IA Part A	6
STAT131	Understanding Variation & Uncertainty	6

Plus one 6 credit point elective chosen from those subjects on offer in any Faculty other than the Faculty of Education in which the students enrolment is accepted. Refer to the General Schedule.

Year 1 - Spring Session

EDUT104	Introduction to Teaching/Learning	6
SCIE201	Modern Perspectives in Science	6
MATH188	Mathematics 1A Part B	6
CSCI111	Computer Science	6

Year 2 - Autumn Session

EDUF204	Learners with Special Needs	6
EDUF212	Education II	6
MATH121	Discrete Mathematics	6
MATH203	Linear Algebra	6

Year 2 - Spring Session

EDUT204	Professional Mathematics Community I	6
EDIT102	Information Technology for Learning	6
MATH111	Applied Mathematical Modeling 1	6

Plus one 6 credit point Science/Computing elective subject.

Year 3 - Autumn Session

EDUT301	Research Methods	6
INFO101	Secure & Reliable Digital Communications	6
MATH201	Multi & Vector Calculus	6

Plus one 6 credit point 200 level Mathematics elective subject.

Year 3 - Spring Session

EDUT304	Professional Mathematics Community II	6
EDUL312	Understanding the Literacy Needs of Adolescents	6
MATH202	Differential Equations II	6
MATH204	Complex & Group Theory	6

Year 4 - Autumn Session

EDUP301	Issues in Health and Physical Activity	6
EDUT405	Critical Approaches to Curriculum	6

Plus two 6 credit point 300 level Mathematics elective subjects.

Year 4 - Spring Session

EDUT404	Professional Mathematics Community III	12
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Plus two 6 credit point 300 level Mathematics elective subjects.

Bachelor of Science Education

The Bachelor of Science Education course is directed towards providing pre-service educational training for teachers. The degree focuses on developing secondary school teachers as critical reflective practitioners with a sound basis of practical teaching skills. In addition, this degree also develops scientific concepts in a broad range of areas to provide a full Science major in a specialisation of their choice that can be applied in other community settings.

The degree is an innovative approach in providing students both the scientific knowledge/training and the teaching/educational training in an integrated fashion.

Students accepted into the program will study the following areas:

- Educational Foundation Studies
- Curriculum & Pedagogy
- Discipline Studies in Science
- Teaching & Learning in Science

The degree is structured to allow the integration of university and classroom throughout the course. Degree delivery includes lectures, tutorials, seminars and school-based workshops using alternative modes of delivery.

Year 1 - Autumn Session

EDUF111	Education I	6
MATH141	Mathematics 1C Part A	6
GEOS111	Planet Earth	6
PHYS141	Physics 1A	6

Year 1 - Spring Session

EDUT104	Introduction to Teaching/Learning	6
GEOS102	Earth, Environments & Resources	6
PHYS142	Fundamental of Physics B	6
SCIE201*	Modern Perspectives in Science	6

* Students proposing to teach Physics undertake MATH142 - Mathematics 1C Part B in lieu.

Year 2 - Autumn Session

EDUF204	Learners with Special Needs	6
EDUF212	Education II	6
CHEM101	Chemistry 1A - Introductory Physical & General Chemistry	6
BIOL104	Evolution, Biodiversity and Environment	6

Year 2 - Spring Session

EDUT206	Professional Science Community I	6
EDIT102	Information Technology for Learning	6
CHEM102	Chemistry 1B - Introductory Organic & Physical Chemistry	6
BIOL103	Molecules, Cells and Organisms	6

Course Structures

Year 3 - Autumn Session

EDUT301	Research Methods	6
INFO101*	Secure & Reliable Digital Communications	6

* Students proposing to teach Physics undertake one 6 credit point 200 level Mathematics elective subject in lieu.

Plus two 6 credit point 200 level Science elective subjects.

Year 3 - Spring Session

EDUT306	Professional Science Community II	6
EDUL312	Understanding the Literacy Needs of Adolescents	6

Plus two 6 credit point 200 level Science elective subjects.

Students proposing to teach Physics also undertake an additional 6 credit point 200 level Mathematics elective subject.

Year 4 - Autumn Session

EDUP301	Issues in Health and Physical Activity	6
EDUT405	Critical Approaches to Curriculum	6

Plus two 6 credit point 300 level Science elective subjects.

Year 4 - Spring Session

EDUT406	Professional Science Community III	12
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Plus two 6 credit point 300 level Science elective subjects.

Bachelor of Arts (Education) - 702

For students undertaking a Bachelor of Arts degree with a major study in Education, a list of available subjects appears in the Faculty of Arts section. It should be noted that a Bachelor of Arts (Education) is not a recognised teacher training credential, although some study in Education is recommended for students interested in a career in any instructional or communication oriented field.

EDUCATION SUBJECT DESCRIPTIONS

EDIT102 Information Technology For A Learning 6cp

Spring Wollongong On Campus
Spring Loftus On Campus

Subject Description: This subject focuses on the use of information technology tools for both personal and professional use. In terms of personal use, the subject emphasises the need for students to become familiar with a range of applications packages, such as word processing, drawing, spreadsheet and authoring packages. From the professional perspective students will learn about the use of these applications in educational settings, the role of telecommunications, especially the Internet, and study a range of commercial educational software packages.

EDUA111 Creative and Expressive Arts in Early Childhood 6cp

Autumn Wollongong On Campus

Subject Description: In this subject emphasis will be given to ways in which the expressive curriculum areas of art, craft, drama and music can be interrelated. Types of teaching and learning processes that will be explored include: aesthetic expression; communication through personal ideas/feelings; and arts appreciation. Cognitive and intellectual concepts through arts activities such as colour, size, rhythm, and melody will be examined.

EDUA201 Creative Arts Education 6cp

Autumn Wollongong On Campus

Subject Description: This course analyses and interprets the value of the arts and their application to the K-6 classroom setting. Students will: research, compare and interpret music and visual arts in a variety of contexts; identify and prepare appropriate arts education teaching materials; examine possibilities for integrating the arts with other subject areas; and be involved in listening, singing, playing, moving, creating, as well as in the making of art works.

EDUA224 Creative Arts KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUA201

Subject Description: Students will participate in both the art forms of visual arts and music and gain a personal shared meaning and value of aesthetics in the arts. Students will appreciate the role of each art form through making and appraising their own works and the works of others.

EDUA331 Creative Arts KLA Elective II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUA201

Subject Description: In this subject students focus on the interrelation of dance, drama, music and visual arts. The NSW K-6 Creative Arts syllabus will provide the framework for students to understand where commonalities occur across the arts. Cognisance will be given to the uniqueness and integrity of each art form.

EDUA441 Creative Arts Key Learning Area Elective III 6cp

Autumn Wollongong On Campus

Subject Description: Students will engage in listening, creating and performing music as a means of: developing an understanding of how music can be valued in different ways; investigating and developing an understanding of the elements of music; and applying their understandings to the development of sequenced programs of work for the primary classroom.

EDUA442 Creative Arts Key Learning Area Elective IV 6cp

Spring Wollongong On Campus

Subject Description: Students will explore the creative arts key learning area from a visual arts perspective. Students will conceptualise the role of the artist, the researcher and the educator. Students will examine, explore and evaluate current visual arts practices and research.

EDUC213 Educational Psychology of Typical Children 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF111 plus EDUF212 or 12 cp of related 100 level study

Subject Description: A treatment of the growth and behaviour of typical children, emphasising perception, cognition, learning and language. The impact of environmental influences is considered, in educational settings ranging from preschool to university and adult education, and in the context of contemporary and psychological theory. Students are encouraged to become familiar with, and to enquire further into, the main principles of educational psychology.

EDUC217 Educational Psychology of Atypical Children & Introductory Educational Measurement 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF111 plus EDUF212 or 12 cp of related 100 level study

Subject Description: An introduction to principles and practices of measurement and research in education is offered, with an introduction to a study of atypical children in relation to educational processes. The principles of educational and psychological measurement, test construction and the analysis of test results are included. The characteristics of atypical children are examined. A visit to a special-education location is included.

EDUC291 Culture, Immigration & Education 8cp

Autumn Wollongong On Campus

Subject Description: This subject will examine the impact of immigration on the family and education system in Australia since the end of the 19th century. Changing social expectations, values and practices of the family and education system will be examined.

The central role of language in the construction of individual, cultural and national identities, and multicultural policy will be explored.

EDUC292 Gender and Social Justice 8cp

Spring Wollongong On Campus

Subject Description: This subject will examine theoretical, policy and praxis issues with relation to social justice in education, with a particular focus on gender and education. Using interdisciplinary approaches, it will critically analyse the nature of inequality, power relations in Australian society and the role of educational institutions in addressing issues of equality. The intersections between class, race and gender will be addressed. The implications of gender relations in society for educational institutions will be examined.

EDUC323 Curriculum and Program Evaluation 8cp

Spring Wollongong On Campus

Subject Description: The subject will develop an understanding of the principles of curriculum and program evaluation. Emphasis will be on a range of evaluation models and the application of evaluation procedures in a variety of business, formal and non-formal education and training contexts. The process of implementing an evaluation will be a central feature of the subject.

EDUE301 Issues in Aboriginal Education 6cp

Autumn Wollongong On Campus

Exclusions: Not to count with ABST361

Subject Description: This subject provides students with historical and sociological understandings from Aboriginal perspectives of the significant role formal education has played and continues to play as a site of struggle in the process of colonisation. Topics vary, but may include: the history of Aboriginal education in NSW; racial doctrines; individual and institutional racism; Aboriginal cultures, identities and education; various 'models' of Aboriginal education; current policies and issues; self-determination and education.

EDUE302 Aboriginal Pedagogy 6cp

Spring Wollongong On Campus

Exclusions: Not to count with ABST362

Subject Description: This subject canvasses a range of related issues which will help equip students with skills and knowledge related to: designing programs and teaching Aboriginal children, youth and adults in culturally-appropriate ways; and designing programs and teaching all people about Aboriginal Studies. Topics will vary, but may include: differences between Aboriginal education, Aboriginal studies, cultural studies, and anti-racist education; 'Western' and Aboriginal approaches to knowledge, teaching and learning styles, communication styles, and discipline methods; and methods for consulting with Aboriginal communities.

EDUE303 Teaching Language and Literacy Through Literature in Early Childhood 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject focuses on the theory and practice of using a literature based approach in teaching in the early childhood years (preschool-year 2).

The role of literature in developing children's language, literacy and critical thinking will be the primary emphasis. Children's literature discussed will include traditional literature (folktales, fables, myths and legends), picture books, big books, poetry, factual texts, realistic fiction and fantasy. A range of appropriate learning contexts, such as group discussions, drama and writing workshops will be used to model relevant classroom strategies.

EDUE304 Teaching Language Through Literature in the Primary and Middle Years 6cp

Spring Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject focuses on literature suitable for the needs, interests and abilities of middle to upper primary children. A range of literature including poetry, drama (scripted and television), short stories, realistic fiction, fantasy, and non-fiction (information texts, reference books, autobiography, biography) will be treated. A central issue will be 'critical literacy', which includes investigation of social and gender issues in reading and responding to literature, racial and gender biases and stereotyping.

EDUE305 Design and Assessment of Learning Experiences for Adults 6cp

Autumn Wollongong On Campus

Subject Description: This subject focusses on the essential processes in the design of effective learning programs for adults. It is concerned with assessing needs, setting objectives, establishing the scope and sequence of proposed programs, deciding on resources, planning how to assess learner performance and designing an evaluation strategy. Students will be expected to prepare a design statement which addresses a stated problem and reflects their understanding of the instructional design process.

EDUE306 Learning Strategies and Communication in Adult Education 6cp

Spring Wollongong On Campus

Subject Description: This subject introduces students to a range of learning strategies appropriate to adult learners. It is based on a consideration of a basic model of interpersonal communication which will provide one criterion for the evaluation of the strategies. These will be modelled, described and examined throughout the subject so that students may experience and analyse them in order to make informed choices for their own applications.

EDUE307 Physical Education: Coaching and Sport Administration 6cp

Autumn Wollongong On Campus

Subject Description: This subject analyses the general principles of coaching and sport administration. In coaching topics include coaching roles, psychological and physical factors,

programming for all coaching environments and practical sessions. Students also undertake practical work and have the opportunity to complete the Australian Coaching Council Level 1 General Principles. In Sport Administration they have the opportunity to complete the Australian Society of Sport Administrators Level 1. topics include strategic planning, operations management, financial aspects, legal issues, effective meetings and marketing and promotion.

EDUE308 PDHPE: Health Promotion 6cp

Spring Wollongong On Campus

Subject Description: This subject will examine the concept of health promotion, and will afford students the opportunity to specialise in a specific aspect of health promotion e.g. physical activity or community health. The latest research will be examined to reinforce the notion of health promotion in the community.

There will be an emphasis in this subject on students acquiring skills in program development and implementation.

EDUE313 Interactive Multimedia by Design 6cp

Autumn Wollongong On Campus

Pre-requisites: EDIT102 or CSCI101 or CSCI102 or IACT101 or permission of Subject Coordinator

Subject Description: The subject reviews the basic principles of interactive multimedia design and develops a prototype interactive multimedia project using authoring tools. This will entail developing awareness and skills in visual thinking and communicating, an understanding of learning theory, and relevant cognitive and software tools. Issues of project management, rapid prototyping and a critical examination of design, implementation and evaluation will be addressed. Issues of resource management and product maintenance will also be considered.

EDUE314 Interactivity and the WEB (Designing Hypertext Multimedia) 6cp

Spring Wollongong On Campus

Pre-requisites: EDIT102 or CSCI101 or CSCI102 or IACT101 or permission of Subject Coordinator

Subject Description: The subject will apply the principles of instructional design and product development to an interactive web-based environment. The focus will be upon information design for a hypertext environment and the development of an informative and interactive Web Site. This will entail a discussion of project development, software tools for interactive and collaborative Web-Based environment development, the process of rapid prototyping and a critical examination of design issues that define effective sites. To undertake the project students will design an information structure and develop an interface and screen design.

EDUE315 Environmental Education - The Natural Environment 6cp

Autumn Wollongong On Campus

Subject Description: This subject focuses on teaching in natural environments with children from local primary schools. Students will visit local field study centres and schools to engage in teaching and research.

They will also be involved in seminar presentations of selected global and local environmental problems relevant to primary school children.

EDUE316 Environmental Education - The Built Environment 6cp

Spring Wollongong On Campus

Subject Description: This subject focuses on teaching in built environments with children from local primary schools. Students will visit urban field study centres and schools to engage in teaching and research.

Also students will critically examine local environmental issues that relate to the use of appropriate technology in the built environment.

EDUE317 English Language: Examining Learners' Problems 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Autumn Wollongong Distance

Spring Wollongong Distance

Subject Description: This subject is an introduction to assumptions about the nature of the English language and its relevance to teaching English to speakers of other languages. It will canvass a number of aspects of English grammar and discourse, including differences between spoken and written English, common grammatical problems, teaching vocabulary, and discourse analysis. It will guide participants in the diagnosis of learners' problems in the areas of English grammar, vocabulary and pronunciation.

EDUE319 Programming and Methodology in Second Language Teaching 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Autumn Wollongong Distance

Spring Wollongong Distance

Subject Description: This subject is intended as an introduction to classroom practice in teaching a second language for those with little or no experience in the field. It aims to assist students to develop a teaching program/unit of work appropriate for a specified group of learners. Students will be familiarised with a number of commonly used teaching/learning activities in oral communication, reading and writing.

EDUE320 Behaviour Management 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Exclusions: Not to count with EDUE311

Subject Description: This elective examines the prevalence and aetiology of behaviour disorders and their effects on classroom learning and community integration. Practical classroom techniques which have been found to be effective in developing a supportive classroom environment and in increasing academic engaged time will be the focus of the subject.

Subject Descriptions

The issues of attention deficit hyperactivity disorder, oppositional behaviour, non-compliance, bullying and developing models of student and collegial support will be addressed.

EDUE321 Reading Difficulties 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Exclusions: Not to count with EDUE312

Subject Description: Both reading acquisition and reading comprehension will be addressed in this subject, with particular reference to those students who do not acquire these essential skills as quickly or as easily as their peers. The assessment of reading skills, including critical phonological skills, and the planning, implementation and evaluation of an appropriate reading program based on those assessment results, will form the basis of the subject.

EDUE322 Educational Psych of Atypical Children & Introd Educ Measurement 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF111 plus EDUF212 or 12 cp of related 100 level study.

Subject Description: An introduction to principles and practices of measurement and research in education is offered, with an introduction to a study of atypical children in relation to educational processes. The principles of educational and psychological measurement, test construction and the analysis of test results are included. The characteristics of atypical children are examined. A visit to a special-education location is included.

EDUE323 Educational Psychology of Typical Children 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF111 plus EDUF212 or 12 cp of related 100 level study

Subject Description: A treatment of the growth and behaviour of typical children, emphasising perception, cognition, learning and language. The impact of environmental influences is considered, in educational settings ranging from preschool to university and adult education, and in the context of contemporary and psychological theory. Students are encouraged to become familiar with, and to enquire further into, the main principles of educational psychology.

EDUE324 Gender and Social Justice 6cp

Spring Wollongong On Campus

Subject Description: This subject will examine theoretical, policy and praxis issues with relation to social justice in education, with a particular focus on gender and education. Using interdisciplinary approaches, it will critically analyse the nature of inequality, power relations in Australian society and the role of educational institutions in addressing issues of equality. The intersections between class, race and gender will be addressed. The implications of gender relations in society for educational institutions will be examined.

EDUE325 Culture, Immigration & Education 6cp

Autumn Wollongong On Campus

Subject Description: This subject will examine the impact of immigration on the family and education system in Australia since the end of the 19th century.

Changing social expectations, values and practices of the family and education system will be examined. The central role of language in the construction of individual, cultural and national identities, and multicultural policy will be explored.

EDUE326 Curriculum and Program Evaluation 6cp

Spring Wollongong On Campus

Subject Description: The subject will develop an understanding of the principles of curriculum and program evaluation. Emphasis will be on a range of evaluation models and the application of evaluation procedures in a variety of business, formal and non-formal education and training contexts. The process of implementing an evaluation will be a central feature of the subject.

EDUE327 Language and Ideology 6cp

Autumn Wollongong On Campus

Subject Description: This subject aims to explore the ways in which the use of language contributes to the social construction of knowledge and social relations.

Students will investigate how culture and individual identity is constituted in the production and interpretation of written and spoken texts, including those generated in the media, through conversations, fictional and factual genres and work place interactions. The subject will also investigate critical literacy as it can be put into practice in education settings.

EDUE333 International Teaching Project 6cp

Summer Wollongong On Campus

2003 / 2004

Pre-requisites: EDUT111 OR EDUT121

Exclusions: Not to count with EDUE311

Subject Description: This subject is intended as an introduction to teaching in another country and explores issues such as teaching english as a second language, cross-cultural education, materials development and instruction. The major component of this subject will allow students to live and teach in another country (eg Thailand) under the direction and supervision of Faculty of Education staff.

EDUE401 Issues In Aboriginal Education 6cp

Autumn Wollongong On Campus

Exclusions: Not to count with EDUE301 and or ABST361

Subject Description: This subject provides students with historical and sociological understandings - from Aboriginal perspectives - of the significant role formal education has played and continues to play as a site of struggle in the process of colonisation. Topics vary, but may include: the history of Aboriginal education in NSW; racial doctrines; individual and institutional racism; Aboriginal cultures, identities and education; various 'models' of Aboriginal education; current policies and issues; self-determination and education.

EDUE402 Aboriginal Pedagogy 6cp

Spring Wollongong On Campus

Exclusions: Not to count with EDUE302 and or ABST362

Subject Description: This subject canvasses a range of related issues which will help equip students with skills and knowledge related to designing programs and working with Aboriginal children, youth and adults in culturally-appropriate ways. Topics will vary, but may include: differences between Aboriginal education, Aboriginal studies, cultural studies, and anti-racist education; 'Western' and Aboriginal approaches to knowledge, teaching and learning styles, communication styles, and discipline methods; and methods for consulting with Aboriginal communities.

EDUE405 Assessing Performance In Adult Training 6cp

Autumn Wollongong On Campus

Subject Description: This subject is designed to develop in the student the essential knowledge, skills, understandings and attitudes which will ensure sound evaluation of training programs. It is directed towards the establishment and consolidation of logical links between evaluation and instructional design and deals with the assessment of trainee performance and current skill levels. Attention is given to examining the importance of language competency in this assessment process. The formative and summative evaluation of training strategies will then contribute to the development of effective performance outcomes.

EDUE406 Theories Of Adult Learning 6cp

Spring Wollongong On Campus

Subject Description: In this subject students will examine relevant theories of cognition and motivation and consider the contributions of several prominent theorists to the study of adult learning. They will investigate learning styles, the characteristics of adult learners, and processes and conditions that promote adult learning.

EDUE407 Inquiry Project In Physical and Health Education 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Subject Description: The student in consultation with a faculty member will be required to identify an appropriate topic for action research in the Physical Education or Health settings. Each student will plan, conduct and report (approximately 6000 words) on the approved project. Staff will liaise regularly with student and site staff but will not supervise students on site. Group meetings of students will be arranged as necessary.

EDUE408 Placement In Physical and Health Education 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Subject Description: Students will work in either an applied Physical or Health Education setting. Two hours a week will be spent in the field with one hour a week spent in class.

Students will be required to prepare an in-depth workbook of their practical experience and will also give an in-depth presentation to the rest of the class.

EDUE411 Disability Issues Across the Lifespan 6cp

Autumn Wollongong On Campus

Subject Description: This subject will examine issues which face individuals with moderate to severe disabilities throughout their lives.

It will address the Disability Services Act and Service Standards; personal care; family impact; community access and support; accommodation options; vocational and recreational opportunities; sexuality; legal and ethical issues; augmentative communication; aging and advocacy.

EDUE412 Programming for Individuals with Moderate to Severe Disabilities 6cp

Spring Wollongong On Campus

Subject Description: This subject will address needs assessment and the design, implementation and evaluation of programs for individuals with moderate to severe intellectual disabilities as a result of Down Syndrome, Autism, neural tube defects, traumatic brain injury, severe cerebral palsy, and other developmental disabilities. The development of communication and social skills, independent living skills and intellectual growth will be addressed within the context of promoting individual rights and enhancing opportunities for participation in society.

EDUE413 Managing Multimedia Resources 6cp

Autumn Wollongong On Campus

Subject Description: This subject focuses on skill development to manage multimedia resources. It begins with the development of an information management system to monitor and store project resources. This evolves into resource production and ongoing team communication via the web and chat spaces. The collection of resources requires careful organisation prior to its storage on CD. Students are required to keep a process journal to enable reflection and analysis of the information management cycle they have experienced.

EDUE414 Cognition, Interface and Interactivity 6cp

Spring Wollongong On Campus

Subject Description: This subject explores the relationship between interactive multimedia and the meanings that it can create. It will include a discussion of the psychology of interactive design, the role of non-linear narrative and navigation options. It will explore several strategies of interaction. In particular it will examine popular genres within interactive multimedia such as games and simulations and how the interface conventions are established and learned.

EDUE415 School and Community Based Sustainable Development Practices 6cp

Autumn Wollongong On Campus

Subject Description: In this subject students will critically examine the practices that communities, schools and government authorities employ to support sustainable development. Students will critically evaluate the education potential of various projects in sustainable development examples include Sydney's Sustainable House, Permaculture and the Sustainable Energy Development Authority.

EDUE416 Environmental Education Through Information Technology 6cp

Spring Wollongong On Campus

Subject Description: In this subject students will critically examine how information technology presents environmental issues. Teaching methods employed in this subject will make appropriate use of information technology. students will also be involved in the development of a suitable information technology resource for teaching about environmental education.

EDUF104 Early Childhood Learning Environment I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUT121

Subject Description: This subject introduces students to theories of play - how play develops and changes; its contribution to children's development; play as an approach to learning; play and children's texts; and sociocultural variations. Ways of observing, documenting, interpreting, planning, implementing and assessing children's play will also be developed. The subject will be presented through lectures, seminars, and self-directed study in groups.

EDUF106 Child Development and Care I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF111

Subject Description: This subject follows on from EDUF111. The focus is on child development theories, principles, research and observational methods and how they relate to the study, education and care of young children from 0-8 years.

EDUF111 Education I 6cp

Autumn Wollongong On Campus

Summer Wollongong On Campus

2003 / 2004

Autumn Loftus On Campus

Subject Description: This subject involves a study of physical, social, emotional, moral and cognitive aspects of children from a developmental perspective. It will deal with the following topics: issues and theories in child development; the physical development of children and adolescents; contrasting theories of cognitive development; theories of language development; the nature of intelligence and its relation to achievement;

social contexts for development; moral and emotional development; and gender-role development.

EDUF201 Early Childhood Learning Environment II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF104

Subject Description: This subject will enable students to study the relationship of theory and practice in terms of the basic principles of program planning and implementation of an early childhood education program for young children and their families. Students will participate in micro teaching experiences as well as teaching practice in an early childhood centre under the supervision of a trained teacher.

EDUF204 Learners With Exceptional Needs 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF111 OR EDUF101

Subject Description: This subject will cover the prevalence of children with special educational needs, the concept of normalisation and the current educational policies of mainstreaming, integration and inclusion. It will develop an understanding of the needs of exceptional learners and basic skills in the individualisation of instruction in relation to students with learning difficulties in the regular classroom.

EDUF212 Education II 6cp

Spring Wollongong On Campus

Spring Loftus On Campus

Pre-requisites: EDUF111

Subject Description: This subject identifies and examines the major theories, perspectives and methodologies which support a critical awareness and understanding of issues of consequence in education in society. The role of education in gender, class and race relations is considered and students explore contemporary issues such as: inclusion of the differently abled student; violence in schools and families; changing perceptions of sexualities; and the use and critique of technology and mass media.

EDUF232 Early Intervention and Children with Special Needs 6cp

Spring Wollongong On Campus

Subject Description: This subject examines various factors which put the young child at risk of developmental delays or disabilities, and develops management, care and teaching strategies which are appropriate for young children with special needs. The roles of parents, associated professionals and paraprofessionals in the education of young children with special needs are also addressed.

EDUF252 Child Development and Care II 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF106

Subject Description: This subject extends the knowledge and skills gained in previous developmental studies by examining particular contexts and situations in early childhood education.

These include: child abuse and neglect, health and safety management, evaluation of policies and practices, evaluation of government regulations, working with families; and current issues. Students will apply child development theories and principles to evaluation and critical analysis of a variety of specified situations and contexts and engage in reflective thinking.

EDUF303 Early Childhood Learning Environment III 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF201

Subject Description: This subject will focus on the physical, social, emotional & intellectual learning environments in early childhood settings. Students will examine the role of the early childhood teacher and take into account the diverse nature of the population and the importance of parent teacher relationships.

EDUF304 Early Childhood Curriculum 12cp

Spring Wollongong On Campus

Pre-requisites: EDUF201

Subject Description: The compulsory core of this subject examines different ways of conceptualising curriculum, and processes and approaches involved in curriculum planning in various early childhood settings. Students will be able to choose a specialisation within this subject, focusing on 0-3s, 3-5s or 5-8s. In this specialisation, students will be involved in collaborative inquiry into relevant curriculum policies and practices, and apply the findings of this inquiry to designing programs.

EDUF311 Education III 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF101 OR EDUF111

Subject Description: This subject is designed to provide students with an understanding of current research related to the major theories of cognitive development and the impact of these theories on contemporary teaching practice. The topics treated will include: information processing theories of cognitive functioning; metacognition and learning; Piaget and the neo-Piagetians; Vygotskian theory; theories of intelligence and creativity; psychological perspectives on motivation; and, cognitive development as a social and cultural process.

EDUF313 Historical and Philosophical Perspectives of Early Childhood 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF212

Subject Description: This subject will critically examine the importance of early childhood education, perspectives on childhood in different historical contexts, the roles of children and families in learning and schooling, and childrearing practices in different historical and societal contexts. The impact of historical changes and philosophical shifts upon the world of the child and upon the development of early childhood services and programs will be considered.

EDUF353 Management of Early Childhood Services 6cp

Autumn Wollongong On Campus

Subject Description: This subject will prepare early childhood educators to fulfil the roles of organizational communicator, leader, teamworker, (action) researcher, and supervisor of staff. Topics -as they relate to early childhood professionals- such as industrial issues, human resources management, change management effective communication, legal responsibilities, use of technology in services management, personal career management, and contextual issues will be covered. The delivery strategy of self directed teamwork will provide practical experience in group dynamics, conflict resolution, team building and leadership.

EDUF421 Leadership and International Perspectives In Education 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject examines early language development, including emergent literacy, reading contexts at home and school, the shift from oral to written modes, early writing, early reading, spelling and phonology. Students will become familiar with a range of teaching/learning activities designed to cater for the language and literacy needs of a variety of learners, including those of non-English-speaking background and those with literacy difficulties.

EDUK101 Problem Based Learning in Education 6cp

Autumn Wollongong Flexible

EDUL101 Language and Literacy Education I 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject examines theoretical foundations and develops practical strategies for the teaching of reading. It examines the relationships between reading, writing and oral language development and explores the knowledge and strategies readers use to make meaning from both literary and factual texts. Students will become familiar with the developmental patterns of emergent, beginning and fluent readers and the respective teaching and assessment strategies.

EDUL202 Language and Literacy Education II 6cp

Spring Wollongong On Campus

Contact Hours: 3 Hours per week.

Pre-requisites: EDUL101 - Language & Literacy Education I

Subject Description: This subject examines theoretical foundations and develops practical strategies for the teaching of writing. It examines the relationship between reading, writing and oral language development and explores the knowledge and strategies writers use to compose the range of literary and factual texts. Students will become familiar with the developmental patterns of emergent, beginning and fluent writers and the respective teaching and assessment strategies.

EDUL224 Language Education KLA Elective I 6cp

Spring Wollongong On Campus

Contact Hours: 3 Hours per week. per week.

Pre-requisites: EDUL101

Subject Description: This subject will focus indepth on Early Stage 1 & Stage 1 of the English K-6 Syllabus. It will examine the relationship between the outcomes, assessment of literacy learning, the design and implementation of learning activities, and the creation of effective classroom settings. It will examine a range of teaching/learning activities and the use of time, resources, that K-2 teachers use to plan, implement and evaluate their literacy curriculum.

EDUL240 Materials Technology In Second Language Teaching 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Autumn Wollongong Distance

Spring Wollongong Distance

Subject Description: This subject is intended as a practical introduction to the selection, development, adaptation, analysis and evaluation of a range of teaching materials and media in second language teaching. It will examine the nature and role of materials/technologies, including their place in the curriculum, the assumptions underlying them, and the roles of teacher and learners implied by them.

EDUL301 Language and Literacy Studies in Early Childhood 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Pre-requisites: EDUL101

Subject Description: This subject examines language and literacy development in the early childhood years. Topics include: early spoken language development; emergent literacy development; later reading and writing development; the role of picture books in children's lives; and the relationship between development and children's learning environments. Teaching strategies for supporting children's talk, reading and writing will be addressed. Students will be involved in conducting independent inquiry in teams into aspects of children's language and literacy development.

EDUL312 Understanding Literacy Needs of Adolescents 6cp

Spring Loftus On Campus

Subject Description: This subject will examine the characteristics and needs of adolescent students and in particular adolescent literacy. It will explore the social, emotional, intellectual and physical developmental period of adolescence and examine specific issues of identify, peer acceptance, independence, social and political awareness and how these characteristics relate to adolescent literacy development and specifically to the learning and teaching of mathematics and science. What literacy is and the role it plays in learning will be demonstrated. Practical classroom strategies and techniques will be introduced that will enhance the learning experiences of the adolescent student.

EDUL314 Language and Ideology 8cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject aims to explore the ways in which the use of language contributes to the social construction of knowledge and social relations. Students will investigate how culture and individual identity is constituted in the production and interpretation of written and spoken texts, including those generated in the media, through conversations, fictional and factual genres and work place interactions. The subject will also investigate critical literacy as it can be put into practice in education settings.

EDUL330 Practicum or Project In Second Language Teaching 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Autumn Wollongong Distance

Spring Wollongong Distance

Pre-requisites: EDUE319

Subject Description: The Practicum aims to provide the intending language teacher with practical experience in the classroom in order to develop the knowledge and skills needed to become a specialist EFL/ESL teacher. Alternatively, students may elect to undertake an independent project on a topic of interest in language teaching following consultation with their supervisor.

EDUL331 English Language: Examining Learners' Problems 8cp

Autumn Wollongong On Campus

Subject Description: This subject is an introduction to assumptions about the nature of the English language and its relevance to teaching English to speakers of other languages. It will canvass a number of aspects of English grammar and discourse, including differences between spoken and written English, common grammatical problems, teaching vocabulary, and discourse analysis. It will guide participants in the diagnosis of learners' problems in the areas of English grammar, vocabulary and pronunciation.

EDUL335 Language Education KLA Elective II 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Pre-requisites: EDUL202

Subject Description: This subject will focus indepth on Stage 2 & Stage 3 of the English K-6 Syllabus. It will examine the relationship between the outcomes, assessment of literacy learning, the design and implementation of learning activities, and the creation of effective classroom settings. It will examine a range of teaching/learning activities and the use of time, resources, that Year 3-6 teachers use to plan, implement and evaluate their literacy curriculum.

EDUL340 Materials and Technology in Second Language Teaching 8cp

Spring Wollongong On Campus

Subject Description: This subject is intended as a practical introduction to the selection, development, adaptation, analysis and evaluation of a range of teaching materials and media in second language teaching. It will examine the nature and role of materials/technologies, including their place in the curriculum, the assumptions underlying them, and the roles of teacher and learners implied by them.

EDUL350 Programming and Methodology in Second Language Teaching 8cp

Autumn Wollongong On Campus

Subject Description: This subject is intended as an introduction to classroom practice in teaching a second language for those with little or no experience in the field. It aims to assist students to develop a teaching program/unit of work appropriate for a specified group of learners. Students will be familiarised with a number of commonly used teaching/learning activities in oral communication, reading and writing.

EDUL360 Practicum Or Project in Language Teaching 8cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Pre-requisites: EDUL350

Subject Description: The Practicum aims to provide the intending language teacher with practical experience in the classroom in order to develop the knowledge and skills needed to become a specialist EFL/ESL teacher. Alternatively, students may elect to undertake an independent project on a topic of interest in language teaching following consultation with their supervisor.

EDUL441 Language Education Key Learning Area Elective III 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject will focus on the world wide movement towards Standards, Profiles and Benchmarks as tools of accountability and identification of student levels of literacy achievement, and for planning future teaching learning experiences in literacy education. The history, development and politics of such tools will be examined. A basic component of study will be the assessment and evaluation theory that students need to understand, including knowledge of quantitative and qualitative methods, in order to make valid judgments of students literacy levels. Finally students will learn how they can use the data gathered to plan future teaching/learning experiences that best respond to the needs of their students.

EDUL442 Language Education Key Learning Area Elective IV 6cp

Spring Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject will take the form of a school based inquiry project into some aspect of literacy education.

Students will be asked to identify a problem worthy of inquiry, develop a needs analysis and proposal; carry out a literature review in the area; carry out action research and data collection and finally write a brief report presenting the findings.

EDUM201 Mathematics Education I 6cp

Autumn Wollongong On Campus

Exclusions: Not to count with EDUM102

Subject Description: This subject focuses on the teaching and learning of K-6 mathematics, based on the NSW K-6 syllabus and the National Statement on Mathematics. The subject requires students to develop a rationale for teaching mathematics, to examine approaches to teaching the content of infants and primary school mathematics, and emphasises the theoretical underpinnings both of the structure and sequence of the curriculum, and of specific teaching and learning strategies.

EDUM224 Mathematics Education KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUM102

Subject Description: This subject will focus on the development of content and activities for teaching units and extensions of the K-6 Mathematics syllabus. Topics include topology, tessellations, number patterns, fractals, probability, geodesics, polyhedrons and mathematics in our environment. Students will be expected to present an overview of the extension strands and prepare a sequence of lessons related to them.

EDUM333 Mathematics Education Elective II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUM102

Subject Description: This subject will focus on the underlying issues which have been given emphasis in the structuring of the Mathematics K-6 syllabus and the National Statement. Areas to be considered will include technology, language, gender, multiculturalism, problem solving, attitudes to mathematics and children with special needs. The subject will extend the work done in EDUM102.

EDUM441 Mathematics Education Key Learning Area Elective III 6cp

Autumn Wollongong On Campus

Subject Description: This subject will apply various means to evaluate the resources available to enhance and enrich the K-6 curriculum. It will investigate computer software, textbook series and mathematics laboratories.

EDUM442 Mathematics Education Key Learning Area Elective IV 6cp

Spring Wollongong On Campus

Subject Description: This subject will employ theoretical models of learning in mathematics to evaluate and prepare programs and units of work related to the K-6 mathematics curriculum.

Subject Descriptions

The subject will look in particular at the theories of Dienes and Skemp for their validity. Extensive use will be made of the testing facilities available on the Web to support this program.

EDUP123 Movement Concepts and Practices 6cp

Autumn Wollongong On Campus

Subject Description: Health and Physical Education teachers have a major role to play in the promotion of physical activity in both schools and the general community. Physical activity contributes to quality of life, and develops fitness as well as motor skills. There are a range of experiences that people can participate in to ensure a lifelong commitment to regular physical activity. In this subject students will participate in practical experiences which will explore the fundamental principles underlying all movement and identify how these principles impact on the development of specialised skills. The health and skill related elements of physical fitness will be examined from both a theoretical and practical perspective. As the first subject in the practical studies component of the course students will be introduced to teaching strategies which can be implemented when teaching games, dance and fitness.

EDUP124 Skill Analysis and Performance I 6cp

Spring Wollongong On Campus

Subject Description: Movement experiences in this subject will consolidate and extend students' knowledge and understanding of physical activity and the principles underlying movement. These principles will be applied to specialised skills in aquatics, gymnastics and the invasion games of touch football, oztag, and rugby. Students will develop their own level of performance in these specialised areas of physical activity, as well as further their understanding of teaching strategies which can be utilised when implementing these activities in schools.

EDUP144 Health and Health Behaviour 6cp

Spring Wollongong On Campus

Subject Description: This subject is the first in a series of subjects which examine major issues from a socio-cultural and individual perspective. In this subject models of health behaviour will be critically examined in relation to the major lifestyle factors in the disease process. The nature of disease and the major risk factors will be addressed. The subject culminates with an exploration of nutrition as a dimension of health. A Web site has been constructed for this subject, with subject resources and Web links, and as a support for tutorial activities which may be conducted on line.

EDUP153 Foundations of Personal Development, Health & Physical Education 6cp

Autumn Wollongong On Campus

Subject Description: Students will examine the theoretical foundations and rationale for the inclusion of Personal Development, Health and Physical Education within both the primary and secondary curriculum.

The basic principles of teaching related to communication, lesson planning, classroom management and reflection will be discussed and practised in outdoor and indoor micro teaching contexts as preparation for the first practicum component of 10 days, which will take place in the primary school setting.

EDUP201 Personal Development, Health and Physical Education 6cp

Autumn Wollongong On Campus

Subject Description: This subject will introduce students to the Key Learning Area: Personal Development, Health and Physical Education. This KLA has an important role to play in the health promotion of young people. Students will examine basic movement skills, body awareness and communication through physical activity. Personal Development and Health will deal with aspects of growth and development, interpersonal relationships, healthy decision making, safe practices and the Health Promoting School.

EDUP223 Skill Analysis and Performance II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUP123

Subject Description: Students will further their knowledge and understanding of the principles and practices involved in the development of specialised skills in social dance, the invasion games of hockey and soccer, and gymnastics. Students will further their own skill level in each content area covered, as well as examine the considerations for teaching these activities in schools. Through participation in a variety of practical and theoretical experiences students will further their ability to utilise a variety of teaching strategies when implementing Physical Education lessons in these content areas.

EDUP224 Skill Analysis and Performance III 6cp

Spring Wollongong On Campus

Pre-requisites: EDUP123

Subject Description: In this subject students will continue to increase their knowledge and understanding of content areas taught in the Physical Education component of the PDHPE Syllabus. Students will experience the invasion games of netball and basketball, group exercise activities such as aerobics and aquarobics, orienteering and track and field. Combining the experience they have had in practice teaching and the knowledge gained through a variety of theory and practical subjects, students will further their ability to plan and implement appropriate Physical Education lessons. Students will focus on continuing to improve their own personal performance and as well as the selection of strategies to meet the special needs of individuals, create active participation, and to challenge and extend each student's capabilities in Physical Education.

EDUP226 Personal Development, Health and Physical Education KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUP201

Subject Description: This subject will enable students to further develop the knowledge, understandings and pedagogical skills introduced in EDUP201 Personal Development, Health and Physical Education.

The major focus of the subject will investigate factors which impact upon the individual in relation to their physical activity levels and health status. The content introduced in lectures will be supplemented by PDHPE teaching experiences in a primary school setting

EDUP243 Exploring Emotional Well Being 6cp

Autumn Wollongong On Campus

Subject Description: This subject will further develop students knowledge and understanding of "health " by exploring the psychosocial dimension of our health and the impact it has on our total well-being. In identifying the criteria for good mental and emotional health, this subject will discuss self-esteem and self-concept, stress and stress management, communication, and interpersonal relationships. Interpersonal communication skills are integral to the formation of social relationships, to helping others in need and for dealing with conflict. The course will investigate the importance of effective communication in developing a positive perspective of self, and positive relationships with others in various settings. As future secondary teachers the promotion of adolescent well-being and in particular adolescent mental health is an important issue, and will therefore be an underlying focus throughout this subject.

EDUP246 Risk Taking and Young People 6cp

Spring Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Exclusions: Not to count with EDUP344

Subject Description: This subject will focus on risk taking behaviour, in the context of young people's lives and culture, with specific reference to drug taking, suicide, and accidents. Current trends in prevention, intervention, postvention, and harm minimisation, will be dealt with. At the conclusion of this subject, students should have acquired a sound knowledge base, which will enable critical examination of the underlying psycho-social factors associated with drug use, suicide ideation and other risk taking behaviours.

EDUP255 Teaching Physical Education 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUP153

Subject Description: This subject builds on previous studies of the nature of the learner and the learning environment in Physical Education. Opportunities will be provided for students to explore the variety of teaching/learning strategies available, their advantages and disadvantages, the criteria for their selection and their contribution to classroom communication. Students will be given the opportunity to apply their knowledge by participating in field experiences during the session.

EDUP256 Teaching Health Education 6cp

Spring Wollongong On Campus

Pre-requisites: EDUP153

Subject Description: This subject investigates teaching and learning in Health Education. Students will initially explore and analyse a variety of health behaviour theories and explore Health Education in secondary schools as a form of health promotion.

The understandings which are developed will then be related to a variety of teaching and learning opportunities which exist in Health Education in secondary schools given the diverse nature of schools and learners. Health Education demonstration lessons will enable students to observe and reflect upon the teaching of experienced Health Education teachers. This is followed by a one week practicum in a secondary school which will enable students to apply the theories of teaching Health Education to a practical setting

EDUP301 Issues In Health & Physical Activity 6cp

Autumn Loftus On Campus

Subject Description: All teachers irrespective of subject area have a responsibility for the physical, social and emotional well-being of their students. This subject will focus on personal development, health and physical education issues which impact on the welfare and health status of young people. Issues in personal development/health would include: mental health, depression, eating disorders, suicide, drug use, and sexuality. In the physical activity area, the focus would be on increasing students confidence. This would be achieved by: increasing knowledge of a variety of sporting activities; developing organisational skills necessary for conducting an efficient physical activity or sports session; and reinforcing an understanding of risk management in external environments.

EDUP311 Principles & Practices of Coaching 6cp

Spring Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject analyses the basic principles and practices of coach education. The emphasis will be placed on an understanding of the Australian Coaching system and pedagogical issues in coach education. Related issues to coaching such as time management and ethical issues will also be studied. Relevant discipline areas such as physiology and sports psychology will also be applied to coaching. On completion of the subject students will have acquired a General Principles of Coaching certification.

EDUP312 Coaching Practicum 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: Students will work with a recognized coach in an applied setting. Students will be required to organise and run practice sessions for a minimum of 30 hours. Two hours per week will be spent in the field with one hour a week spent in lectures analysing the principles of coaching. Students will be required to prepare an in-depth workbook of their practical experience and will also give an in-depth presentation to class members.

EDUP313 Advanced Coaching & Administration 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: EDUP311 OR EDUP312

Subject Description: This subject provides the opportunity for students to advance their knowledge in the theoretical aspects of coaching and sport administration.

Subject Descriptions

In coaching the disciplines will be applied to the sports coaching environment. Students will also be required to undertake a General Principles (Level 2) coaching qualification. The Sports Administration components related to coaching will also be studied: strategic plans, development, sponsorship etc. Applications of theory will also be studied over the duration of the subject.

EDUP323 Advanced Skill Analysis I 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUP123

Subject Description: The students practical experience in racquet games; games such as cricket, softball and baseball, aquatics (AUSTSWIM); and modern and contemporary dance will be further developed with continuing emphasis on teaching strategies, processes, planning and evaluation.

EDUP324 Advanced Skill Analysis II 6cp

Spring Wollongong On Campus

Pre-requisites: EDUP123

Subject Description: This subject offers an extension of students' prior work in practical studies through experiences with a games sense approach, and the choreography and performance of dance, gymnastics and aerobics routines. The emphasis will be on unit planning, processes and the methodology of teaching in the areas of artistic and display gymnastics, soccer and canoeing, kayaking and camping.

EDUP333 Motor Learning 6cp

Autumn Wollongong On Campus

Subject Description: This subject is designed to develop an understanding of concepts related to skill acquisition and the psychology of sport. Through a variety of practical laboratories, seminars, workshops and lectures, students will be able to identify basic models of information processing, memory and attention; identify stages of learning and appropriate methods of instruction and use practice variables, feedback, transfer, psychological techniques programmed instruction and mechanical aids to enhance the teaching of motor skills.

EDUP335 Personal Development Health and Physical Education KLA Elective II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUP201

Subject Description: This subject will expand knowledge and skills in the Key Learning Area of Personal Development, Health and Physical Education. The concept of the health promoting school will be analysed, particularly as it relates to the school/community interface. Content and understandings will be examined from a strong pedagogical base, and students will develop appropriate teaching strategies and approaches which can be applied to both the school and community settings.

EDUP346 Sexuality, Identity And Relationships 6cp

Spring Wollongong On Campus

EDUP355 Curriculum Perspectives and Issues in Physical & Health Education 6cp

Autumn Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject will enable students to develop an understanding of the foundations of curriculum development as it relates to PDHPE. A particular focus will be placed upon PDHPE in a post compulsory education setting. These understandings will be achieved by engaging students in an analysis of state and national curriculum models that have relevance to PDHPE. Students will critical analyse contemporary issues that impact upon the PDHPE curriculum as well as undertake curriculum planning and development tasks. At the completion of this subject students will undertake a 3 week block practicum in a secondary school.

EDUP361 Progress and Issues in Health and Health Promotion 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 24 cr pts at 200-level

Subject Description: On completion of this subject students will have critically examined the modern concept of health and factors affecting health status. Students will have investigated the scientific basis for health promotion and the research underpinnings associated with health promotion; health behaviour and health behaviour change.

EDUP362 Issues in Drug Education 6cp

Autumn Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject provides for the examination and development of individual knowledge, skills and attitudes which will facilitate the drug education process. Content will include: drug use trends and issues; behavioural theories of drug use and dependence; perspectives on individual and societal attitudes to drug use; and the development of skills and programs relevant to providing meaningful drug education for young people, particularly in relation to the harm minimisation approach.

EDUP363 Stress Management 6cp

Spring Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject will explore the elements of mental health and their relationship to stress. The concept of stress will be examined as well as the theory of stress management. On successful completion of this subject, students will have conducted a stress management workshop. As well students will have identified and evaluated various stress management techniques and explained reasons why individuals may deviate from good health practices.

EDUP366 Independent Project in Physical and Health Education 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Pre-requisites: EDUP391 or EDUP 332

Subject Description: This subject will provide students with the opportunity to engage in an individual project with close guidance through the stages of the project.

The project may take a variety of forms including: working with health or sport groups or organisations; an action research project in a school or community setting; investigating a particular social phenomenon; developing a product using hypermedia or video and developing an piloting an honours proposal.

EDUP367 Sports Studies II 6cp

Spring Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject provides the opportunity to select 2 of 4 sport areas:- Games for understanding; Water Polo (team); Nordic/Alpine skiing (recreational); Accreditation/Certificate NCAS level I , II or III or Instructor/Examiner by contract with a supervisor. The opportunity to perform and teach basic skills, develop leadership, social skills and an understanding and appreciation of recreational and survival strategies of our wilderness arising from Nordic/Alpine skiing will be provided.

EDUP368 Fitness Assessment and Exercise Prescription 6cp

Spring Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject is designed to integrate theoretical concepts with practical experiences to reinforce an understanding of the components of fitness and health. This will result in autonomous decision making to enhance a healthy lifestyle.

The ability to plan, implement and evaluate exercise programs through understanding the role of nutrition and exercise in stress management and alleviating the degenerative effects of hypokinesia will be developed.

EDUP381 Outdoor Education 6cp

Autumn Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject is designed to introduce students to the pedagogical concepts of outdoor education and recreation. Specific content will examine aims, objectives and examples of outdoor education programs with an emphasis on school based programs. By the conclusion of the subject students will exhibit practical skills such as route planning, navigation, campsite and equipment selection.

EDUP382 Leadership and Management Skills in Outdoor Education 6cp

Spring Wollongong On Campus

Pre-requisites: EDUP381

Subject Description: This subject is designed to introduce students to leadership, administration and managerial aspects involved in outdoor education and recreation. Specific content will examine various styles of leadership in outdoor education programs in a variety of educational contexts. Practical skills such as setting up abseiling and rock climbing systems and preparing for, and conducting, major expeditions are used as a vehicle to integrate theory and practice.

EDUP391 Research and Evaluation in Physical and Health Education 6cp

Autumn Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject will provide students with an introduction to the different approaches used in research and evaluation in physical education and related fields. For each of these approaches the following aspects will be examined: underlying assumptions; planning the research or evaluation; collecting, analysing, interpreting data and reporting findings; ethical issues involved in the research or evaluation process. Students will also be introduced to the use of statistics in research and evaluation.

EDUP392 Social and Cultural Perspectives in Physical Activity and Phys Ed 6cp

Spring Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject examines physical education as a curriculum area which has changed over time in relation to different political and social circumstances. It provides students with the opportunity to investigate how physical education is influenced by and influences Australian culture. Specific topics to be investigated in the context of sport and the teaching of physical education include: ethnicity, youth culture, gender, the body and the commodification of physical activity.

EDUP430 Project in Physical and Health Education 12cp

Annual Wollongong On Campus

Subject Description: A report or major essay is required to satisfy the requirements for this subject. The topic is to be approved by the subject coordinator. The final project may take the form of: (a) a report of original work performed by the student; (b) a theoretical investigation of a research related problem; (c) a multimedia presentation of a physical or health education topic.

EDUP435 First Aid and Sports Medicine 6cp

Autumn Wollongong On Campus

Subject Description: The health and physical education teacher has a diversity of roles and responsibilities within the school environment. They not only have the responsibility to deliver safe and effective physical education and sport programmes, but must also educate students in injury prevention and first aid.

Consequently, it is essential that they have a sound knowledge in both the theoretical and practical aspects of first aid and sports medicine. This course is designed to give students the knowledge and skills to prevent, assess, and treat injuries; and prepare them to teach first aid in the 2 Unit PDHPE Preliminary Core, sports medicine in the 2 Unit PDHPE HSC Course, and first aid/injury prevention components in the K-6 and 7-10 PDHPE syllabi. Students have the option in this course to pay an additional cost and complete a combined Level 1 Sports First Aid and Level 1 Sports Trainer accreditation from Sports Medicine Australia.

Subject Descriptions

EDUP441 PDH&PE Key Learning Area Elective III 6cp

Spring Wollongong On Campus

Subject Description: This subject looks at advanced programming and planning in Physical Education and the contribution of PE to the overall development of children. Issues such as legal aspects and administrative procedures related to primary school physical events such as carnival organisation will be covered. The game centered approach is analysed in great depth from both a theoretical and practical perspective. Students will also participate in practical in school sessions.

EDUP444 PDH&PE Key Learning Area Elective IV 6cp

Autumn Wollongong On Campus

Subject Description: The basis of this subject is an investigation of the health promoting schools concept. Specific content will vary according to the needs/interests of the group, but will include some of the following: programming for PD/Health; "healthy school" projects; children with special health needs - asthma, diabetes, epilepsy, cancer; dealing with crises in classrooms e.g. protective behaviours, conflict resolution, assertiveness, bullying, violence; issues in sexuality; grief and loss; death education.

EDUP446 Contemporary Health Issues 6cp

Spring Wollongong On Campus

Subject Description: In recent years it has become increasingly difficult to deal with health problems inherent in the community, many of which are the result of the complex interaction between psychosocial, sociological, political and environmental factors. This subject will examine important community health issues, including consumer and environmental health and identify specific agencies (including the health promoting school), which assist the community to achieve and sustain a supportive environment for health.

EDUP447 Sports Studies I 6cp

Autumn Wollongong On Campus

Subject Description: This subject provides the opportunity for students to select 2 of 4 sports areas:- Skin and Scuba Diving (recreational): Advanced composition, choreography and performance in dance, gym: aerobics: aquarobics: Accreditation or Certification e.g. NCAS I, II or III or an Instructors or Examiners e.g. fitness Outdoor Education by contract with a supervisor. On successful completion of the subject students will be able to demonstrate a variety of skills in selected sports areas, apply appropriate teaching techniques, provide leadership and develop an understanding of the physical and recreational benefits and safety precautions of the fragile underwater environment.

EDUP453 Professional Studies in PDH&PE 6cp

Autumn Wollongong On Campus

Subject Description: This subject will conclude studies in the curriculum and pedagogy strand by focusing on the professional preparation of final year student teachers in PDHPE.

Students will engage in critically analysing, investigating and reflecting as a means of: developing an understanding of the policies and structures for PDHPE in Post Compulsory Education, with a focus on programming and assessment; investigating and experimenting with advanced and innovative teaching strategies in PDHPE, including design of WEB based material: and critiquing selected philosophies in education and Physical and Health Education with a view toward formulating a personal teaching philosophy.

EDUP454 Physical and Health Education Extended Practicum 6cp

Spring Wollongong On Campus

Subject Description: This final teaching practice is designed to provide an extended teaching experience which approximates the work of a full time secondary Health and Physical Education teacher. The extended period of practice enables the student to bring together teaching and curriculum development skills, with students taking responsibility for programming, implementing and evaluating appropriate sequences of learning experiences for children based on their developmental needs and learning styles.

EDUP491 Theory and Application of Special Ed in P&HE 6cp

Autumn Wollongong On Campus

Subject Description: This subject will analyse the contribution that Physical and Health Education can make to responding to students with a wide range of learning needs. On completion of the subject students will have developed basic skills in the individualisation of instruction, analysed and evaluated theoretical issues underpinning the education of learners with exceptional needs and critically evaluated current trends in relation to the policies of integration in schools and the community.

EDUP492 Leadership and Management in Physical and Health Education 6cp

Spring Wollongong On Campus

Subject Description: Students will be introduced to the nature and scope of leadership and management in physical and health education and sport. The subject will focus on current and future issues of leadership and management of staff and event management with other significant responsibilities related to both education departments and community sporting organisations also discussed.

EDUS102 Science and Technology Education 6cp

Spring Wollongong On Campus

Subject Description: This subject develops teaching skills that support constructivist based learning in science. It examines some of the ideas children have about energy, motion, electricity, time and space, and the environment so that pre-service teachers can appreciate some of the prior conceptions children bring to their own learning situations in science.

EDUS104 Human Society and It's Environment 6cp

Spring Wollongong On Campus

Exclusions: Not to count with EDUS203

Subject Description: This subject is concerned with developing an understanding of the nature and importance of an integrated humanities course within the primary school curriculum. It focuses on the Australian content for this KLA and on raising awareness of appropriate methodologies and choices of content for each year level. HSIE is a key KLA for the examination of attitudes and values and this informs the work undertaken in this subject.

EDUS122 Science and Mathematics in Early Childhood I 6cp

Spring Wollongong On Campus

Subject Description: This subject examines some of the basic concepts associated with science topics associated with energy, electricity, and environmental education. They will also examine relevant aspects of the current Mathematics K-6 syllabus that apply to children under 8 years of age. Students then critically evaluate a range of approaches to the instruction of young children in science and mathematics.

EDUS203 Human Society and Its Environment 6cp

Autumn Wollongong On Campus

Exclusions: Not to count with EDUS104

Subject Description: This subject is concerned with developing an understanding of the nature and importance of an integrated humanities course within the primary school curriculum. It focuses on the Australian content for this KLA and on raising awareness of appropriate methodologies and choices of content for each year level. HSIE is a key KLA for the examination of attitudes and values and this informs the work undertaken in this subject.

EDUS213 Science and Maths in Early Childhood II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUS122

Subject Description: This subject is designed to provide preservice teachers in the field of early childhood with practical experience in planning, implementing and evaluating learning experiences in mathematics and science that will contribute to the development of skills, concepts and values in young children. Emphasis is placed on providing developmentally appropriate experiences for young children, including child-centred learning that directly links to hands-on experiences related to events and materials in the immediate environment.

EDUS224 Science and Technology Education KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUS102

Subject Description: This subject focuses on the discipline areas of education with emphasis on the content of the Science and Technology K - 6 syllabus. At all times the link between science and technology will be stressed.

Students will study the implications of recent research into children's understanding of scientific concepts to the teaching of science. Topics include: living things; natural phenomena; the earth and its surroundings; built environments; information and communication; products and services.

EDUS226 Human Society and its Environment KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUS203

Subject Description: This subject is concerned with the development of a 'global quilt' of knowledge and understandings relevant to the teaching of HSIE in primary schools. Approaches will be both thematic and by continent. A range of teaching strategies for effective classroom implementation will be studied. Further work on developing lessons and units of work in HSIE will build on the basis established in EDUS203.

EDUS333 Science and Technology Education (K-6) Elective II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUS102

Subject Description: During this subject students will plan a five week sequence of science education lessons that relate to one of the content topics listed below. They will teach 5 lessons from the unit they developed at a local primary school. Topics to be studied include: working scientifically, energy, investigating small animals, chemistry in primary schools, the changing earth, weather, motion, astronomy, applications of technology in our lives.

EDUS335 HSIE KLA Elective II 6cp

Autumn Wollongong On Campus

Subject Description: This subject covers knowledge and understanding of each of the continents and includes a major study on a continent of the students choice. Close attention is paid to linking all work covered to the current syllabus. Successful completion of this subject will mean that the student has developed a range of teaching materials and teaching and learning strategies of immediate use and practicality. Interaction and interdependence of all systems within our world is the unifying concept.

EDUS411 Science and Technology Education KLA Elective III 6cp

Autumn Wollongong On Campus

Subject Description: This subject examines in detail the investigating processes emphasised in recent primary school science and technology syllabuses. It promotes changes in teacher behaviour required to effectively develop, implement and evaluate instructional programs that employ the processes of investigation .

**EDUS414 Science and Technology
Education Key Learning Area
Elective IV** **6cp****Spring** Wollongong On Campus

Subject Description: A study of educational theory supporting teaching strategies currently employed in technology and design education. This subject critically examines approaches that have been taken to design and technology in the United Kingdom. These approaches will be compared with the recommendations in the Technology - a curriculum profile for Australian Schools (1994). The proposed recommendations for levels 1 to 4 will be critiqued and implications for primary schools discussed.

**EDUS441 Human Society and It's
Environment KLA Elective III** **6cp****Autumn** Wollongong On Campus

Subject Description: This subject will select themes from the syllabus document HSIE K-6 and develop alternative approaches towards scope and sequence development. Innovative and creative methods of presentation of themes for the primary classroom will be stressed. Lesson and unit development will be a part of this. In addition a theoretical base for curriculum planning in the social sciences will be studied. Above all, this is a practical subject with immediate applicability to the classroom.

**EDUS444 Human Society and It's
Environment Key Learning
Area Elective IV** **6cp****Spring** Wollongong On Campus

Subject Description: In the course of this subject students will use a problem solving approach to examine critically and develop possible, probable and preferred scenarios on a range of global issues. Topics may include: goals for a better world: alternative futures: ecological analysis of consumerism: population and food supply: women's issues: urbanization: informed citizenship.

**EDUT104 Introduction To Teaching /
Learning** **6cp****Spring** Loftus On Campus

Subject Description: In this subject, students will develop understandings about general principles that underpin learning and teaching as a dynamic relationship in the classroom. They will be introduced to the fundamental concepts of pedagogy (the art of teaching), and will focus on various approaches to the areas of lesson planning and classroom management that are two of the most important issues facing beginning teachers.

In addition, an understanding of the issues related to the transition of children from primary to secondary school will be covered as well as issues about child protection and student welfare. The subject will include a practicum with 5 separate days plus a one-week block.

EDUT111 Curriculum and Pedagogy I **6cp****Autumn** Wollongong On Campus

Subject Description: This subject will assist students to develop an understanding of learning and teaching as an interactive process. Students will be introduced to essential curriculum concepts, classroom management strategies and pupil welfare issues. The subject will guide students in lesson planning and encourage reflective practice. Students will observe a range of demonstration lessons and apply their knowledge and skills in micro teaching. They will also complete ten days of practice teaching.

**EDUT121 Curriculum and Pedagogy I
Early Childhood** **6cp****Autumn** Wollongong On Campus

Subject Description: This subject will assist students to develop an understanding of learning and teaching as an interactive process. Students will be introduced to essential curriculum concepts, classroom management strategies and pupil welfare issues. The subject will guide students in lesson planning and encourage reflective practice. Students will observe a range of demonstration lessons and apply their knowledge and skills in micro teaching. They will also complete fifteen days of practice teaching.

**EDUT204 Professional Mathematics
Community I** **6cp****Spring** Loftus On Campus

Subject Description: This subject is designed to develop competencies needed for planning and teaching the NSW Mathematics syllabus (Stages 4/5). Students will appreciate of the nature of mathematics and how this impacts on pupils thinking and classroom learning of mathematical concepts and conventions. It will provide students with ideas and opportunities to apply practise and develop basic teaching competencies that are appropriate for year s 7-10 mathematics. These competencies reflect an understanding of the school culture, classroom environment and would involve the design and evaluation of a series of lessons. Suggestions for classroom management strategies for effective teaching will be presented. The subject will include a practicum with 5 separate days plus a two-week block.

**EDUT206 Professional Science
Community I** **6cp****Spring** Loftus On Campus

Subject Description: This subject covers teaching and assessment strategies applicable to the NSW Science syllabus (Stages 4/5). It involves a critical examination of mandatory policies that affect teachers & students across the prescribed focus areas in order to develop pedagogy that models best practice. Ideas for classroom management strategies for effective teaching will be presented. Students will encounter a range of hands-on experiences with a variety of stimulus material to enhance their learning opportunities and assist in developing strategies for teaching science in ways that contribute to scientific literacy. The subject will include a practicum with 5 separate days plus a two week block.

EDUT211 Curriculum and Pedagogy II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUT111

Subject Description: This subject builds on the skills and knowledge of EDUT111. Topics include: the theory and application of the role of the teacher; principles of curriculum planning; interactive learning and teaching strategies; principles of student assessment; classroom organisation and management. Students will apply these areas of understanding to planning sequences of lessons, to teaching practice, and to communicating effectively in the classroom.

EDUT301 Research Methods 6cp

Autumn Wollongong On Campus

Autumn Loftus On Campus

Pre-requisites: EDUT211

Subject Description: This subject is designed to introduce students to a range of inquiry and evaluation strategies relevant to the development of a reflective teacher. Topics will include: an overview of inquiry paradigms; assumptions underpinning different paradigms; critically reviewing research literature; developing skills in data gathering, representation, analysis and interpretation; ethical issues associated with educational inquiry; and the design, implementation and reporting of an educational inquiry.

EDUT302 Curriculum and Pedagogy III 12cp

Spring Wollongong On Campus

Pre-requisites: EDUT211

Subject Description: Approaches to curriculum design and change and an appreciation of the complexity of the teacher's role in the classroom, school and the community will be developed. A school level inquiry will evaluate an aspect of school curriculum or policy related to across-curricula equity perspectives. For the extended practicum a five week program in all KLS's will be required. As part of this experience students will be expected to display confidence and competence in interpersonal relations and complete and evaluate an effective teaching position for six weeks.

EDUT304 Professional Mathematics Community II 6cp

Spring Loftus On Campus

Subject Description: Students will develop understanding of teaching and assessment strategies applicable to the NSW Mathematics syllabus Stages 6, including requirements for the three HSC mathematics subjects.

Students will encounter a range of experiences that are aimed at identifying and investigating the deep structure of mathematical understanding and problem solving. The theme learning mathematics within a classroom community will be investigated via a series of episode-based seminars. Discussion will also examine the role of teachers in establishing communities of mathematical inquiry in the classroom.

It will build on the understandings and skills developed in EDUT204, further preparing students for the Professional Practice component of the course. The subject will include a practicum with 5 separate days plus a two-week block.

EDUT306 Professional Science Community II 6cp

Spring Loftus On Campus

Subject Description: This subject covers teaching & assessment strategies applicable to the NSW Science syllabus for Stage 6. It involves a critical examination of mandatory policies that affect teachers & students across the Preliminary & HSC courses. This course assists pre-service teachers in planning & conducting investigations, communicating information & understanding, & developing scientific thinking & problem-solving techniques. It will focus on the current scope of contemporary education, curriculum development and research in the areas of Earth & Environmental Science, Physics & Senior Science. The subject will include a practicum with 5 separate days plus a two-week block.

EDUT312 Early Childhood Extended Practicum 12cp

Spring Wollongong On Campus

Pre-requisites: EDUF303

Subject Description: Students will teach in early childhood centres supervised by teacher trained early childhood educators and monitored by visiting academics. Students will be expected to take responsibility for programming, implementing and evaluating coherent sequences of learning experiences based on the children's developmental learning needs and interests.

EDUT403 Research Methods in Education 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF303

Subject Description: This subjects extends students' understandings of qualitative and quantitative inquiry paradigms in educational research. This subject is designed, particularly, to support honours students as they conduct their honours thesis. As such, topics covered will extend students' understandings of ethics, and in identifying a research question, writing a literature review, choosing an effective research method, gathering, representing, analysing and interpreting data, and report writing.

EDUT404 Professional Mathematics Community III 12cp

Spring Loftus On Campus

Subject Description: In this subject students will review a number of theoretical frameworks and evaluate their impact on 7-12 mathematics learning and teaching. It is intended that students will reflect on the influence of cognitivist and constructivist perspectives on classroom practices and design of productive learning environments. Seminars will also focus on cultural, social and organisational constraints that have traditionally impeded access to mathematics. The use of Information Technology in the examination of growth of deeper understanding of selected mathematics concepts will be explored further.

It will build on the understandings and skills developed in EDUT204 and EDUT304, preparing students for Professional Practice and leading to the development of confidence and competence in applying class management skills, and facilitating the use of post-lesson reflection and evaluation.

EDUT405 Critical Approaches To Curriculum 6cp

Autumn Loftus On Campus

Subject Description: This subject covers fundamental principles of curriculum design, implementation and evaluation, and critiques them from a variety of perspectives, within NSW, Australian and international contexts. This subject addresses issues such as the competing interests of different curriculum stakeholders, questions of rigour and the determination of subject content, unequal learning outcomes, critiques of the curriculum within academic, media and political domains and the contribution of research in learning and teaching. Part of the subject will require students to apply these critiques to their own teaching subject(s).

EDUT406 Professional Mathematics Community III 12cp

Spring Loftus On Campus

Subject Description: This subject will focus on how to become an effective member of a secondary science staff. This includes understanding the stage 4-6 syllabus documents, related school documents, how to plan a teaching program, how to devise assessment and reporting schemes, devise and organise resources as well as how to work in a team. Seminars will also focus on cultural, social and organisational constraints that have traditionally impeded access to science. The use of IT in the examination of growth of deeper understanding of selected science concepts will be explored further. It will build on the understandings and skills developed in EDUT306 and, preparing students for Professional Practice and leading to the development of confidence and competence in applying class management skills, and facilitating the use of post-lesson reflection and evaluation. The subject will include an internship consisting of a five-week block.

EDUT422 Reflective Practice 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Subject Description: In this subject students will study the application of action research as it relates to inquiry in professional settings. This subject develops the knowledge and skills needed to develop and implement an inquiry project in an educational setting.

Faculty of Engineering

Member Units

Civil Engineering

Engineering Physics

Environmental Engineering

Materials Engineering

Mechanical Engineering

Mining Engineering

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Refer to the Faculty of Science for the following double degrees:

Bachelor of Arts- Bachelor of Science (Physics)

Bachelor of Commerce - Bachelor of Science (Physics)

Refer to the Faculty of Creative Arts for the following double degree:

Bachelor of Creative Arts - Bachelor of Science (Physics)

Refer to the Faculty of Law for the following double degree:

Bachelor of Law - Bachelor of Science (Physics)

Refer to the Faculty of Informatics for the following double degree:

Bachelor of Engineering (Computer, Electrical or Telecommunications)-Bachelor of Science (Physics)

Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Engineering

The normal full time load is 48 credit points per year and, apart from thesis subjects, all subjects have a credit point value of 6. The Bachelor of Engineering normally takes four years to complete, with double majors and double degrees normally taking five years to complete.

The formal contact hours, methods of teaching and learning and forms of assessment vary from subject to subject. Explicit details will be provided to students at the commencement of each subject by the subject coordinator. Laboratory experience and workshop training are an essential part of the degree.

Each course consists of a common core of fundamentals and engineering practice subjects, with discipline specific examples incorporated into some tutorials. The discipline specific parts of each course consist of compulsory and elective subjects.

Scholars Research Options:

Engineering Scholars Program students have the option of undertaking research projects with the various Faculty Research Units. Students should discuss proposals with the Discipline Director of Studies or the Sub Dean before enrolling in the following elective subjects:

ENGG171	Scholars Research Project 1	6
ENGG271	Scholars Research Project 2	6
ENGG371	Scholars Research Project 3	6

Professional Options:

The Faculty encourages the development of engineering skills and knowledge gained in the workplace through Professional Options. Students who work in appropriate industries can enrol in Professional Option subjects and count their industry skills and knowledge toward their degree. Depending on the degree, students will be able to take two or three of the following 6 credit point Professional Option subjects during their course.

ENGG255	Professional Option 2	6
ENGG355	Professional Option 3	6
ENGG455	Professional Option 4	6

Approval should be sought from the Discipline Director of Studies before enrolling in these subjects.

Professional Experience:

As a requirement for the award of the degree of the Bachelor of Engineering, students are required to obtain at least 12 weeks approved professional experience in a relevant industry during the course and submit a report to the satisfaction of the Director of Studies. Subject ENGG454 outlines the requirements for professional experience.

Honours are awarded at the end of the course on the basis of overall performance throughout the course. All students must take particular notice of the Course Rules regarding minimum rate of progress.

The Engineering degrees have been fully recognised by The Institution of Engineers, Australia. This recognition ensures that graduates from these courses are admitted, on application, to the grade of Graduate Membership of the Institution of Engineers, Australia.

The Faculty of Engineering offers courses leading to the degree of Bachelor of Engineering in the six major engineering disciplines listed below:

Civil
Environmental
Materials
Mechanical
Mechatronics
Mining

The following double majors are also available:

Bachelor of Engineering - Civil/Mining
Bachelor of Engineering - Civil/Environmental
Bachelor of Engineering - Mining/Environmental

Bachelor of Engineering (Civil Engineering)

The course in Civil Engineering is aimed at providing broad based knowledge, training, skills and experience in the areas required for practice in civil engineering. The normal period of full time study is four years. However, the course can be taken on a part-time basis over a longer period of time, normally six years.

Upon satisfactory completion of the course students should be able to practise in areas requiring skills for planning, design and construction of buildings and bridges, dams, harbours, water supply systems, waste management systems, airports, roads, tunnels and railways. Graduates, therefore, will be able to integrate technical, planning, organisational, management, and financial skills, with an emphasis on those areas as their talents allow.

The structure of the course is such that the first year largely concerns basic subjects, such as mathematics, physics, chemistry, computing, and introductory engineering subjects. The second year is primarily devoted to engineering science subjects, but areas such as surveying, construction and design are introduced. The latter subjects are developed further in third year, where more time is devoted to engineering subjects, such as structures, hydraulics and hydrology, geomechanics, and more design work.

At the end of the third year, students are required, as a condition for graduation, to undertake at least twelve weeks of approved work in industry, whether for construction companies, consulting offices, or federal, state or local government agencies. For part-time students, each year of appropriate full time employment may be credited as one professional option elective, up to a maximum of three electives.

In the final year, emphasis is given to professional orientation, with subjects covering project management, structures, geomechanics design and water engineering. Roads engineering is also included, and some elective subjects are available for those students wishing to specialise further. Attention is given to a teamwork approach in a design that requires integration of all aspects of the course. Each student must prepare a substantial project thesis on a research or design topic under the supervision of a staff member.

The course has been fully recognised by the Institution of Engineers, Australia, which is the professional accrediting body. This recognition ensures that graduates from this course are admitted, on application, to the grade of Graduate Membership of the Institution of Engineers, Australia.

Honours are awarded at the end of the course on the basis of overall performance throughout the course.

All students must take particular notice of the Course Rules regarding minimum rate of progress. Students should attend all classes including lectures, tutorials and laboratory classes. The Director of Studies of Civil Engineering may refuse to certify that students have satisfactorily completed a subject unless they have attended at least 80 percent of the classes scheduled.

The following subjects must be completed in order to qualify for the Civil Engineering degree.

Year 1 - Autumn

CHEM103	Chemistry for Engineers	6
CIVL196	Engineering Computing 1	6
ENGG154	Engineering Design and Innovation	6
MATH141	Mathematics 1C Part 1	6

or

MATH187	Mathematics 1A Part 1	6
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Year 1 - Spring

ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
PHYS143	Physics for Engineers	6
MATH142	Mathematics 1C Part 2	6

or

MATH188	Mathematics 1A Part 2	6
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Year 2 - Autumn

ENGG251	Mechanics of Solids	6
ENGG252	Engineering Fluid Mechanics	6
ENGG261	Professional Engineers and the Management of Technology	6

MATH283	Mathematics 2E for Engineers Part 1	6
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Year 2 - Spring

CIVL245	Construction Materials	6
CIVL272	Surveying	6
ECTE290	Fundamentals of Electrical Engineering	6
GEOS251	Geology for Engineers 1	6

Year 3 - Autumn

CIVL311	Structural Design 1	6
CIVL352	Structures 1	6
CIVL361	Geomechanics 1	6
CIVL392	Engineering Computing 2	6

Year 3 - Spring

CIVL314	Structural Design 2	6
CIVL322	Hydraulics and Hydrology	6
CIVL394	Construction	6
ENGG361	Engineering Management	6

Year 4 - Autumn

CIVL454	Structures 2	6
CIVL489	Roads Engineering	6
ENGG461	Project Management and Human Factors in Engineering	6

Year 4 - Spring

CIVL444	Civil Engineering Design	6
CIVL462	Geomechanics 2	6

Electives: one elective

Plus (either Autumn or Spring)

ENGG454	Professional Experience	0
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Plus (Annual)

ENGG452	Thesis A	12
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or

ENGG453	Thesis B	18
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Electives: one elective from the following list

CIVL415	Structural Design 3	6
CIVL457	Structures 3	6
CIVL463	Geomechanics 3	6
CIVL487	Traffic Engineering	6
CIVL491	Engineering Computing 3	6
CIVL495	Public Health Engineering	6
ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON215	Microeconomic Theory and Policy	6
GEOS231	Environmental Input of Societies	6
GEOS239	Remote Sensing of the Environment	6
GEOS242	Living in Cities	6
GEOS252	Geology for Engineers II	6
MINE311	Surface Mining and Blasting	6

Bachelor of Engineering (Environmental Engineering)

The course in Environmental Engineering is aimed at providing broad based knowledge, training, skills and experience in the areas required to practise environmental engineering. The normal period of full time study is four years. However, the course can be taken on a part-time basis over a longer period of time, normally six years.

Graduates of this course will be able to work for industry, for government agencies and for engineering consultancies. The range of work that will lead to Ecologically Sustainable Development include: monitoring, analysis and design to control water, air and noise pollution; ecologically sustainable development; renewable energy technology; treatment and disposal of solid and hazardous waste; site remediation; and cleaner production and industrial waste management.

The first year of the course introduces mathematics, physics, chemistry, computing and general engineering subjects including engineering design.

The second year introduces fluid mechanics, water quality engineering, and air and noise pollution, plus advanced environmental chemistry and management skills. The emphasis in third year is on developing knowledge and skills across the range of environmental engineering topic areas.

At the end of third year students are required to undertake twelve weeks of approved work in industry, consulting engineering, commonwealth, state or local government agencies. For part-time students, each year of appropriate full time employment may be credited as one professional option elective, up to a maximum of three electives.

In the final year, emphasis is on environmental engineering practice, with subjects covering environmental engineering design, project management, site remediation and environmental impacts. Elective subjects may be taken from courses within and outside the Engineering Faculty. Each student prepares a substantial thesis on a research or design topic under the supervision of a staff member.

The course has been recognised by the Institution of Engineers, Australia, which is the professional accrediting body. This recognition ensures that graduates from this course are admitted, on application, to the grade of Graduate Membership of the Institution of Engineers, Australia.

Honours are awarded at the end of the course on the basis of overall performance throughout the course.

All students must take particular notice of the Course Rules regarding minimum rate of progress. Students should attend all classes including lectures, tutorials and laboratory classes. The Director of Studies of Environmental Engineering, may refuse to certify that students have satisfactorily completed a subject unless they have attended at least 80 percent of the classes scheduled.

The following subjects must be completed in order to qualify for the Environmental Engineering degree.

Year 1 - Autumn

CHEM103	Chemistry for Engineers	6
CIVL196	Engineering Computing 1	6
ENGG154	Engineering Design and Innovation	6
MATH141	Mathematics 1C Part 1	6

or

MATH187	Mathematics 1A Part 1	6
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Year 1 - Spring

ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
PHYS143	Principles of Physics for Engineers	6
MATH142	Mathematics 1C Part 2	6

or

MATH188	Mathematics 1A Part 2	6
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Year 2 - Autumn

ENGG261	Professional Engineers and the Management of Technology	6
ENGG251	Mechanics of Solids	6
ENGG252	Engineering Fluid Mechanics	6

MATH283	Mathematics 2E for Engineers Part 1	6
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Year 2 - Spring

CHEM214	Analytical and Environmental Chemistry	6
CIVL272	Surveying	6
ENVE220	Water Quality Engineering	6
ENVE221	Air and Noise Pollution	6

Year 3 - Autumn

BIOL352	Biology for Environmental Engineers	6
CIVL361	Geomechanics 1	6
ENVE311	Pollution Control and Cleaner Production	6
ENVE320	Environmental Engineering Design 1	6

Year 3 - Spring

CIVL322	Hydraulics and Hydrology	6
ENGG361	Engineering Management	6
ENVE321	Solid and Hazardous Waste Management	6

Electives: one elective

Year 4 - Autumn

CIVL462	Geomechanics 2	6
ENGG461	Project Management and Human Factors in Engineering	6

Electives: one elective

Year 4 - Spring

ENVE410	Site Remediation	6
ENVE421	Environmental Design 2	6

Electives: one elective

Plus (either Autumn or Spring)

ENGG454	Professional Experience	0
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Plus (Annual)

ENGG452	Thesis A	12
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or

ENGG453	Thesis B	18
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Electives: 3 electives from the following list:

One elective to be taken in Year 3 (students are encouraged to take MECH378 as the recommended third year elective) two electives to be taken in Year 4.

ACCY100	Accounting 1A	6
CIVL392	Engineering Computing 2	6
CIVL394	Construction	6
CIVL463	Geomechanics 3	6
CIVL487	Traffic Engineering	6
CIVL489	Roads Engineering	6
ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ENVE411	Aqueous and Atmospheric Chemistry	6
ENVE420	Water Engineering	6
GEOS231	Environmental Impact of Societies	6
GEOS239	Remote Sensing of the Environment	6
GEOS251	Geology for Engineers 1	6
LAW100	Law in Society	6
LAW210	Contract Law	6
LAW334	Environmental Law	6
MECH341	Thermodynamics	6
MECH343	Heat Transfer and Gas Dynamics	6
MECH378	Sustainable Energy Technologies	6
MECH417	Biomedical Engineering	6
MECH438	Sustainable Transport and Engine Technologies	6
MECH474	Systems Engineering and Life Cycle Management	6
STS216	Environment and Technology	6

STS306	Special Topics on the Social and Policy Aspects of Engineering	6
STS376	The Politics of Risk	6

Note: Other electives may be taken subject to approval by the Director of Studies of Environmental Engineering. Not all electives will be offered in any one year.

Bachelor of Engineering (Materials Engineering)

The objective of the Materials Engineering course is to provide students with the knowledge and skills necessary for the design, development, production and application of engineering materials for gainful use by society. This objective is achieved through detailed study of the relationships between the structure, processing and properties of materials. The course is also designed to provide training in effective communication, management and teamwork skills, and the environmental sensitivity required of modern engineers.

The course is structured so that the early years provide training in sciences, mathematics, computing and design. This establishes the basis for the study of structures and properties of metallic, ceramic, polymeric and composite materials, the ways they are produced and processed, and how they are used in the manufacture of goods and engineering components. The emphasis of the later years of the course is on processing, and design and application of engineering materials.

In their final year, students can choose a series of elective subjects from a number of specialist areas: Materials Science and Technology, Metallurgical Processing or Materials Manufacturing.

The course may be taken as a four year full-time program or a five year combined part-time/full-time program. A seven year part-time program is possible.

As a requirement for graduation, full-time students must gain at least twelve weeks approved experience in a relevant industry during the course. Part-time students in approved full-time employment may be exempted from up to three prescribed subjects by completion of Professional Option subjects.

Normally, a student may not proceed to subjects in the fourth year of the full-time course until subjects in the first and second year have been completed satisfactorily. In addition, students must satisfactorily complete a sufficient number of subjects each year to meet the minimum rate of progress requirement as set out in the Course Rules. Failure to do so may result in exclusion from the course.

Honours are awarded at the end of the course on the basis of overall performance throughout the course.

The course has been fully recognised by The Institution of Engineers, Australia, which is the professional accrediting body.

This recognition ensures that graduates from this course are admitted, on application, to the grade of Graduate Membership of the Institution of Engineers, Australia.

Students entering the University who have attained an Associate Diploma in a relevant field from the New South Wales Department of Technical and Further Education or an approved equivalent qualification are entitled to limited exemptions as approved by the Director of Studies of Materials Engineering.

All students must take particular notice of the Course Rules regarding minimum rate of progress. Students should attend all classes including lectures, tutorials and laboratory classes. The Director of Studies of Materials Engineering may refuse to certify that students have satisfactorily completed a subject unless they have attended at least 80 percent of the classes scheduled.

The following subjects must be completed to qualify for the Materials Engineering degree.

Year 1 - Autumn

CHEM103	Chemistry for Engineers	6
ENGG261	Professional Engineers and the Management of Technology	6
ENGG154	Engineering Design and Innovation	6
MATH141	Mathematics 1C Part 1	6

or

MATH187	Mathematics 1A Part 1	6
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Year 1 - Spring

ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
PHYS143	Principles of Physics for Engineers	6
MATH142	Mathematics 1C Part 2	6

or

MATH188	Mathematics 1A Part 2	6
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Year 2 - Autumn

MATE201	Structure and Properties of Materials	6
MATE202	Thermodynamics and Phase Equilibria	6
MATE291	Engineering Computing and Laboratory Skills	6
MATH283	Mathematics 2E for Engineers Part 1	6

Year 2 - Spring

ECTE290	Fundamentals of Electrical Engineering	6
MATE203	Phase Transformations	6
MATE204	Mechanical Behaviour and Fracture	6
MATE304	Transport Phenomena in Materials Processing	6

Year 3 - Autumn

ENGG251	Mechanics of Solids	6
MATE301	Engineering Alloys	6
MATE302	Polymeric Materials	6
MATE391	Materials Testing Techniques	6

Year 3 - Spring

ENGG361	Engineering Management	6
MATE303	Ceramics, Glass and Refractories	6
MATE305	Primary Materials Processing	6
MATE306	Degradation of Engineering Materials	6

Year 4 - Autumn

ENGG461	Project Management and Human Factors in Engineering	6
MATE401	Selection of Materials in Engineering Design	6

Electives: one elective

Year 4 - Spring

MATE402 Secondary Materials Processing 6

Electives: two Electives

Plus (either Autumn or Spring)

ENGG454 Professional Experience 0

Plus (Annual)

ENGG452 Thesis A 12

or

ENGG453 Thesis B 18

Electives: Any three electives from the following groups:

Materials Science and Technology

MATE411 Advanced Materials and Processing 6

MATE412 Electronic Materials 6

MATE413 Structural Characterisation Techniques 6

MATE433 Surface Engineering 6

Metallurgical Processing

MINE421 Minerals Beneficiation 6

MATE421 Metallurgical Process Engineering 6

MATE422 Iron and Steelmaking 6

MATE432 Mechanical and Thermal Processing 6

Materials Manufacturing

ENGG434 Introduction to Materials Welding and Joining 6

MATE431 Sheet Metal Processing 6

MATE432 Mechanical and Thermal Processing 6

MATE433 Surface Engineering 6

Bachelor of Engineering (Mechanical Engineering)

The aim of this course is to give high quality academic training in mechanical engineering and to produce graduates with the core skills, knowledge and attributes required to practise as professional engineers. These required graduate skills/attributes are transferable to a wide range of careers and include:

- ability to formulate and solve problems
- a creative approach to design and synthesis
- excellent oral and written communication skills
- ability to work effectively in teams
- appreciation of the environmental, social and business contexts of Mechanical Engineering
- independent and self motivated approach
- understanding and commitment to lifelong learning
- in-depth technical competence in the Mechanical Engineering discipline.

The normal period of study for the BE degree is 4 years (8 semesters) full-time. The course also can be taken on a part-time basis subject to timetabling restrictions over a period of six or more years. Students are trained through a range of learning experiences that include laboratory experiments, problem-based learning, computer simulations, teamwork assignments, project work, industrial case studies and site visits to industry.

Mechanical Engineering has the broadest scope of all the branches of engineering and graduates in this field have the core skills to adapt to other fields of engineering. It includes many exciting fields such as advanced manufacturing, metal forming technology, robotics, control of systems, computer aided design and manufacturing, air conditioning, bio-mechanics, powder technology and bearing dynamics. The degree covers a wide range of technical subjects including engineering computing and instrumentation and workshop practice, mechanical engineering design, control of machines and processes, process design and analysis, manufacturing process analysis, manufacturing systems, sustainable energy, transport and engine technologies, dynamics of engineering systems, bulk solids handling technology, fluid power, heat transfer and gas dynamics. Design innovation and project management are important aspects of mechanical engineering. The highlight of the course is the final year thesis, which requires each student to complete a major engineering project in a field of their choice or in research projects funded by government and/or industry.

Students can select electives from a number of specialist areas in their final year including, Sustainable Energy and Engineering Systems, Manufacturing Engineering, Applied Mechanics and Bulk Materials Handling. The list of electives on offer in any one year varies somewhat, depending on staff availability and other factors.

The course is fully recognised by the Institution of Engineers, Australia, which is the professional accrediting body. The course is recognised as meeting the examination requirements for admission to graduate and corporate membership of the Institution.

The Professional Option subjects allow part-time students to count their industrial experience towards their degree. Each of these subjects is taken over a year of appropriate and approved full-time industrial employment. Professional Option subjects may be counted in lieu of electives up to a maximum of 3 and completion of one or more gives a student an exemption in ENGG454 Professional Experience, which involves at least 12 weeks of work in industry and must be completed by full time students.

Students entering the University with a Mechanical Engineering Certificate or Associate Diploma from the New South Wales Department of Technical and Further Education (or an approved equivalent) are entitled to exemptions as approved by the Director of Studies of Mechanical Engineering.

All study programs are subject to approval by the Director of Studies. In general, students must satisfy pre- and co-requisites and are not permitted to enrol in subjects spanning more than two years of the full-time course. In particular, a candidate who has not satisfactorily completed all subjects in the first year of the prescribed four year course will not be permitted to proceed to study third year subjects; under exceptional circumstances approval to proceed may be given by the Director of Studies.

All students must take particular note of the regulations regarding Minimum Rate of Progress - refer to the University of Wollongong Course Rules. Honours are awarded at the end of the course on the basis of overall performance throughout the course.

Students should attend all classes including lectures, tutorials and laboratory classes. The Director of Studies may refuse to certify that students have satisfactorily completed a subject unless they have attended at least 80 per cent of the classes scheduled.

The following subjects must be completed to qualify for the Mechanical Engineering degree.

Year 1 - Autumn

CHEM103	Chemistry for Engineers	6
ENGG154	Engineering Design and Innovation	6
MATH141	Mathematics 1C Part 1	6
or		
MATH187	Mathematics 1A Part 1	6
MECH152	Engineering Computing, Instrumentation and Workshop Practice	6

Year 1 - Spring

ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
PHYS143	Principles of Physics for Engineers	6
MATH142	Mathematics 1C Part 2	6
or		
MATH188	Mathematics 1A Part 2	6

Year 2 - Autumn

ENGG251	Mechanics of Solids	6
ENGG252	Engineering Fluid Mechanics	6
ENGG261	Professional Engineers and the Management of Technology	6
MATH283	Mathematics 2E for Engineers Part 1	6

Year 2 - Spring

ECTE290	Fundamentals of Electrical Engineering	6
MECH201	Engineering Analysis	6
MECH215	Fundamentals of Machine Component Design	6
MECH226	Machine Dynamics	6

Year 3 - Autumn

MECH311	Mechanical Engineering Design	6
MECH321	Dynamics of Engineering Systems	6
MECH341	Thermodynamics	6
MECH382	Manufacturing Engineering Principles	6

Year 3 - Spring

ENGG361	Engineering Management	6
MECH343	Heat Transfer and Aerodynamics	6
MECH365	Control of Machines and Processes	6
MECH372	Solids Handling and Process Engineering	6

Year 4 - Autumn

ENGG461	Project Management and Human Factors in Engineering	6
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Electives: one elective

Year 4 - Spring

Electives: three electives plus (either Autumn or Spring)

ENGG454	Professional Experience Plus (Annual)	0
ENGG452	Thesis A	12
or		
ENGG453	Thesis B	18

Electives: five electives.

Electives on offer in 2003 will be a selection from the following list. Electives may be taken in other departments, subject to approval by the Director of Studies (maximum of two for full-time and one for part-time students).

Sustainable Energy and Engineering Systems

MECH378	Sustainable Energy Technologies	6
MECH442	Sustainable Energy in Buildings	6
MECH474	Systems Engineering and Life Cycle Management	6
MECH479	Sustainable Transport and Engine Technologies	6

Applied Mechanics

MECH417	Biomedical Engineering	6
MECH418	Mechanical Behaviour of Engineering Materials	6
MECH419	Finite Element Methods in Engineering	6
MECH420	Engineering Stress Analysis	6
MECH430	Automotive Dynamics	6
MECH431	Computational Fluid Dynamics	6
MECH438	Fluid Power	6

Bulk Materials Handling

MECH426	Storage and Flow of Bulk Solids	6
MECH427	Mechanical Conveying of Bulk Solids	6
MECH428	Pneumatic Conveying and Dust Control	6
MECH429	Physical Processing of Bulk Solids	6

Manufacturing

MECH421	Manufacturing Process Analysis	6
MECH422	Design and Analysis of Manufacturing Systems	6
MECH423	Design for Manufacturing	6
MECH424	Managing Manufacturing Activities	6
MECH468	Computer Control of Machines and Processes	6
MECH481	Materials Welding and Joining (special topics in Mechanical Engineering 1)	6
MECH487	Systems Analysis for Maintenance Management	6
MECH488	Introduction to Condition Monitoring in Mechanical Engineering	6
MECH489	Maintenance Management	6
ECTE494	Robotics	6

Bachelor of Engineering (Mechatronics)

Mechatronics is the combination of Mechanical, Electrical and Computer technologies. It is a relatively new field of engineering with many exciting developments such as internet control of machines, autonomous robots and engine management systems.

The Mechatronics BE degree program at the University of Wollongong has been designed to give students high quality training in rapidly developing fields such as digital electronics, manufacturing, information technology and robotics.

In addition, the aim of the program is to produce graduates with the core skills, knowledge and attributes that will help them excel as professional engineers.

Course Structures

These skills and attributes include:

- the ability to formulate and solve problems
- a creative approach to design and synthesis
- excellent oral and written communication skills
- ability to work effectively in teams
- appreciation of the environmental, social and business contexts of Engineering
- independent and self motivated approach
- understanding and commitment to lifelong learning
- in-depth technical competence in the field of Mechatronic Engineering

The course includes substantial training in design techniques to prepare the student for an exciting career in this emerging field of engineering.

The normal period of study for the BE degree is 4 years (8 semesters) full-time. Students are trained through a range of learning experiences that include hands-on laboratory experiments, problem-based learning, computer simulations, teamwork assignments, industrial case studies and site visits to industry.

The degree covers a wide range of technical subjects including computer science, innovation and design, electronics and communication, dynamics and control of machines, robotics and manufacturing processes.

The highlight of the course is the final year project in which students apply their knowledge and skills acquired during the previous years to solve a real-life Mechatronics problem. This may be carried out in one of our research laboratories or in industry.

Students entering the University with an appropriate Engineering Certificate or Associate Diploma from the New South Wales Department of Technical and Further Education (or an approved equivalent) are entitled to exemptions as approved by the Director of Studies.

In general, students must satisfy pre- and co-requisites and are not permitted to enrol in subjects spanning more than two years of the full-time course. In particular, a candidate who has not satisfactorily completed all subjects in the first year of the prescribed four year course will not be permitted to proceed to study third year subjects; under exceptional circumstances approval to proceed may be given by the Director of Studies.

All students must take particular note of the regulations regarding Minimum Rate of Progress - refer to the University of Wollongong Course Rules. Honours are awarded at the end of the course on the basis of overall performance throughout the course.

Students should attend all classes including lectures, tutorials and laboratory classes. The Director of Studies may refuse to certify that students have satisfactorily completed a subject unless they have attended at least 80 per cent of the classes scheduled.

The following subjects must be completed to qualify for the Mechatronics degree.

Year 1 - Autumn

CSCI111	Computer Science 1A	6
ENGG261	Professional Engineers and the Management of Technology	6
ENGG154	Engineering Design and Innovation	6
MATH141	Mathematics 1C Part 1	6

or

MATH187	Mathematics 1A Part 1	6
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Year 1 - Spring

ECTE101	Electrical Engineering 1	6
ENGG152	Engineering Mechanics	6
MATH142	Mathematics 1C Part 2	6

or

MATH188	Mathematics 1A Part 2	6
PHYS142	Fundamentals of Physics B	6

Year 2 - Autumn

ECTE202	Circuits and Systems	6
ECTE233	Digital Hardware 1	6
ENGG251	Mechanics of Solids	6
MATH283	Mathematics 2E for Engineers Part 1	6

Year 2 - Spring

CSCI121	Computer Science 1B	6
ENGG153	Engineering Materials	6
ECTE212	Electronics and Communications	6
MECH215	Fundamentals of Machine Component Design	6

Year 3 - Autumn

ECTE313	Electronics	6
ECTE344	Control Theory	6
ECTE371	Mechatronics Design	6
MECH311	Mechanical Engineering Design	6
MECH382	Manufacturing Engineering Principles	6

Year 3 - Spring

ECTE301	Digital Signal Processing 1	6
ECTE333	Digital Hardware 2	6
MECH266	Machine Dynamics	6

Year 4 - Autumn

ENGG461	Project Management and Human Factors in Engineering	6
ECTE323	Power Engineering 2	6
MECH440	Fluid and Heat Transfer	6

Year 4 - Spring

ECTE494	Robotics	6
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Electives: two electives

Plus (Annual)

ENGG452	Thesis A or	12
ENGG453	Thesis B or	18
ECTE457	Thesis	18

Plus (either Autumn or Spring)

ENGG454	Professional Experience	0
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Electives

Two electives are to be taken by students undertaking a 12 credit point thesis (one elective for students undertaking an 18 cp thesis). Electives are chosen from the list of electives on offer in the Faculties of Engineering and Informatics. The final year study program is to be determined in consultation with the Director of Studies.

Bachelor of Engineering (Mining Engineering)

The course in Mining Engineering is aimed at providing broad based knowledge, training, skills and experience in the areas required in mining engineering. The normal period of full time study is four years. However, the course can be taken on a part-time basis over a longer period of time, normally six years.

Upon satisfactory completion of the course, students should be able to practise in areas requiring skills for mine planning and design, rock excavation, water and gas drainage and mine environment control. Graduates, therefore, will be able to integrate technical, planning, organisational, management and financial skills with an emphasis on those areas as their talents allow.

The structure of the course is such that the first year largely concerns basic subjects, such as mathematics, physics, chemistry, computing, and introductory engineering subjects. The second year is primarily devoted to engineering science subjects, but areas such as surveying, mining and design are introduced. The latter subjects are developed further in third year, where more time is devoted to engineering subjects, such as mining methods, both surface and underground methods, geology and mine transport and mine ventilation.

At the end of the third year, students are required, as a condition for graduation; to undertake at least twelve weeks of approved work in industry, whether for mining, or mining related companies, mining consultants, state or federal government agencies. For part-time students, each year of appropriate full time employment may be credited as one professional option elective.

In the final year, emphasis is given to professional orientation, with subjects covering project management, mine planning, mine geomechanics and minerals beneficiation. Some elective subjects are available for those students wishing to specialise further. Attention is given to a teamwork approach in a design that requires integration of all aspects of the course. Each student must prepare a substantial project thesis on a research or design topic under the supervision of a staff member.

The course has been fully recognised by both The Institution of Engineers, Australia, and the Australasian Institute on Mining and Metallurgy which are the professional accrediting bodies. This recognition ensures that graduates from this course are admitted, on application, to the grade of Graduate for both professional bodies.

Honours are awarded at the end of the course on the basis of overall performance throughout the course.

All students must take particular notice of the Course Rules regarding minimum rate of progress. Students should attend all classes including lectures, tutorials and laboratory classes.

The Director of Studies in Mining Engineering may refuse to certify that students have satisfactorily completed a subject unless they have attended at least 80 percent of the classes scheduled.

The following subjects must be completed to qualify for the Mining Engineering degree.

Year 1 - Autumn

CHEM103	Chemistry for Engineers	6
CIVL196	Engineering Computing 1	6
ENGG154	Engineering Design and Innovation	6
MATH141	Mathematics 1C Part 1	6

or

MATH187	Mathematics 1A Part 1	6
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Year 1 - Spring

ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
PHYS143	Principles of Physics for Engineers	6
MATH142	Mathematics 1C Part 2	6

or

MATH188	Mathematics 1A Part 2	6
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Year 2 - Autumn

ENGG251	Mechanics of Solids	6
ENGG252	Engineering Fluid Mechanics	6
ENGG261	Professional Engineers and the Management of Technology	6
MATH283	Mathematics 2E for Engineers Part 1	6

Year 2 - Spring

CIVL272	Surveying	6
ECTE290	Fundamentals of Electrical Engineering	6
MINE221	Underground Coal Mining	6
GEOS251	Geology for Engineers 1	6

Year 3 - Autumn

CIVL361	Geomechanics 1	6
CIVL392	Engineering Computing 2	6
MINE311	Surface Mining and Blasting	6
MINE312	Mine Ventilation	6

Year 3 - Spring

ENGG361	Engineering Management	6
GEOS252	Geology for Engineers 2	6
MINE321	Underground Metal Mining	6
MINE323	Mining Geomechanics	6

Year 4 - Autumn

ENGG461	Project Management and Human Factors in Engineering	6
MINE411	Health and Safety in Mines	6
Elective		

Year 4 - Spring

MINE412	Mining Economics	6
MINE421	Minerals Beneficiation	6
MINE422	Mine Planning and Development	6

Plus (Annual)

ENGG452	Thesis A or	12
ENGG453	Thesis B	18

Plus (either Autumn or Spring)

ENGG454	Professional Experience	0
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Electives: one elective from the following list

ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON215	Microeconomic Theory and Policy	6
GEOS302	Basin Resources	8

Course Structures

GEOS307	Mineral Resources	8
MINE431	Mine Water	6
MINE433	Geostatistical Ore Reserve Estimation	6
MINE434	Special Topics in Mining Engineering	6
MINE438	Environmental Impact of Minerals Operation	6

ENGG453	Thesis B	18
MINE411	Health and Safety in Mines	6
MINE412	Mining Economics	6
MINE421	Minerals Beneficiation	6
MINE422	Mine Planning and Development	6

Electives: one elective

ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON215	Microeconomic Theory and Policy	6
GEOS302	Basin Resources	8
MINE431	Mine Water	6
MINE433	Geostatistical Ore Reserve Estimation	6
MINE434	Special Topics in Mining Engineering	6
MINE438	Environmental Impact of Mineral Operations	6
CIVL462	Geomechanics 2	6

Bachelor of Engineering (Civil and Mining Engineering)

Refer to the introductions for both Civil and Mining Engineering.

Prescribed subjects for all BE - Civil and Mining Engineering candidates:

100-Level

CHEM103	Chemistry for Engineers	6
CIVL196	Engineering Computing 1	6
ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
ENGG154	Engineering Design and Innovation	6
PHYS143	Principles of Physics for Engineers	6
MATH141	Mathematics 1C Part 1 and	6
MATH142	Mathematics 1C Part 2	6

or

MATH187	Mathematics 1A Part 1 and	6
MATH188	Mathematics 1A Part 2	6

200-Level

CIVL245	Construction Materials	6
CIVL272	Surveying	6
ECTE290	Fundamentals of Electrical Engineering	6
ENGG251	Mechanics of Solids	6
ENGG252	Engineering Fluid Mechanics	6
ENGG261	Professional Engineers and the Management of Technology	6

GEOS251	Geology for Engineers 1	6
GEOS252	Geology for Engineers 2	6
MATH283	Mathematics 2E for Engineers Part 1	6
MINE221	Underground Coal Mining	6

300-Level

CIVL311	Structural Design 1	6
CIVL314	Structural Design 2	6
CIVL322	Hydraulics and Hydrology	6
CIVL352	Structures 1	6
CIVL361	Geomechanics 1	6
CIVL392	Engineering Computing 2	6
CIVL394	Construction	6
ENGG361	Engineering Management	6
MINE311	Surface Mining and Blasting	6
MINE312	Mine Ventilation	6
MINE321	Underground Metal Mining	6
MINE323	Mining Geomechanics	6

400-Level

CIVL444	Civil Engineering Design	6
CIVL454	Structures 2	6
CIVL462	Geomechanics 2	6
CIVL489	Roads Engineering	6
ENGG461	Project Management and Human Factors in Engineering	6
ENGG454	Professional Experience	0
ENGG452	Thesis A	12

Or

Bachelor of Engineering (Civil and Environmental Engineering)

Refer to the introductions for both Civil and Environmental Engineering.

Prescribed subjects for all BE - Civil and Environmental Engineering candidates:

100-Level

CHEM103	Chemistry for Engineers	6
CIVL196	Engineering Computing 1	6
ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
ENGG154	Engineering Design and Innovation	6
PHYS143	Principles of Physics for Engineers	6
MATH141	Mathematics 1C Part 1 and	6
MATH142	Mathematics 1C Part 2	6

or

MATH187	Mathematics 1A Part 1 and	6
MATH188	Mathematics 1A Part 2	6

200-Level

CIVL245	Construction Materials	6
CIVL272	Surveying	6
CHEM214	Analytical and Environmental Chemistry	6
ECTE290	Fundamentals of Electrical Engineering	6
ENGG251	Mechanics of Solids	6
ENGG252	Engineering Fluid Mechanics	6
ENGG261	Professional Engineers and the Management of Technology	6

ENVE220	Water Quality Engineering	6
ENVE221	Air and Noise Pollution	6
GEOS251	Geology for Engineers 1	6
MATH283	Mathematics 2E for Engineers Part 1	6

300-Level

BIOL352	Biology for Environmental Engineers	6
CIVL311	Structural Design 1	6
CIVL314	Structural Design 2	6
CIVL322	Hydraulics and Hydrology	6
CIVL352	Structures 1	6
CIVL361	Geomechanics 1	6
CIVL392	Engineering Computing 2	6
CIVL394	Construction	6
ENGG361	Engineering Management	6
ENVE311	Pollution Control and Cleaner Production	6
ENVE320	Environmental Engineering Design 1	6
ENVE321	Solid and Hazardous Waste Management	6

400-Level

CIVL444	Civil Engineering Design	6
CIVL454	Structures 2	6
CIVL462	Geomechanics 2	6
CIVL489	Roads Engineering	6
ENGG461	Project Management and Human Factors in Engineering	6
ENGG454	Professional Experience	0
ENGG452	Thesis A	12
or		
ENGG453	Thesis B	18
ENVE410	Site Remediation	6
ENVE421	Environmental Design 2	6

Bachelor of Engineering (Mining and Environmental Engineering)

Refer to the introductions for both Mining and Environmental Engineering.

Prescribed subjects for all BE - Mining and Environmental candidates:

100-Level

CHEM103	Chemistry for Engineers	6
CIVL196	Engineering Computing 1	6
ENGG261	Professional Engineers and the Management of Technology	6
ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
ENGG154	Engineering Design and Innovation	6
PHYS143	Principles of Physics for Engineers	6
MATH141	Mathematics 1C Part 1 and	6
MATH142	Mathematics 1C Part 2	6

or

MATH187	Mathematics 1A Part 1 and	6
MATH188	Mathematics 1A Part 2	6

200-Level

CHEM214	Analytical and Environmental Chemistry	6
CIVL272	Surveying	6
GEOS251	Geology for Engineers 1	6
GEOS252	Geology for Engineers 2	6
ECTE290	Fundamentals of Electrical Engineering	6
ENGG251	Mechanics of Solids	6
ENGG252	Engineering Fluid Mechanics	6
ENVE220	Water Quality Engineering	6
ENVE221	Air and Noise Pollution	6
MATH283	Mathematics 2E for Engineers Part 1	6
MINE221	Underground Coal Mining	6

300-Level

BIOL352	Biology for Environmental Engineers	6
CIVL322	Hydraulics and Hydrology	6
CIVL361	Geomechanics 1	6
CIVL392	Engineering Computing 2	6
ENGG361	Engineering Management	6
ENVE311	Pollution Control and Cleaner Production	6
ENVE320	Environmental Engineering Design 1	6
ENVE321	Solid and Hazardous Waste Management	6
MINE311	Surface Mining and Blasting	6
MINE312	Mine Ventilation	6
MINE321	Underground Metal Mining	6
MINE323	Mining Geomechanics*	6

400-Level

ENGG461	Project Management and Human Factors in Engineering	6
ENGG454	Professional Experience	0
ENGG452	Thesis A	12
or		
ENGG453	Thesis B	18
ENVE410	Site Remediation	6
ENVE421	Environmental Design 2	6
MINE411	Health and Safety in Mines	6
MINE412	Mining Economics	6
MINE421	Minerals Beneficiation	6
MINE422	Mine Planning and Development	6

Electives: one elective

ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON215	Microeconomic Theory and Policy	6
GEOS302	Basin Resources	8
MINE431	Mine Water	6
MINE433	Geostatistical Ore Reserve Estimation	6
MINE434	Special Topics in Mining Engineering	6
MINE438	Environmental Impact of Mineral Operations	6
CIVL462	Geomechanics 2	6

Bachelor of Medical Radiation Physics

The Bachelor of Medical Radiation Physics degree is designed to produce physics graduates with the specialist skills in Medical Radiation Physics necessary to find employment in hospitals, research or industry along with a strong background in basic physics.

Students will have a specialist knowledge in areas relating to nuclear medicine, radiation physics, detector and instrumentation physics and data analysis. Graduates working in the area require both a theoretical background and practical skills in physics with an emphasis on advanced knowledge and practice in specialist areas applicable to medical physics.

Professional medical physicists from major hospitals in the state will deliver key lectures and practical work as well as co-supervising Honours students thesis work. Students will find that they will move easily into employment and/or postgraduate work in this specialised area.

In the fourth year students will complete an in-depth research project on an aspect of Medical Physics.

The following subjects must be completed in order to qualify for the Bachelor of Medical Radiation Physics.

100-Level

BMS101	Systemic Anatomy	6
BMS112	Human Physiology	6
PHYS141	Fundamental Physics A	6
PHYS142	Fundamental Physics B	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6

Electives: two electives

200-Level

MATH201	Multivariate and Vector Calculus	6
MATH253	Linear Algebra	6
MATH291	Differential Equations	6

Course Structures

PHYS205	Advanced Modern Physics	6
PHYS215	Vibrations, Waves and Optics	6
PHYS225	Electromagnetism and Optoelectronics	6
PHYS235	Mechanics and Thermodynamics	6
PHYS255	Radiation Physics	6

300-Level

PHYS305	Quantum Mechanics	6
PHYS325	Electromagnetism	6
PHYS365	Detection of Radiation: Neutrons, Electrons and X-Rays	6
PHYS366	Physics of Radiotherapy	6
PHYS375	Nuclear Physics	6
PHYS385	Statistical Mechanics	6
PHYS396	Electronic Materials	6

Electives: one elective

400-Level

PHYS451	Nuclear Medicine	8
PHYS452	Medical Imaging	8
PHYS453	Radiobiology and Radiation Protection	8
PHYS457	Research Project	24

Bachelor of Science (Photonics)

Photonics is a rapidly developing area associated with the development of detectors, light sources and optical fibres to support R&D in a wide range of industries including optoelectronics, telecommunications and defence.

This degree provides students with training which combines skills in experimental and theoretical physics and electronics with a strong background in optics, electronics and computing necessary to enter a career in the photonics industry. It is structured around the existing core of the Physics degree, complemented by a coherent program of subjects from the Informatics Schedule.

The following subjects are required to qualify for the Bachelor of Science (Photonics):

100-Level

CHEM103	Introductory Chemistry	6
CSCI111	Computer Science 1A	6
ECTE101	Electrical Engineering 1	6
ECTE196	Internet Technology	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

200-Level

MATH201	Multivariate and Vector Calculus	6
MATH203	Linear Algebra	4
MATH291	Differential Equations	3
MATH293	Complex Variables	4
PHYS205	Advanced Modern Physics	6
PHYS225	Electromagnetism and Optoelectronics	6
PHYS235	Mechanics and Thermodynamics	6
PHYS262	Vibrations and Waves	3
PHYS263	Photonics and Communication	6

300-Level

ECTE364	Telecommunication Networks 1	6
ECTE381	Internet Engineering	6
PHYS305	Quantum Mechanics	6
PHYS306	Project in Physics	6
PHYS325	Electromagnetism	6

PHYS356	Physics of Detectors and Imaging	6
PHYS385	Statistical Mechanics	6
PHYS396	Electronic Materials	6

Bachelor of Science (Physics)

This degree course may be taken on a part time basis provided that students are able to attend classes at the scheduled times.

Two major programs in Physics are offered:

- i) Basic Major Program in Physics - a basic Physics program, designed with a minimum of compulsory subjects for combining with an array of elective subjects or a second major in another discipline - or
- ii) Full Major Program - a full Physics program for students planning to undertake Honours and to pursue a career as a professional physicist.

Graduates of both programs may apply for membership of the Australian Institute of Physics.

The following subjects must be completed in order to qualify for the Bachelor of Science (Physics).

Basic Major Program in Physics

100-Level

PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

plus

MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6

or

MATH141	Mathematics 1C Part 1	6
MATH142	Mathematics 1C Part 2	6

200-Level

MATH201	Multivariate and Vector Calculus	6
MATH253	Linear Algebra	6
MATH291	Differential Equations	6
PHYS205	Advanced Modern Physics	6
PHYS215	Vibrations, Waves and Optics	6
PHYS225	Electromagnetism Optoelectronics	6
PHYS235	Mechanics and Thermodynamics	6

300-Level

PHYS305	Quantum Mechanics	6
PHYS325	Electromagnetism	6

and two of

PHYS375	Nuclear Physics	6
PHYS335	Classical Mechanics	6
PHYS385	Statistical Mechanics	6
PHYS390	Astrophysics	6
PHYS396	Electronic Materials	6

Plus additional 12 cp of subjects taken from the Science or Engineering Schedules

Major Total: 90cp

Full Major Program

100-Level

PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

plus

MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
or		
MATH141	Mathematics 1C Part 1 and	6
MATH142	Mathematics 1C Part 2	6
200-Level		
PHYS205	Advanced Modern Physics	6
PHYS215	Vibrations, Waves and Optics	6
PHYS225	Electromagnetism Optoelectronics	6
PHYS235	Mechanics and Thermodynamics	6
PHYS295	Astronomy - Concepts of the Universe	6
MATH201	Multivariate and Vector Calculus	6
MATH203	Linear Algebra	6
MATH291	Differential Equations	6
MATH293	Complex Variables	6
300-Level		
PHYS305	Quantum Mechanics	6
PHYS325	Electromagnetism	6
PHYS335	Classical Mechanics	6
PHYS375	Nuclear Physics	6
PHYS385	Statistical Mechanics	6
PHYS390	Astrophysics	6
PHYS396	Electronic Materials	6

Major Study: 108 Credit Points

Physics Electives

100-Level

PHYS131	Physics for the Environmental and Life Sciences A	6
PHYS132	Physics for the Environmental and Life Sciences B	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6
PHYS143	Physics for Engineers	6

200-Level

PHYS205	Modern Physics	6
PHYS206	Project in Physics	6
PHYS215	Vibrations, Waves and Optics	6
PHYS225	Electromagnetism and Optoelectronics	6
PHYS235	Mechanics and Thermodynamics	6
PHYS255	Radiation Physics	6
PHYS295	Astronomy - Concepts of the Universe	6

300-Level

PHYS305	Quantum Mechanics	6
PHYS306	Project in Physics	6
PHYS325	Electromagnetism	6
PHYS335	Classical Mechanics	6
PHYS365	Detection of Radiation: Neutrons, Electrons and X Rays	6
PHYS375	Nuclear Physics	6
PHYS385	Statistical Mechanics	6
PHYS390	Astrophysics	6
PHYS396	Electronic Materials	6

400-Level

PHYS401	Theoretical Mechanics and Electromagnetism	8
PHYS405	Honours in Physics	8
PHYS415	Honours in Physics, Part-time A	8
PHYS425	Honours in Physics, Part-time B	8
PHYS441	Astro- and Nuclear Physics	8
PHYS444	Quantum Mechanics	8
PHYS446	Solid State Physics	8
PHYS451	Nuclear Medicine	8
PHYS452	Medical Imaging	8

PHYS453	Radiobiology and Radiation Protection	8
PHYS456	Imaging Physics	8
PHYS457	Research Project	24

Subjects offered by non-member Departments of the Faculty of Engineering toward the Physics Program:

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
MATH141	Mathematics 1C Part 1	6
MATH142	Mathematics 1C Part 2	6
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6
MATH253	Linear Algebra	6
MATH283	Mathematics IIE for Engineers	6
MATH291	Differential Equations	6
MATH293	Complex Variables	6
STAT231	Probability and Random Variables	6

Bachelor of Science (Honours) Advanced Program - Physics

The Advanced Program, designed specifically for high-achieving students, offers direct entry into Honours, unlike the normal BSc which delays selection for Honours until the completion of the third year. It offers a greater degree of flexibility in program design through the possibility of exemptions from some first year subjects; direct entry into some 200 level subjects; the opportunity to undertake individual research subjects at second, third and fourth year level; the opportunity to progress at a faster rate through the use of "fast-tracking" mechanisms; the chance to participate in various enrichment activities and to develop a close association with an appropriate member of one of the Faculty's research teams. In the final year, all students undertake a substantial piece of supervised research in their major discipline together with other required seminar and/or course work.

Study programs are structured on an individual basis in consultation with the Director of Studies. Students are required to fulfil all the normal BSc and Honours requirements and may select their major study program from any of those available from Physics.

Bachelor of Science (Materials)

The objective of the Materials Science course is to provide the scientific knowledge and technical skills necessary for a successful materials based career in areas such as quality control and laboratory testing, materials process control, and research and development in government and private sector laboratories. It also provides an ideal basis for those who wish to pursue a career in secondary teaching. The core materials subjects involve detailed study of the structure and properties of metals, ceramics and polymers.

Course Structures

This is complemented by studies in design and innovation, maths, and sciences. Students may select elective subjects in a wide range of fields to further extend their knowledge.

The course is structured so that the first year provides education in basic sciences, mathematics, design and an introduction to materials. This is followed in later years by detailed study of the structures of materials, physical and mechanical properties, thermodynamics, kinetics, corrosion and wear, and materials testing. Electives in second and third years can include additional studies in materials (electronic materials, advanced materials, materials processing, etc.), chemistry, physics, engineering or general studies. The electives are normally selected to provide a coherent minor in a particular field. Students should consult their Director of Studies when choosing elective subjects. Some suggested elective programs are shown below.

An additional Honours year is available for those who achieve a satisfactory level of performance in the first three years of the course. Students are required to fulfil all the normal BSc and Honours requirements.

The following subjects must be completed in order to qualify for the Bachelor of Science (Materials)

Core Subjects

Year 1

CHEM101	Chemistry 1A	6
CHEM102	Chemistry 1B	6
PHYS141	Fundamental Physics A	6
PHYS142	Fundamental Physics B	6
ENGG153	Engineering Materials	6
ENGG154	Engineering Innovation and Design	6
MATH141	Mathematics 1C Part 1 and	6
MATH142	Mathematics 1C Part 2	6

or

MATH187	Mathematics 1A Part 1 and	6
MATH188	Mathematics 1A Part 2	6

Year 2

MATE201	Structure and Properties of Materials	6
MATE202	Thermodynamics and Phase Equilibria	6
MATE203	Phase Transformations	6
MATE204	Mechanical Behaviour	6
MATE291	Engineering Computing and Laboratory Skills	6

Plus 18 credit points of electives from the Engineering, Science or General Schedules.

Year 3

MATE301	Engineering Alloys	6
MATE302	Polymeric Materials	6
MATE303	Ceramics, Glass and Refractories	6
MATE306	Degradation of Materials	6
MATE391	Materials Testing	6

Plus 18 credit points of electives from the Engineering, Science or General Schedules.

Year 4

MATE406	Research Project	24
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Plus 24 credit points of electives from the Engineering, Science or General Schedules.

Electives

Materials

MATE305	Primary Materials Processing	6
MATE402	Secondary Materials Processing	6
MATE411	Advanced Materials and Processing	6
MATE412	Electronic Materials	6
MATE413	Structural Characterisation Techniques	6

Chemistry

CHEM211	Inorganic Chemistry II	6
CHEM212	Organic Chemistry II	6
CHEM213	Molecular Structure, Reactivity and Change	6
CHEM214	Analytical and Environmental Chemistry	6
CHEM311	Inorganic Chemistry III	6
CHEM314	Instrumental Analysis	6
CHEM321	Organic Synthesis and Reactivity	6

Science and Technology Studies

STS100	Social Aspects of Science and Technology	6
STS112	The Scientific Revolution: History, Philosophy and Politics of Science 1	6
STS215	Globalisation: Science, Technology and Progress	6
STS216	Environment in Crisis: Technology and Society	6
STS229	Scientific and Technological Controversy	6
STS376	Risk Assessment, Health and Safety	6

Bachelor of Engineering - Bachelor of Arts

The Faculties of Arts and Engineering offer double degree courses over five years of full-time or eight years of part-time study, leading to the degrees of Bachelor of Arts and Bachelor of Engineering. These courses provide education in a discipline of Engineering, together with a major study in Arts to broaden the knowledge base of the graduate thereby enhancing career prospects. The Engineering courses are accredited by the Institution of Engineers, Australia.

Requirements for admission to the double degree is a UAI, or the equivalent, which is equal to or greater than the rank required for admission to the course for the degree of Bachelor of Arts, or the course for the degree of Bachelor of Engineering, whichever is the higher. English and Mathematics pre-requisites for both degrees must be satisfied.

Bachelor of Arts

To qualify for the award of the degree of Bachelor of Arts, a candidate must satisfactorily complete;

- subjects to the value of at least 90 credit points selected from the General Schedule or the Arts Schedule, together with
- subjects to the value of at least 54 credit points prescribed by one of the Engineering programs.

Of the above specified 144 credit points required for the Arts degree:

- at least 72 credit points, including a major study, shall be from subjects listed in the Arts Schedule;
- at least 36 credit points shall be for subjects offered by one or more academic units of the Faculty of Arts and
- no more than 60 credit points shall be for 100-level subjects.

Students intending to enrol in Japanese must contact the Modern Languages Program Office. Students undertaking the beginner strand in the Japanese language are required to take 36 credit points in Japanese in the first year of full time study. Enrolment in Japanese is not recommended for part-time students.

A candidate who qualifies for award of the degree of Bachelor of Arts, and who satisfies entry requirements, may subsequently enrol in the course for the honours degree of Bachelor of Arts as set out in the Course Rule 112.

Bachelor of Engineering

To qualify for the award of the degree of Bachelor of Engineering, a candidate must complete a total of 192 credit points. Of the 192 credit points, 174 credit points must be Engineering subjects taken from the following:

Bachelor of Engineering - Core Subjects

plus the subjects leading to one of the Engineering degrees:

Bachelor of Engineering - Civil Engineering

Bachelor of Engineering - Environmental Engineering

Bachelor of Engineering - Materials Engineering

Bachelor of Engineering - Mechanical Engineering

Bachelor of Engineering - Mechatronics

Bachelor of Engineering - Mining Engineering

A candidate must complete at least 12 weeks of approved professional engineering experience during the course. A part-time candidate in approved full-time engineering employment may be exempted from up to three specified subjects in accordance with the provisions of the Professional Options subjects, thereby enabling the joint course to be completed in a shorter time.

All students must discuss their Engineering program with the relevant Course Coordinator.

Bachelor of Engineering - Bachelor of Commerce

The Faculties of Commerce and Engineering offer a double degree courses over five years of full-time or eight years of part-time study, leading to the degrees of Bachelor of Commerce and Bachelor of Engineering.

These courses provide education in a discipline of Engineering, together with a major study in Commerce to broaden the knowledge base of the graduate thereby enhancing career prospects. The Engineering courses are accredited by the Institution of Engineers, Australia.

Requirements for admission to the double degree is a UAI, or the equivalent, which is equal to or greater than the rank required for admission to the course for the degree of Bachelor of Commerce, or the course for the degree of Bachelor of Engineering, whichever is the higher. English and Mathematics pre-requisites for both degrees must be satisfied.

Because of the very large number of possible combinations between the two faculties student study programs will be determined via a contract signed by the student and the appropriate course coordinators and Sub-Deans.

Bachelor of Commerce

Candidates are required to complete core subjects and subjects which satisfy the requirements of one of the Commerce programs. Candidates need to be aware that the number of credit points required by each program varies and that they must seek advice and approval from the Sub Dean and relevant Head of Department of Commerce before enrolment.

Students should be aware that it may not be possible to complete all Commerce programs with the usual 264 credit points required for a double degree.

The following subjects may be substituted for another Commerce schedule subject on completion of the alternate Engineering subject:

- BUSS110 Introduction to Business Information Systems

Alternate subjects:

CIVL196 Engineering Computing 1 6
or

MECH152 Engineering Computing Instrumentation and Workshop Practice 6

or

MATE291 Engineering Computing and Laboratory Skills 6

or

CSCI111 Computer Science 1A 6

- ECON121 Qualitative Methods 1

Alternative subject:

MATH283 Mathematics 2E for Engineers Part 1 6

Bachelor of Engineering

To qualify for the award of the degree of Bachelor of Engineering, a candidate must complete a total of 192 credit points. Of the 192 credits points, 174 credits points must be Engineering subjects taken from the following:

Bachelor of Engineering - Core Subjects

Course Structures

plus subjects leading to one of the following degrees:

Bachelor of Engineering - Civil Engineering

Bachelor of Engineering - Environmental Engineering

Bachelor of Engineering - Materials Engineering

Bachelor of Engineering - Mechanical Engineering

Bachelor of Engineering - Mechatronics

Bachelor of Engineering - Mining Engineering

A candidate must complete at least 12 weeks of approved professional engineering experience during the course. A part-time candidate in approved full-time engineering employment may be exempted from up to three specified subjects in accordance with the provisions of the Professional Options subjects, thereby enabling the joint course to be completed in a shorter time.

All students must discuss their Engineering program with the relevant Course Coordinator at enrolment.

Bachelor of Engineering - Bachelor of Computer Science

The Faculties of Engineering and Informatics offer double degree courses over five years of full-time or eight years of part-time study leading to the degrees of Bachelor of Engineering and Bachelor of Computer Science. These courses provide education in a discipline of Engineering, together with a major study in Computer Science to broaden the knowledge base of the graduate thereby enhancing careers prospects. The Engineering courses are accredited by the Institution of Engineers, Australia.

Requirements for admission to the double degree is a Universities Admission Index, or the equivalent, which is equal to or greater than the rank required for admission to the course for the degree of Bachelor of Engineering, or the course for the degree of Bachelor of Computer Science, whichever is higher. Pre-requisites for both degrees must be satisfied.

Bachelor of Computer Science

To qualify for the award of the degree of Bachelor of Computer Science, a candidate must satisfactorily complete requirements 1-7, excluding 4, of the Bachelor of Computer Science Course Rules.

Bachelor of Engineering

To qualify for the award of the degree of Bachelor of Engineering, a candidate must complete a total of 192 credit points. Of the 192 credit points, 174 credit points must be in Engineering subjects taken from the following:

Bachelor of Engineering – Core Subjects

Plus subjects leading to one of the following degrees:

Bachelor of Engineering – Civil Engineering

Bachelor of Engineering – Environmental Engineering

Bachelor of Engineering – Materials Engineering

Bachelor of Engineering – Mechanical Engineering

Bachelor of Engineering – Mechatronics

Bachelor of Engineering – Mining Engineering

A candidate must complete at least 12 weeks of approved professional engineering experience during the course. A part-time candidate in approved full-time employment may be exempted from up to three specified subjects in accordance with the provisions of the Professional Options subjects, thereby enabling the joint course to be completed in a shorter time.

All students must discuss their Engineering program with the relevant Course Coordinator at enrolment.

Bachelor of Engineering - Bachelor of Mathematics

The Faculties of Engineering and Informatics offer double degree courses over five years of full-time or eight years of part-time study leading to the degrees of Bachelor of Engineering and Bachelor of Mathematics. These courses provide education in a discipline of Engineering, together with a major study in Mathematics to broaden the knowledge base of the graduate thereby enhancing careers prospects. The Engineering courses are accredited by the Institution of Engineers, Australia.

Requirements for admission to the double degree is a Universities Admission Index, or the equivalent, which is equal to or greater than the rank required for admission to the course for the degree of Bachelor of Engineering, or the course for the degree of Bachelor of Mathematics, whichever is higher. Pre-requisites for both degrees must be satisfied.

Bachelor of Mathematics

To qualify for the award of the degree of Bachelor of Mathematics, a candidate must satisfactorily complete requirements 1 to 9, excluding 5, of the Bachelor of Mathematics degree rules, including no more than 18 credit points at 100 level.

Bachelor of Engineering

To qualify for the award of the degree of Bachelor of Engineering, a candidate must complete a total of 192 credit points. Of the 192 credit points, 174 credit points must be in Engineering subjects taken from the following:

Bachelor of Engineering – Core Subjects

Plus subjects leading to one of the following degrees:

Bachelor of Engineering – Civil Engineering

Bachelor of Engineering – Environmental Engineering

Bachelor of Engineering – Materials Engineering

Bachelor of Engineering – Mechanical Engineering

Bachelor of Engineering – Mechatronics

Bachelor of Engineering – Mining Engineering

A candidate must complete at least 12 weeks of approved professional engineering experience during the course. A part-time candidate in approved full-time employment may be exempted from up to three specified subjects in accordance with the provisions of the Professional Options subjects, thereby enabling the joint course to be completed in a shorter time.

All students must discuss their Engineering program with the relevant Course Coordinator at enrolment.

Bachelor of Engineering - Bachelor of Science

The Faculties of Engineering and Science offer double degree courses over five years of full-time or eight years of part-time study, leading to the degrees of Bachelor of Engineering and Bachelor of Science. These courses provide education in a discipline of Engineering, together with a major study in Science to broaden the knowledge base of the graduate thereby enhancing career prospects. The Engineering courses are accredited by the Institution of Engineers, Australia.

Requirements for admission to the double degree is a UAI, or the equivalent, which is equal to or greater than the rank required for admission to the course for the degree of Bachelor of Engineering, or the course for the degree of Bachelor of Science, whichever is the higher. English and Mathematics pre-requisites for both degrees must be satisfied.

Bachelor of Science

To qualify for the award of the degree of Bachelor of Science, a candidate must satisfactorily complete;

- subjects having a value of at least 90 credit points selected from the Science Schedule, which include either a major study prescribed by the Faculty of Science, or a major prescribed by Engineering Physics within the Faculty of Engineering; together with
- subjects having a value of at least 54 credit points prescribed by one of the Engineering programs.

Of the above specified 144 credit points required for the Science degree:

- at least 72 credit points, including a major study, shall be from subjects offered by Academic Units within the Faculty of Science or by Engineering Physics in the Faculty of Engineering; and no more than 60 credit points shall be for 100-level subjects.

A candidate who qualifies for award of the degree of Bachelor of Science, and who satisfies entry requirements, may subsequently enrol in the course for the honours degree of Bachelor of Science as set out in the Course Rule 112.

Bachelor of Engineering

To qualify for the award of the degree of Bachelor of Engineering, a candidate must complete a total of 192 credit points. Of the 192 credits points, 174 credits points must be in Engineering subjects taken from the following:

Bachelor of Engineering - Core Subjects

plus subjects leading to one of the following degrees:

Bachelor of Engineering - Civil Engineering

Bachelor of Engineering - Environmental Engineering

Bachelor of Engineering - Materials Engineering

Bachelor of Engineering - Mechanical Engineering

Bachelor of Engineering - Mechatronics

Bachelor of Engineering - Mining Engineering

A candidate must complete at least 12 weeks of approved professional engineering experience during the course. A part-time candidate in approved full-time engineering employment may be exempted from up to three specified subjects in accordance with the provisions of the Professional Options subjects, thereby enabling the joint course to be completed in a shorter time.

All students must discuss their Engineering program with the relevant Course Coordinator at enrolment.

Bachelor of Engineering (Mechanical or Mechatronics) - Bachelor of Science (Exercise Science)

The Faculties of Engineering and Health and Behavioural Sciences offer double degree courses over five years of full-time or eight years of part-time study, leading to the degrees of Bachelor of Engineering and Bachelor of Science. These courses provide education in either Mechanical Engineering or Mechatronics, together with a major study in Exercise Science to broaden the knowledge base of the graduate thereby enhancing career prospects.

Requirements for admission to the double degree is a UAI, or the equivalent, which is equal to or greater than the rank required for admission to the course for the degree of Bachelor of Engineering, or the course for the degree of Bachelor of Science (Exercise Science), whichever is the higher. English and Mathematics pre-requisites for both degrees must be satisfied.

To qualify for the double degree the following subjects must be completed:

Bachelor of Engineering (Mechanical)/Bachelor of Science (Exercise Science)

Year 1

CHEM103	Chemistry for Engineers	6
ENGG152	Engineering Mechanics	6
ENGG153	Engineering Materials	6
ENGG154	Engineering Design and Innovation	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6

Course Structures

MECH152	Engineering Computing, Instrumentation Workshop Practice	6
PHYS143	Principles of Physics for Engineers	6
Year 2		
BMS101	Systemic Anatomy	6
BMS112	Human Physiology 1	6
ECTE290	Fundamentals of Electrical Engineering	6
ENGG251	Mechanics of Solids	6
ENGG261	Professional Engineers and the Management of Technology	6
MATH283	Mathematics 2E for Engineers Part 1	6
MECH201	Engineering Analysis	6
MECH215	Fundamentals of Machine Component Design	6
MECH226	Machine Dynamics	6
Year 3		
BIOL103	Molecules, Cells and Organisms	6
BMS203	Musculoskeletal Functional Anatomy	6
BMS211	Foundations of Biomechanics	6
ENGG252	Engineering Fluid Mechanics	6
ENGG361	Engineering Management	6
MECH311	Mechanical Engineering Design	6
MECH341	Thermodynamics	6
MECH343	Heat Transfer and Aerodynamics	6
PHYC101	Introduction to Behavioural Science	6
Year 4		
BMS202	Human Physiology II	6
BMS242	Exercise Physiology	6
BMS341	Clinical Biomechanics	6
MECH321	Dynamics of Engineering Systems	6
MECH365	Control of Machines and Processes	6
MECH382	Manufacturing Engineering Principles	6
PSYC216	Psychology of Physical Activity	6
Electives: two electives (Mechanical plus one other)		
Year 5		
BExS351	Exercise Prescription I	6
BExS352	Exercise Prescription II	6
BExS401	Ergonomics	6
BMS346	Motor Control and Dysfunction	6
ENGG461	Project Management and Human Factors in Engineering	6
Electives: one elective (Mechanical) plus one other elective (exclude if enrolled in ENGG453 Thesis B)		
ENGG454	Professional Experience	0
ENGG452	Thesis A	12
or		
ENGG453	Thesis B	18

Bachelor of Engineering (Mechatronics)/ Bachelor of Science (Exercise Science)

Year 1		
CHEM103	Chemistry for Engineers	6
CSCI111	Computer Science 1A	6
ECTE101	Electrical Engineering 1	6
ENGG152	Engineering Mechanics	6
ENGG154	Engineering Design and Innovation	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS142	Fundamentals of Physics B	6

Year 2

BMS101	Systemic Anatomy	6
BMS112	Human Physiology 1	6
CSCI121	Computer Science 1B	6
ECTE202	Circuits and Systems	6
ECTE233	Digital Hardware 1	6
ENGG153	Engineering Materials	6
ENGG251	Mechanics of Solids	6
MATH283	Mathematics 2E for Engineers Part 1	6
MECH215	Fundamentals of Machine Component Design	6

Year 3

BIOL103	Molecules, Cells and Organisms	6
BMS202	Human Physiology II	6
BMS203	Musculoskeletal Functional Anatomy	6
BMS211	Foundations of Biomechanics	6
ECTE212	Electronics and Communications	6
ENGG261	Professional Engineers and the Management of Technology	6
MECH226	Machine Dynamics	6
MECH311	Mechanical Engineering Design	6
PHYC101	Introduction to Behavioural Science	6

Year 4

BMS242	Exercise Physiology	6
BMS341	Clinical Biomechanics	6
ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics 3	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ECTE371	Mechatronics Design	6
MECH382	Manufacturing Engineering Principles	6
PSYC216	Psychology of Physical Activity	6

Year 5

BExS351	Exercise Prescription I	6
BExS352	Exercise Prescription II	6
BExS401	Ergonomics	6
BMS346	Motor Control and Dysfunction	6
ECTE494	Robotics	6
ENGG461	Project Management and Human Factors in Engineering	6

Electives: one elective (exclude if enrolled in ENGG453 Thesis B) 6 credit points

ENGG454	Professional Experience	0
ENGG452	Thesis A	12
or		
ENGG453	Thesis B	18

Bachelor of Engineering - Bachelor of Laws

Refer to the Faculty of Law section for details of this double degree program.

ENGINEERING SUBJECT DESCRIPTIONS

CIVL196 Engineering Computing I 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Assessment: Assignments: objectives i – iv. Mid-Session examination: objectives i, ii and iii. One 2 hour final examination: objective iv.

Subject Description: Operating Systems - understand the essentials of WINDOWS Operating System; Spreadsheets - solving engineering problems using EXCEL, preparing reports, customising tables and graphs. Preparing technical reports using MS Word. Introduction to computer programming using MATLAB, scalar and vector variables, assignment statements, program loops, program branches, sub-programs, input and output files, graphics.

Subject Objectives: On successful completion of this subject students should be able to: (i) use WINDOWS Operating System and University's e-Rources (ii) solve numerical problems in engineering using EXCEL spreadsheet software (iii) prepare technical reports with equations using WORD (iv) write computer codes using MATLAB, programming language.

CIVL245 Construction Materials 6cp

Spring Wollongong On Campus

Assessment: One 2 hour final examination: objectives i to iii. Laboratory work: objective iv. Assignments: objectives i to iii.

Subject Description: The subject is designed to introduce the properties and use of the more common materials in modern construction practice. Topics will include: Concrete - Properties of concrete; structure and composition; cements; mix design; durability; high performance concrete; concrete manufacture Steel - Properties of steel with particular reference to brittle fracture, fatigue, corrosion and fire damage Alternative materials - timber; masonry; polymers; aluminium; composites.

Subject Objectives: On successful completion of this subject students should be able to: (i) describe engineering properties of concrete, steel and other materials related to their use in construction; (ii) assess the significance of environmental factors on the behaviour and durability of concrete and steel; (iii) formulate engineering solutions to problems associated with the use of concrete, steel and other materials; (iv) prepare reports on practical exercises relevant to the manufacture and properties of concrete.

CIVL272 Surveying 6cp

Spring Wollongong On Campus

Assessment: Final examination: objectives i, iii, iv. Mid-session examination: objectives i, iii, iv. Tutorial: objectives i, iii, iv. Fieldwork: objectives i to iv.

Subject Description: Basic concepts - Australian map grid, Integrated survey grid, Australian height datum, control surveys, locating position, errors in measurement, units in surveying and significant figures. Measuring distances, reduced levels and angles. Determining position - traversing, global positioning systems and plane rectangular coordinates. Earthworks and volumes. Setting out - basic procedures, setting out curves, trenches, sewers, buildings and slope stakes for road grade. Introduction to underground surveying. Computer assisted data reduction.

In addition to theoretical instruction, fieldwork assignments will be undertaken in electromagnetic distance measurement, traversing, levelling, curve ranging, staking a \ slope, and, for mining students, practical surveying in an underground environment.

Subject Objectives: On successful completion of this subject students should be able to: (i) demonstrate a knowledge of the principles and techniques of basic surveying; (ii) be able to identify appropriate equipment required for tasks in basic surveying; (iii) show how to reduce data obtained from fieldwork to a useable form; (iv) demonstrate an understanding of accuracy of measurement required in surveying.

CIVL311 Structural Design 1 6cp

Autumn Wollongong On Campus

Assessment: Design projects/tutorial assignments: objectives i to iv. 1 hour mid-session examination: objectives i to iv. 2 hour final examination: objectives 1 to iv.

Subject Description: Introduction to structural design, dead and live loads. Review of limit states design. Design of reinforced concrete structural elements according to AS 3600. Strength and serviceability of reinforced concrete beams and one way slabs. Design of reinforced concrete columns for strength and stability. Design of steel beams and girders to AS 4100. Design of tension and compression members for trusses. Introduction to local and lateral buckling. Design of bolted and welded steel connections.

Subject Objectives: On the successful completion of this subject students should be able to: (i) calculate dead and live loads for structures; (ii) apply the concepts of limit states design for structural elements; (iii) analyse and design reinforced concrete, beams, one way slabs and columns; (iv) analyse and design steel beams, columns and trusses.

CIVL314 Structural Design 2 6cp

Spring Wollongong On Campus

Pre-requisite: CIVL311 Structural Design 1

Assessment: Design, Projects/Tutorial, Assignments: objectives i to iii. 2 hour Final Examination: objectives i to iii.

Subject Description: This course will consider an introduction to wind and seismic loads, reinforced concrete structures including the serviceability and strength design of reinforced concrete two way slab and flat plates for multistorey buildings together with reinforced concrete footings and retaining structures. An introduction to the design of prestressed concrete beams for serviceability and strength for both buildings and bridges. Case studies of multistorey building frames.

Subject Objectives: On successful completion of this subject students should be able to: (i) analyse and design reinforced concrete two ways, flat plate and flat slab systems; (ii) analyse and design reinforced concrete footings and retaining walls; (iii) analyse and design fully and partially prestressed concrete beams.

CIVL322 Hydraulics and Hydrology 6cp

Spring Wollongong On Campus

Contact Hours: 56

Co-requisites: ENGG252 - Engineering Fluid Mechanics

Subject Descriptions

Assessment: 2 hour Final Examination: objectives i to iii. Mid-Session Quiz: objectives i and ii. Laboratory reports and projects: objectives iii and iv.

Subject Description: Open Channel Hydraulics - uniform flow; gradually varied flow; changes in channel cross section; hydraulic structures; unsteady flow Flood Hydrology - data collection and analysis; flood frequency; rainfall intensity-frequency-duration relationships;

unit hydrograph; design flood estimation; flood routing in rivers and storage reservoirs Pipeline and pumping systems - pipe networks; water distribution systems; pump characteristics; pressure surges.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the basic principles of open channels hydraulics, flood hydrology and pipeline and pumping systems; (ii) identify the significant factors which must be considered when analysing these topics; (iii) apply analytical techniques to solve problems in hydraulics and hydrology; (iv) design channels and channel structures, estimate design floods, and design pipeline and pumping systems.

CIVL352 Structures 1 6cp

Autumn Wollongong On Campus

Pre-requisite: ENGG251 - Mechanics of Solids

Assessment: 2 hour final examination: objectives i to iii. 1 hour mid-session examination: objectives i to iii. Other assignments may be taken into consideration: objectives i to iii.

Subject Description: Statically determinate and indeterminate trusses and frames. Flexibility and stiffness methods. Moment distribution. Unsymmetrical bending; shear centre. Elastic stability. Influence lines.

Subject Objectives: On successful completion of this subject students should be able to: (i) analyse simple truss and frame structures for internal actions; (ii) recognise statically determinate and indeterminate structural systems; (iii) appreciate how the analytical methods can be applied in the design process in later subjects.

CIVL361 Geomechanics 1 6cp

Autumn Wollongong On Campus

Assessment: 2 hour final examination: objectives i to iv; Class tests/assignments: objectives i to v.

Subject Description: Soils and rocks - differences and similarities; cohesionless and cohesive soils; behaviour of intact and jointed rock masses; weight-volume relationships; particle size distribution; index properties of soils; soil classification; soil compaction and compressibility; mechanical properties of rock. Some topics will be presented in a laboratory environment Pore water pressures and effective stress concept; permeability of soil and hydraulic properties of rock masses; groundwater flow; seepage theory; flow nets Shear strength of soils and rock masses, total and effective stress parameters, Mohr-Coulomb criterion; Hoek and Brown failure; sliding on planes of weakness. Application of elastic theory for calculating stresses and displacements within soil or rock masses. Stability analysis of soil and rock slopes; stabilisation methods.

Subject Objectives: On successful completion of this subject students should be able to: (i) identify the basic principles and factors controlling the behaviour of soils and rocks; (ii) apply simplified solutions to geotechnical and mining problems including ground control; (iii) apply elastic theory for the determination of stresses for simple geotechnical problems;

(iv) identify key assumptions in the development of theories and in the solution of practical problems; (v) understand and select the appropriate procedures for laboratory testing, and interpret the results in relation to the field practice.

CIVL392 Engineering Computing 2 6cp

Autumn Wollongong On Campus

Contact Hours: 56

Pre-requisites: CIVL196 and MATH283

Assessment: Mid-Session examination: objectives i to iii. 2 hour final examination: objectives i to iv. Reports and assignments: objectives i to iv.

Subject Description: Numerical computation. Taylor series, roots of equations, numerical differentiation, difference tables, linear systems, numerical integration, differential equations. Use of applications software. Numeric Computation and Visualisation - MATLAB interactive, graphically based system for solving mathematical and engineering problems.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the principles of numerical computations; (ii) solve basic numerical problems manually; (iii) use MATLAB software to solve numerical problems in engineering; (iv) Use EXCEL to solve numerical problems in engineering.

CIVL394 Construction 6cp

Spring Wollongong On Campus

Assessment: Final examination: objectives i to v. Class test: objectives i to iii. Tutorials or project reports: objectives i to v.

Subject Description: The subject is designed to provide students with detailed knowledge of construction with regard to both surface and underground structures, including construction techniques, stability and maintenance aspects. The following subject material will be covered: Plant and equipment in Civil Engineering practice; Construction processes and quality control; Tunnelling in soft ground and rock; Cofferdams and caissons; Harbour works; Dewatering and grouting methods; Performance monitoring and observational design; underpinning and restoration techniques; formwork and scaffolding. The lectures and tutorials will be complemented with practical project work and a field trip.

Subject Objectives: On successful completion of this subject students should be able to: (i) demonstrate understanding of fundamental construction principles and methods; (ii) ability to identify the probable construction difficulties encountered in practice, and being able to select the optimum equipment and construction techniques for a given project; (iii) appreciate the inter-relations between the structural, geotechnical, hydraulic and environmental factors that govern construction solutions; (iv) recognise the limitations of theory when applied to actual design and construction schemes, and appreciate the relevance of performance monitoring during and after construction; (v) distinguish the difference in construction solutions between the new and innovative construction projects on one hand, and yet challenging renovation and reconstruction schemes on the other.

CIVL415 Structural Design 3 6cp

Autumn Wollongong On Campus

Pre-requisites: CIVL311 Structural Design 1 and CIVL314 Structural Design 2.

Assessment: Major design projects: objectives i to iv.

Subject Description: This subject includes the design of some large steel, concrete, timber and mixed structures. Gravity and lateral load resisting systems for steel, concrete, timber and mixed construction frames for wind and earthquake loads. Advanced design considerations in steel and concrete structures. Implications of fire and corrosion for steel structures, and creep and shrinkage effects in concrete structures. Advanced reinforced concrete design including shear walls, deep beams and pile caps. Integrated topics may include the design of transmission towers, large industrial buildings, multistorey buildings, carparks or other structures which enable integration of the concepts of structural design and construction.

Subject Objectives: On successful completion of this subject students should be able to: (i) undertake detailed design of structures; (ii) calculate important loading and secondary issues which affect the design of structures, such as fire, corrosion, creep and shrinkage; (iii) develop conceptual designs for building structures; (iv) quantify labour and construction issues and the concept of total structural costs.

CIVL444 Civil Engineering Design 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisites: CIVL361 Geomechanics 1, CIVL311 Structural Design 1, CIVL322 Hydraulics and Hydrology.

Assessment: No formal examination will be held. Submitted design work and assignments will be assessed covering all objectives. Site visits may be arranged.

Subject Description: Major Civil Engineering design, which will cover an integrated project incorporating geotechnical, hydraulic, structural and transport engineering.

Subject Objectives: On successful completion of this subject students should have: (i) gained experience in conceptual design incorporating a systems approach; (ii) gained the ability to break down complex problems into smaller, more readily handled components; (iii) gained experience in working in design teams and accepting responsibilities; (iv) incorporated significant components of prior learning into a large project.

CIVL454 Structures 2 6cp

Autumn Wollongong On Campus

Pre-requisite: CIVL352 Structures 1

Assessment: 2 hour final examination: objectives i to iii. 1 hour mid-session examination: objectives i to iii. Laboratory reports: objective iv. Other assignments may be taken into account: objectives i to iii.

Subject Description: Ultimate load analysis of beams, plates, slabs and frames in steel and concrete. Composite beams and columns. Vibrations due to earthquake, wind, and water. Dynamics of single degree of freedom systems.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the structural behaviour of more complex structural systems subject to static forces; (ii) understand the response of simple structures to dynamic forces; (iii) gained experience in testing structural elements and simple systems; (iv) carry out laboratory tests and interpret results.

CIVL457 Structures 3 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: CIVL352 - Structures 1

Assessment: 2 hour final examination: objectives i and ii. 1 hour mid-session examination: objective i. Designated tutorial exercises will be assessed: objectives i and ii.

Subject Description: Elementary structural concepts using matrix algebra. Structural assemblages. Finite element analysis for one, two and three dimensional problems. Computer applications in statics, stability and dynamics.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand and use the systematic order of matrix algebra to establish the equations of structural analysis for subsequent solution by computer; (ii) understand the theoretical basis for structural modelling, using the finite element method.

CIVL462 Geomechanics 2 6cp

Spring Wollongong On Campus

Pre-requisite: CIVL361 - Geomechanics 1

Assessment: 2 hour final examination: objectives i to iv. Class tests/assignments: objectives i to iv.

Subject Description: One-dimensional theory of consolidation, primary and secondary consolidation; normally consolidated and over consolidated soils; settlement analysis Relationship between principal stresses at failure, importance of drainage conditions in soils, fully undrained conditions for saturated soils; drained and undrained shear strength of cohesive soils, behaviour of partially saturated soils Overburden and lateral stresses, active and passive pressures, Rankine's earth pressure theory, Coulomb's wedge theory, geotechnical aspects of retaining walls, drainage of backfill Bearing capacity of foundations; shallow footings and rafts, pile foundations, contact stress and subgrade reaction; use of elastic theory for stress and settlement calculation in soils and rocksbr. Unconfined seepage through earth structure, seepage control in dams, design of filters.

Subject Objectives: On successful completion of this subject students should be able to: (i) identify the key principles and factors controlling the mechanical behaviour of soils with particular reference to drainage conditions; (ii) develop and apply simplified solutions to geotechnical problems encountered in foundations and retaining structures; (iii) understand principles concerning seepage through dams and its control; (iv) identify key assumptions in the development of theories and in the solution of practical (field) problems; (v) understand and select the correct procedures for laboratory testing and interpret the results in relation to the field practice.

CIVL463 Geomechanics 3 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: CIVL462 - Geomechanics 2

Assessment: 2 hour final examination: objectives i to iii. Class tests/assignments: objectives i to iii.

Subject Description: Models of soil behaviour, stress paths in soil mechanics, total and effective stress paths, Stress strain behaviour of different types of soil under drained and undrained conditions; strain-softening; peak, softened and residual shear strength of cohesive soils; pore pressure co-efficients A and B and their use in practical problems. Soil behaviour under earthquake conditions, the phenomenon of liquefaction. Comparison of laboratory and field testing for geotechnical investigation; uncertainties in geomechanics, Analysis of cantilever and anchored sheet piles, analysis of strutted excavations.

Subject Descriptions

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the importance of stress paths in soil mechanics and the real stress-deformation behaviour of soils under static and seismic conditions

(ii) identify the relative merits and shortcomings in the use of different methods of soil exploration and testing (iii) understand the nature and significance of uncertainties in geomechanics.

CIVL487 Traffic Engineering 6cp

Contact Hours: Not on offer in 2003

Assessment: 2 hour final examination: objectives i to iv. Other short examinations and assignments may be taken into consideration: objectives i to iv.

Subject Description: The subject is designed to provide students with detailed knowledge of traffic and transport engineering. The subject will cover traffic engineering systems, traffic flow theory, intersection capacity, traffic control devices, accident studies, traffic survey methods, traffic management, transport network models, and use of traffic simulation programs. All these roads and traffic designs are to comply with the requirements of the current Australian Standards and codes of practice. The subject will include a number of tutorials, computer applications and field work.

Subject Objectives: The primary objective of this subject is to understand and appreciate traffic network as a single system and to comprehend the design of roads. After finishing the subject successfully, the student should be in a position to: (i) Carry out analysis of traffic networks; (ii) Be able to design and conduct a traffic survey; (iii) Design urban roads and intersections; (iv) Design traffic control devices.

CIVL489 Roads Engineering 6cp

Autumn Wollongong On Campus

Pre-requisites: ENGG251 Mechanics of Solids and CIVL361.

Assessment: 2 hour final examination: objectives i to v. Other short examinations and assignments may be taken into consideration: objectives i to v.

Subject Description: The subject is designed to provide students with detailed knowledge of roads engineering: the design of roads both geometrically and structurally, construction and rehabilitation of roads. The subject will cover the following topics: route selection, road location, environmental factors, land information systems, geometric design of rural roads, pavement and subgrade materials, vehicular loading, analysis of road pavements, pavement design, road drainage, recycling pavements, cost analysis, planning and road construction and traffic engineering. All these roads designs are to comply with the requirements of the current Australian Standards and codes of practice. The subject may include a number of tutorials, computer applications and field work.

Subject Objectives: On successful completion of this subject students should be able to: (i) Design roads, both geometrically and structurally taking into account materials availability. (ii) Predict traffic loading and future growth. (iii) Assess the rehabilitation of roads. (iv) Conduct cost analysis of alternative designs. (v) Supervise the construction of roads.

CIVL491 Engineering Computing 3 6cp

Spring Wollongong On Campus

Pre-requisite: CIVL392

Assessment: Reports and assignments will be assessed: objectives i and ii. No formal examination.

Subject Description: Use of engineering applications software, including structural and geotechnical mechanics, using finite element programs for stress, stability, and dynamic analysis.

Discrete simulation. Depending on the availability of software other applications may be utilised. Problems will be selected from various areas in engineering.

Subject Objectives: On successful completion of this subject students should be able to: (i) develop practical skills necessary to use engineering commercial software successfully; (ii) be exposed to a wide range of commercial software and be able to handle various engineering applications.

CIVL495 Public Health Engineering 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: ENGG252 - Fluid Mechanics

Assessment: Two 1.5 hour class tests and two design and laboratory reports.

Subject Description: The subject is designed to introduce public and environmental engineering concepts to civil engineers. The public health issues relating to natural resources, ecological concepts, water supply and sanitation problems, water and wastewater characteristics, water quality standards and guidelines, engineering management of water quality processes in rivers and lakes, stormwater and mine water pollution and control, design of water supply and treatment processes, design of wastewater collection, treatment, reuse and disposal systems, industrial water treatment and reuse will be discussed. The lecture components will be complemented with tutorials, laboratory classes and field trips.

Subject Objectives: On successful completion of this subject students should be able to: (i) Understand the civil engineer's role in the environment and will have the ability to solve engineering problems relating to water supply and sanitation. (ii) Understand water quality principles and parameters and be able to identify physico-chemical and biological characteristics of water and wastewater. (iii) Demonstrate understanding of engineering issues relating to water quality of rivers and catchments. (iv) Design of water supply systems and treatment plants. (v) Ability to undertake environmental engineering experiments and write a report. (vi) Design of wastewater collection, treatment, reuse and disposal systems. (vii) Demonstrate understanding of industrial water treatment and water reuse.

ENGG152 Engineering Mechanics 6cp

Spring Wollongong On Campus

Assessment: 2 hour final examination: objectives i to iv. Other short examinations: objectives i to iv. Laboratory reports: objectives i and v.

Subject Description: Two dimensional statics of particles and rigid bodies. Forces in frames. Kinematics of particles in rectilinear and plane motion. Kinetics of particles: equations of motion; work and energy; impulse and momentum.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand and simplify force and moment systems; (ii) draw and apply free body diagrams to solve engineering systems; (iii) analyse particles in equilibrium and motion, including work, energy, impulse and momentum; (iv) analyse simple engineering problems in statics and dynamics; (v) understand and observe basic behaviour of static and dynamic systems.

ENGG153 Engineering Materials **6cp**
Spring Wollongong On Campus
Assessment: Final examination: objectives ii to v. Quizzes: objectives ii to v. Tutorial/practical assignments: objectives i, iii and iv.
Subject Description: Introduction to engineering materials: definition and description of properties; influence of material properties on engineering design; description of material structures and relationships to properties; production processes for engineering materials; the materials cycle. Case studies illustrating the use of metals, ceramics and polymers in engineering applications. Practical classes on measuring mechanical properties and observing mechanical behaviour.
Subject Objectives: On successful completion of this subject students should be able to: (i) use materials properties data to solve basic engineering design problems; (ii) define the main categories of engineering materials and describe their general properties; (iii) define the main mechanical properties of materials and describe elastic, plastic and viscoelastic mechanical behaviour; (iv) conduct tensile tests on material samples and calculate the main mechanical properties from the data obtained; (v) describe the general relationships between structure, processing and properties of metals, ceramics and polymers; (vi) describe the production of major engineering materials from natural resources.

ENGG154 Engineering Design and Innovation **6cp**
Autumn Wollongong On Campus
Contact Hours: 5-6 hours per week
Assessment: Progressive Assessment through quizzes: objectives i and ii. Assignments: objective i. Design reports: objective iii. Presentations: objective iii.
Subject Description: (a) Engineering Drawing: Introduction and standards information; geometrical constructions; freehand sketching; the production of a mechanical drawing; orthographic projection; selection and layout of views; sectional views of orthographic projections; auxiliary views of orthographic projections; general arrangements and assembly drawings. (b) Computer-Aided Drafting: Introduction to computer aided drafting; use of entity draw and selected utility commands and services; dimensioning, display controls; coordinate systems; editing and inquiry commands; entity properties (layers) and use of blocks. (c) The phases of design; team building; design and manufacturing processes; design models; design economics; decision processes; creative design; case studies. The three sections of this subject will be presented as an integrated whole. This will be achieved through a number of creative design projects and case studies.
Subject Objectives: As a result of involvement in the activities of this subject the students should be able to: (i) read and produce engineering drawings; (ii) produce computer-aided drawings using AutoCAD; (iii) learn in a team/cooperative environment and produce creative designs of simple products/ideas both in general engineering and their own engineering discipline.

ENGG171 Scholars Research Project 1 **6cp**
Annual Wollongong On Campus
Autumn Wollongong On Campus
Spring Wollongong On Campus
Contact Hours: No formal contact hours

Restrictions: Students must be enrolled in the Engineering Scholars Program.
Assessment: Research proposal, seminar presentation, progress report and final report.
Subject Description: The subject introduces students to specific areas of research in the field of Engineering. Topics will be negotiated based on the current activities of various research units linked to the Faculty of Engineering and the interests of the student. Students will join a particular project and undertake certain tasks under the supervision of a designated staff member. Students are required to undertake literature reviews, collect and analyse data and report on their findings to the research team. Hands on experience in an engineering laboratory is a feature.
Subject Objectives: 1. Develop a research proposal, supported by initial review of existing knowledge. 2 Construct a literature search on appropriate search engines. 3. Design an experiment to examine an engineering research problem. 4. Structure a research report.

ENGG251 Mechanics of Solids **6cp**
Autumn Wollongong On Campus
Contact Hours: 5 hours per week
Pre-requisite: ENGG152 Engineering Mechanics
Assessment: Tutorial and laboratory assignments: objectives i to iv. 1 hour mid-session quiz: objectives i and ii. 3 hour final examination: objectives i and ii.
Subject Description: Stress on a section, concept of stress-strain relationship and Hooke's Law. Torsion of shafts and hollow sections. Problems in bending and stress of beams. Analysis of plane stress and plane strain, combined stresses. Introductory yield criteria for metals, and anelastic behaviour of non metals. Deflection of beams and frames. Statically indeterminate beams, and simple column buckling. Thermal stresses and energy methods. Experimental techniques. Prerequisite minimum preparation is Engineering Mechanics, Engineering Mathematics and Engineering Materials.
Subject Objectives: On successful completion of this subject, students should be able to: (i) have a general understanding of the concepts and methods of mechanics of materials and elementary structural analysis; (ii) solve problems involving stress and strain, deflections, failure loads and stability; (iii) develop skills in experimental stress-strain analysis; (iv) understand and observe basic behaviour of structural elements.

ENGG252 Engineering Fluid Mechanics **6cp**
Autumn Wollongong On Campus
Co-requisites: MATH142 or MATH188.
Assessment: Final examination: objectives i to v. Mid-session quizzes: objectives i and iv. Tutorial assessments: objectives i to iv. Laboratory work on hydrostatics, momentum of fluid, venturi meter, wave flow and pipe flows.
Subject Description: This subject is designed to introduce elementary fluid mechanics concepts for civil, environmental, mechanical and mining engineers. The topics include fluid properties, hydrostatics, manometry, Bernoulli's, mass, energy and momentum equations and their applications, dimensional analysis, fluid flow in pipes, pipe friction losses and fluid flow measurements. The lecture components will be complemented with tutorials and laboratory classes. This subject intends to provide a working knowledge to solve simple fluid flow problems in the various branches of engineering. Students are assumed to have knowledge of 1st year engineering mathematics.

Subject Descriptions

Subject Objectives: On successful completion of this subject students should be able to: (i) understand fundamental engineering concepts relating to fluid properties; (ii) derive and solve hydrostatics problems encountered in manometers, plane and curved surfaces and buoyant bodies; (iii) solve problems associated with the three fundamental fluid flow equations namely equations of mass, momentum and energy; (iv) carry out analysis of problems associated with fluid flow in pipes; (v) measure fluid flow using simple flow measuring principles associated with weirs, venturi meters, nozzles, orifices and pipes.

ENGG255 Professional Option 2 6cp

Annual	Wollongong	On Campus
Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus

Contact Hours: No formal contact hours

Restrictions: Only part-time students in full-time employment allowed to enrol.

Assessment: A work plan, a 4000 word report and a formal seminar presentation. All submitted material must be certified by a professional supervising engineer.

Subject Description: This subject is for students currently in approved full-time employment and enrolled in a part-time study program. This subject will normally be taken in Stages 3, 4 or 5 of the BE Program. Students must seek approval to enrol in this subject from the Director of Studies. Approval will be granted to students who can demonstrate that their employment provides appropriate experience and training as part of their degree program. Approval will not be granted for work that involves essentially trivial/routine tasks or that is not directly related to the discipline of engineering relevant to the student's program.

Subject Objectives: On satisfactory completion of this subject students should be able to: (i) maintain a professional diary; (ii) write a technical report detailing their activities during their employment; (iii) critically evaluate the activities carried out during the period of employment; (iv) report on the application and relevance of University subjects to their industrial employment.

ENGG261 Professional Engineers and the Management of Technology 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 4-5 Hours per week

Assessment: Tutorial Assignments: objectives i to viii. Seminar: objective ix. Reports: objectives v to ix.

Subject Description: An introduction to the engineering profession, the important role engineers play in managing technology in a modern community, and development of communications skills essential for effective leadership. Topics include the engineering profession, engineering design and philosophy, the engineer's role in modern society, communications processes, research methods, oral and written communications techniques. Case studies, statistics, and historical data are used to stimulate wide ranging thought and discussion about the engineering profession, our role and responsibilities.

Subject Objectives: On successful completion of this subject students should be able to: (i) explain what it means to be a professional engineer; (ii) discuss the qualities and skills that an engineer requires to do their job well; (iii) explain the significance of communications to effective management, and identify barriers to communications;

(iv) recognise the experimental nature of engineering design, and the implications of this; (v) understand the research process, and how engineers apply it to problem solving; (vi) discuss ways in which technological developments are socially shaped and directed; (vii) identify environmental factors that should be considered in engineering activities and incorporated into engineering design; (viii) recognise the ways in which legislation, regulation and technological change are related; (ix) be able to communicate technical information to a variety of audiences in a clear, concise and professional manner.

ENGG271 Scholars Research Project 2 6cp

Annual	Wollongong	On Campus
Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus

Contact Hours: No formal contact hours

Restrictions: Students must be enrolled in the Engineering Scholars Program.

Assessment: Research proposal, seminar presentation, progress report and final report.

Subject Description: The subject introduces students to specific areas of research in the field of Engineering. Topics will be negotiated based on the current activities of various research units linked to the Faculty of Engineering and the interests of the student. Students will join a particular project and undertake certain tasks under the supervision of a designated staff member. Students are required to undertake literature reviews, collect and analyse data and report on their findings to the research team. Experience in engineering design, experimentation and data analysis will be a feature.

Subject Objectives: 1. Design an experiment to examine an engineering problem. 2. Collect and analyse data sets. 3. Evaluate data and synthesise into ideas and concepts. 4. Communicate research results and ideas to a research group verbally and in writing.

ENGG291 Engineering Fundamentals 6cp

Spring	Wollongong	On Campus
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Contact Hours: 5 hours per week

Assessment: Examinations (60%). Laboratory work and assignments (40%).

Subject Description: This subject is designed to provide students from disciplines such as Electrical, Telecommunications and Computer Engineering with an introduction to some other Engineering disciplines which have an important role in the design and application of electrical and computer technologies. Three main areas are covered. Heat Transfer- Conduction, convection and radiation heat transfer as applicable to the field of electrical engineering. Engineering Mechanics- Forces, moments and equilibrium states; stress in beams, cylinders and shafts; simple deflection analysis. Materials Engineering- Overview, of engineering materials; bonding and crystal structure in electrical and electronic materials; origin of electrical and electronic properties; structure and properties of electrical and electronic materials; selection of materials for application in electrical engineering.

Subject Objectives: On successful completion of this subject students should: (a) i- analyse thermal engineering problems relevant to electrical engineering (eg. cooling of electronics, power transformers and motors); ii- measure temperatures and other heat transfer parameters important in electronic equipment through a laboratory experiment on the cooling of power electronics;

iii- predict heat transfer rates in a variety of industrial equipment and processes; (b) i- understand forces, moments and equilibrium states and the relationship between stress and strain; ii -understand the effect of stresses on simple engineering systems; (c) i- understand the origin of electrical, electronic and magnetic properties in electrical and electronic materials; ii- understand the structure-property relationships in electronic and electrical materials; iii- have some understanding of materials applications in electrical engineering.

ENGG355 Professional Option 3		6cp
Annual	Wollongong	On Campus
Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus

Contact Hours: No formal contact hours

Restrictions: Only part-time students in full time employment are allowed to enrol.

Assessment: A work plan, a 4000 word report and a formal seminar presentation. All submitted material must be certified by a professional supervising engineer.

Subject Description: This subject is for students currently in approved full-time employment and enrolled in a part-time study program. This subject will normally be taken in Stages 3, 4 or 5 of the BE Program. Students must seek approval to enrol in this subject from their Director of Studies. Approval will be granted to students who can demonstrate that their employment provides appropriate experience and training as part of their degree program. Approval will not be granted for work that involves essentially trivial/routine tasks or that is not directly related to the discipline of engineering relevant to the student's program.

Subject Objectives: On successful completion of this subject students should be able to: (i) maintain a professional diary; (ii) write a technical report detailing their activities during their employment; (iii) critically evaluate the activities carried out during the period of employment; (iv) report on the application and relevance of University subjects to their industrial employment.

ENGG361 Engineering Management		6cp
Spring	Wollongong	On Campus

Assessment: Case study report; examination, tutorial papers, and tutorial presentation.

Subject Description: This subject identifies and examines the economic, financial and statutory basis for decisions required in the evaluation of proposed engineering projects, and in the financial management of engineering projects and operations. It provides a brief introduction to the foundations of modern quality management and to statistical quality control methods relevant to engineering operations. It also provides an introduction to the law of contracts and to the evaluation and management of engineering contracts.

Subject Objectives: After successful completion of ENGG351 the students should be able to describe the managerial issues involved in the engineering functions of an organisation, and in the initiation, planning and control of engineering projects.

They should understand the methods of evaluating the feasibility of an engineering project and of comparing alternative proposals for attaining engineering objectives and should be able to carry out example calculations in these areas.

They should be able to interpret balance sheets and profit-and-loss accounts and describe and provide examples of accounting methods used in the financial control of engineering operations and projects, including cost control. They should understand the legal and managerial issues involved in the preparation, evaluation and administration of engineering contracts. Finally, they should have a basic understanding of modern quality management and the use of appropriate logical and statistical quality control methods in engineering.

ENGG371 Scholars Research Project 3 6cp

Annual	Wollongong	On Campus
Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus

Contact Hours: No formal contact hours

Restrictions: Students must be enrolled in the Engineering Scholars Program.

Assessment: Research proposal, seminar presentation, progress report and final report.

Subject Description: The subject introduces students to specific areas of research in the field of Engineering. Topics will be negotiated based on the current activities of various research units linked to the Faculty of Engineering and the interests of the student. Students will join a particular project and undertake certain tasks under the supervision of a designated staff member. Students are required to undertake literature reviews, collect and analyse data and report on their findings to the research team. The research will include experience in an engineering laboratory and/or computer work.

Subject Objectives: 1. Develop a research proposal, supported by initial review of existing knowledge. 2. Conduct a thorough review of literature. 3. Design an experiment/computer program to examine an engineering research problem. 4. Present their work. 5. Write a comprehensive research report.

ENGG434 Introduction to Materials Welding and Joining 6cp

Autumn	Wollongong	Flexible
Spring	Wollongong	Flexible

Exclusion: MATE434 - Materials Welding and Joining

Assessment: Assignments (2). Quiz (computer based via WebCT). Exam.

Subject Description: The subject introduces the student to the selection and cost effective application of joining technology. OH&S and quality issues and recent welding innovations are covered.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Understand the significance of welding and potential problems. 2. Be able to identify suitable processes for specific applications. 3. Be aware of safety considerations in applying welding. 4. Understand requirements for process control.

ENGG452 Thesis A 12cp

Autumn	Wollongong	On Campus
Annual	Wollongong	On Campus
Spring	Wollongong	On Campus
Spring 2003 / Autumn 2004	Wollongong	On Campus

Pre-requisites: Completion of 120cps

Subject Descriptions

Assessment: Reports: objectives i to iii. Seminar: objective vi. Manuscript: objectives i to vi.

Subject Description: All students must complete a 12 credit point thesis (ENGG452) normally over a period of two sessions - though Scholars Program students may elect to take ENGG453. Students are expected to spend at least 336 hours on the 12 credit point thesis. The thesis is a core element of the degree in each engineering course. The knowledge and skills acquired in the design, experimentation, analysis, management and communications aspects of the course are brought together in an individual project undertaken by the student under the guidance of an academic supervisor. Individual disciplines will advise further requirements at the start of the thesis.

Subject Objectives: On successful completion of this subject(s) a student should be able to: (i) define a problem; (ii) retrieve and analyse previous work on related problems; (iii) formulate methods for problem solution; (iv) plan, design and construct and experimental or theoretical procedure where appropriate; (v) collate and evaluate findings; (vi) communicate conclusions and solutions verbally and in writing.

ENGG453 Thesis B 18cp

Annual	Wollongong	On Campus
Spring	Wollongong	On Campus
Autumn	Wollongong	On Campus
Spring 2003 / Autumn 2004	Wollongong	On Campus

Pre-requisite: Completion of 120cps

Assessment: Reports: objectives i to iii. Seminar: objective vi. Manuscript: objectives i to vi.

Subject Description: As an alternative to ENGG452, subject ENGG453 (18 credit points) may be taken by students in the Engineering Scholars program, or by other high achieving students with the permission of the Sub Dean of Engineering. A student electing to take ENGG453 will undertake a longer period of work and complete a longer thesis. Students are expected to spend 504 hours on the 18 credit point thesis. The thesis is a core element of the degree in each engineering course. The knowledge and skills acquired in the design, experimentation, analysis, management and communications aspects of the course are brought together in an individual project undertaken by the student under the guidance of an academic supervisor. Individual disciplines will advise further requirements at the start of the thesis.

Subject Objectives: On successful completion of this subject(s) a student should be able to: (i) define a problem; (ii) retrieve and analyse previous work on related problems; (iii) formulate methods for problem solution; (iv) plan, design and construct an experimental or theoretical procedure where appropriate; (v) collate and evaluate findings; (vi) communicate conclusions and solutions verbally and in writing.

ENGG454 Professional Experience 0cp

Spring	Wollongong	On Campus
Autumn	Wollongong	On Campus

Assessment: Written report (guidelines available from Engineering Enquiry Centre).

Subject Description: As a requirement for the award of the degree of Bachelor of Engineering, students are required to obtain at least 12 weeks approved professional experience in a relevant industry during the course and submit a report to the satisfaction of the Discipline Directors of Studies.

It is preferable that candidates undertake this requirement during the summer recess, between the third and fourth years of the BE degree. Exemption from the requirement will be given to a student who has passed one or more of the Professional Option subjects. Refer to Discipline Directors' of Studies for details.

Subject Objectives: The objectives of undertaking this experience are to: (i) expose the student to an industrial/professional environment in order to appreciate the various activities associated with engineering in practice; (ii) allow the student to observe and undertake tasks in practical aspects of investigations, design and construction of engineering works as a complement to theoretical studies; (iii) instil confidence in the student to take up positions that require responsibility, motivation, decision making and communication with other people in the work place; (iv) satisfy requirements for the degree by professional bodies such as the Institution of Engineers, Australia.

ENGG455 Professional Option 4 6cp

Annual	Wollongong	On Campus
Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus

Contact Hours: No formal contact hours

Restrictions: Only part-time students in full-time employment allowed to enrol.

Assessment: A work plan, a 4000 word report and a formal seminar presentation. All submitted material must be certified by a professional supervising engineer.

Subject Description: This subject is for students currently in approved full-time employment and enrolled in a part-time study program. This subject will normally be taken in Stages 3, 4 or 5 of the BE Program. Students must seek approval to enrol in this subject from their Director of Studies. Approval will be granted to students who can demonstrate that their employment provides appropriate experience and training as part of their degree program. Approval will not be granted for work that involves essentially trivial/routine tasks or that is not directly related to the discipline of engineering relevant to the students' program.

Subject Objectives: On successful completion of this subject students should be able to: (i) maintain a professional diary; (ii) write a technical report detailing their activities during their employment; (iii) critically evaluate the activities carried out during the period of employment; (iv) report on the application and relevance of University subjects to their industrial employment.

ENGG461 Project Management and Human Factors in Engineering 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 4 hours per week

Assessment: Assignments and examination - covering all objectives.

Subject Description: The particular topics addressed in this course, which every engineering student should know and be prepared to put into practice on entering his/her professional career, include: Project Management; Total Quality Management; Quantitative Management Techniques; Human Relations; Engineers' Ethics and Controversy; Engineers as Consultants/Experts;

Accidents and Risk, Occupational Health and Safety; Maintenance Management; and Innovation Management.

Subject Objectives: On successful completion of this subject students should have an understanding and working knowledge of some of the major aspects of engineering management including: (i) the important concepts of modern management theory and practice, with emphasis on project management; (ii) professional and social responsibilities; (iii) human and behavioural aspects; (iv) modern engineering management tools and techniques; and (v) the principles of total quality management.

ENVE220 Water Quality Engineering 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG252 - Engineering Fluid Mechanics

Assessment: 2 hour final examination: objectives i to v. 1hour mid-session quiz: objectives ii to iv. Laboratory reports: objectives i to v.

Subject Description: The subject is designed to introduce environmental engineering concepts at a fundamental level. The environmental problems and solutions relating to natural resources, ecological systems, water pollution, water quality processes in rivers and lakes, water supply and treatment processes, wastewater collection, treatment and disposal, water quality guidelines and other global environmental issues will be discussed. The lecture components will be complemented with tutorials and laboratory classes.

Subject Objectives: On successful completion of this subject the student should be able to: (i) understand water quality issues relating to water resources and wastewater; (ii) solve problems relating to natural purification processes; (iii) design unit processes in water and wastewater treatment; (iv) conduct simple experiments and assess water quality of a given water sample.

ENVE221 Air and Noise Pollution 6cp

Spring Wollongong On Campus

Assessment: 2 hour Final Examination: objectives i and iv. Mid-session quizzes: objectives i and iii. Laboratory reports and projects: objectives i to iii.

Subject Description: Air Pollution - meteorology; atmospheric chemistry; air quality; sources of air pollution; effects of air pollution; dispersion modelling; control of air pollution. Noise Pollution - noise pollution legislation; sound power and intensity levels; noise from several sources; background noise effects; defining and measuring noise; weighting factors and equivalent noise levels; effect of noise on people; propagation of sound; noise control at source, during propagation and at receiver; design of noise barriers.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the basic principles of air and noise pollution; (ii) identify the significant factors affecting air and noise pollution; (iii) apply analytical techniques to solve problems in air and noise pollution measurement and control; (iv) design air and noise control devices.

ENVE311 Pollution Control and Cleaner Production 6cp

Autumn Wollongong On Campus

Pre-requisite: ENVE220 - Water Quality Engineering

Assessment: Project report: objective iv. Tutorial/assignments: objective iii. 2 hour mid-session examination: objectives i and ii. 2 hour final examination: objectives i and ii.

Subject Description: This subject is divided into two sections. The first section deals with unit processes design. In this section all the physico-chemical processes commonly used for water pollution control will be discussed in detail. In the second section two topics viz, industrial waste management and cleaner production will be introduced. Industrial waste management includes source identification, characterisation, segregation, treatment and disposal. It also includes design of various unit operations/processes for liquid waste treatment. Application of advanced processes in an industry for waste treatment, reuse and recycling, and final disposal of wastes, plus overall waste auditing of an industry will be illustrated using a case study.

Subject Objectives: On successful completion of this subject students should be able to: (i) design unit processes for water pollution control, for the given influent and effluent conditions; (ii) carry out a complete analysis of industrial wastes including source identification, characterisation, and segregation; (iii) apply principles of cleaner production in order to minimise the waste generated from an industry; (iv) carry out waste auditing processes for a given industry.

ENVE320 Environmental Engineering Design 1 6cp

Autumn Wollongong On Campus

Pre-requisite: ENVE220 Water Quality Engineering

Assessment: 2 hour mid-session examination: objective ii. 2 hour end of session quiz: objectives iii to iv. Design reports: objective i to iv. Field trip assessment: objectives i and iv.

Subject Description: The subject is designed to introduce system design using unit processes encountered in environmental engineering. The subject will cover design concepts, detailed and advanced design of water supply and treatment systems, advanced solid-liquid separation processes, design of wastewater collection systems, design of advanced wastewater treatment plant design, ocean outfall systems, design of land based systems, network design. The subject also includes design of air pollution and control systems. The lecture components will be complemented with design classes and field trips.

Subject Objectives: On successful completion of this subject students should be able to understand the main principles relating to the design components of the following environmental systems: (i) Understand the design philosophy in environmental engineering. (ii) Design conventional water and wastewater treatment plants including wastewater collection, reuse and disposal systems. (iii) Network design land based treatment systems. (iv) Design air pollution control systems.

ENVE321 Solid and Hazardous Waste Management 6cp

Spring Wollongong On Campus

Assessment: Project report: objectives i to iv. Tutorial/assignments: objectives ii to iv. 2 hour mid-session examination: objectives i to v. 2 hour final examination: objectives i to v.

Subject Description: This subject introduces fundamentals of solid and hazardous waste management. The content includes characterisation, collection, transportation, storage and final disposal of solid and hazardous waste. In the case of hazardous waste, additional topics of identification, classification, risk assessment, legislation and health hazards will be covered.

Subject Descriptions

Waste minimisation, reuse/recycle; stabilisation and volume reduction of hazardous waste are considered. Besides lectures and tutorial sessions, this subject includes field trips, laboratory classes and project work.

Subject Objectives: On successful completion of this subject students should be able to: (i) design collection routes for municipal solid waste; (ii) carry out feasibility analysis and design of facilities for collection, transportation, storage and treatment of solid and hazardous waste; (iii) carry out a complete analysis of hazardous waste in terms of identification, classification and determination of harmful effects on humans and environment; (iv) carry out characterisation studies, identify opportunities for waste minimisation and recycle/reuse of solid waste; (v) design facilities for detoxification, stabilisation, volume reduction and final disposal of hazardous waste.

ENVE385 Environmental Engineering 8cp

Autumn Wollongong On Campus

Pre-requisites: MATH151 or MATH187 or MATH141 or equivalent.

Subject Description: (a) Causes and control of air pollution, water pollution and noise pollution. (b) Experiments on water characteristics determination, waste water characteristics determination, oxygen capacity of water, noise pollution and air pollution.

ENVE410 Site Remediation 6cp

Spring Wollongong On Campus

Pre-requisite: CHEM214 - Analytical and Environmental Chemistry

Assessment: 2 hour final examination: objectives i to iii. Selection of mid-session quizzes: objectives i to iii. Lab reports: objective ii. Projects: objective iii.

Subject Description: This subject introduces fundamentals of site remediation and will include topics such as site characterisation, containment, soil erosion and remediation technologies. Remediation technologies such as biodegradation, permeable barriers, composting, incineration and soil vapour extraction will be presented in detail. Containment topics will include cover systems, reactive barriers, vertical barriers and geosynthetics. Topics such as remediation of soft and compressible ground, and acid sulphate soils will also be presented.

Subject Objectives: On successful completion of this subject students should be able to: (i) identify the elements required in a site characterisation study; (ii) understand the advantages and disadvantages of a variety of remediation techniques; (iii) know when and how to apply these technologies to specific sites.

ENVE411 Aqueous and Atmospheric Chemistry 6cp

Autumn Wollongong On Campus

Pre-requisite: CHEM214 - Analytical and Environmental Chemistry

Assessment: 2 hour final examination: objectives i and ii. Mid-session quizzes: objective i and ii. Tutorial assignments: objectives i and ii. Laboratory reports: objective i.

Subject Description: The application of physical chemistry to aqueous and atmospheric environments.

Pollution of the environment is often controlled by the chemical nature of possible contaminants and the surrounding media into which they are released. Topics will include chemical thermodynamics, acid-base chemistry, solubility of species, redox chemistry, gas phase chemistry, mass transfer and properties of aerosols. Laboratory exercises will be conducted to supplement the theoretical basis of the subject.

Subject Objectives: On successful completion of the subject, the students should have a basic understanding of chemical processes in environmental engineering as they pertain to aqueous and atmospheric environments and specifically: (i) the ability to understand the chemical interactions that influence speciation; (ii) the ability to conduct basic lab analyses of air and water samples; and (iii) the ability to use principles of chemistry to design treatment systems.

ENVE420 Water Engineering 6cp

Autumn Wollongong On Campus

Co-requisite: CIVL322 - Hydraulics and Hydrology

Assessment: 2 hour final examination: objectives i to iii. Mid-session quiz: objectives i to iii. Projects: objective iv.

Subject Description: Coastal Engineering - wave forecasting; wave refraction; diffraction and breaking; wave forces on structures; beach erosion and beach protection. Water Resources - the hydrologic cycle; distribution of the world's water resources; surface water resources; groundwater resources; computer models of catchment water balances; storage reservoir yield analysis. River Engineering - fluvial hydraulics; morphology of natural channels; erosion and sediment transport; re-naturalising streams; remediation of polluted rivers. Urban Stormwater Management - stormwater quality and flooding problems in urban areas; flood reduction using detention basins; computer modelling of urban stormwater systems.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the basic principles of coastal engineering, water resources, river engineering, and urban stormwater management; (ii) identify the significant factors which must be considered when analysing these topics; (iii) apply analytical techniques to solve problems in water engineering; (iv) design coastal, water resources, river and urban stormwater engineering works.

ENVE421 Environmental Engineering Design 2 6cp

Spring Wollongong On Campus

Pre-requisites: ENVE320, ENVE321 and CIVL322.

Assessment: Five design reports: objective i.

Subject Description: The ability to undertake a comprehensive integrated project design is the capstone of a student's engineering education. This subject will provide students with the opportunity to undertake the design of a major project.

Students will be provided with an overall concept plus specific requirements that must be met by the design. All aspects of environmental engineering will be involved, including impact assessment, legislation, and modelling. Topic areas that have not been presented in previous subjects, but are required for the successful completion of the project, will be covered during the lecture portion of the class. Lecture topics will include environmental impact assessment and legislation, and environmental modelling.

Subject Objectives: On the successful completion of this subject students should be able to: (i) Carry out analysis of problems associated with urban stormwater quantity and quality management. (ii) Design urban flood control structures including detention basins. (iii) Design water pollution control ponds including wetlands. (iv) Solve problems associated with water quality modelling of river and lake systems.

MATE201 Structure and Properties of Materials 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisites: ENGG153 - Engineering Materials or PHYS141 - Fundamentals of Physics A and PHYS142 - Fundamentals of Physics B.

Assessment: Assignments: objectives i to v. CD ROM based tutorials: objectives i to iv. Tests: objectives i to v. Examinations: objectives i to v.

Subject Description: Study of fundamental crystallography, structural defects, non-crystalline structures, structures of common metals, intermetallics, simple ceramics and polymers. Electrical, magnetic, optical, thermal and mechanical properties of materials and their relationships to structure will be discussed. Basic principles of techniques used to study structure will be introduced: optical microscopy, x-ray diffraction and scanning and transmission electron microscopy. Students will participate in tutorials and laboratory work related to these topics.

Subject Objectives: On successful completion of this subject students should be able to: (i) apply fundamental crystallographic techniques to correctly classify crystals, and identify directions and planes in crystals; (ii) describe the structures of some common metals, ceramics, polymers and intermetallics; (iii) discuss the origin of electrical, magnetic, optical, thermal and mechanical properties of materials, and explain how they are related to structure; (iv) describe the types of defects found in crystalline materials, and explain their effects on properties; and (v) explain the basic principles of optical microscopy, x-ray diffraction and scanning and transmission electron microscopy, and perform calculations using experimental data to correctly identify materials and structural features.

MATE202 Thermodynamics and Phase Equilibria 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: CHEM103 - Introductory Chemistry for Engineers

Assessment: Assignments, laboratory reports, mid-session test, and final examination.

Subject Description: Laws of thermodynamics: energy, entropy and free energy; equilibrium in chemical systems; chemical potential; determination of thermodynamical quantities; thermodynamics of phase equilibria and construction of phase diagrams. Binary condensed systems; Gibbs phase rule: lever rule; types of equilibrium diagram; experimental determination of phase diagrams, microstructural development, non-equilibrium effects. Ternary condensed systems. Application of phase equilibria to metallic, ceramic and polymeric systems.

Subject Objectives: On successful completion of this subject a student should be able to: (i) understand the basic laws and principles of thermodynamics; (ii) calculate the values of thermodynamic functions from tabulated data; (iii) appreciate the use of Ellingham diagrams in metallurgical processes; (iv) understand the relationship between thermodynamics and phase equilibria in condensed systems and construct simple binary diagrams from thermodynamic and experimental data; (v) interpret basic binary and ternary phase diagrams and determine the effects of equilibrium and non-equilibrium cooling on microstructural development; and (vi) appreciate the use of phase diagrams in understanding phase equilibria and transformations in metallic and ceramic systems.

MATE203 Phase Transformations 6cp

Spring Wollongong On Campus

Contact Hours: 52

Co-requisite: MATE201 - Structure and Properties of Materials

Assessment: Final examination and assignments.

Subject Description: Nucleation in liquid and solid states; thermodynamics of solidification; solidification of pure materials and alloys; thermal supercooling; constitutional supercooling; interface stability; solute redistribution; eutectic solidification; crystal growth techniques. Solid-state transformations - nucleation and growth of phases; Fick's laws of diffusion; diffusion mechanisms; transformation kinetics; transformation diagrams. Diffusional and diffusionless transformations: decomposition of solid solutions; ordering reactions, spinodal decomposition; eutectoid, massive, bainitic and martensitic transformations; crystallographic features; transformations in common alloy systems.

Subject Objectives: On successful completion of this subject students should be able to: (i) explain the fundamental principles underlying various types of phase transformations; (ii) apply basic thermodynamics to phase transformations; (iii) apply basic kinetics to phase transformations; and (iv) explain how material microstructures develop, and how phase transformations can be used to control microstructures during processing.

MATE204 Mechanical Behaviour and Fracture 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE201 - Structure and Properties of Materials

Assessment: Assignments, laboratories, and final examination.

Subject Description: Theoretical strength; slip; twinning; deformation of single and poly crystals; dislocation multiplication; cross slip; climb; dislocation interactions. Strain hardening; solid solution hardening; dispersion hardening; grain size strengthening; other strengthening mechanisms.

High temperature deformation; creep; stress relaxation; effect of strain rate and temperature; plastic instability; super plasticity; viscoelastic behaviour. Fracture mechanics - fracture modes; plane stress and plane strain; notch effects; crack propagation; fracture toughness; high temperature fracture; fatigue and environmentally-assisted failure; design to minimise fracture.

Subject Objectives: On successful completion of this subject a student should be able to: (i) explain the fundamental aspects of mechanical deformation and fracture; (ii) describe strengthening mechanisms;

Subject Descriptions

(iii) discuss factors which affect high temperature deformation; (iv) explain short and long term effects of crack propagation, and factors which influence failure; and (v) apply principles of mechanical behaviour and fracture to engineering design problems.

MATE291 Engineering Computing and Laboratory Skills 6cp

Autumn Wollongong On Campus

Contact Hours: 65

Pre-requisite: ENGG153 - Engineering Materials

Assessment: Assignments, tests, laboratory reports, and examination.

Subject Description: Introduction to basic laboratory techniques used to study structure and properties of materials. Techniques include thermal treatment, reflected and transmitted light microscopy, basic x-ray diffraction, mechanical testing of metals, ceramics and polymers, and statistical analysis of data. Introduction to computer operating systems, application of spreadsheets to engineering problems, introduction to structured programming using flow-charts; data acquisition and control using the C-language. Information gathering and report writing skills will be further developed.

Subject Objectives: On successful completion of this subject, students should be able to: (i) discuss the principles of temperature measurement, optical microscopy, basic x-ray diffraction and mechanical testing; (ii) explain the applications and limitations of these techniques; (iii) apply spreadsheets to analyse experimental data and to solve engineering problems; (iv) apply the C-language to elementary data acquisition and control tasks; and (v) prepare high quality laboratory reports.

MATE301 Engineering Alloys 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE203 - Phase Transformations

Assessment: Laboratory reports, assignments and examinations.

Subject Description: Ferrous alloys - Phase transformations in ferrous alloys; binary and ternary additions to iron; strengthening mechanisms; ternary and multi component alloys; commercial steels and cast irons; hardenability Non-ferrous alloys - Physical metallurgy, processing and applications of commercially significant non-ferrous alloys Advanced alloys and processing - superalloys, superplastic alloys and metal-matrix composites. Design and selection of metallic materials on the basis of property requirements. Case studies.

Subject Objectives: On successful completion of this subject the student should be able to: (i) understand the effect of adding a second component to iron on the stability, structure and properties of ferrite and austenite; (ii) be familiar with the effect of third components X on the stability and properties of austenite and ferrite in Fe-C-X alloys; (iii) be familiar with commercial cast irons and alloy steels in the categories of structural, constructional, tool and die, stainless and heat resisting; (iv) understand the concept of hardenability and the way it can be measured; (v) be familiar with the common non-ferrous commercial alloys and their thermal and mechanical treatments; and (vi) be familiar with structure-property relationships and processing of superplastic alloys, rapidly-solidified alloys, metal-matrix composites and intermetallics.

MATE302 Polymeric Materials 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: ENGG153 - Engineering Materials

Assessment: Tutorial assignments, quizzes, and final examination.

Subject Description: Review of polymerisation chemistry. Description of polymer structures from macromolecular to macroscopic; introduction to techniques for characterisation of polymer structures. Relationships between structure and properties of polymers, including mechanical, thermal, chemical, optical, electrical and rheological. Processing techniques for polymer products. Engineering design with polymers. Advanced polymers.

Subject Objectives: On successful completion of this subject the student should be able to: (i) describe the physical and structural features of polymeric materials; (ii) describe the inter-relationships between structure, processing and properties of polymeric materials; and (iii) solve problems related to the use of polymers in engineering applications, including polymer selection, failure analysis, processing and design.

MATE303 Ceramics, Glasses and Refractories 6cp

Spring Wollongong On Campus

Contact Hours: 39

Pre-requisite: MATE201

Assessment: Assignments: objectives i to iv. Tests: objectives i to iv. Seminar: objective iv. Processing project: objective iii. Examination: objectives i to iv.

Subject Description: Description of complex ceramic structures, including atomic and microstructural features of glass and crystalline ceramics, study of relationships between structures and physical and mechanical properties, methods for testing ceramics, industrial processing methods for ceramics, refractories, engineering ceramics, case study in design with brittle materials. A major process design project, in which students attempt to make a finished ceramic product which meets certain specifications forms a key part of the assessment.

Subject Objectives: On successful completion of this subject a student should be able to: (i) describe the structures of a range of ceramic materials; (ii) explain the inter-relationships between structures, processing methods and properties of ceramic materials; (iii) describe commonly used ceramics processing methods, and select the best method for making a particular product; and (iv) be able to explain why certain ceramics are used in particular engineering applications, and discuss the advantages and limitations of ceramics in comparison to other engineering materials.

MATE304 Transport Phenomena in Materials Processes 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATH283 Mathematics 2E for Engineers Part 1

Assessment: Tutorials, quizzes, and final examination.

Subject Description: Fluid dynamics - Properties of and types of fluids; laminar and turbulent flow; energy balances; conservation of energy; flow through packed beds; dimensional analysis; fluid flow measurement.

Heat and mass transfer - One and two dimensional heat conduction; radiation heat transfer; free and forced convection. Application of Ficks laws to diffusion in solids, liquids and gases; mass transfer coefficient; mass transport in fluid systems; interphase mass transfer; two-resistance theory. Applications of transport phenomena to a range of metallurgical processes.

Subject Objectives: On successful completion of this subject a student should be able to: (i) describe the properties of ideal and real fluids; (ii) understand the transition from laminar to turbulent flow and how fluid flow is measured; (iii) discuss the effect of fluid flow on metallurgical processes such as refining and casting; (iv) differentiate between the various modes of heat transfer and appreciate the significance of the heat transfer coefficient; (v) explain how the transport of heat affects a wide range of metallurgical processes such as refining, casting, heat treatment and thermomechanical processing; and (vi) understand the effect of diffusion in solid, liquids and gases on interface reaction kinetics.

MATE305 Primary Materials Processing 6cp

Spring Wollongong On Campus

Pre-requisite: MATE202 - Thermodynamics and Phase Equilibria

Assessment: Assignments, laboratory, project, examination.

Subject Description: Introduction to primary processing; raw materials and materials preparation for production of metals, ceramics and polymers; mineral processing ; production of metal oxides, clinkers and sinters. Study of metallurgical processes including iron and steelmaking, production of copper and aluminium. Introduction to polymerisation processes. The application of thermodynamics and kinetics to processing. Students will be involved in case study based projects, some laboratory work and visits to industrial sites.

Subject Objectives: On successful completion of this subject, students should be able to: (i) describe the major processes used for mineral processing and raw material preparation; (ii) explain the basic primary production processes used for metals, and ceramics and polymers; (iii) understand how the thermodynamics of a variety of reactions relate to the processes being described; (iv) explain basic kinetics of reactions involved in materials processing and how this relates to the processes being described; and (v) perform simple kinetic and thermodynamic calculations related to materials processing and process design.

MATE306 Degradation of Engineering Materials 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE202 - Thermodynamics and Phase Equilibria

Assessment: Examination, tutorial assignments (some using interactive computer software), laboratory reports.

Subject Description: Preliminary corrosion & electrochemistry; metals in equilibrium, thermodynamics of corrosion and dissolution, Pourbaix diagrams; Departures from equilibrium-kinetics of corrosion & the Evans diagram; types of corrosion, methods of measuring corrosion rates; Surface films & passivity; Corrosion prevention & control. Wear of materials; surface topography and its determination; origin of friction, influence of surface films and work hardening on friction; introduction to contact mechanics;

wear mechanisms and wear maps; techniques for minimising wear. Design of materials for particular service environments.

Subject Objectives: On successful completion of this subject, students should be able to: (i) explain the electrochemical principles involved for metals in equilibrium and the departure from equilibrium; (ii) describe electrochemical corrosion theory and common cathodic processes; (iii) explain the thermodynamics of corrosion and the Pourbaix diagram; (iv) explain the kinetics of corrosion and the Evans diagram; (v) describe types of corrosion and methods for corrosion prevention; (vi) explain surface films and passivity of metals; (vii) explain the importance of surface topography in friction and wear; (viii) discuss the origins of friction and the frictional behaviour of metals, ceramics and polymers; and (ix) describe common wear mechanisms, and apply wear maps to engineering problems.

MATE391 Materials Testing Techniques 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE291 - Engineering Computing and Laboratory Skills

Assessment: Logbooks, laboratory reports.

Subject Description: This is a laboratory based subject designed to give students practical experience with a variety of testing techniques used to assess materials. Techniques include thermal analysis, dilatometry, particle size analysis, and scanning electron microscopy and energy dispersive spectroscopy of x-rays. Principles of the techniques, data analysis and applications of the techniques to engineering problems such as failure analysis and phase transformations will be studied.

Subject Objectives: On successful completion of this subject, students should be able to: (i) discuss the principles of a variety of testing techniques used to assess materials; (ii) explain the applications and limitations of these techniques; (iii) demonstrate a basic level of proficiency in the use of selected techniques; and (iv) select appropriate techniques to assess engineering materials or investigate problems.

MATE401 Selection of Materials in Engineering Design 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE201 - Structure and Properties of Materials

Assessment: Assignments, case study projects, examination.

Subject Description: Engineering materials: properties, specifications and standards. Processes for shaping materials. Analysis of property - processing requirements for given applications. Design for recycling and sustainable development. Cost considerations in selection and design. Influence of shape factors in component design. Selection methodologies: performance indices, weighted property indices, value analysis, failure analysis and cost-benefit analysis.

Subject Objectives: This subject has the main objective of providing the student with an appreciation of the principles underlying the selection of materials and processing methods for the design of engineering components. A student who has successfully completed this subject should: (i) have acquired a broad knowledge of the range of materials that are available for engineering applications; (ii) be able to identify material property and processing requirements for a particular application;

Subject Descriptions

(iii) be able to describe and use the common methods for selecting materials for a given engineering component and; (iv) appreciate the influence on selection is issues such as production techniques, quantity requirements, environmental requirements satisfaction of standards and business economics.

MATE402 Secondary Materials Processing 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisites: MATE202 - Thermodynamics and Phase Equilibria and MATE203 - Phase Transformations.

Assessment: Assignments and final examination.

Subject Description: Heat flow in solidification; solidification of castings and ingots; mould design; continuous casting, near-net-shape casting, squeeze casting, spray forming and other casting methods; grain refinement; as-cast microstructure and homogenisation; casting defects. Mechanics of deformation processing; flow stress determination; temperature and strain-rate effects; dynamic restoration mechanisms; friction and lubrication; residual stresses; deformation-zone geometry; microstructural modelling; control of microstructure; computer-aided programming. Industrial metalworking processes: rolling, forging, extrusion, drawing, and machining; production of polymers and ceramics.

Subject Objectives: On successful completion of this subject, students should be able to: (i) explain a solidification process used to produce materials, and why they are used; (ii) discuss deformations processed used to produce materials, and perform mechanics calculations related to these processes and; (iii) describe how these processes can be used to control microstructure and properties of the final product.

MATE411 Advanced Materials and Processing 6cp

Spring Wollongong On Campus

Contact Hours: 39

Pre-requisites: MATE201 - Structure and Properties of Materials and MATE203 - Phase Transformations.

Assessment: Assignments and final examination.

Subject Description: Study of advanced materials selected from: glassy, quasi crystalline and nano crystalline materials, magnetic, electronic, catalytic and bio sensing materials; intelligent, functionally gradient and environmental materials. Superplasticity, superelasticity and superconductivity. Metal, polymer and ceramic based composite and principles of reinforcement. Advanced processing methods selected from: rapid solidification, powder processing, near-net-shape forming, self-sustaining high temperature synthesis, biomimetic processing, sol-gel processing, zone refining and molecular beam epitaxy. Engineering applications of advanced materials and processing methods.

Subject Objectives: On successful completion of this subject a students should be able to: (i) demonstrate an understanding of current developments in materials; (ii) explain the principles of advanced materials processing methods; (iii) describe the production methods for composite materials; and (iv) apply basic principles to the design of composites and other advanced materials.

MATE412 Electronic Materials 6cp

Autumn Wollongong On Campus

Contact Hours: 42

Pre-requisites: MATE201 - Structure and Properties of Materials or PHYS205 - Advanced Modern Physics or PHYS230 - Intermediate Physics.

Assessment: Assignments, laboratory reports and examinations.

Subject Description: The nature of electronic materials; Electrons in solids, band theory, insulators, conductors, semiconductors and superconductors. The free and nearly free electron theories. Electrical conductivity, hall effect. Types of magnetic materials. Semiconductors - intrinsic, extrinsic, the hole, the p-n junction. Superconductors - phenomena, BCS theory. Production of semiconductors and superconductors, control of processing to achieve desired properties. Design and production of novel materials to achieve improved performance in electronic devices; modern applications.

Subject Objectives: On successful completion of this subject, students should be able to: (i) explain the origins of electrical and magnetic properties of materials in terms of electronic structure; (ii) describe how electrical properties are related to structure; (iii) describe the processing of semiconductors and superconductors, and explain how processing parameters affect electrical properties; (iv) discuss applications for a range of electronic and magnetic materials; (v) use theoretical concepts to design new materials with improved properties.

MATE413 Structural Characterisation Techniques 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE291 - Engineering Computing and Laboratory Skills

Assessment: Assignments, seminars, laboratory practice and reports.

Subject Description: Several advanced structural characterisation techniques will be introduced through lectures and laboratory classes. Topics may be selected from: electron microscopy - interactions of electrons with solids, electron optics, image formation and interpretation, scanning and transmission electron microscopy, energy dispersive spectroscopy, convergent beam electron diffraction, image contrast theory, thin foil microanalysis. Atomic force microscopy, X-ray diffraction and texture analysis. Studies of advanced materials characterisation techniques may also be included.

Subject Objectives: On successful completion of this subject students should be able to: (i) explain the nature and capabilities of the materials characterisation techniques studied; (ii) understand the basic operations of the equipment used; (iii) demonstrate a basic level of proficiency with the equipment used; and (iv) obtain and analyse data using the techniques studied.

MATE421 Metallurgical Process Engineering 6cp

Spring Wollongong On Campus

Contact Hours: 39

Pre-requisites: MATE202 - Thermodynamics and Phase Equilibria

Assessment: Assignments, case study and examinations.

Subject Description: This subject provides an introduction to the principles of metallurgical process engineering. The underpinning scientific principles of metallurgical processing are used to elucidate operating procedures of industrial processes. Application of metallurgical thermodynamics to slag - metal equilibria during metallurgical processes. Study of pyrometallurgical refining of copper and the use of stability diagrams: electrolytic refining. Introduction to other non-ferrous processes such as aluminium and zinc production.

Subject Objectives: On successful completion of this project, a student should be able to: (i) explain the principles of selected industrial metallurgical processes; (ii) apply thermodynamics to slag-metal equilibria; (iii) correctly use stability diagrams; (iv) describe the operations of a range of metallurgical production processes and explain why they are used.

MATE422 Iron and Steelmaking 6cp

Autumn Wollongong On Campus

Pre-requisite: MATE202 - Thermodynamics and Phase Equilibria

Assessment: Assignments and examinations.

Subject Description: The fundamentals of metallurgical thermochemistry and reaction kinetics are studied with a view to metallurgical process analysis in the iron and steelmaking industry, with an emphasis on ladle metallurgy. Direct reduction of iron ore; single particle reduction kinetics and the analysis of shaft furnace operation leading to an analysis of the blast furnace. Analysis of industrial processes with emphasis on reactor design, smelting-reduction and ferro-alloy production. Principles of continuous casting.

Subject Objectives: On successful completion of this project, a student should be able to: (i) explain the principles and operation of the iron blast furnace; (ii) explain the principles and operation of basic oxygen furnaces for steelmaking; (iii) describe methods used for direct iron production; (iv) apply the relevant thermodynamics and kinetics of slag-metal and gas-solid reactions to iron and steelmaking processes, including ladle metallurgy; and (v) explain the principles of the continuous casting of steel.

MATE431 Sheet Metal Processing 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MATE203

Assessment: Assignments, laboratory report, mid-session examination, final examination.

Subject Description: Plastic forming - Flow behaviour of sheet metals under uniaxial and biaxial stress; yielding criteria; plastic anisotropy. Shaping processes - Deep drawing; press forming; wall ironing and spinning; stretch forming; superplastic forming; workability; forming limit criteria; defects in formed parts; cutting; piercing and blanking. Surface finishing - Metallic, ceramic and polymeric coating of sheet materials; formability and defects in coated sheet. Case studies of forming of industrially significant sheet metals.

Subject Objectives: On successful completion of this subject, students should be able to: (i) understand the effect of stress state on yielding of sheet metals; (ii) understand the influence of microstructure on plastic anisotropy of sheet metals; (iii) understand the effect of structure and mode of deformation on the workability of sheet metals; and (iv) appreciate how various coating methods may affect the formability and service performance of sheet metals.

MATE432 Mechanical and Thermal Processing 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisites: MATE301- Engineering Alloys and MATE304 - Transport Phenomena in Materials Processes.

Assessment: Laboratory reports, assignments and final examination.

Subject Description: Thermal treatment - Heat transfer in batch and continuous annealing; furnace design; heating efficiency; temperature control; heat treatment problems in engineering. Deformation and annealing - Polycrystalline plasticity; deformation microstructure and texture; stored energy; mechanisms of recovery and recrystallization; nucleation and growth of new grains; kinetics; effect of purity, solutes and particles; control of grain size; grain growth and secondary recrystallization; annealing textures; plastic and magnetic anisotropy; case studies.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) explain the main modes of heat transfer in batch and continuous annealing furnaces; (ii) describe the structural and property changes during tempering of steel; (iii) understand the role of slip and deformation twinning on the development of microstructure and texture in polycrystalline materials; (iv) appreciate the effect of thermal treatment on recovery, recrystallization and grain growth of metals and ceramics; (v) appreciate the influence of initial microstructure on the annealing behaviour of deformed metals and ceramics; and (vi) understand the development of annealing textures and their influence on plastic and magnetic anisotropy of sheet metals.

MATE433 Surface Engineering 6cp

Autumn Wollongong On Campus

Co-requisite: MATE306 - Degradation of Engineering Materials

Assessment: Assignments, case studies and examinations.

Subject Description: Classification of surface treatments, thermal, thermochemical, chemical vapour deposition, physical vapour deposition, thermal spraying, chemical and electrochemical processing; industrial engineering applications.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) correctly classify surface treatments; (ii) describe selected surface engineering techniques, and the key parameters used to control them; and (iii) discuss industrial applications of surface engineering, and select appropriate surface engineering techniques for a given application.

MATE441 Polymer Science 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MATE302 - Polymeric Materials

Assessment: Examination, practicals and assignments.

Subject Description: Detailed study of polymerisation reactions and control of molecular structure. Macromolecular conformations, shapes and entanglements. Solution properties of polymers. Rheological behaviour and viscoelasticity will be discussed using examples from industrial processes.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) describe the need for, and methods used to control the molecular structure of polymers through controlled polymerisation;

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(ii) use the principles of thermodynamics to describe the shape of individual polymer molecules at equilibrium; (iii) discuss the influence of molecular structure, solvent and temperature on the solution and melt rheological properties of polymers.

MATE442 Polymer Processing 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MATE302 - Polymeric Materials

Assessment: Examination, practicals and assignments.

Subject Description: Study of polymer processing and fabrication methods including compounding, moulding and joining. Design of polymeric products. The influence of polymer properties (especially melt rheology) on processing performance will be discussed in detail. Environmental sustainability of polymers processing, including recycling, will also be studied.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) describe the steps involved in the manufacture of a typical component made from polymer parts; (ii) describe the main principles of operation of injection moulding, blow moulding and extrusion; (iii) explain how polymer properties influence the processability of the polymer; (iv) design a processing method for a given polymer part; (v) discuss issues of environmentally sustainable polymers processing and how these can be addressed.

MATE443 Advanced Polymers 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MATE302 - Polymeric Materials

Assessment: Examination, practicals and assignments.

Subject Description: Recent developments in the polymers field will be discussed including a description of the global polymer industry and recent examples of newly developed polymers, such as structural polymers, biomedical materials and conducting polymers. Students will undertake a detailed case study of the development of a new polymer from lab to final application as part of the assessment.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) explain the scale and significance of the global polymer industry; (ii) understand the influences driving the development of new polymeric materials; (iii) explain the fundamental basis of recent research and development of new polymers including structural, biomedical and conducting polymers; (iv) devise a research strategy and project plan for the development of a new polymer for a given new application.

MECH152 Engineering Computing Instrumentation and Workshop Practice 6cp

Autumn Wollongong On Campus

Assessment: Final examination: objectives iii and iv. Laboratory reports: objective ii. Practical tasks: objective i. Other examination, assignments may be incorporated in the final assessment: objectives iii and iv.

Subject Description: Introduction to practical methods and skills basic to mechanical fabrication; fitting and machining, welding and sheet metal work; elements of engineering instrumentation and mechanical measurement techniques applied to temperature, pressure, velocity, stress and displacement; introduction to computer operating systems; application of spreadsheets to engineering problems;

introduction to structured programming using flow-charts; data acquisition and control using the C-language.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) apply basic fabrication techniques; (ii) explain the principles of the most widely used instrumentation elements; (iii) apply spreadsheets to analysis of experimental data and for solution of engineering problems; (iv) apply the C-language for elementary data-acquisition and control tasks.

MECH201 Engineering Analysis 6cp

Spring Wollongong On Campus

Contact Hours: 5 per week

Pre-requisite: MATH283 - Mathematics II E Part 1

Assessment: Final examination: other short examinations; tutorials and assignments and projects may be incorporated in the final assessment: objectives i to iv.

Subject Description: Analysis for the conservation of mass, momentum and energy in engineering systems; control volume analysis for the conservation of mass, momentum and energy in engineering systems; numerical methods for the solution for a selection of problems in fluid mechanics, heat transfer, solids mechanics, bulk solids and control systems; linear algebra; eigenvalue analysis; optimisation curve fitting; roots of equation; experimentation to validate engineering analysis.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) construct mathematical models for linear and non-linear engineering systems; (ii) apply existing analytical solutions for a range of engineering systems; (iii) make efficient use of computer for the solution of engineering problems; (iv) incorporate experimental data in the analysis of engineering systems.

MECH215 Fundamentals of Machine Component Design 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG154 - Engineering Design and Innovation

Co-requisite: ENGG251- Mechanics of Solids

Assessment: Final examination: objectives i, iii and iv. Other short examinations : objectives i, iii and iv. Project/Assignments: objectives i to iv.

Subject Description: Design and Build Competition requiring team work, concept designs and final solution; design and analysis of fundamental machine components, such as limits and fits, bolted and welded connections, power screws, keys, spur and helical gears, brakes, clutches, bearings and failure theories for static and cyclic load conditions.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) provide concept designs and solutions to engineering problems; (ii) verify design by prototype building and testing; (iii) calculate stresses, limits and fits, and tolerances for machine elements; (iv) design and analyse fundamental machine components such as gears, bearings, welds, etc.

MECH226 Machine Dynamics 6cp

Spring Wollongong On Campus

Pre-requisites: MATH188 or MATH142 and ENGG152.

Assessment: Final examination: objectives i to v. Other examinations, assignments and laboratory experiments may be incorporated in the final assessment: objectives i to v.

Subject Description: Dynamics of rigid bodies and simple mechanisms in plane motion, kinematic analysis by vector and polygon methods, velocity analysis by instantaneous centres; kinetic analysis by superposition vector and force polygon methods, matrix method, method of virtual work; energy distribution method; kinematics of cam profiles; balance of rotors; introduction to CAD mechanism design; synthesis of a mechanism.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) analyse rigid bodies in plane motion; (ii) synthesise four bar mechanism and cam profiles; (iii) understand the kinematics of plane mechanisms; (iv) analyse the forces acting on plane mechanisms; (v) solve a kinematic or kinetic problem using analytical, graphical and software tools.

MECH311 Mechanical Engineering Design 6cp

Autumn Wollongong On Campus

Pre-requisite: MECH215 - Fundamentals of Machine Component Design

Assessment: Final examination: objectives i to iii. Other short examinations/tutorials and assignments and design projects may be incorporated into the final assessment: objectives i to iii.

Subject Description: Fatigue design including combined stresses, fracture mechanics and material selection. Contact stresses. Application of current design codes (eg for shaft design and rating helical and spur gears). Case studies incorporating cost estimation and evaluation, and project management. Students are required to analyse and propose solutions for a typical engineering problem drawn from the local industry. The solution would normally involve a combination of innovative thinking and an integration of analysis tools provided in this and preceding subjects. A site visit is normally incorporated to clarify the link between the analytical work and the application to a real problem.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) Apply a number of important analysis tools in the design of mechanical components (eg fatigue design, contact stresses, curved beam stresses); (ii) Use Australian Standards in the design and rating of rotating steel shafts, and gears (spur and helical) and recognise the relevance of applying standards in a design context; (iii) Apply and integrate these design skills in the solution of a typical engineering problem.

MECH321 Dynamics of Engineering Systems 6cp

Autumn Wollongong On Campus

Pre-requisite: MATH283 - Mathematics IIE for Engineers Part 1

Co-requisite: MECH226 - Machine Dynamics

Assessment: Final examination: objectives i to v. Other examinations, assignments and laboratory experiments may be incorporated into the final assessment: objectives i to v.

Subject Description: Derivation of system equations for mechanical, electrical, thermo-dynamic and fluid-dynamic systems; analysis of linear, transverse and torsional vibration of mechanical systems; system classification; linearisation of system equations; linear time-invariant differential equations using transfer function representation analysis of system response in the time and frequency domain; simulation of dynamic systems.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) derive the differential equation describing the behaviour of a dynamic system;

(ii) use block-diagrams and Laplace transforms to solve differential equations; (iii) analyse the behaviour of dynamic systems in the time and frequency domain; (iv) simulate and evaluate system response of mechanical systems and processes; and (v) apply the above to industrial problems.

MECH341 Thermodynamics 6cp

Autumn Wollongong On Campus

Co-requisite: ENGG252 - Engineering Fluid Mechanics

Assessment: Final examination: objectives i to iv. Quizzes: objectives i to iv. Laboratory experimental reports: objective iv.

Subject Description: Properties of pure substances; first law of thermodynamics, closed systems, control volumes; second law of thermodynamics; entropy; second law analysis of engineering systems; power and refrigeration cycles; mixtures; psychrometrics and basic air conditioning.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) determine the thermodynamic properties of pure substances using property tables; (ii) determine work and heat transfer through conservation of energy for closed systems and control volumes; (iii) understand the second law of thermodynamics and entropy generation as applied to a variety of engineering systems; (iv) analyse and measure the performance of various power and refrigeration cycles and basic air conditioning systems.

MECH343 Heat Transfer and Aerodynamics 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG252

Assessment: Final Examination: objectives i, iii, iv and iv. Mid-session quiz: objectives i and iii. Assignments: objective i to v. Laboratory Reports: objectives i to iii.

Subject Description: One and two dimensional heat conduction; forced convection; heat exchangers; radiation; boundary layer flows; flow around immersed bodies; one dimensional compressible flow with and without heat transfer; normal shock waves; compressible flow in pipes.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) analyse thermal engineering problems; (ii) design simple thermal devices and equipment such as heat exchangers and furnace wall insulation; (iii) predict heat transfer rates in a wide variety of industrial equipment and processes; (iv) understand the fundamental engineering concepts involved in compressible flow of gases; (v) carry out analysis of problems and design of high speed gas flow in pipes and nozzles.

MECH365 Control of Machines and Processes 6cp

Spring Wollongong On Campus

Pre-requisites: MATH284 or MECH201 and MECH321.

Assessment: Final examination: objectives i to iv and vi. Other examinations, assignments and laboratory experiments may be incorporated in the final assessment: objectives i to vi.

Subject Description: Classical control system analysis and design concepts: transient response, steady-state error analysis, frequency domain analysis, root-locus controller design methods and frequency domain controller design methods; PLC programming.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) analyse the behaviour of control systems in the time and frequency domain;

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(ii) design a controller using the root-locus method; (iii) design a lead-lag compensator; (iv) design a PID controller; (v) implement and evaluate the performance and robustness of controllers for mechanical systems and industrial processes; (vi) write and implement a ladder diagram in a PLC and evaluate it in practice.

MECH372 Solids Handling and Process Engineering 6cp

Spring Wollongong On Campus

Pre-requisite: MECH215 - Fundamentals of Machine Component Design

Co-requisite: ENGG252 - Engineering Fluid Mechanics

Assessment: Final examination: objectives i to iii. Other examinations and assignments may be incorporated in the final assessment: objectives i to iii.

Subject Description: An overview of bulk materials handling. Introduction to characterisation of bulk solid materials, gravity flow in hoppers and chutes, feeding and discharge devices, mechanical conveying, pneumatic conveying, dust control and dust explosions, and instrumentation and control for materials handling systems.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) determine physical properties of bulk solids; (ii) use particle and bulk properties in the design and analysis of different handling operations; (iii) calculate relevant design and operating parameters in the feeding, discharge, mechanical and pneumatic conveying, and dust control.

MECH378 Sustainable Energy Technologies 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG252 - Engineering Fluid Mechanics

Co-requisite: ECTE290 - Fundamentals of Electrical Engineering

Assessment: Final examination: objectives i to iv. Short examinations: objectives i to iv. Projects/assignments: objectives i to v.

Subject Description: This subjects covers a number of Sustainable Energy Technologies including the following: solar thermal systems; photovoltaics; wind energy; hydroelectricity generation; wave power systems; biomass; remote area power supplies; energy conservation/auditing.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) describe various types of sustainable energy technologies and their advantages and disadvantages; (ii) Demonstrate an understanding of solar radiation and its impact on energy systems including solar thermal applications and photovoltaics; (iii) Demonstrate an understanding of the thermofluid principles that underpin wind, wave and hydroelectric technologies; (iv) Demonstrate an appreciation of the social and environmental benefits or disadvantages of sustainable energy technologies; (v) Measure and/or analyse the performance of a practical sustainable energy power supply system.

MECH382 Manufacturing Engineering Principles 6cp

Autumn Wollongong On Campus

Pre-requisites: MECH215 - Fundamentals of Machine Component Design and ENGG153 - Engineering Materials.

Assessment: Final examination: objectives i to vi. Assignments: objectives i to vi. Laboratory reports: objectives iv and v.

Subject Description: This course introduces students to the basic principles of manufacturing engineering. Topics include an overall perspective on manufacturing; life-cycle and environmental factors; interactions between product design, materials and manufacturing processes; machining processes; metal cutting theory and machinability; joining and assembly processes; computers in manufacturing, NC/CIM/FMS/IMS; introduction to component handling and industrial robotics; basic metrology and geometric tolerancing; process capability and quality control; machining economics; overview of non-conventional processes and advanced manufacturing trends.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) demonstrate their understanding of the fundamental principles of modern manufacturing; (ii) demonstrate an awareness of the multitude of manufacturing processes available; (iii) understand the interaction between manufacturing design, materials and processes; (iv) analyse processes of manufacturing design and materials processing mathematically; (v) select the best manufacturing process(es) for particular products and/or situations; (vi) understand the importance of manufacturing both locally and on a global basis.

MECH417 Biomedical Engineering 6cp

Contact Hours: Not on offer in 2003

Assessment: Mid-session quiz, assignments and final examination: objectives i to vii.

Subject Description: Introduction to Biomechanics, Anatomy and physiology, musculoskeletal system, human movement: function of muscles and nerves, ergonomics, heart and circulation. Dynamics of Human movement and strain rosette, advanced biomaterials. May include a visit to a biomedical manufacturer and laboratories. Review of Research Problems in Biomechanics. Assumed prior knowledge - Mechanics of Solids (e.g. ENGG251).

Subject Objectives: On successful completion of this subject, a student should be able to: (i) understand the basic applications of mechanics to human bodies; (ii) demonstrate a knowledge of basic human anatomy and physiology; (iii) understand the functioning of muscles, nerves, heart and circulation systems; (vi) apply mechanical engineering principles to the musculoskeletal system; (v) apply strain rosettes to measure strain and stress in human bodies; (vi) identify the equipment and techniques used in measurement and imaging; (vii) apply ergonomic principles to manual handling jobs.

MECH418 Mechanical Behaviour of Engineering Materials 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG251- Mechanics of Solids

Assessment: Final examination, mid-session quiz and tutorial assignments: objectives i and ii.

Subject Description: Review of the various forms of mechanical behaviour of materials. Development of tensorial stress, strain and elasticity. Physical basis for general materials behaviour and mathematical representation using constitutive equations for non-linear elasticity, plasticity, viscoelasticity and creep. Experimental and analytical approach to solutions of limit analysis for forming, ductile fracture and brittle fracture. Mechanisms of fatigue, friction and internal damping.

Applications to engineering problems in product design, manufacturing operations, and reliability assessment.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) Understand the basis of mechanical behaviour of engineering materials including metals, plastics, and ceramics. (ii) Assess materials characteristics affecting product response throughout the design-manufacturing-utilisation cycle.

MECH419 Finite Element Methods in Engineering 6cp

Autumn Wollongong On Campus

Pre-requisites: ENGG251- Mechanics of Solids and MECH201 - Engineering Analysis.

Assessment: Final examination, term project, mid-session quiz: objectives i and ii.

Subject Description: Review of solid mechanics fundamentals and of matrix algebra. Elementary derivation of finite element methods by variational principles, Galerkin method, and Rayleigh-Ritz technique. Finite element interpolation functions; natural and isoparametric coordinates. Derivation of stiffness matrix for selected one-, two-, and three-dimensional elements. Derivation of strain-displacement relations and calculation of element stresses. Assembly and solution of system matrices; application of constraints and local coordinate systems. Introduction to structural dynamics and vibration problems, mesh generation, and finite element software in engineering applications.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) demonstrate a basic understanding of the principles and techniques of finite element analysis in engineering applications; (ii) utilise computational techniques for solution of practical problems.

MECH420 Engineering Stress Analysis 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: ENGG251 - Mechanics of Solids and MECH201 - Engineering Analysis.

Assessment: Final examination, mid-session quiz and tutorial assignments: objectives i and ii.

Subject Description: Introduction to the theory of elasticity in rectangular and curvilinear coordinates. Solution of elementary problems in plane stress and plane strain using Airy's stress function. Thermoelasticity. Elementary theory of plates and shells. Classical and numerical techniques for solution of boundary value problems.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) demonstrate a general understanding of the theory of elasticity; (ii) solve practical problems requiring the application of the theory of elasticity; (iii) calculate stress and strain in the presence of stress concentrations, temperature fields, and electromagnetic force fields.

MECH421 Manufacturing Process Analysis 6cp

Autumn Wollongong On Campus

Pre-requisite: MECH382-Manufacturing Engineering Principles

Assessment: Final examination, assignments and laboratory reports: objectives i and ii.

Subject Description: Comparative Process Analysis for Rolling, Casting, Forging & Forming; Advanced or 'Non-Traditional' Manufacturing; Joining & Welding;

Steel Rolling Technology & Analysis; Metals vs. Plastics Processing; Component Assembly and Disassembly; Automation and Component Handling; CAPP (Computer Aided Process Planning) and Process Optimisation; Process Integration into Manufacturing Systems; and Economic and Ecological Process Considerations.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) demonstrate an in-depth knowledge of the physical processing of materials with particular emphasis on steel rolling; (ii) assess and optimise the various factors involved in the application of modern manufacturing processes.

MECH422 Design and Analysis of Manufacturing Systems 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MECH382-Manufacturing Engineering Principles

Assessment: Final examination: objectives i, ii and v. Short examinations and assignments: objective i to v. Project: objectives i to v.

Subject Description: Basic concepts and ideas of systems study with particular reference to their use in a manufacturing environment. Categories of manufacturing systems. Principles of the structure and operations of manufacturing systems and their elements (including the human component) especially those systems applied in discrete manufacturing. Techniques of systems analysis including computer simulations. Frameworks for applying systems analysis techniques to the design and analysis of advanced manufacturing systems including intelligent manufacturing systems and those associated with achieving enterprise integration, agile manufacturing and virtual enterprises. Plant layout and facility planning. Case studies and project work involving the design and analysis of advanced manufacturing systems.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) explain a range of techniques and frameworks specifically applicable to the design and analysis of manufacturing systems; (ii) identify areas of application for these techniques; (iii) construct computer models simulating manufacturing systems; (iv) Complete practical equipment selection, plant layout and facility planning assignments; (v) Display competence in applying the systems approach to the design and analysis of manufacturing systems.

MECH423 Design for Manufacturing 6cp

Spring Wollongong On Campus

Pre-requisite: MECH382-Manufacturing Engineering Principles

Assessment: Final examination: objectives i and iv. Other short examinations/tutorials and assignments may be incorporated in the final assessment.

Subject Description: Introduction to concurrent engineering; application and benefits; concurrent engineering applied to product development, product design, manufacturing process design, and manufacturing systems design; application of engineering tools including CAD, CAM, CAPP and rapid prototyping; design for machining, forming, casting, welding and assembly concepts; design efficiency; industrial ergonomics. General planning concepts in manufacturing; CAD/CAM and CIM/FMS.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) select suitable material for components depending upon their manufacturability and operational use; (ii) analyse the product from the point of view of productivity;

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(iii) analyse and select a suitable manufacturing method with a view to producing the component in the most economical manner; (iv) apply concurrent engineering to product development, design and manufacture.

MECH424 Managing Manufacturing Activities 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MECH382-Manufacturing Engineering Principles

Assessment: Final examination, group and individual assignments: objectives i to iv.

Subject Description: The problem of designing and managing a manufacturing activity, scope of manufacturing activities, demand forecasting, product design, capacity planning, scheduling, quality management, maintenance management, safety management, financial management, performance measurement, project presentation and reflection.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) describe the generic situations confronting manufacturing managers; (ii) analyse an existing activity; (iii) determine a set of actions required for improvement; (iv) develop a specification for the design of a manufacturing activity.

MECH426 Storage and Flow of Bulk Solids 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MECH372 - Bulk Solids Handling Technology

Assessment: Final examination and other short examinations, tutorials and assignments may be incorporated in the final assessment.

Subject Description: Characterisation of bulk solids and principles of granular flow; measurement and application of flow properties; bin and hopper flow patterns and geometries; chute design; flow rate predictions of coarse and fine powders; feeders and dischargers; bin wall pressures; mixing and segregation; case studies.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) identify and apply material properties relevant to the storage and handling of bulk solids; (ii) design bulk solid handling systems taking into account flow rates, feeder/discharger interactions, segregation and wall pressures.

MECH427 Mechanical Conveying of Bulk Solids 6cp

Spring Wollongong On Campus

Pre-requisite: MECH372 - Bulk Solids Handling Technology

Assessment: Final examination: objectives i and ii. Other short examinations, tutorials, major design project/s and assignments may be incorporated in the final assessment.

Subject Description: Design, application and characteristics of mechanical conveyors including belt, screw, cable rope way, cable and disk, chain, vibratory and elevating conveyors; unit handling; Standards; safety and case studies.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) select the most suitable mechanical conveyer or transport system for a specific application; (ii) evaluate the main design variables for mechanical conveying or transport systems; (iii) conduct a thorough engineering design investigation for mechanical conveying or transport systems.

MECH428 Pneumatic Conveying and Dust Control 6cp

Autumn Wollongong On Campus

Pre-requisite: MECH372 - Bulk Solids Handling Technology

Co-requisite: ENGG252 - Engineering Fluid Mechanics

Assessment: Final examination: objectives i to v. Other short examinations, tutorials, major design project/s and assignments may be incorporated in the final assessment.

Subject Description: Basic components of pneumatic transport systems; Modes of conveying; Models to predict conveying parameters; Dense-phase suitability; Conveying characteristics and scale-up procedures; Dust control health and safety requirements; Dust characterisation; Design and operating parameters for dust control systems; Duct networks.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) identify and analyse different methods of feeding and conveying bulk solids; (ii) calculate and predict operating parameters for conveying systems; (iii) evaluate dense-phase conveying suitability using classification techniques; (iv) design simple dust extraction systems, including duct networks; (v) apply the various techniques available to the capture and treatment of dusts and fumes.

MECH429 Physical Processing of Bulk Solids 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MECH372 - Bulk Solids Handling Technology

Assessment: Final Examination: objectives i to iii. Other short examinations, tutorials, major design project/s may be incorporated in the final assessment.

Subject Description: Bulk solids description and characterisation; process flow sheets; unit operation characteristics and power requirements: solid-solid, liquid-solid and gas-solid and multiphase-solid processes; batch, continuous or intermediate processing and handling; control and instrumentation; case studies.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) evaluate mechanical power requirements and select suitable equipment for bulk solids processing and value adding; (ii) predict the paramount product characteristics of common unit processes; (iii) understand the intimate relationship between bulk solid properties and unit process design and operation parameters.

MECH430 Automotive Dynamics 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MECH321 - Dynamics of Engineering Systems

Co-requisite: MECH365 Control of Machines and Processes

Assessment: Final examination and projects: objectives i to vi.

Subject Description: Introduction, dynamics associated with acceleration, braking, cornering and rollovers; occupant comfort and response; dynamics of multi-mode mechanical systems; component characteristics and interactions including cabin, chassis, steering and suspensions.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) predict the forces acting on vehicles during actual normal and unstable operation; (ii) predict the frequency response of vehicle like systems and effect design decisions regarding the same; (iii) assess and report on the mechanical suitability of purpose of vehicles and components; (iv) assess and report on the mechanical aspects of the interaction between vehicles and occupants, cargo and the immediate surrounds.

MECH431 Computational Fluid Dynamics 6cp

Autumn Wollongong On Campus

Pre-requisites: ENGG252 - Engineering Fluid Mechanics and MECH201 - Engineering Analysis.**Assessment:** Final examination and projects: objectives i to v.**Subject Description:** Introducing the finite difference and finite volume methods for computational fluid dynamics. Explicit and implicit methods for computation. Stability analyses. Validation of computational results. Analysis of engineering systems involving incompressible and compressible flow of fluid.**Subject Objectives:** On successful completion of this subject, a student should be able to: i. understand the fundamental concepts, the potential and the limitations of computational fluid dynamics; ii. evaluate the accuracy and quality of computer results pertaining to fluid flows; iii. analyse the stability, consistency and convergency of computational schemes; iv. develop techniques for the computations of compressible and incompressible fluid flow; v. case studies using computational fluid dynamic packages.**MECH438 Fluid Power 6cp**

Spring Wollongong On Campus

Pre-requisite: ENGG252 - Engineering Fluid Mechanics**Co-requisite:** MECH365 - Control of Machines and Processes**Assessment:** Final examination: objectives i to iv. Other short examinations, tutorials and assignments and projects may be incorporated in the final assessment.**Subject Description:** Characteristics of fluid power components for the provision of power and/or control in machines and mechatronic systems. Synthesis of systems, integration with Programmable Logic Controller (PLC) units and remote controllers. Industrial applications of fluid power, design application, case study.**Subject Objectives:** On successful completion of this subject, a student should be able to: (i) understand and apply the principles of fluid mechanics to hydraulic and pneumatic systems; (ii) understand the function of various components including PLC units; (iii) understand and apply component design and selection criteria; (iv) design basic hydraulic and pneumatic systems.**MECH439 Special Topics in Mechatronics 6cp**

Spring Wollongong On Campus

Autumn Wollongong On Campus

Assessment: To be advised on the subject handout at the beginning of the session.**Subject Description:** There is no set syllabus for this subject. It is intended to be offered normally on a specialised mechatronics topic given by members of the Faculty, visiting academic staff or engineering consultants.**Subject Objectives:** On successful completion of this subject, students should have statistical, information, computer, generic skills/competencies. The should have: 1. The ability to access, locate, critically analyse, interpret, evaluate and use information. 2. The ability to develop a command of existing knowledge in a chosen discipline. 3. Willingness to explore the existing body of knowledge. 4. The ability to identify, respond to and devise solutions to problems. 5. The ability to organise and synthesise information, in a logical format, for various applications.**MECH440 Fluid Dynamics and Heat Transfer for Mechantronics 6cp**

Annual Wollongong On Campus

Co-requisites: MATH142 or MATH188.**Assessment:** Final examination, mid session quizzes, tutorial assessments and laboratory work: objectives i to vi.**Subject Description:** This subject is designed to introduce elementary fluid mechanics and heat transfer concepts to mechatronic engineers. The topics include fluid properties, hydrostatics, manometry, Bernoulli's, mass and energy, fluid flow in pipes and their applications and dimensional analysis; fundamentals of heat transfer and how to analyse situations involving heat transfer.**Subject Objectives:** On successful completion of this subject, students should be able to: i) Understand fundamental engineering concepts relating to fluid properties. ii) Derive and solve hydrostatics problems encountered in manometers, plane and curved surfaces and buoyant bodies. iii) Solve problems associated with the 3 fundamental fluid flow equations namely equations of mass, momentum and energy. iv) Carry out analysis of problems associated with fluid flow in pipes. v) Analyse thermal engineering problems relevant to mechatronic engineering. vi) Measure fluid flow and heat transfer using simple measuring principles.**MECH442 Sustainable Energy in Buildings 6cp**

Autumn Wollongong On Campus

Assessment: Final examination: objectives i to vii. Assignments: objectives i to vi. Lab report: objective vii. Other quizzes and presentations may be included in the final assessment.**Subject Description:** Fundamental principles of the performance of buildings with particular regard to thermal comfort and ventilation; analysis and design of conventional air conditioning systems to appropriate Australian Design Standards; passive solar design of buildings; energy conservation in buildings; embodied energy in buildings; natural ventilation systems; and refrigeration systems.**Subject Objectives:** On successful completion of this subject, a student should be able to: (i) analyse conventional mechanical air conditioning processes such as heating and dehumidification; (ii) analyse the performance of naturally ventilated buildings; (iii) use basic passive solar design principles in formulating the concept design of a building; (iv) determine building heating and cooling loads for equipment selection purposes; (v) design sustainable air conditioning systems for buildings; (vi) analyse various types of industrial refrigeration systems including vapour compression and absorption systems; (vii) measure the performance of air conditioning and refrigeration systems.**MECH468 Computer Control of Machines and Processes 6cp**

Autumn Wollongong On Campus

Pre-requisite: MECH321 - Dynamics of Engineering Systems**Co-requisite:** MECH365 - Control of Machines and Processes**Assessment:** Final examination: objectives i to iii. Other short examinations, assignments, laboratory experiments may be incorporated in the final assessment: objectives ii and iii.**Subject Description:** State-variable modelling; design of state variable feedback systems, controllability, observability, optimal control, pole placement using state feedback, internal model design;

Subject Descriptions

digital control systems, z-transform, stability analysis in the z-domain; performance and robustness of closed loop computer controlled systems, implementation aspects.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) analyse a dynamic system using state variable techniques; (ii) design, simulate, implement and evaluate multivariable control systems; (iii) design, simulate, implement and evaluate the performance and robustness of digital controllers for mechanical systems and industrial processes.

MECH474 Systems Engineering and Life Cycle Management 6cp

Contact Hours: Not on offer in 2003

Assessment: Final examination: objectives i to v. Other short examinations, assignments, laboratory experiments may be incorporated in the final assessment.

Subject Description: Phases of life cycle of products and industrial equipment, life cycle costing, economics and models, manufacturing and environmental considerations, cost estimations, analysis and design, logistic support, maintainability, availability, interface control, system integration, testing and performance evaluation, installation procedures, asset management, disposal purchase/replacement policies and decision making.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) explain the principles of systems engineering and the systems design process; (ii) explain the systems concept in the context of the systems life cycle; (iii) explain significant design concepts affecting operational feasibility and how these can be applied to different situations; (iv) explain the technique of life cycle costing and how it could be applied to all stages of the system life cycle; (v) identify and explain mathematical tools and physical modelling techniques commonly used in systems analysis and how they can be applied in the systems engineering process; (vi) explain the systems engineering approach by reference to case studies; (vii) develop a Systems Engineering Management Plan for practical application.

MECH479 Sustainable Transport and Engine Technologies 6cp

Autumn Wollongong On Campus

Pre-requisites: MECH341- Thermodynamics and MECH226 - Machine Dynamics.

Assessment: Final examination: objectives i to iv. Other short examinations, assignments, laboratory experiments may be incorporated in the final assessment.

Subject Description: Human powered transport; conventional and novel engine technology design, analysis and evaluation; strategies for reducing emissions; fuel supplies and alternative fuels; electric and hybrid vehicles; solar vehicles; fuel cells.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) describe conventional engine systems, and estimate energy requirements and pollution outcomes; (ii) describe alternative engine systems and identify their key features; (iii) evaluate and assess the potential of alternative engine technologies and fuels to enhance the sustainability of energy use in this field; (iv) advise on the selection of technology for transport needs.

MECH481 Special Topics in Mechanical Engineering 1 6cp

Spring Wollongong Flexible

Autumn Wollongong On Campus

Assessment: To be advised on the subject handout at the beginning of the session.

Subject Description: There is no set syllabus for this subject. It is intended to be offered normally on a specialised mechanical engineering topic given by members of the Department, visiting academic staff or engineering consultants.

Subject Objectives: To be advised on the subject handout at the beginning of the session.

MECH482 Special Topics in Mechanical Engineering 2 6cp

Autumn Wollongong On Campus

Spring Wollongong On Campus

Assessment: To be advised on the subject handout at the beginning of the session.

Subject Description: There is no set syllabus for this subject. It is intended to be offered normally on a specialised mechanical engineering topic given by members of the Department, visiting academic staff or engineering consultants.

Subject Objectives: To be advised on the subject handout at the beginning of the session.

MECH487 Systems Analysis for Maintenance Management 6cp

Autumn Wollongong On Campus

Pre-requisite: MATH283-Mathematics 2E for Engineers Part 1

Assessment: Final examination, individual assignment and group assignment: objectives i to vi.

Subject Description: Maintenance Requirements Analysis Methodology, Qualitative Methods of Failure Mode Identification, Reliability Theory for Systems, Reliability Data Analysis, Preventive Replacement Policies, Selection of Inspection Intervals, Grouping of Maintenance Actions, Repair/Replace Decisions, Practical considerations in Maintenance Requirements Analysis, Auditing Maintenance Requirements Analysis outcomes.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) demonstrate an understanding of the available theory in the area of maintenance requirements analysis; (ii) apply appropriate theory to the problem of maintenance requirements analysis; (iii) demonstrate an understanding of basic reliability theory and terminology; (iv) explain the uses, and limitations of use, of simple reliability modelling techniques in making decisions on maintenance intervals; (v) design appropriate methods for performing maintenance requirements analysis on specific equipment given a specific situation; (vi) audit the analysis of others to determine the adequacy of the analysis.

MECH488 Introduction to Condition Monitoring in Mechanical Engineering 6cp

Contact Hours: Not on offer in 2003

Pre-requisite: MECH226 - Machine Dynamics

Assessment: Final examination: objectives i to iv. Assignment and other quizzes and tutorials may be incorporated in the final assessment.

Subject Description: Introduction to Condition Based Maintenance (CBM); Tribology and Condition Based Maintenance; Condition Monitoring using Signal Diagnostics; CBM of Bearings, Pumps, Fans, Motors, Gearboxes, Hydraulic and Electrical Equipment; Failure Case Studies and Issues in Implementation; Artificial Intelligence in Condition Monitoring.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) demonstrate an understanding of available condition monitoring techniques and their application; (ii) identify the required conditions for specific condition monitoring techniques (that make CBM a potential effective elementary maintenance rule in practice cases); (iii) demonstrate knowledge of the failure diagnostic techniques available and how they work; (iv) identify possible techniques for application to specific problems.

MECH489 Maintenance Management 6cp
Spring Wollongong On Campus

Pre-requisite: ENGG361 - Engineering Management

Assessment: Final examination, individual assignment and group assignment: objectives i to iii.

Subject Description: Approaches to maintenance, The Systems Approach, Life cycle considerations for systems, Defining maintenance - A maintenance model, Analysing Maintenance Requirements: The Process, The Business Environment, Safety and Quality Standards, System Analysis, Failure Behaviour, Condition Monitoring, Maintenance Planning and Control, Inventory selection and control, Human factors and organisational aspects for maintenance, The information flows, documentation and computer control in maintenance.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) describe the generic situations confronting maintenance managers; (ii) analyse an existing activity and determine a set of actions required for improvement; (iii) develop a specification for design of a maintenance activity and a maintenance system.

MINE221 Underground Coal Mining 6cp
Contact Hours: Not on offer in 2003

Assessment: Assignments/Seminars: objectives i to vi. Mid-session examination: objectives i to vi. 2 hour final examination: objectives i to vi.

Subject Description: Access to underground coal seams, Coal mining methods; bord and pillar, longwall, miniwall, thick seam, multi-seam and horizon mining and highwall mining. Mechanisation; powered loaders and coal cutting technology, coal transport to include chain and belt conveyors, man and material transport, rope haulage and hoisting. Ventilation systems and field visits.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) understand the methods of access to underground coal deposits and various methods of coal extraction used in Australia and overseas; (ii) select the most suitable method of mining a particular coal deposit; (iii) evaluate different types of ground support systems for various mining methods; (iv) understand various methods of coal cutting and coal transportation from the coal face to the surface; (v) appreciate the statutory requirements related to coal mining systems; (vi) design an underground mining operation based on the knowledge gained as a result of the course studied.

MINE311 Surface Mining and Blasting 6cp

Contact Hours: Not on offer in 2003

Assessment: Assignments/seminars: objectives i to iv. Mid-session examination: objectives i to iv. 2 hour final examination: objectives i to iv.

Subject Description: Surface mining operations; alluvial mining, hydraulic mining, and dredging; strip mining of bedded deposits, surface mining of massive deposits, quarrying. Loading and transport of rocks and minerals. Drilling and blasting. Classification of explosives used in mines. Properties of explosives. Theories of detonation and blasting. Initiation of explosives. Blasting accessories. Systems of firing and blast design. Controlled blasting. Noise and vibration. storage, transport and handling of explosives. Misfires and accident prevention. Regulations.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand how different types of blasting accessories work; (ii) design blasting patterns for different mining conditions; (iii) understand different material handling systems for surface mine operations; (iv) be familiar with different types of surface mining operations.

MINE312 Mine Ventilation 6cp

Autumn Wollongong On Campus

Assessment: Final examination: objectives i, ii, iv and v. Mid-session examination: objectives i, ii, iv and v. Tutorials: objectives i, ii, iv and v. Laboratory: objectives i, ii and iv.

Subject Description: Mine air; pressure, temperature and humidity, sampling. General principles of ventilation; natural and artificial ventilation. Fans; axial and centrifugal. Fan characteristics and operations. Fan combinations and analysis. Booster and auxiliary fans. Ventilation surveying and planning. Network analysis. Application of computers to mine ventilation. Heat in mines, its physiological and psychological effects. Mine air conditioning and refrigeration. Elements of mine thermodynamics. Ventilation. Laboratory experiments.

Subject Objectives: On successful completion of this subject students should be able to: (i) demonstrate a knowledge of the principles of Mine Ventilation; (ii) understand why it is necessary to mechanically ventilate a mine; (iii) show how to analyse data obtained from ventilation surveys and reduce it to a form which can be used for ventilation planning; (iv) determine the quantity of air required at each point of a mine based on the Mines Regulations Act; (v) understand why it is necessary to control air quality as well as quantity in mine ventilation; (vi) demonstrate a knowledge of how to control air quality in the underground environment.

MINE321 Underground Metal Mining 6cp

Autumn Wollongong On Campus

Assessment: Assignments/seminars: objectives i to vi. Mid-session examination: objectives i to vi. 2 hour final examination: objectives i to vi.

Subject Description: Underground Metalliferous ore deposit development, mining methods for regular and irregular deposits; open and supported stoping, sub level stoping, VCR, cuts and fill stoping, shrinkage stoping, block caving. Blasting and stope ventilation, Mechanisation to include drilling machines, LHD, track and Trackless transport. Pumps and Compressors, regulations and field visits.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the methods of access to underground metalliferous mines and various methods of mining; (ii) select the most suitable method of mining of a particular ore deposit; (iii) understand the means of transporting broken ore from the stiope to the surface; (iv) appreciate the statutory requirements related to metalliferous mining system; (v) ability to design blasting patterns for heading development and stoping operation; (vi) ability to design an underground metalliferous mining operation based on the knowledge gained from the course undertaken.

MINE323 Mining Geomechanics 6cp

Spring Wollongong On Campus

Assessment: 2 hour final examination: objectives i to v. Assignments and short examination will be taken into consideration: objectives i to v.

Subject Description: Mechanical properties of rock, insitu properties of rock mass, index properties of rocks, pre-mining state of stress. Stress distribution around underground openings. Excavation design in massive elastic rock, stratified rock and jointed rock. Support and reinforcement - pillar design, rock bolting systems, passive support systems, longwall powered supports and mine backfill. Surface subsidence and methods of limiting damage due to subsidence. Rock bursts and bumps. Monitoring rock mass performance. Laboratory experiments.

Subject Objectives: On successful completion of this subject students should be able to: (i) appreciate the effect insitu rock properties and stress state have on the stability of underground mining excavations; (ii) design major elements of support and supporting structures in underground mining; (iii) evaluate regional or local instability of underground mining structures and suggest possible remedial measures; (iv) integrate stability of mining structures into mine design; (v) monitor rock mass performance.

MINE411 Health & Safety in Mines 6cp

Autumn Wollongong On Campus

Pre-requisites: MINE221 - Underground Coal Mining, MINE311- Surface Mining and Blasting, MINE321- Underground Metal Mining.

Assessment: 2 hour final examination: objectives i to iii. Assignments and short examination will be taken into consideration: objectives i to iii.

Subject Description: Gases in mines - firedamp emission and control, layering of mine gases. Spontaneous combustion. Dust and dust suppression. Fires and explosions. Measurement and control of noise. Rescue and recovery. Government regulations - coal and metalliferous mine regulations and acts, occupational health and safety act. Legal aspects of mining lease and legal responsibilities of mining engineers. Safety and accident avoidance. Optimising production without compromising safety.

Subject Objectives: On successful completion of this subject students should be able to: (i) appreciate Government regulations regarding coal and metalliferous mine safety; (ii) understand the legal responsibility of mining engineers; (iii) appreciate welfare, ethical and safety aspects of mining industry.

MINE412 Mining Economics 6cp

Spring Wollongong On Campus

Assessment: Assignments/seminars: objectives i to iii. Mid-session examination: objectives i to iii. 2 hour final examination: objectives i to iii.

Subject Description: Valuation of mineral properties and mining prospects: global and local block reserves by traditional methods. Interaction of grade, tonnage, mining recovery and mining method. Introductory geostatistics. Project evaluation techniques: cash flow models, mineral taxation, tariffs, smelter agreements and accounting for inflation and risks. Marketing of mineral commodities.

Subject Objectives: On successful completion of this subject students should be able to: (i) determine both the quantity and quality of mineable ore from exploration data; (ii) evaluate the viability of a mine; (iii) understand the procedures and analyses associated with valuation of mining projects.

MINE421 Minerals Benefication 6cp

Contact Hours: Not on offer in 2003

Assessment: Final examination: objectives i to v. Class test: objective i to vi. Tutorials: objectives iii to v. Laboratory and project reports: objectives i to vi.

Subject Description: The subject is designed to provide students with detailed knowledge of the art of processing raw minerals to yield marketable products using physical, chemical and electro-magnetic techniques. The course contents will cover: Metallic and non-metallic ore, process flow charts and unit operations, sampling systems, slurry streams and mass balancing, concentration and recovery, net smelter return, particle size analysis, liberation and comminution, crushing and grinding, screening, classification, gravity concentration, flotation, dewatering, tailings disposal and industrial re-use. The lectures and tutorials will be complemented with laboratory tests, project work and a field trip.

Subject Objectives: On successful completion of this subject students should be able to: (i) appreciate the role of minerals processing in the Australian economy, and demonstrate understanding of the fundamental ore processing principles and methods; (ii) identify the recovery difficulties associated with a given mineral, and being able to select the most economical processing techniques; (iii) ability to design the optimum flow sheets, and perform the appropriate mass balancing computations for a given circuit operation; (iv) understand the theoretical limitations of Physics and Dynamics when applied to real-life processing units, and maximise their efficiency using engineering judgement and design alterations; (v) recognise the major environmental problems associated with tailing disposal, and to familiarise with appropriate technologies contributing towards waste reduction and re-use.

MINE422 Mine Planning and Development 6cp

Spring Wollongong On Campus

Assessment: No formal examinations. Assignments and submission of a mine project report: objectives i to iv.

Subject Description: Each student will be given basic information of a mining prospect including borehole data, surface topography and projected output. The student will be required to submit a comprehensive report of the mine project together with appropriate plans.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the fundamentals of both surface and underground mine design and planning;

(ii) elect the most suitable method of mining a particular deposit safely and economically; (iii) understand the hazards associated with planning a mining operation whereby the deposit is liable to fire and explode due to the excessive presence of mine gases or selfheating; (iv) understand the importance of a skilled workforce in carrying out mine development safely.

MINE431 Mine Water 6cp

Contact Hours: Not on offer in 2003

Assessment: 2 hour final examination: objectives i to v. Other short examinations/tutorials/projects may be taken into consideration: objectives i to v.

Subject Description: Origin and hydro-geological aspects of mine water. Salinity problems. Acid mine drainage. Drainage in open pit mines. Drainage control in underground mine. Mine drainage design and calculations. Elements of tailings dam construction. Pollution case histories.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the origin of mine water; (ii) understand the problems caused by water in mining; (iii) understand the hydrological and hydrogeological factors affecting mine drainage; (iv) understand the design of mine workings below bodies of water; (v) understand the methods of mine dewatering for mines.

MINE433 Geostatistical Ore Reserve Estimation 6cp

Contact Hours: Not on offer in 2003

Assessment: Final examination: objectives i to iii. Class test: objectives i to iii. Assignments: objectives i to iii.

Subject Description: Review of statistical measures, outliers, and the desirable properties of an estimator. Basic concepts: regionalised variables, stationarity and intrinsic hypothesis. Variograms and structural analysis: calculation and interpretation experimental variograms and fitting theoretical models. Use of volume variance relationships. Estimation variance: sampling programs, optimal drill hole positions. Theory and practice of kriging: estimation at grid node and over block, total, and average grade. Recoverable reserves.

Subject Objectives: On successful completion of this subject students should be able to: (i) understand the theoretical concepts and practical applications of ore reserve methods; (ii) appreciate the practical limitations of ore reserve estimators; (iii) understand the optimally design of an exploration drilling program by locating the best drillhole positions.

MINE434 Special Topics in Mining Engineering 6cp

Spring Wollongong On Campus

Assessment: Final examination: objectives i to v. Class test: objectives i to vi. Tutorials: objectives iii to vi. Laboratory and project reports: objectives i to vi.

Subject Description: There is no set syllabus for this subject. It is intended that it normally be offered on a specialised mining engineering topic given by members of the Department or visiting academic staff or engineering consultants.

Subject Objectives: On successful completion of this subject students should be able to: (i) appreciate the role of and importance of the topic taught to mining engineering, and demonstrate understanding of the subject; (ii) understand the procedures and analysis associated with the topics involved; (iii) apply the knowledge gained to the practice and in compliance with the legal aspects of the mining rules and regulations.

MINE438 Environmental Impact of Mineral Operations 6cp

Contact Hours: Not on offer in 2003

Assessment: 2 hour final examination: objectives i to v. Assignments and short examination will be taken into consideration: objectives i to v.

Subject Description: Environmental impact of surface and underground mining - visual impact assessment, air pollution, noise and vibration. Waste solids management, water pollution and acid drainage. Restoration of mine sites, land use, subsidence and socio-economic effects of mining. Field Visits.

Subject Objectives: On successful completion of this subject students should be able to understand: (i) the environmental impact of various types of mining operation; (ii) environmental considerations in mine planning and opening new mining operations; (iii) surface environmental effects during the working life of mines; (iv) planning of and procedures to be followed during mine closure; (v) environmental aspects after mine closure.

PHYS131 Physics For the Environmental and Life Sciences A 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Assessment: Sessional written examination, written tests, one essay/poster paper, performance in laboratory and tutorials.

Subject Description: This course provides an awareness of the physical principles underlying locomotion, gas and fluid transport, and temperature control in living organisms. In addition, principles relating to the environmental impact of human activities are discussed. An emphasis is placed on the physical principles involved and examples drawn from the biosciences wherever possible.

Subject Objectives: A student will develop skills in interpreting natural phenomena in terms of the motion and interaction of bodies on macroscopic, microscopic and molecular scales. These skills will include: (i) the capability to apply basic physical theory to the world around them; (ii) a familiarity with current concepts and their historical development; (iii) the ability to interpret information and formulate solutions to problems in terms of simple physical models using high school mathematics (iv) the ability to communicate ideas and observations using written and pictorial methods; (v) the ability to interpret instructions and carry out practical experiments safely and effectively.

PHYS132 Physics For the Environmental and Life Sciences B 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Assessment: Sessional written examination, written tests, one essay/poster paper, performance in laboratory and tutorials.

Subject Description: This course introduces the physical principles underlying the uses of light, lasers and radar measurement in remote sensing as well as the assessment of nuclear-radiological hazards. It covers topics in wave phenomena, principles of electrical measurements, atomic and molecular physics and nuclear physics with an emphasis on the physical principles involved and examples drawn from the biosciences.

Subject Objectives: On successful completion of this subject, a student should be able to develop skills in interpreting natural phenomena encountered in the environmental and life sciences in terms of electromagnetic, atomic and nuclear interactions. These skills include: (i) the capability to apply basic physical theory to the world around them; (ii) a familiarity with current concepts and their historical development; (iii) the ability to interpret information and formulate solutions to problems in terms of simple physical models using high school mathematics; (iv) the ability to communicate ideas and observations using written and pictorial methods; (v) the ability to interpret instructions and carry out practical experiments safely and effectively; (vi) an understanding of the basic physics underlying advanced instrumentation and techniques encountered in environmental science; and (vii) the ability to analyse and present material using computer word processing and spread sheet techniques.

PHYS141 Fundamentals of Physics A 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Co-requisites: MATH141 or MATH187.

Assessment: Performance in assignments, practical work, tests and sessional examinations.

Subject Description: Vectors; vector algebra; motion in one dimension; motion in a plane; particle dynamics; work and energy; conservation of energy; conservation of momentum; collisions; rotational kinematics; rotational dynamics; conservation of angular momentum; equilibrium of rigid bodies; simple harmonic motion; gravitation; elasticity; temperature; heat and the first law of thermodynamics; kinetic theory of gases; entropy and the second law of thermodynamics; fluid statics; fluid dynamics.

Subject Objectives: On successful completion of this subject, a student should be able to develop an understanding of some of the fundamental laws of nature and their mathematical representation. This should provide them with skills in interpreting natural phenomena in terms of the motion and interaction of masses on macroscopic, microscopic and molecular levels. These skills include: (i) the ability to apply basic physical theory to the world around them; (ii) the ability to interpret information and formulate solutions to problems in terms of simple physical models building on high school and 100-level mathematics; (iii) the ability to communicate ideas and observations using written and pictorial methods; and (iv) the ability to interpret instructions and carry out practical experiments safely and effectively. Students should also acquire a familiarity with current concepts and their historical development.

PHYS142 Fundamentals of Physics B 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Co-requisites: MATH142 or MATH188.

Assessment: Performance in assignments, practical work, tests and end of session examinations.

Subject Description: Vectors and their applications; charge and matter; electric field; Gauss's Law; electric potential; capacitance; current and resistance; emf and circuits; magnetic fields; Ampere's Law; Faraday's Law; inductance; waves; reflection and refraction; interference; diffraction; polarization; optical instruments; quantum physics; waves and particles; atomic physics; the Bohr atom.

Subject Objectives: On successful completion of this subject, a student should be able to develop an understanding of some of the fundamental laws of nature and their mathematical representation. They should extend their understanding of macroscopic phenomena to include the effects of stationary and moving charges and the role they play in electromagnetic and atomic and nuclear interactions. This understanding will extend beyond a theoretical development of ideas to include practical application i.e. optics, solid state phenomena, nuclear radioactivity. They should acquire skills which should include the ability to: (i) apply basic physical theory to the world around them; (ii) interpret information and formulate solutions to problems in terms of simple physical models building on high school and 100-level mathematics; (iii) communicate ideas and observations using written and pictorial methods; and (iv) interpret instructions and carry out practical experiments safely and effectively.

PHYS143 Physics For Engineers 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Co-requisites: MATH142 or MATH188.

Assessment: Performance in assignments, practical work, tests and end of session examinations.

Subject Description: Vectors and their applications; charge and matter; electric field; Gauss's Law; electric potential; capacitance; current and resistance; emf and circuits; magnetic fields; Ampere's Law; Faraday's Law; inductance; waves; reflection and refraction; interference; diffraction; polarization; optical instruments; quantum physics; waves and particles; atomic physics; the Bohr atom.

Subject Objectives: On successful completion of this subject, a student should be able to develop an understanding of some of the fundamental laws of nature and their mathematical representation. This should provide them with skills in interpreting natural phenomena in terms of the motion and interaction of masses on macroscopic, microscopic and molecular levels. These skills should include the ability to: (i) apply basic physical theory to the world around them; (ii) interpret information and formulate solutions to problems in terms of simple physical models building on high school and 100-level mathematics; (iii) communicate ideas and observations using written and pictorial methods; and (iv) interpret instructions and carry out practical experiments safely and effectively.

PHYS205 Advanced Modern Physics 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS141 and PHYS142.

Assessment: Final assessment is determined by a weighting factor based on the contact hours of each section. Based on performance in homework assignments, tests, laboratory work and sessional exams.

Subject Description: Special relativity; Lorentz transformations; quantum effects; atomic structure; wave-particle duality; black body radiation; photo-electric effect; bremsstrahlung; Compton effect; X-rays; de Broglie hypothesis; particle diffraction; quantum mechanics; wave packets; uncertainty principle; Schrodinger equation; correspondence principle; particle in a box; wave functions of the hydrogen atom; nuclear particles, decay laws;

binding energy; nuclear reactions; fission and fusion; statistical distribution functions; energy bands; impurity states; p-n junction and transistor.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) Have an appreciation of the historical observations which could not be explained by 19th Century physics. (ii) Be able to describe the new concepts which provide the basis for our modern understanding of the physical universe. (iii) Be able to make elementary calculations relating to these concepts. (iv) Have a sound foundation for understanding more sophisticated concepts developed in higher level subjects for which this subject is a prerequisite.

PHYS206 Project in Physics 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Annual Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: Normally performance in 100-level Physics and Mathematics subjects at the level of distinction or better.

Assessment: Based on satisfactory written progress reports during the project and a written description on completion.

Subject Description: Option 1 and Option 2 Dbl (A)/Aut/Spr.

Subject Objectives: Option 1: On successful completion of this subject, a student should: (i) be able to design and construct experiments appropriate to undergraduate physics programs and to those for use in practical classes in High Schools; and (ii) be able to document the procedure required for carrying out such experiments. Option 2: On successful completion of this subject, a student should: (i) have gained experience in working as part of a small research group; (ii) be able to keep working records of the progress of experiments; and (iii) have gained a variety of basic skills related to the specific area of research in which they have been involved.

PHYS215 Vibrations, Waves & Optics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS141 and PHYS142.

Assessment: Determined from the assessment of each section separately. Final assessment is determined by a weighting factor based on the contact hours of each section. Based on performance in exams, assignments and laboratory work.

Subject Description: Simple harmonic motion; two body oscillations; damped harmonic oscillator; power dissipation; quality factor; driven harmonic oscillator; superposition principle; Fourier analysis; Huygens' principle; reflection and refraction; wave motion; sinusoidal waves; group velocity; dispersion; Young's experiment; interference; coherence; Stokes' treatment of reflection and refraction; interference; standing waves; Fabry-Perot interferometer; Michelson interferometer; Fourier spectroscopy; Fresnel diffraction; Fraunhofer diffraction; resolving power; diffraction grating; holography; polarization of waves; double refraction; interference of polarized light.

Subject Objectives: On successful completion of this subject a student should: (i) have an analytical and practical understanding of the relationship between vibrations and waves; and (ii) be able to apply this understanding to explain mechanical, electrical and optical phenomena.

PHYS225 Electromagnetism and Optoelectronics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS141, PHYS142, MATH201.

Assessment: Test, examinations, laboratory work and assignments.

Subject Description: Theory of electromagnetism, Maxwell's equations and electromagnetic waves. Optoelectronics laboratory. An introduction to modern electronic and optoelectronic devices.

Subject Objectives: On successful completion of this subject a student should have a firm understanding of the fundamental concepts of electromagnetism and the experimental basis of Maxwell's equations.

PHYS230 Intermediate Physics 12cp

Contact Hours: Not on offer in 2003

Pre-requisites: PHYS141 and PHYS142 or PHYS144 and PHYS145.

Co-requisites: MATH284 or MATH201 and MATH202.

Assessment: Assessment is based on performance in homework assignments, tests, lab work and sessional exams.

Subject Description: As for the subjects PHYS205, PHYS215 and PHYS225.

PHYS233 Introduction to Environmental Physics 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Assessment: Exam, Assignments and Fieldwork.

Subject Description: This subject is based on a sequence of modules, each of which introduces a key environmental physics theme illustrated using case studies. Students will be introduced to simple systems modelling utilising spread sheet analysis. The key areas studied are: (i) Atmospheric gases and vapours. (ii) Thermal radiation and the environment. (iii) Hydrodynamics of air, water and particulates. (iv) Hydrology of soils and porous materials.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) demonstrate an understanding of, and utilise physical concepts in environmental modelling; (ii) mathematically model a range of simple environmental systems using spreadsheet analysis and other techniques; (iii) conduct simple measurements associated with solar radiation, humidity, temperature and other environmental variables; (iv) be able to critically analyse various physical impacts on the atmosphere, oceans and biosphere.

PHYS235 Mechanics & Thermodynamics 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS141 and PHYS142.

Co-requisites: MATH201 and MATH202.

Assessment: Assessments determined from each section separately. Final assessment determined by weighting factor based on contact hours of section. Assessment based on performance in homework assignments, tests, lab work and sessional exams.

Subject Description: Vector calculus; kinematics of a particle; dynamics of a particle; moving reference systems; central forces; dynamics of a system of particles; mechanics of rigid bodies; Lagrange's Equations. Thermodynamic systems; equations of state; work; the first law of thermodynamics and its consequences; the second law of thermodynamics; entropy; combined first and second laws; thermodynamics potentials; applications of thermodynamics; kinetic theory of the ideal gas; molecular velocity distribution.

Subject Objectives: Mechanics: On successful completion of this subject, a student should be able to: (i) Solve problems at the intermediate level using the Newtonian, Lagrangian and Hamiltonian formalisms. Thermodynamics: On successful completion of this subject, a student should be able to: (i) Obtain the properties of a thermodynamic system from experimentally determined macroscopic properties of the system. (ii) Determine the microscopic properties of thermodynamic systems using kinetic theory and statistical mechanical methods. (iii) Have developed skills in partial differentiation, the solution of differential equations, integration and statistics.

PHYS255 Radiation Physics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS131 and 132 or PHYS141 and 142.

Assessment: Assessment: sessional written examination, performance in laboratory, assignments and sessional report on ANSTO visit.

Subject Description: Different types of radiation; Interaction between radiation and matter; Nuclear reactor and particle accelerator based applications in biology, medicine and physics; Nuclear reactions and the production of radioisotopes; Nuclear instrumentation; Application of radio-isotopes in biology, chemistry, medicine and physics; Use of neutrons in biology, chemistry, physics and in industry.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) Undertake observations involving nuclear instrumentation and ionizing radiations and apply basic analysis techniques. (ii) Analyse and solve practical problems associated with radiation physics. (iii) Assess radiation hazards and implement safety procedures for handling ionizing radiation. (iv) Discuss the application of nuclear physics to medical diagnosis and therapy. (v) Communicate ideas and findings, orally and in writing, to the professional and wider community and substantiate these with relevant examples in the field of radiation physics. In addition the student on completion of the subject must be: (i) Computer literate, with demonstrable skills in spread sheet analysis in a laboratory context. (ii) Creative, adaptive and flexible in their approach to applying physical principles to other disciplines. (iii) Capable of making efficient use of library and other information sources in assessing physics based environmental problems.

PHYS262 Vibrations and Waves 3cp

Contact Hours: Not on offer in 2003.

Pre-requisites: PHYS141 and PHYS142.

Exclusions: Cannot count with PHYS215 Vibration/waves and Optics.

Assessment: Final examination, practical work and tutorial problems.

Subject Description: A background to vibrations including: Simple harmonic motion; two body oscillations; damped harmonic oscillator: power dissipation; quality factor; driven harmonic oscillator; superposition principle; Fourier analysis. B background to wave motion and their interactions including topics on: wave motion; sinusoidal waves; Huygens' principle; reflection and refraction; group velocity; dispersion.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Describe simple harmonic motion and wave motion mathematically. 2. Discuss superposition of waves and calculate the resultant wave motion. 3. Describe the motion of waves across boundaries in terms of refraction and reflection laws. 4. Graphically explain wave motion using Huygen's principle. 5. Analyse wave motion and wave interactions mathematically. 6. Analyse complex waves in terms of a Fourier series. 7. Undertake experiments associated with simple harmonic motion and wave motion.

PHYS263 Photonics and Communications 6cp

Contact Hours: Not on offer in 2003.

Pre-requisites: PHYS141 and PHYS142.

Exclusion: PHYS215 - Vibrations, Waves and Optics.

Assessment: Final examination; Practical work; and Tutorial problems.

Subject Description: The subject will consist of the following modules: 1. Electromagnetic waves: Waves and photons 2. Geometric optics 3. Interference: Amplitude and Wavefront Division 4. Fraunhofer and Fresnel Diffraction: Fourier Optics 5. Diffraction Gratings and Interferometers: Spectrometers 6. Coherence 7. Lasers 8. Fibre Optics 9. Detectors

Subject Objectives: On successful completion of this subject, students should be able to: 1. Describe the interaction of electromagnetic waves mathematically. 2. Discuss superposition of electromagnetic waves and calculate the resultant intensity patterns. 3. Describe the motion of electromagnetic waves across boundaries. 4. Describe the images production using simple ray tracing techniques. 5. Analyse diffraction effects associated with simple apertures using phasor diagrams and fourier optics. 6. Analyse the characteristics of optical instrumentation including cameras, spectrometers, and fibre optics. 7. Successfully undertake optical experiments and experiments relating to electronic communications.

PHYS295 Astronomy - Concepts of the Universe 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisite: 24 credit points at 100-level.

Assessment: Performance in tests, written assignments and one 2 hr examination.

Subject Description: This subject takes a non-mathematical approach to Astronomy. No prior knowledge of physics is required to do the subject. This course will illustrate the techniques used by astronomers and will attempt to give an understanding of the universe as we presently understand it. The use of telescopes will give the opportunity to observe the phenomena discussed. The development of astronomy; the planets; the formation of the solar system; the sun as a star; the message of starlight; the visible stars; the birth and death of stars; telescopes, big and small; the milky way; the universe of galaxies.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) Describe the instruments and techniques (and their limitations) used in astronomy. (ii) Link the development of instrumentation to the progress in our understanding of the Universe. (iii) Make and record simple observations of astronomical phenomena. (iv) Describe the techniques used to classify astronomical sources. (v) Explain how astronomical distances are estimated and appreciate the limitations of each method. (vi) Develop physical explanations for the appearance and behaviour of astronomical sources. (vii) Describe how astronomical objects (stars, galaxies) evolve. In addition the student on completion of the subject should be able to: (i) Communicate ideas and findings, orally and in writing, to the professional and wider community and substantiate these with relevant examples in the field of astronomy.

PHYS305 Quantum Mechanics 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS205 or PHYS230.

Assessment: Laboratory work 35%, homework assignments 15% and end of session examination 50%.

Subject Description: Lectures: Applications of Schrodinger's equation; operators in co-ordinate and momentum space with applications; angular momentum operators; uncertainty relations for angular momentum operators; spherically symmetrical potentials; Stern-Gerlach experiments; topics in spectroscopy; rigid rotator, molecular spectra, hydrogen atom, normal Zeeman effect; spin, spin-orbit interaction, vector model for addition of angular momentum, anomalous Zeeman effect. L-S and j-j coupling, excited state of helium, selection rules, hyperfine structure; periodic table; time independent perturbation theory; Stark effect; matrix representations of operators and applications. Experimental: Selection of experiments appropriate to the subject.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) have a fundamental knowledge of the mechanics of particles on the atomic scale; (ii) be conversant with the developments leading to modern quantum theory; (iii) be able to calculate, in detail, the properties of the states of several simple systems including their energies; and (iv) be able to determine the changes in atomic states under the effect of static external perturbations.

PHYS306 Project in Physics 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: Normally performance in 200-level Physics and Mathematics subjects at the level of distinction or better.

Assessment: Assessment is based on satisfactory written progress reports during the project and a written description on completion.

Subject Description: Option 1 and Option 2 Dbl (A)/Aut/Spr.

Subject Objectives: Option 1: On successful completion of this subject, a student should: (i) be able to design and construct experiments appropriate to intermediate undergraduate physics programs; (ii) be able to document the procedure required for carrying out such experiments. Option 2: On successful completion of this subject, a student should: (i) have gained experience in contributing to the work of a small research group;

(ii) be able to keep detailed working records of the progress of experiments; (iii) have gained a variety of intermediate practical and analytical level skills related to the specific area of research in which they have been involved; and (iv) be able present a short seminar on the research in which they were engaged.

PHYS325 Electromagnetism 6cp

Autumn Wollongong On Campus

Contact Hours: 64

Pre-requisites: PHYS225 or PHYS230.

Assessment: Laboratory work (35%), end-of-session examination (30%), homework assignments (20%) and an essay (15%).

Subject Description: Maxwell's equations; boundary conditions; wave propagation in free space; free and bounded media and plasmas.

Subject Objectives: On successful completion of this subject, a student should: (i) understand the fundamentals of the generation, propagation and properties of electromagnetic radiation and its interaction with matter and be versatile in the use of Maxwell's equations; and (ii) have gained practical experience in the transmission of electromagnetic radiation and in interfacing digital computers to experimental apparatus for data collection and processing.

PHYS335 Classic Mechanics 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisite: PHYS235

Assessment: End of session examination and tutorial assignments 66% and practical, 34%.

Subject Description: Vectors and matrices; the special theory of relativity; motion in a non-inertial frame; dynamics of rigid bodies; Euler's Angles; Euler's Equations and applications; small oscillations; normal modes; Lagrange's equations of motion; dispersion.

Subject Objectives: On successful completion of this subject, a student should be able: (i) to apply theory relating to relativity and motion of bodies in non inertial reference frames; (ii) to solve problems relating to the motion of rigid bodies and small oscillations in coupled systems and strings; and (iii) to apply generalised methods of problem solving in mechanics.

PHYS356 Physics of Detectors and Imaging 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week

Exclusion: PHYS452 - Medical Imaging

Assessment: Image analysis labs 20%; Review paper 30%; End of Session Exam 30%; Project 20%.

Subject Description: This course leads to an understanding of the instrumentation and techniques involved in imaging and their role in medical physics specifically and in physics. The photographic process, Solid state detectors and CCD's, Characterisation of detectors; signal to noise sensitivity, Calibration of 2-D detectors eg. response curves, flat fields and reduction techniques; The hardware and software of image digitisation; film digitisers, plate scanners and A/D converters, Image processing techniques: spatial filters, histogram enhancement, fourier and other transforms,

Examples of imaging technologies e.g. Side looking radar, Confocal microscopy, Radiography and CT scanning, Ultrasonics, Sonar, NMR.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Describe a variety of imaging systems and identify the most appropriate for specific tasks. 2. Calibrate photographic images and discuss the errors involved in accurate photogrammetry. 3. Describe methods of reducing signal to noise in 1-D and 2-D detectors. 4. Successfully undertake image enhancement of medical and astronomical images. 5. Describe the process of A/D conversion and discuss the effects of under sampling on specific image data 6. Describe the application of Fourier techniques to image processing.

PHYS363 Advanced Photonics 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: PHYS263 - Photonics and Communication and 1 subject of 200-level Mathematics or PHYS215.

Assessment: Written examinations, assignments and a practical seminar.

Subject Description: Optical Design and Fabrication, Light Sources and Lasers, Photonic Materials, Quantum optics and Nanostructures, Opto-mechanical and Electro-optical Devices, materials Diagnostics, Advanced Metrology.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Explain the process of ray tracing and undertake simple ray tracing tasks. 2. Discuss the major aberrations in optical systems and explain how they can be reduced. 3. Describe optical coating processes and discuss the outcomes of such coating. 4. Describe the characteristics of light sources commonly used in photonics and select appropriate sources for specific tasks. 5. Discuss optical processes in semiconductor and organics materials in terms of electronic band gaps. 6. Describe a number of quantum optical devices and explain their operation. 7. Describe a variety of opto-mechanical and electro-optical devices and discuss their application. 8. Describe the instrumentation and physical processes relevant to FIR spectroscopy and fluorescent spectroscopy. 9. Discuss and describe the application of photonic devices to metrology.

PHYS365 Detection of Radiation: Neutrons, Electrons and X Rays 6cp

Autumn Wollongong On Campus

Contact Hours: Not on offer in 2003.

Pre-requisites: PHYS205 or PHYS230 or PHYS255.

Assessment: 3 Assignments, Labs and Final Exam.

Subject Description: Cylindrical and parallel plate ionisation chambers and their optimised design. Absolute dose calibration protocols and the relative dose concept. Semiconductor detectors and their response to radiation. Thermoluminescent dosimeters - their properties, types and advantages. Film dosimetry - the principles of radiation film exposure and non-linearity of film response, EPR dosimetry and chemical dosimetry.

Subject Objectives: On successful completion of this subject, a student should be able to use different types of particle detectors and determine nuclear radiation doses and depth dose profiles. They should also be able to use the techniques which give knowledge of electron and photon interaction in biological tissues.

PHYS366 Physics of Radiotherapy 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Assessment: Written examination, Assignments, Practical.

Subject Description: This subject is intended to lead to an understanding of the techniques involved in diagnostic and therapeutic uses of radioactive isotopes in medicine. Topics covered will include: A review of homeostasis and cellular functions, epidemiology of disease; abnormal cell growth; benign and malignant tumours; cell kill; introduction to particle accelerators; medical linear accelerators; the interaction properties of X-rays and electrons; clinical radiotherapy, linear accelerator x-ray and electron beam properties; the radiotherapy computer planning process, x-ray modelling methods and brachytherapy and radiosurgery.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) summarise the processes giving rise to abnormal cell development; (ii) to discuss the effects of various treatments for malignant tumours at a cellular level; (iii) determine the most effective dosage of various radiations for different therapeutic purposes; (iv) computer-model the process including the design of radiation shielding and sequel of the treatment; (v) use different types of particle detectors and determine nuclear radiation doses and depth dose profiles; and (vi) apply techniques which give knowledge of electron and photon interaction in biological tissues.

PHYS375 Nuclear Physics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisite: PHYS205

Co-requisites: PHYS305 and PHYS385.

Assessment: Assessment will be based on a group case study, spreadsheet exercises, tutorial problems and a final examination.

Subject Description: Topics presented will be selected from: 1. Nuclear characteristics: radius, charge, mass, composition, energy levels, angular momentum. 2. Nuclear models: liquid drop, semi-empirical and shell models 3. nuclear interactions and the compound nucleus. 4. Radioactive decay including alpha, beta and gamma emission. 5. Fission and chain reactions. 6. Fission reactors and radioactive waste. 7. Nuclear fusion and stellar nuclear processes. 8. Particle accelerators. 9. Elementary particles: protons to quarks.

Subject Objectives: On successful completion of this subject students should: 1. demonstrate an understanding of the historical background to models of the nucleus, its stability, modes of decay and reactions; 2. be able to apply simple models to binding energies, radioactive decay, fission and fusion processes; 3. describe techniques of measurement of nuclear properties; 4. describe and discuss nuclear fusion and fission processes used in power generation, weapons development and medical physics; 5. describe the hierarchy of elementary particles and the role of quarks in understanding this; and 6. demonstrate an understanding of radiation OH&S.

PHYS385 Statistical Mechanics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS205 or PHYS230.

Assessment: Assessment: Laboratory work, 35%; Homework assignments 15%; End of session examination 50%.

Subject Description: Review of thermodynamics, quantum statistical mechanics; sharply peaked distributions, ensembles; entropy and temperature; the chemical potential; Gibbs and Boltzmann factors - partition functions; fluctuations; pressure and thermodynamic identity; Boltzmann definition of entropy; identical particles - fermion and boson distribution functions; applications to electrons in metals; blackbody radiation and Debye theory of vibrations in solids; classical limit of the quantum distribution functions; monatomic ideal gas; Maxwell-Boltzmann velocity distribution; kinetic theory; transport processes.

Subject Objectives: On successful completion of this subject, a student should: (i) have a fundamental knowledge of the behaviour of matter on a microscopic scale which will enable them to predict its macroscopic behaviour such as its thermodynamical properties; and (ii) be able to determine the distribution of electrons amongst the energy states of metals, insulators and semiconductors.

PHYS390 Astrophysics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS205

Assessment: Assignments, sessional examination and poster paper.

Subject Description: Two strands will be presented on alternate years 1. Observational Astrophysics- Modern observational astrophysics involves observing across a wide range of wavebands from the X-ray and Gamma Rays through visible light and into the infrared and radio. To do this requires a broad understanding of optics, detector physics, astronomical database and analysis software. 2. Theoretical Astrophysics- Key topics will be selected from: Cloud collapse, Star formation and radiative transfer, Main sequence stellar models, Stellar evolution, Galaxy evolution, Cosmology.

Subject Objectives: On successful completion of the subject the student should be able to: 1. discuss the detection techniques used in Xray, visible, infrared and radio astronomy; 2. identify observing strategies relevant to a specific astrophysical problem; 3. describe the part played by computer applications in observational astrophysics; 4. apply simple image analysis techniques to a variety of images; 5. apply simple fourier transform theory to signal analysis and optical systems; 6. apply their knowledge in detector physics, computational and image analysis techniques to other disciplines; and 7. make efficient use of library and other information sources.

PHYS396 Electronic Materials 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisite: PHYS205

Co-requisite: PHYS305

Assessment: Assignments, laboratory reports, exam.

Subject Description: The nature of electronic materials. Electrons in solids, band theory: insulators, conductors, semiconductors and superconductors. The free and nearly free electron theories. Electrical conductivity, Hall effect. Types of magnetic materials. Semiconductors - intrinsic, extrinsic, the hole, the p-n junction. Superconductors - phenomena, BCS theory. Production of semiconductors and superconductors, control of processing to achieve desired properties.

Design and production of novel materials to achieve improved performance in electronic devices; modern applications.

PHYS401 Theoretical Mechanics & Electromagnetism 8cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: The main programs in physics at 400-level are directed toward the Honours BSc qualification and BMedPhys. Full time Honours BSc students will normally enrol in PHYS405.

Honours BMedPhys students will enrol in the Bachelor of Medical Physics program.

Assessment: Two sessional examinations and assignments.

Subject Description: Advanced theoretical mechanics and Electromagnetism.

Subject Objectives: On successful completion of this subject, a student should be able to solve problems and explore fundamental principles in mechanics and electromagnetism using the most advanced techniques available for this purpose.

PHYS405 Honours in Physics 48cp

Annual Wollongong On Campus

Contact Hours: 10 hours per week

Pre-requisites: Completion of a 144 cp BSc degree which includes PHYS305, PHYS325, PHYS335, PHYS375, PHYS385, PHYS390 and PHYS396 (or equivalent). These subjects are to be passed at the level of credit or better.

Assessment: The candidate is to complete successfully the following two components: (i) An Honours Project (50% of the assessment) and (ii) A program of coursework (50% of the assessment).

Subject Description: Includes: Honours Project, Coursework Program, Electromagnetism, Quantum Mechanics, Astrophysics, Nuclear Physics, Solid State Physics.

Subject Objectives: On successful completion of this subject, a student should be able to embark on a career as a physicist. They should have advanced skills in problem solving in the fundamental areas of the discipline and should be able to involve themselves in research programs either to assist in their execution or develop these themselves. Also, they should be qualified to enrol in Higher Degree programs without the need for further preliminary study.

PHYS441 Astro- and Nuclear Physics 8cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: The main programs in physics at 400-level are directed toward the Honours BSc qualification and BMedPhys. Full time Honours BSc students will normally enrol in PHYS405. Honours BMedPhys students will enrol in the Bachelor of Medical Physics program.

Assessment: Two sessional examinations and assignments.

Subject Description: This subject consists of the lecture content of Astrophysics and Nuclear Physics sections of PHYS405.

Subject Objectives: Astrophysics: On successful completion of this subject, students should have an extensive knowledge of several important phenomena in astrophysics.

They should be able to appreciate the manner in which the fundamentals of physics are applied to the derivative areas of astrophysics and understand the basis of our knowledge of the universe. A topic that may be covered is radiative transfer. A student should be able to: set up the equation of radiative transfer for a wide variety of physical systems and solve it in simple cases; recognize the conditions of local thermodynamic equilibrium (LTE), non-LTE and population inversion; estimate the importance of scattering and absorption in a system. Nuclear Physics: On successful completion of this subject, students should be able to: (i) Use partial waves for calculating the scattering cross section at low incident particle energies; use Born's approximation to calculate the reaction cross sections at high energy. Use Fermi Gas Model to calculate energetics of an excited nuclei.

PHYS444 Quantum Mechanics 8cp

Annual Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: The main programs in physics at 400-level are directed toward the Honours BSc qualification and BMedPhys. Full time Honours BSc students will normally enrol in PHYS405. Honours BMedPhys students will enrol in the Bachelor of Medical Physics program.

Assessment: Two sessional examinations (45% each) and homework assignments (10%).

Subject Description: This subject consists of the lecture content of Quantum Mechanics section of PHYS405.

Subject Objectives: On successful completion of this subject, a student should be able to apply advanced mathematical techniques to problems dealing with phenomena which are understandable only if behaviour on a microscopic scale is considered.

PHYS446 Solid State Physics 8cp

Annual Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: The main programs in physics at 400-level are directed toward the Honours BSc qualification and BMedPhys. Full time Honours BSc students will normally enrol in PHYS405. Honours BMedPhys students will enrol in the Bachelor of Medical Physics program.

Assessment: Two sessional examinations.

Subject Description: This subject consists of the lecture content of the Solid State Physics section of PHYS405.

Subject Objectives: On successful completion of this subject, a student should be able to apply the fundamental aspects of physics to problems relating to matter in the solid state.

PHYS451 Nuclear Medicine 8cp

Annual Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: 24 cp of third year subjects from the BMedical Physics program including PHYS375 and PHYS255.

Assessment: Labs, Assignments, Final Exam.

Subject Description: Evolution and basic physics of radionuclide imaging. Tracer principle in Nuclear Medicine. Radioactive agents or diagnostic studies. Therapeutic radioactive agents. Physiology of body organs. Diagnosis of body organ damage - single photon emitters, positron emitters. Technetium generating, instrumentation.

Quantification of the radionuclide image. Role of the computer, quality control of Nuclear Medicine studies. Therapeutic Nuclear Medicine, dosimetry principles, waste disposal. I-131, Radiation safety for patients and personnel. Paediatric considerations.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) Demonstrate a detailed knowledge of nuclear medicine procedures in the following areas Central nervous system, Respiratory systems, Gastrointestinal systems, Skeletal systems, Positron emission tomography, Bone densitometry, Paediatric applications. (ii) Demonstrate how to perform and interpret the results of both Non nuclear and Nuclear medical procedures in selected areas. (iii) Describe the advantages and limitations of nuclear medicine.

PHYS452 Medical Imaging 8cp

Annual Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: 24 cp of third year subjects from the BMedical Physics program including PHYS375.

Assessment: Assignments, test and final written examination 60%; Practical and / or project 40% .

Subject Description: Sources of diagnostic X - rays, computer tomography, instrumental set up, image definition, back projection, signal to noise, CT numbers, contrast, CT and radiotherapy. Nuclear magnetic resonances, Larmor frequency, basic imaging, slice selection, phase and frequency encoding, spin echoes, TE and TR relaxation times, mechanisms of contrast in MRI, multiecho imaging, multi slice imaging, fast imaging, flow imaging. MR angiography, 3D data acquisition, chemical shift imaging, contrast agents, image artifacts and distortion, localised spectroscopy, set up of a clinical MR scanner, safety aspects.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) Describe the process of image digitising. (ii) Describe PC based methods used in medical image manipulation. (iii) Describe PC based image storage techniques. (iv) Acquire, store and display 3 dimension data. (v) Discuss the technology behind and operational methods used in Computer Assisted Tomography, Magnetic Resonance Imaging and other medical imaging systems. (vi) Apply nuclear radiation protection principles.

PHYS453 Radiobiology and Radiation Protection 8cp

Annual Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: 24 cp of third year subjects from the BMedical Physics program including PHYS375.

Assessment: Assignments, test and written examination 60%; Practical and / or project 40%.

Subject Description: Interaction of radiation with matter, molecular effects of radiation, cell kill, repair of injury, assays of cell survival, the effect of oxygen, effect of chemical and biological modifiers, cell kinetics, tumour cell kill, early and late responding normal tissues, radio biological models, four Rs of radiobiology, time as an important factor, clinical impact in radiotherapy, protons, neutrons and pions. The natural background of radiation, man made sources of radiation, genetic and somatic risks, risks of low dose exposure, quality factor, critical organs , concepts of radiation protection.

ALARA limit values, open and closed sources of radiation, incorporation and bio kinetics of radionuclides, external sources of radiation, pregnancy and radiation, the role of the ICRP, legal aspects.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) Discuss the various types of radiation and their effect on physical and biological materials. (ii) Discuss the effects of ionizing radiation on genes, chromosomes, cell, tissues, macromolecules. (iii) Discuss the prompt and late effects of radiation. (iv) Describe the Medical Radiation Departments various procedure of radiation protection. (v) Outline the considerations which should be employed for the pregnant women. (vi) Describe the codes of standard of national and international radiation councils.

PHYS456 Imaging Physics 8cp

Annual Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: 24 cp in 300-level Physics subjects.

Assessment: mage analysis lab 40%, Review paper 30%, End of Session Exam 30%.

Subject Description: his course leads to an understanding of the instrumentation and techniques involved imaging and its role in medical physics specifically and in physics generally. The photographic process, solid state detectors and CCD's. Characterisation of detectors; signal to noise, sensitivity, calibration, flat fields and reduction techniques. The hardware and software of image processing; film digitisers and plate scanners. An overview of Medical Imaging Techniques; Radiography, Ultrasonics, NMR.

PHYS457 Research Project 24cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Annual Wollongong On Campus

Contact Hours: 8 hours per week

Pre-requisites: 24 cp of third year subjects from the BMedical Physics or BSc (Physics).

Co-requisites: 24 cp of fourth year subjects from the BMedical Physics or BSc (Honours).

Assessment: A formal report on the research project is to be delivered as a colloquium and a written report/thesis to be submitted in tenth week of spring session.

Subject Description: The student will be required to participate in a research program on some topic of physics under the supervision of one of the staff member. The student will have a choice of the following fields: Nuclear Medicine, Medical Imaging, Radiobiology, Radiation Protection, Diagnostic Radiology, Pathology and Imaging Physics, Astronomy, Solid State Physics. All the above research topics may not be available very year.

Faculty of Health & Behavioural Sciences

Member Units

Biomedical Science

Nursing

Psychology

Public Health

Degrees Offered

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The subjects comprising the Health and Behavioural Sciences major studies are:

- a) the subjects offered by the Departments of Biomedical Science and Psychology and the Graduate School of Public Health, as listed in the General Schedule, together with
- (b) subjects offered by other academic units which are included in one or more of the approved major studies.

Double Degrees **266**

Bachelor of Medical Science - Bachelor of Commerce

Bachelor of Psychology – Bachelor of Commerce

Bachelor of Science (Exercise Science) - Bachelor of Commerce

Bachelor of Science (Nutrition) - Bachelor of Commerce

Bachelor of Science (Psychology) - Bachelor of Commerce

Bachelor of Science - Bachelor of Laws (Health and Behavioural Sciences Major)

Bachelor of Medical Science - Bachelor of Laws

Other combinations may be available with other Faculties after consultation with the Sub-Dean.

Degrees with TAFE NSW

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Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Arts (Population Health)

The Bachelor of Arts (Population Health), Course Code 708, is designed to train students in skills to obtain, review and analyse health information, to plan and manage a project and to improve the health of populations. The major in Population Health may be taken by students who expect to be employed in the health system, but it should be considered by students who wish to be informed about a subject of interest to all Australians. A number of postgraduate options are available to allow graduates to proceed into masters degrees (e.g. in public health, health policy and management) or into research programs.

For the Bachelor of Arts in Population Health, candidates must undertake all subjects prescribed for the Population Health major together with additional subjects from the Arts Schedule, the Health & Behavioural Sciences Schedule or the General Schedule to make up the required 144 credit points.

100 level

POP101	Population health – current health issues and their determinants	6
BMS103	Human growth nutrition and exercise	6
STAT151	Introduction to the concepts & practice of statistics	6

and one of

ABST150	Introduction to Aboriginal Australia	6
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or

PSYC101	Introduction to behavioural science	6
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200 level

POP201	Contemporary population health problems	6
POP210	Epidemiology	6
POP202	Promoting healthy lifestyles	6
POP203	Health policy and service structure	6

300 level

POP320	Project and program design, management and evaluation	8
POP321	Analysis and interpretation of evidence	8
POP331*	Population health project A	24

* Students taking a joint major with another specialisation should take POP332 Population Health Project B, 8 credit points.

Note: Students can include additional subjects in Population Health in their degree, including:

POP102 – Sex, drugs and rock'n'roll: public health perspectives

POP220 – Mass media and population health

POP221 – Behaviour change for population health

Bachelor of Arts (Psychology)

For the Bachelor of Arts (Psychology), Course Code 708, candidates must undertake the subjects listed below; as well as additional subjects from the Arts Schedule, the Health & Behavioural Sciences Schedule or the General Schedule to make up the required 144 credit points. Students enrolled in Course Code 702, must comply with the Bachelor Degree Rules in the Faculty of Arts and should consult an Arts Faculty adviser.

100-Level

PSYC121	Foundations of Psychology A	6
PSYC122	Foundations of Psychology B	6
PSYC123	Theory, Design and Statistics in Psychology	6

200-Level for students who commenced prior to 2003 (Options are available. See following notes.)

PSYC216	Psychology of Physical Activity	6
PSYC231	Personality	6
PSYC232#	Research Methods and Statistics	6
PSYC234	Biological Psychology and Learning	6
PSYC235	Introduction to Psychological Assessment	6
PSYC236	Cognition and Perception	6
PSYC241	Developmental & Social Psychology	6

Completion of PSYC232 prior to enrolment in PSYC235 is strongly recommended.

Notes:

- Students enrolled prior to 2003 intending to complete three years of Psychology only, must complete PSYC232, plus three Psychology elective subjects. An elective must be a 200 level subject, excluding PSYC216, and must include at least one from each of the following groups:
Group A - PSYC231, PSYC241
Group B - PSYC234, PSYC236
Students enrolling from 2003 must complete an additional 6 credit points at 200-level.
- Students intending to proceed to an honours year in Psychology must complete PSYC232 and PSYC235, together with three electives from the following subjects: PSYC231, PSYC241, PSYC234, PSYC236.

300-Level for students who commenced prior to 2003 (See notes below.)

24 credit points of Psychology at 200-level (excluding PSYC216) should be completed as a general pre-requisite to 300 level subjects. Further specific pre-requisites are indicated in brackets.

PSYC315	Psychology of Abnormality (PSYC231)	8
PSYC318	Change Throughout the Life Span (PSYC231)	8
PSYC345	Advanced Cognition (PSYC236)	8
PSYC347	Assessment and Intervention	8
PSYC348	History and Metatheory of Psychology	8
PSYC349	Visual Perception	8
PSYC350	Social Behaviour and Individual Differences (PSYC241)	8
PSYC352	Psychophysiology (PSYC234)	8
PSYC354	Design and Analysis (PSYC232)	8

Notes:

- Students intending to complete three years of Psychology only, must complete three Psychology electives, including at least one from each of the following groups:
Group A - PSYC345, PSYC349, PSYC352
Group B - PSYC315, PSYC318, PSYC347, PSYC348, PSYC350
- Students intending to proceed to Honours in Psychology must complete PSYC348 and PSYC354 together with three electives which must include at least one from: PSYC345, PSYC349, PSYC352

3. Students enrolling from 2003 must complete PSYC315.

Note: Subjects to the value of at least 90 credit points must be selected from the Arts or Health and Behavioural Sciences Schedules.

Bachelor of Exercise Science & Rehabilitation

The Bachelor of Exercise Science and Rehabilitation degree requires 4 years of full-time study and the completion of 192 credit points of approved subjects. 178 credit points of subjects represent core study while the balance of the credit points may be taken as elective subjects from the Health and Behavioural Science or Science Schedules. Further, at least 88 credit points will be at 300- and/or 400-level, including at least 40 credit points at the 400-level.

The design of the Bachelor of Exercise Science and Rehabilitation course emphasises professional development and provides the student with opportunities to gain clinical skills through work experience within the department's Exercise Science and Rehabilitation Centre and other clinical application placement programs operating within the community. Graduates are trained to utilise exercise as an intervention to maintain and improve health and fitness and rehabilitate after injury or disease.

Graduates may apply for professional accreditation from the Australian Association for Exercise and Sports Science (AAESS) and practice as professional Exercise Physiologists or Sport Scientists after completing a period of post-graduation work experience.

Undergraduate students wishing to transfer into the Bachelor of Exercise Science and Rehabilitation degree may make application upon completion of the first two years of the BSc (Exercise Science) or BSc (Exercise Science and Nutrition) degrees (or other approved degree programs). Selection is based on University results over that time.

For the Bachelor of Exercise Science & Rehabilitation the following subjects must be undertaken:

Year 1

BMS101	Systemic Anatomy	6
BMS103	Human Growth, Nutrition and Exercise	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6
PSYC101	Introduction to Behavioural Science	6
BMS112	Human Physiology I: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry (or CHEM105)	6
STAT151	Introduction to the Concepts and Practice of Statistics	6

Year 2

BMS202	Human Physiology II: Control Mechanisms	6
BMS211	Foundations of Biomechanics	6
BIOL213	Principles of Biochemistry	6
PSYC216	Psychology of Physical Activity	6

BMS203	Musculoskeletal Functional Anatomy	6
BMS204	Introduction to Pathophysiology	6
BMS242	Exercise Physiology	6

plus a further subject from:

BIOL214	The Biochemistry of Energy and Metabolism	6
MGMT102	Business Communications	6
POP101	Population Health – current health issues and their determinants	6
POP220	Behaviour change for Population Health	6

Year 3

BMS342	Advanced Exercise Physiology	8
BMS344	Cardiorespiratory Physiology	8
BEXS351	Exercise Prescription 1: Strength and Conditioning	8
BMS346	Motor Control and Dysfunction	8
BEXS352	Exercise Prescription 2: Aerobic Fitness	8

plus a further subject from:

BMS341	Clinical Biomechanics	8
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or another approved subject.

Year 4

BEXS411	Practicum in Exercise Science A	8
BEXS451	Exercise Rehabilitation 1: Musculoskeletal	8
BEXS452	Exercise Rehabilitation 2: Cardiorespiratory and Neurological	8
BMS303	Research Topics in Exercise Science	8
BEXS402	Exercise in Special Populations	8
BEXS412	Practicum in Exercise Science B	8

Bachelor of Health Science in Indigenous Health Studies

The Bachelor of Health Science in Indigenous Health Studies is a flexibly delivered degree offered in partnership with the Illawarra Institute of Technology (TAFE NSW) Shellharbour campus. The degree program is open to both Indigenous and non-Indigenous students and provides students interested in the health of Aboriginal and Torres Strait Islander people with the knowledge and skills to effectively address Aboriginal community health issues.

The degree requires 3 years of full-time study (or part-time equivalent) and the completion of 144 credit points of approved subjects. During the program students complete the Advanced Diploma in Aboriginal and Torres Strait Islander Health offered by TAFE NSW which is recognised for 72 credit points of advanced standing towards the degree. This is followed by 1.5 years full-time study (or part time equivalent) in the Indigenous Health program at the University to complete a further 72 credit points of approved subjects.

The program is fully articulated so that students may enter and exit at each level in the program while pursuing a career in Aboriginal Health. A significant placement component is included to provide practical as well as theoretical knowledge and skills in Aboriginal culture, health and community development.

The TAFE component of the course is offered in flexible delivery mode. Students completing the course will be concurrently enrolled at both the University of Wollongong and the Illawarra Institute of Technology.

Course Structures

Students should be aware that the TAFE component of the program begins in February, earlier than normal session start.

Students should seek advice from an academic adviser at the University or at TAFE before enrolling in this program:

Ms Samia Goudie or Ms Isla Bowen
Lecturers, Department of Nursing,
University of Wollongong
Phone: 4221 3576 or 4221 3470
Fax: 4221 3137
Email: samia_goudie@uow.edu.au
Email: isla_bowen@uow.edu.au

Ms Sandra Bolack
Head Teacher, Nursing Unit,
The Illawarra Institute of Technology
(TAFE NSW)
Shellharbour campus
Phone: 4295 2289
Fax: 4295 2114
Email: sandra.bolack@det.nsw.edu.au

Students wishing to undertake part time study in the TAFE component must discuss this with the TAFE coordinator.

Aims & Objectives of the Course:

The Bachelor of Health Science in Indigenous Health Studies provides:

- ◆ Primary health care workers with the knowledge and skills to effectively address Aboriginal and Torres Strait Islander community health, community development and cultural issues;
- ◆ Indigenous health workers with professional accreditation, based on a competency based program that is linked to the Aboriginal Health Worker award.

At the completion of this degree the graduate will have Community Development Skills in:

1. management;
2. advocacy;
3. liaison with outside agencies;
4. negotiation, particularly at a community level;

and Health Professional Skills in:

1. health management;
2. health promotion;
3. health planning;
4. counselling;
5. inter-agency referral;
6. monitoring of the health status of the community.

Degree structure

The degree consists of the TAFE Advanced Diploma of Aboriginal and Torres Strait Islander Health for 72 credit points of advanced standing, with an additional 72 credit points of UOW subjects that provide advanced and theoretical knowledge and skills in Aboriginal culture,

health and community development, and research in Aboriginal Health.

TAFE Advanced Diploma of Aboriginal & Torres Strait Islander Health

(1.5 years full-time equivalent)

includes subjects in:

Aboriginal History and Culture
Aboriginal Health Issues
Mental Health
Drug and Alcohol
Nutrition
Management
Mentor Training
Health Promotion
Environmental Health
Counselling

The TAFE Advanced Diploma of Aboriginal & Torres Strait Islander Health comprises

Certificate III in Aboriginal and Torres Strait Islander Health

Certificate IV in Aboriginal and Torres Strait Islander Health

Diploma in Aboriginal and Torres Strait Islander Health

Advanced Diploma in Aboriginal and Torres Strait Islander Health

This is a fully articulated (nested) program, with multiple entry and exit points, and Recognised Prior Learning criteria.

Students in the degree complete an additional 72 credit points of University of Wollongong subjects comprising:

NURS140	Introductory Communication Studies	6
SOC111	Sociological Dimensions of Nursing	6
NURS240	Current Services in Aboriginal Health	6
NURS242	Functional Community Structures	6
NURS243	Special Topic (Workplace Analysis)	6
NURS341	Special Topic	8
NURS343	Community Health Development: Theory and Practice*	8
NURS344	Community Health: Theory Research and Practice	8
NURS345	Health and Human Ecology*	6

* Subject to approval

plus at least 12 credit points to be selected from

ABST150	Introduction to Aboriginal Australia	6
ABST200	Aboriginal History Since Invasion	6
ABST300	Indigenous Theories of De-Colonisation	8

or other subjects approved by the Head of Department

Total 144 credit points.

Bachelor of Medical Science

The Bachelor of Medical Science degree requires 3 years of full-time study and satisfactory completion of 144 credit points including at least 24 credit points at 300-level. The degree provides a solid foundation of study in areas such as anatomy, physiology, chemistry, biochemistry, neuroscience, biology and research methods.

The Bachelor of Medical Science degree provides an excellent first degree for students wishing to enrol in post-graduate studies in medicine, teaching or research. Students seeking a research orientation are encouraged to complete a BSc (Honours) year and then seek enrolment in either a MSc – Research or a PhD degree program.

The Bachelor of Medical Science degree may also be taken as a double degree program with the Bachelor of Commerce (BMedSc/BComm) and completed in four and a half years of full-time study.

The Bachelor of Medical Science degree may also be taken as a double award program with the TAFE Diploma of Laboratory Techniques (Pathology Testing).

For the Bachelor of Medical Science, the following subjects must be undertaken:

Year 1

BMS101	Systemic Anatomy	6
BMS103	Human Growth, Nutrition and Exercise	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6
PSYC101	Introduction to Behavioural Science	6
BMS112	Human Physiology 1: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry (or CHEM105)	6
STAT151	Introduction to the Concepts and Practice of Statistics	6

Year 2

BMS202	Human Physiology II: Control Mechanisms	6
BIOL213	Principles of Biochemistry	6
BMS200	Histology	6

plus a further subject from the following:

BMS211	Foundations of Biomechanics	6
CHEM212	Organic Chemistry II	6
STS215	Globalisation: Science, Technology and Progress	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BMS204	Introduction to Pathophysiology	6

plus a further two subjects from the following:

BMS242	Exercise Physiology	6
BMS203	Musculoskeletal Functional Anatomy	6
BIOL215	Introductory Genetics	6

or other subjects approved by the Head of Department

Year 3

BMS352	Fundamentals of Neuroscience	8
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plus a further two subjects from:

BMS302	Research Topics	8
BMS311	Nutrients and Metabolism	8
BMS342	Advanced Exercise Physiology	8
BMS344	Cardiorespiratory Physiology	8
BIOL320	Molecular Cell Biology	8

CHEM350	Principals of Pharmacology	8
or other subjects approved by the Head of Department		
BMS300	Regional Anatomy	8
plus a further two subjects from:		

BMS302	Research Topics	8
BMS345	Advanced Topics in Pathophysiology	8
BMS346	Motor Control and Dysfunction	8
CHEM320	Biological Chemistry	8
PHIL380	Bioethics	8

or other subjects approved by the Head of Department

Bachelor of Medical Science/TAFE Diploma of Laboratory Techniques (Pathology Testing)

The double award of Bachelor of Medical Science/TAFE Diploma of Laboratory Techniques (Pathology Testing) provides opportunities for improved vocational outcomes, and the development of practical skills through simultaneous enrolment in the university degree and the TAFE diploma. This double award can be completed in 4 years of full-time study.

For the Bachelor of Medical Science/TAFE Diploma of Laboratory Techniques (Pathology Testing) the following subjects must be undertaken:

Note: ITALIC type indicates TAFE component

Year 1

BMS101	Systemic Anatomy	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6
PSYC101	Introduction to Behavioural Science	6
BMS103	Human Growth, Nutrition and Exercise	6
BMS112	Human Physiology I: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry (or CHEM105)	6
STAT151	Introduction to the Concepts and Practice of Statistics	6

Year 2

BMS202	Human Physiology II: Control Mechanisms	6
BIOL213	Principles of Biochemistry	6
BMS200	Histology	6

plus a further subject from the following:

BMS211	Foundations of Biomechanics	6
CHEM212	Organic Chemistry II	6
STS215	Globalisation: Science, Technology and Progress	6

Plus

BIOL214	The Biochemistry of Energy and Metabolism	6
BMS204	Introduction to Pathophysiology	6
MGMT110	Introduction to Management	6
MGMT321	Occupational Health and Safety Management	6

Year 3

<i>6849AG</i>	<i>Laboratory Testing & Procedures 2</i>	<i>72h</i>
<i>6849AH</i>	<i>Laboratory Testing & Procedures 3</i>	<i>45h</i>
<i>6849AA</i>	<i>Calibration & Data Handling</i>	<i>27h</i>
<i>6850AA</i>	<i>Quality Improvement</i>	<i>18h</i>
<i>6850AD</i>	<i>Instrumental Tests 1 – Spectroscopy</i>	<i>45h</i>

Course Structures

6850AE	<i>Instrumental Tests 2 – Chromatography</i>	36h
6850AF	<i>Instrumental Tests 3</i>	18h
1822F	<i>Histotechnology</i>	45h
1822A	<i>Microbiology</i>	45h
1822D	<i>Haematology 1</i>	54h
1822H	<i>Clinical Chemistry 1</i>	54h
1822B	<i>Medical Microbiology</i>	45h
1822G	<i>Histotechnology 2</i>	45h
1822K	<i>Immunohaematology</i>	45h
1822E	<i>Haematology II</i>	54h
1822C	<i>Parasitology and Virology</i>	18h
1822J	<i>Clinical Chemistry II</i>	54h
1822L	<i>Workplace Practice 4 – Pathology</i>	27h
1822M	<i>Workplace Practice 5 – Pathology</i>	27h
	TOTAL	774 hrs

Year 4

BMS352	Fundamentals of Neuroscience	8
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plus a further 16 credit points from:

BMS302	Research Topics	8
BMS311	Nutrients and Metabolism	8
BMS344	Cardiorespiratory Physiology	8
BIOL320	Molecular Cell Biology	8

or other approved subjects

BMS300	Regional Anatomy	8
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plus a further 16 credit points from:

BMS302	Research Topics	8
BMS345	Advanced Topics in Pathophysiology	8
BMS346	Motor Control and Dysfunction	8
PHIL380	Bioethics	8

or other approved subjects

Bachelor of Nursing

Bachelor of Nursing (Honours)

The Bachelor of Nursing Degree is a first level award. The conversion program for Bachelor of Nursing (Conversion) is an essential complement, as it provides practising nurses who achieved qualifications under the previous hospital system, or diplomates, with the opportunity to upgrade their certificates or diplomas to degree level. The Bachelor of Nursing (Honours) adds a dimension to studies at the graduate level. This award provides exceptional nursing students with the opportunity to extend their knowledge and skills beyond the beginning level.

A new curriculum commenced in 2002. Years 1 & 2 of the new curriculum will run in 2003. Year 3 of the old curriculum will also run in 2003.

Aims & Objectives of the Course

Primary goals:

- To foster respect for diversity.
- To graduate registered nurses who:
 - respect difference
 - respond quickly and appropriately to changing care requirements
 - uphold professional responsibility
 - advance nursing practice through evidence
 - commit to lifelong learning

- To graduate nurses who meet the ANCI competencies for Registered Nurses.
- To graduate students who reflect the attributes of the University of Wollongong Graduate.
- To graduate students who achieve the recommended tertiary literacy's of the University of Wollongong.

Year 1

NURS123	Introduction to Psychology	6
NURS162	Effective Communication in Health Care Relationships	6
NURS163	Fundamentals of Nursing	6
NURS164	Patterns of Knowing in Nursing	6
NURS165	Primary Health Care Nursing	6
NURS166	Medical/Surgical Nursing 1	6
BMS112	Human physiology 1	6
SCIE122	Biology for Nurses	6

Students who commenced the Bachelor of Nursing before 2002 who have not completed the required 100-level subjects from their program should consult with the Undergraduate Coordinator in Nursing.

Course requirements for the 3 Year Course leading to award of the Degree of Bachelor of Nursing

(For students who commenced the degree in or before 2001)

The course leading to the award of Bachelor of Nursing is a prescribed course designed for persons seeking registration with the New South Wales Nurses' Registration Board, in which:

Year 1 of the course introduces Fundamentals of Nursing Practice,

Year 2 of the course focuses on developing Collaborative Practice, and

Year 3 of the course is concerned with Autonomous Practice.

Candidates should note that pre- and co-requisites apply to many subjects in the course. Satisfactory completion of all **Year 2** nursing theory and practice subjects (NURS222 and NURS223) is a pre-requisite to enrolment in **Year 3** nursing theory and practice subjects. The reason for these prescriptions is that the Department of Nursing has a legal responsibility to ensure that candidates meet nursing theory and practice requirements at each level of the course.

Due to the necessary inclusion of clinical practicum, the length of each session of the course varies from the normal 13 week session.

Aims & Objectives of the course

Graduates from this course will demonstrate:

1. sound knowledge for safe and competent practice;
2. appropriate affective and psychomotor skills in providing holistic patient care;
3. reflective nursing practice skills in a variety of clinical and community settings;

4. the application of human ecological concepts in planning care, drawing on relevant principles of the biosciences and social and behavioural sciences;
5. effective interpersonal and group communication skills;
6. effective and collaborative functioning as a professional member of the health care team;
7. effective and sensitive practice within a multicultural environment;
8. responsibility for the continuing development of self and profession; and
9. high level skills in organisation and allocation of priorities in clinical and practice activities.

Year 2

ARTS211	Social Science Perspectives on Health and Illness	6
NURS227	Human Bioscience 3	6
NURS262	Medical / Surgical Nursing 1	6
NURS263	Mental Health Nursing 1	6
NURS264	Reflection and Practice	6
NURS265	Nursing Therapeutics	6
NURS266	Medical / Surgical Nursing 3	6
NURS267	Family and Maternal Health Nursing	6

Year 3 (for students entering 3rd year in 2003)

NURS321	Mental Health/Psychiatric Nursing: Theory and Practice	6
NURS322	Developmental Disability: Theory and Practice	6
NURS324	Preparation for Professional Practice	6
NURS325	Community Development Nursing: Theory and Practice	6
NURS326	Community Health Nursing: Theory, Research and Practice	6
NURS327	Health and Human Ecology	6
NURS328	Nursing Resources Management	6
NURS330	Research in Nursing	8

Course requirements for the course for Certificated Registered Nurses Leading to Award of the Degree of Bachelor of Nursing.

Candidates must be Registered Nurses to enrol in this course. The Department of Nursing offers opportunities for registered nurses to convert from certificate to a Bachelor of Nursing. The number of candidates admitted to the course will be limited and applicants must be approved by the Head of the Department of Nursing. Registered nurses with certificate(s) are required to satisfactorily complete subjects with value of at least 72 credit points, selected from this part of the Nursing Course Structure, and of which:

1. at least 6 credit points will be for 100-level subjects, and must include NURS164;
2. at least 12 credit points will be for 200-level subjects;
3. at least 24 credit points will be for 300-level subjects, and must include NURS330.

Advanced standing of up to 24 credit points may be approved for candidates with post certificate qualifications and experience, but each candidate must satisfy each of the requirements 1, 2 and 3 prescribed above.

Aims & Objectives of the Course

Graduates from this course will:

1. demonstrate an increased and sophisticated understanding of the nature of nursing and the role of the nurse as a health care professional;
2. evaluate and apply as appropriate, concepts drawn from nursing theory and research to professional practice;
3. offer leadership to less experienced and/or qualified members of the nursing profession;
4. demonstrate an increased awareness of the effects of cultural, social, economic, legal and ethical influences on the development of the nursing profession and on the health care system;
5. demonstrate increased ability in critical reflection and research;
6. display a readiness and ability to participate in positive changes and technological innovation; and
7. demonstrate competencies that will enable health professionals to accept responsibility for a more complex level of client management.

NURS123	Introduction to Psychology	6
NURS162	Effective Communication in Health Care Relationships	6
NURS164	Patterns of Knowing in Nursing	6
NURS325	Community Development Nursing	6
NURS327	Health and Human Ecology	6
NURS328	Nursing Resource Management	6
NURS330	Research in Nursing	8
ARTS211	Social Science Perspectives on Health and Illness	6
NURS264	Reflection & Practice	6
NURS265	Nursing Therapeutics	6

Students may also choose a limited number of credit points from the General Schedule at the discretion of the Department.

Course requirements for Registered Nurses who hold a Diploma of Nursing, or equivalent, for the course leading to award of the Degree of Bachelor of Nursing.

Candidates must hold a Diploma of Nursing to enrol in this course. The Department of Nursing offers opportunities for registered nurses to convert from a Diploma of Nursing to a Bachelor of Nursing. The number of candidates admitted to the course will be limited and applicants must be approved by the Head of the Department of Nursing. Registered nurses with a Diploma of Nursing, or equivalent, are required to satisfactorily complete subjects with value of at least 24 credit points, selected from this part of the Nursing Course Structure, and of which at least 12 credit points shall be for 300-level subjects and must include NURS330 (or NURS331 for full-time students).

Aims & Objectives of the Course

Graduates from this course will:

1. demonstrate an increased and sophisticated understanding of the nature of nursing and the role of the nurse as a health care professional;

Course Structures

- evaluate and apply as appropriate, concepts drawn from nursing theory and research to professional practice;
- offer leadership to less experienced and/or qualified members of the nursing profession;
- demonstrate an increased awareness of the effects of cultural, social, economic, legal and ethical influences on the development of the nursing profession and on the health care system;
- demonstrate increased ability in critical reflection and research;
- display a readiness and ability to participate in positive changes and technological innovation; and
- demonstrate competencies that will enable health professionals to accept responsibility for a more complex level of client management.

NURS264	Reflection & Practice	6
NURS265	Nursing Therapeutics	6
NURS325	Community Development Nursing	6
NURS327	Health and Human Ecology	6
NURS328	Nursing Resources Management	6
NURS330	Research in Nursing	8
NURS331	Research for Registered Nurses	6
POP101	Population Health - current health issues and their determinants	6

Course requirements for the course leading to award of the Degree of Bachelor of Nursing (Honours)

There is an increasing need for graduates to develop more advanced and extensive knowledge in the discipline than can be attained in a pass degree. This need can be achieved by qualified candidates, who have attained a level of scholarship at credit level or above in 300-level Nursing subjects, undertaking advanced coursework and research.

The Bachelor of Nursing (Honours) adds this dimension to studies at the undergraduate level. This award provides exceptional nursing candidates with the opportunity to extend their knowledge and skills and also provides an alternative academic study pathway to the existing specialist graduate courses in nursing on offer in the University of Wollongong.

Aims & Objectives of the Course

Graduates from this course will:

- develop and contribute to new forms of nursing practice through the ability to read, summarise, critique and interpret research;
- apply selected concepts and theories from nursing and related disciplines to support advanced nursing practice;
- understand and develop research approaches which aim to resolve problems in clinical situations;
- understand the relationship between theory, practice and research;
- apply sound research principles to the design, implementation, interpretation and reporting of original research;

- demonstrate skills in the preparation of research proposals; and
- acquire a foundation for advanced studies in nursing.

NURS401 Nursing Honours 48

Bachelor of Nutrition & Dietetics

The Bachelor of Nutrition and Dietetics degree requires 4 years of full-time study and the completion of 192 credit points of approved subjects. The Bachelor of Nutrition and Dietetics course emphasises professional development and provides the student with opportunities to gain clinical and health promotion skills through placements in hospitals, community health centres and the department's Exercise Science and Rehabilitation Centre. Graduates are eligible for membership of the Dieticians Association of Australia (DAA) and practice as professional Dietitians/Nutritionists. Undergraduate students wishing to transfer into the Bachelor of Nutrition and Dietetics degree may make application upon completion of the first two and a half years of the BSc (Nutrition), BSc (Exercise Science and Nutrition) or the Bachelor of Medical Science degrees (or other approved degree programs). Selection is based on a range of criteria including University results over that time.

Students within the Bachelor of Nutrition and Dietetics will need to have achieved a minimum of credit average across the first two years of their program to be permitted to continue into the third and fourth years of this degree. Students failing to achieve this grade will be transferred to the BSc (Nutrition) degree program. In addition, students within the BSc(Nutrition) who have achieved a credit average in the first 2 years of this degree will be permitted to apply to transfer into the Bachelor of Nutrition and Dietetics at this time.

Year 1

BMS101	Systemic Anatomy	6
BMS103	Human Growth, Nutrition and Exercise	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6
BMS112	Human Physiology I: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry (or CHEM105)	6
STAT151	Introduction to the Concepts and Practice of Statistics	6
PSYC101	Introduction to Behavioural Science	6
or		
SOC103*	Sociology A: Aspects of Australian Society	6

Year 2

BIOL213	Principles of Biochemistry	6
BMS202	Human Physiology II: Control Mechanisms	6
CHEM215	Food Chemistry	6
POP222	Current Issues in Food and Nutrition	6
BIOL214	The Biochemistry of Energy and Metabolism	6
MGMT102	Business Communications	6

plus a further two subjects from:

BMS204	Introduction to Pathophysiology	6
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GEOS246*	A Hungry World: Food Resources and the World Economy	6
POP101*	Population Health – current issues & their determinants	6

Year 3

BMS311	Nutrients and Metabolism	8
BMS310	Community and Public Health Nutrition	8
BMS312	Research in Human Nutrition	8
PHIL380	Bioethics	8
BMS304	Research Topics in Nutrition and Dietetics#	16

Year 4

BND433	Communication in Healthcare Practice	8
BND434	Dietetics	8
BND435	Food Services and Dietetics Management	8
BND437	Practical Studies in Nutrition and Dietetic	24

* suggested elective subjects for a 'public health' emphasis to the degree program.

Students who undertake BMS304 would also be able to undertake population health nutrition projects.

Bachelor of Nutrition & Dietetics/TAFE Certificate IV in Hospitality (Catering Operations)

This 5 year program allows students to graduate with both a Bachelor of Nutrition and Dietetics and the TAFE Certificate IV in Hospitality (Catering Operations). Undertaking the two qualifications separately would normally take 6 years. Graduates would be eligible for membership of the Dieticians Association of Australia (DAA) and practice as professional Dieticians. Graduates would also be eligible to be members of the Institute of Hospitality and Healthcare. This program provides students with the professional degree in Dietetics while enabling career opportunities in food service management, particularly in the public hospital system.

Prospective students should consult the Course Coordinator about their enrolment.

Bachelor of Psychology

100-Level

PSYC121	Foundations of Psychology A	6
PSYC122	Foundations of Psychology B	6
PSYC123	Theory, Design and Statistics in Psychology	6

plus at least 30 credit points from either the Health & Behavioural Science, Science or the General Schedule.

200-Level for students who commenced prior to 2003

PSYC231	Personality	6
PSYC232	Research Methods and Statistics	6
PSYC234	Biological Psychology and Learning	6
PSYC235	Introduction to Psychological Assessment	6
PSYC236	Cognition and Perception	6
PSYC241	Developmental and Social Psychology	6

plus at least 12 credit points from either the Health & Behavioural Science Schedule or the General Schedule.

300-Level for students who commenced prior to 2003 (See note below.)

General pre-requisite (300-level): 24 credit points of Psychology at 200-level, (excluding PSYC216). (Further specific pre-requisites are indicated in brackets).

PSYC347	Assessment and Intervention	8
PSYC348	History and Metatheory of Psychology	8
PSYC354	Design and Analysis (PSYC232)	8

together with 3 electives including at least one of:

PSYC345	Advanced Cognition (PSYC236)	8
PSYC349	Visual Perception (PSYC236)	8
PSYC352	Psychophysiology (PSYC234)	8

and at least one of:

PSYC315	Psychology of Abnormality (PSYC231)	8
PSYC318	Change Throughout the Lifespan (PSYC231)	8
PSYC350	Social Behaviour and Individual Differences (PSYC241)	8

Note: Students enrolling from 2003 must complete PSYC315 instead of PSYC347.

400-Level

Students performing at the level for entry to Honours will enrol in PSYC499. Otherwise, students will enrol in PSYC498.

PSYC498	Psychology IV	48
PSYC499	Psychology IV Honours	48

Students in the Bachelor of Psychology cannot enrol in PSYC498 or PSYC499 until they have completed 144 credit points of the first three years of the BPsych degree.

Bachelor of Science (Exercise Science)

The Bachelor of Science degree, with a major study in Exercise Science, involves 3 years of full time study and the completion of at least 144 credit points including at least 24 credit points at 300-level. This degree represents the first 3 years of the 4-year professional Bachelor of Exercise Science and Rehabilitation degree program. Graduates are trained to utilise exercise as an intervention to maintain health and fitness in healthy individuals. Graduates may become full members of the Australian Association for Exercise and Sports Science (AAESS) although further study maybe required to achieve professional accreditation.

Students wishing to transfer into the professional 4-year Bachelor of Exercise Science and Rehabilitation degree program may apply for transfer upon completion of the second year of the program.

The BSc (Exercise Science) is designed to meet the pre-requisite subject requirements for entry into the Graduate Diploma in Science (Exercise Rehabilitation) or the Master of Science (Exercise Rehabilitation) postgraduate degree programs which lead to professional accreditation, as an Exercise Physiologist or a Sports Scientist, by AAESS.

Course Structures

For the Bachelor of Science (Exercise Science) degree the following subjects must be undertaken:

Year 1

BMS101	Systemic Anatomy	6
BMS103	Human Growth, Nutrition and Exercise	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6
PSYC101	Introduction to Behavioural Science	6
BMS112	Human Physiology I: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry (or CHEM105)	6
STAT151	Introduction to the Concepts and Practice of Statistics	6

Year 2

BMS202	Human Physiology II: Control Mechanisms	6
BMS211	Foundations of Biomechanics	6
BIOL213	Principles of Biochemistry	6
PSYC216	Psychology of Physical Activity	6
BMS203	Musculoskeletal Functional Anatomy	6
BMS204	Introduction to Pathophysiology	6
BMS242	Exercise Physiology	6

plus a further subject from:

BIOL214	The Biochemistry of Energy and Metabolism	6
MGMT102	Business Communications	6
POP101	Population Health – current issues & their determinants	6
POP220	Behaviour Change for Population Health	6

Year 3

BEXS351	Exercise Prescription 1: Strength and Conditioning	8
BMS342	Advanced Exercise Physiology	8
BEXS352	Exercise Prescription 2: Aerobic Fitness	8

plus a further three subjects from:

BMS354#	Practicum in Exercise Science	8
BMS302	Research Topics	8
BMS344	Cardiorespiratory Physiology	8
BMS352	Fundamentals of Neuroscience	8
BEXS401	Ergonomics	8
BMS300	Regional Anatomy	8
BMS303	Research Topics in Exercise Science	8
BMS341	Clinical Biomechanics	8
BMS345	Advanced Topics in Pathophysiology	8
BMS346	Motor Control and Dysfunction	8

or other approved subjects.

Pre-requisite: BMS203, BMS242. This subject is for BSc (Exercise Science) and BSc (Exercise Science and Nutrition) students only.

Bachelor of Science (Population Health)

The Bachelor of Science (Population Health), Course Code 749, is designed to train students in skills to obtain, review and analyse health information, to plan and manage a project and to improve the health of populations. The major in Population Health may be taken by students who expect to be employed in the health system, but it should be considered by students who wish to be informed about a subject of interest to all Australians.

A number of postgraduate options are available to allow graduates to proceed into masters degrees (e.g. in public health, health policy and management) or into research programs.

For the Bachelor of Science in Population Health, candidates must undertake all subjects prescribed for the Population Health major together with other subjects which may be selected from the Health & Behavioural Sciences, Science or General Schedules to make up the required 144 credit points.

For the Bachelor of Science (Population Health) degree the following subjects must be undertaken:

100 level

POP101	Population health – current health issues and their determinants	6
BMS103	Human growth nutrition and exercise	6
STAT151	Introduction to the concepts & practice of statistics	6
and one of		
ABST150	Introduction to Aboriginal Australia	6
or		
PSYC101	Introduction to behavioural science	6

200 level

POP201	Contemporary population health problems	6
POP210	Epidemiology	6
POP202	Promoting healthy lifestyles	6
POP203	Health policy and service structure	6

300 level

POP320	Project and program design, management and evaluation	8
POP321	Analysis and interpretation of evidence	8
POP331*	Population health project A	24

Students can include additional subjects in Population Health in their degree, including:

POP102 – Sex, drugs and rock'n'roll: public health perspectives.

POP220 – Mass media and population health

POP221 – Behaviour change for population health

Note: Subjects to the value of at least 90 credit points must be selected from the Science or Health and Behavioural Sciences Schedules.

Honours Program

The degree of Bachelor of Science (Honours) in the Graduate School of Public Health is designed to provide supervised training in independent research. Candidates can be admitted with a Bachelor degree in a relevant discipline with research skill subjects and a credit average depending on the availability of supervision. The program will consist of 48 credit points of research leading to the submission of a thesis.

Research should be in an area of research expertise of a member of the Graduate School of Public Health. Potential candidates should discuss their research interest with the coordinator of the program and present a research project title and general outline. Once the supervisor has been approved the candidate will undertake an approved course program recommended by the School Head.

The student is also required to pass an examination of the detailed research proposal before about one third of the research time has passed. Requirements are specified in the Honours Bachelor Degree Rules.

The total duration of the honours year is no less than one year full-time and no more than 1.5 years full-time.

Bachelor of Science (Nutrition)

The Bachelor of Science (Nutrition) is a 3 year full time degree program requiring 144 credit points of approved subjects.

The degree provides a general education in the study of human nutrition with core areas of study including biochemistry, physiology, nutritional metabolism and community and public health nutrition. The program may be seen as the first 2 years of the professional 4-year Bachelor of Nutrition and Dietetics degree. The BSc (Nutrition) degree is designed to meet the prerequisite requirements for admission to the MSc (Nutrition and Dietetics) and recognition by the DAA as a professional Dietician/Nutritionist.

Students within the BSc(Nutrition) who have achieved a credit average in the first two and a half years of this degree will be permitted to apply to transfer into the Bachelor of Nutrition and Dietetics at this time.

For the Bachelor of Science (Nutrition) degree the following subjects must be undertaken:

Year 1

BMS101	Systemic Anatomy	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6
BMS103	Human Growth, Nutrition and Exercise	6
BMS112	Human Physiology 1: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry (or CHEM105)	6
STAT151	Introduction to the Concepts and Practice of Statistics	6
PSYC101	Introduction to Behavioural Science	6

or

SOC103*	Sociology A: Aspects of Australian Society	6
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Year 2

BMS202	Human Physiology II: Control Mechanisms	6
BIOL213	Principles of Biochemistry	6
CHEM215	Food Chemistry	6
POP222	Current Issues in Food and Nutrition	6
BIOL214	The Biochemistry of Energy and Metabolism	6
MGMT102	Business Communications	6

plus a further two subjects from:

BMS204	Introduction to Pathophysiology	6
GEOS246*	A Hungry World: Food Resources and the World Economy	6
POP101*	Population health – current health issues and their determinants	6

Or other approved subjects

Year 3

BMS311	Nutrients and Metabolism	8
BMS310	Community and Public Health Nutrition	8
BMS312	Research in Human Nutrition	8
PHIL380	Bioethics	8

plus a further two subjects from:

BMS301	Regional Anatomy	8
BMS302	Research Topics	8
BMS345	Advanced Topics in Pathophysiology	8
BMS346	Motor Control and Dysfunction	8

Or other approved subjects

* Suggested elective subjects for a 'public health' emphasis to the degree

Bachelor of Science (Nutrition)/ TAFE Certificate IV in Hospitality (Catering Operations)

This 4 year program allows students to graduate with both a BSc (Nutrition) and the TAFE Certificate IV in Hospitality (Catering Operations). Undertaking the two qualifications separately would normally take 5 years. This combined program provides a sound training in nutritional science and its applications to human nutrition, as well as practical food service management skills. Topics covered in the TAFE component include staff supervision, menu planning, food safety systems, customer service and marketing, quality management, as well as organising, preparing and serving food. Graduates would be eligible to be members of the Institute of Hospitality and Healthcare.

NOTE: ITALIC type indicates TAFE component.

Year 1

BMS101	Systemic Anatomy	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6
PSCY101	Introduction to Behavioural Science	6
or		
SOC103	Sociology 1: Aspects of Behaviour	6
BMS103	Human Growth, Nutrition and Exercise	6
BMS112	Human Physiology I: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry (or CHEM105)	6
<i>4500H</i>	<i>Hygiene</i>	<i>18h</i>
<i>4501M</i>	<i>Food Safety Systems</i>	<i>18h</i>
<i>4781C</i>	<i>Food Service Systems</i>	<i>36h</i>

Year 2

BIOL213	Principles of Biochemistry	6
BMS202	Human Physiology II: Control Mechanisms	6
CHEM215	Food Chemistry	6
MGMT102	Communication	6
BIOL214	The Biochemistry of Energy and Metabolism	6
POP222	Current Issues in Food and Nutrition	6
STAT252	Statistics for the Natural Sciences	6
<i>4500B</i>	<i>Food Preparation and Service</i>	<i>36h</i>
<i>4565A</i>	<i>Practical Catering I</i>	<i>84h</i>

Year 3

BMS310	Community and Public Health Nutrition	6
BMS311	Nutrients and Metabolism	6
4565G	<i>Food Service in Practice</i>	90h
PHIL380	Bioethics	8
2642B	<i>Supervision</i>	36h
4567A	<i>Catering Supervision in Practice</i>	90h
2643D	<i>Staffing Hospitality</i>	27h
4571A	<i>Hospitality Colleagues and Customers</i>	24h
4571B	<i>Hospitality Industry</i>	18h

Year 4

BMS312	Research in Human Nutrition	8
4566A	<i>Practical Catering 2A – Community</i>	36h
4565D	<i>Cook-Chill Catering</i>	27h
4501D	<i>Food Service Settings – Aged Care</i>	18h
4564A	<i>Catering Commodities</i>	18h
6639C	<i>Quality Management in Nutrition Services</i>	18h
6639A	<i>Administration-Health Care Facilities</i>	36h
BMS304	Research Topics in Nutrition and Dietetics	16
5779F	<i>Food Presentation</i>	10h
6634B	<i>Food Service Planning</i>	36h
6635A	<i>Australian Cuisine</i>	54h
4501K	<i>Work Experience</i>	34h

TOTAL University 124cp
TAFE 764h

- Students intending to proceed to an honours year in Psychology must complete PSYC232 and PSYC235, together with three electives from the following subjects: PSYC231, PSYC241, PSYC234, PSYC236.

300-Level for students who commenced prior to 2003 (See notes below.)

24 credit points of Psychology at 200-level (excluding PSYC216) should be completed as a general pre-requisite to 300 level subjects.

Further specific pre-requisites are indicated in brackets

PSYC315	Psychology of Abnormality (PSYC231)	8
PSYC318	Change Throughout the Life Span (PSYC231)	8
PSYC345	Advanced Cognition (PSYC236)	8
PSYC347	Assessment and Intervention	8
PSYC348	History and Metatheory of Psychology	8
PSYC349	Visual Perception	8
PSYC350	Social Behaviour and Individual Differences (PSYC241)	8
PSYC352	Psychophysiology (PSYC234)	8
PSYC354	Design and Analysis (PSYC232)	8

Notes:

- Students intending to complete three years of Psychology only, must complete three Psychology electives, including at least one from each of the following groups:
 Group A - PSYC345, PSYC349, PSYC352
 Group B - PSYC315, PSYC318, PSYC347, PSYC348, PSYC350
- Students intending to proceed to Honours in Psychology must complete PSYC348 and PSYC354 together with three electives which must include at least one from PSYC345, PSYC349, PSYC352
- Students enrolling from 2003 must complete PSYC315.

Note: Subjects to the value of at least 90 credit points must be selected from the Arts or Health and Behavioural Sciences Schedules.

Bachelor of Science (Psychology)

For the Bachelor of Science (Psychology) degree candidates must undertake the following subjects. Additional subjects may be selected from the Health & Behavioural Sciences schedule or the Science schedule or the General Schedule to make up the required 144 credit points.

100-Level

PSYC121	Foundations of Psychology A	6
PSYC122	Foundations of Psychology B	6
PSYC123	Theory, Design and Statistics in Psychology	6

200-Level for students who commenced prior to 2003

(Options are available. See notes below.)

PSYC216	Psychology of Physical Activity	6
PSYC231	Personality	6
PSYC232	Research Methods and Statistics#	6
PSYC234	Biological Psychology and Learning	6
PSYC235	Introduction to Psychological Assessment	6
PSYC236	Cognition and Perception	6
PSYC241	Developmental and Social Psychology	6

Completion of PSYC232 prior to enrolment in PSYC235 is strongly recommended.

Notes:

- Students enrolled prior to 2003 intending to complete three years of Psychology only, must complete PSYC232, plus three Psychology elective subjects. An elective must be a 200 level subject, excluding PSYC216, and must include at least one from each of the following groups:
 Group A - PSYC231, PSYC241
 Group B - PSYC234, PSYC236
 Students enrolling from 2003 must complete an additional 6 credit points at 200-level.

Bachelor of Science (Exercise Science & Nutrition)

The Bachelor of Science (Exercise Science and Nutrition) combines studies in the areas of Nutrition and Exercise Science. The double major requires the completion of 150 credit points of core subjects and 3 years of full time study. This degree represents the first 3 years of a 5 year integrated undergraduate and postgraduate program of study (with the Master of Science (Nutrition/Dietetics and Exercise Science) designed to produce a combined Dietician and Exercise Science practitioner who has professional accreditation from both the Dieticians Association of Australia (DAA) and the Australian Association for Exercise and Sports Science (AAESS). Students wishing to transfer into the Bachelor of Science (Exercise Science and Nutrition) will normally apply at the beginning of each academic year.

Selection is based on criteria which include University results and UAI scores.

For the Bachelor of Science (Exercise Science and Nutrition) the following subjects must be undertaken:

Year 1

BMS101	Systemic Anatomy	6
BMS103	Human Growth, Nutrition and Exercise	6
CHEM101	Chemistry 1A (or CHEM104)	6
PSYC101	Introduction to Behavioural Science	6

BMS112	Human Physiology I: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
CHEM102	Chemistry 1B (or CHEM105)	6
STAT151	Introduction to the Concepts and Practice of Statistics	6

Year 2

BMS211	Foundations of Biomechanics	6
BIOL213	Principles of Biochemistry	6
CHEM215	Food Chemistry	6
BMS202	Human Physiology II: Control Mechanisms	6
BMS242	Exercise Physiology	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BMS203	Musculoskeletal Functional Anatomy	6
POP222	Current Issues in Food and Nutrition	6

Year 3

BMS204	Introduction to Pathophysiology	6
BMS310	Community and Public Health Nutrition	8
BMS312	Research in Human Nutrition	8
BEXS351	Exercise Prescription 1: Strength and Conditioning	8
BMS311	Nutrients and Metabolism	8
BEXS352	Exercise Prescription 2: Aerobic Conditioning	8
BMS346	Motor Control and Dysfunction	8

If students do not intend to enrol in the MSc (Nutrition and Dietetics and Exercise Rehabilitation) on graduation and wish to qualify for full membership of the professional exercise science association (AAESS) they should complete BMS354 Practicum in Exercise Science instead of BMS204.

Bachelor of Science (Nutrition & Chemistry)

The Bachelor of Science (Nutrition and Chemistry) combines studies in the areas of Nutrition and Chemistry over 144 credit points of core subjects and 3 years of full-time study.

Year 1

BMS101	Systemic Anatomy	6
BMS103	Human Growth, Nutrition and Exercise	6
BMS112	Human Physiology I: Principles and Systems	6
STAT151	Introduction to the Concepts and Practice of Statistics	6
BIOL103	Molecules, Cells and Organisms	6
CHEM101*	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6

CHEM102*	Chemistry 1B: Introductory Organic and Physical Chemistry (or CHEM105)	6
PSYC101	Introduction to Behavioural Science	6
or		
SOC103	Sociology A: Aspects of Australian Society	6

* Note: Students who have not achieved a 50% pass or higher in HSC Chemistry, must enrol in CHEM104 and CHEM105 rather than CHEM101 and CHEM102.

Year 2

BMS202	Human Physiology II: Control Mechanisms	6
BIOL213	Principles of Biochemistry	6
BIOL214	The Biochemistry of Energy and Metabolism	6
POP222	Current Issues in Food and Nutrition	6
CHEM211	Inorganic Chemistry II	6
CHEM212	Organic Chemistry II	6
CHEM213	Molecular Structure, Reactivity and Change	6
CHEM215	Food Chemistry	6

Year 3

BMS311	Nutrients and Metabolism	8
BMS310	Community and Public Health Nutrition	8

plus one subject from the following:

BMS312	Research in Human Nutrition	8
PHIL380	Bioethics	8
BMS301	Regional Anatomy	8
BMS302	Research Topics	8
BMS345	Advanced Topics in Pathophysiology	8
BMS346	Motor Control and Dysfunction	8

plus three subjects from the following:

CHEM311	Inorganic Chemistry III	8
CHEM314	Instrumental Analysis	8
CHEM320	Biological Chemistry	8
CHEM321	Organic Synthesis and Reactivity	8
CHEM327	Environmental Chemistry	8
CHEM340	Chemistry Laboratory Project	8
CHEM364	Molecular Structure and Spectroscopy	8

Bachelor of Science (Psychology & Biology)

For the Bachelor of Science Double Major in Psychology & Biology the following subjects must be undertaken.

Note: Students intending to complete an honours year in Psychology must complete more than 24 credit points of Psychology subjects at 300 Level.

100-Level

PSYC121	Foundations of Psychology A	6
PSYC122	Foundations of Psychology B	6
PSYC123	Theory, Design and Statistics in Psychology	6
BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6
CHEM101	Chemistry 1A (or CHEM104)*	6
CHEM102	Chemistry 1B (or CHEM105)*	6

* Note: Students who have not achieved 50% or more in HSC Chemistry must enrol in CHEM104 and CHEM105 instead of CHEM101 and CHEM102.

200-Level for students who commenced prior to 2003

(Options are available. See following notes)

PSYC216	Psychology of Physical Activity	6
PSYC231	Personality	6
PSYC232	Research Methods and Statistics#	6
PSYC234	Biological Psychology & Learning	6
PSYC235	Introduction to Psychological Assessment#	6
PSYC236	Cognition and Perception	6
PSYC241	Developmental and Social Psychology	6

plus, students must enrol in four biology subjects selected from the following:

BIOL213	Principles of Biochemistry	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BIOL215	Introductory Genetics	6
BIOL240	Functional Biology of Plants and Animals	6
BIOL241	Biodiversity: Classification and Sampling	6
BIOL251	Principles of Ecology and Evolution	6
MARE200	Introduction to Oceanography	6

Completion of PSYC232 prior to enrolment in PSYC235 is strongly recommended.

Notes:

1. Students enrolled prior to 2003 intending to complete three years of Psychology only, must complete PSYC232, plus three Psychology elective subjects. An elective must be a 200 level subject, excluding PSYC216, and must include at least one from each of the following groups:

Group A - PSYC231, PSYC241

Group B - PSYC234, PSYC236

Students enrolling from 2003 must complete an additional 6 credit points at 200-level. See Sub-Dean for advice concerning this.

2. Students intending to proceed to an Honours year in Psychology must complete PSYC232 and PSYC235, together with three electives from the following subjects: PSYC231, PSYC241, PSYC234, PSYC236.

300-Level for students who commenced prior to 2003 (See notes below.)

24 credit points of Psychology at 200-level (excluding PSYC216) should be completed as a general pre-requisite to 300 level subjects. (Further specific pre-requisites are indicated in brackets).

PSYC315	Psychology of Abnormality (PSYC231)	8
PSYC318	Change Throughout the Life Span (PSYC231)	8
PSYC345	Advanced Cognition (PSYC236)	8
PSYC347	Assessment and Intervention	8
PSYC348	History and Metatheory of Psychology	8
PSYC349	Visual Perception (PSYC236)	8
PSYC350	Social Behaviour and Individual Differences (PSYC241)	8
PSYC352	Psychophysiology (PSYC234)	8
PSYC354	Design and Analysis (PSYC232)	8

Notes:

1. Students intending to complete three years of Psychology only, must complete three Psychology electives, including at least one from each of the following groups:

Group A - PSYC345, PSYC349, PSYC352

Group B - PSYC315, PSYC318, PSYC347, PSYC348, PSYC350

2. Students intending to proceed to Honours in Psychology must complete PSYC348 and PSYC354 together with three electives which must include at least one from: PSYC345, PSYC349, PSYC352

3. Students enrolling from 2003 must complete PSYC315

plus, students must enrol in three Biology subjects selected from the following: (total of 24 credit points)

BIOL303	Biotechnology: Applied Cell & Molecular Biology	8
BIOL318	Bioinformatics	8
BIOL320	Molecular Cell Biology	8
BIOL321	Cellular and Molecular Immunology	8
BIOL351	Conservation Biology: Marine and Terrestrial Populations	8
BIOL355	Marine and Terrestrial Ecology	8
BIOL391	Advanced Biology	8
BIOL392	Advanced Biology Project	8

Bachelor of Science (Psychology & Exercise Science)

The BSc (Psychology and Exercise Science) degree requires a minimum of 3 years of full time study and the completion of at least 158 credit points. The degree is designed to meet the requirements for entry into the Honours program within both the Departments of Psychology and Biomedical Science. Students wishing to transfer into the Bachelor of Science (Psychology and Exercise Science) will be judged on criteria including University results and UAI scores.

For the Bachelor of Science (Psychology & Exercise Science) the following subjects must be undertaken:

Year 1

BMS101	Systemic Anatomy	6
BMS103	Human Growth, Nutrition and Exercise	6
PSYC121	Foundations of Psychology A	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104)	6
BMS112	Human Physiology I: Principles and Systems	6
BIOL103	Molecules, Cells and Organisms	6
PSYC122	Foundations of Psychology B	6
PSYC123	Theory, Design and Statistics in Psychology	6

Year 2 for students who commenced prior to 2003

BMS202	Human Physiology II: Control Mechanisms	6
BMS211	Foundations of Biomechanics	6
PSYC232	Research Methods and Statistics	6
BMS203	Musculoskeletal Functional Anatomy	6
BMS242	Exercise Physiology	6

and

PSYC235 Introduction to Psychological Assessment 6
(PSYC235 only for students intending to complete a 4th year program in Psychology)

plus three electives with at least one subject from each of the following groups:

Group A:

PSYC231 Personality 6
PSYC241 Developmental and Social Psychology 6

Group B:

PSYC234 Biological Psychology and Learning 6
PSYC236 Cognition and Perception 6

Note: Students intending to proceed to an Honours year in Psychology must complete PSYC232 and PSYC235, together with three electives from PSYC231, PSYC241, PSYC234, PSYC236.

For those students enrolling from 2003 an additional 6-credit points of psychology are required. See sub-dean re this requirement.

Year 3 for students who commenced prior to 2003

BMS342 Advanced Exercise Physiology 8
BEXS351 Exercise Prescription 1: Strength and Conditioning 8
BEXS352 Exercise Prescription 2: Aerobic Fitness 8

plus three electives which must include at least one subject from each of the following groups:

Group A:

PSYC315 Psychology of Abnormality (PSYC231) 8
PSYC318 Change Throughout the Lifespan (PSYC231) 8
PSYC347 Assessment and Intervention 8
PSYC348 History and Metatheory of Psychology 8
PSYC350 Social Behaviour and Individual Differences (PSYC241) 8

Group B:

PSYC345 Advanced Cognition (PSYC236) 8
PSYC349 Visual Perception 8
PSYC352 Psychophysiology (PSYC234) 8

Students intending to complete Psychology Honours must select PSYC348 from group A above.

For those enrolling from 2003, PSYC315 will be required.

Bachelor of Science (Psychology & Management)

For details of the major studies in the above degree please refer to the Psychology Department and the Management Department.

Bachelor of Science (Psychology & Nutrition)

The BSc (Psychology and Nutrition) degree requires a minimum of 3 years of full time study and the completion of at least 144 credit points. The degree is designed to meet the requirements for entry into the Honours program within the Departments of Psychology and Biomedical Science.

The program also meets entry requirements for the Masters Program in Nutrition and Dietetics.

Students wishing to transfer into the Bachelor of Science (Psychology and Nutrition / Exercise Science) will be judged on criteria including University results and UAI scores.

For the Bachelor of Science (Psychology & Nutrition) the following subjects must be undertaken:

Year 1

BMS101 Systemic Anatomy 6
BMS103 Human Growth, Nutrition and Exercise 6
PSYC121 Foundations of Psychology A 6
CHEM101 Chemistry 1A: Introductory Physical and General Chemistry (or CHEM104) 6
BMS112 Human Physiology I: Principles and Systems 6
BIOL103 Molecules, Cells and Organisms 6
PSYC122 Foundations of Psychology B 6
PSYC123 Theory, Design and Statistics in Psychology 6

Year 2 for students who commenced prior to 2003

BMS202 Human Physiology II: Control Mechanism 6
BIOL213 Principles of Biochemistry 6
CHEM215 Food Chemistry 6
PSYC232 Research Methods and Statistics 6
BIOL214 Metabolic Biochemistry 6

Plus three 6 credit point electives which must include at least one subject from each of the following groups:

Group A:

PSYC231 Personality 6
PSYC241 Development and Social Psychology 6

Group B:

PSYC234 Biological Psychology and Learning 6
PSYC236 Cognition and Perception 6

Further elective:

PSYC235 Introduction to Psychological Assessment 6

For those students enrolling from 2003 an additional 6-credit points of psychology are required. See sub-dean re this requirement.

Year 3 for students who commenced prior to 2003

BMS311 Nutrients and Metabolism 8
BMS310 Community and Public Health Nutrition 8
BMS312 Research in Human Nutrition 8

Plus three 8 credit point electives which must include at least one subject from each of the following groups:

Group A:

PSYC315 Psychology of Abnormality (PSYC231) 8
PSYC318 Change Throughout the Lifespan (PSYC231) 8
PSYC347 Assessment and Intervention 8
PSYC348 History and Metatheory of Psychology 8
PSYC350 Social Behaviour and Individual Differences (PSYC241) 8

Group B:

PSYC345 Advanced Cognition (PSYC236) 8
PSYC349 Visual Perception 8
PSYC352 Advance Psychophysiology (PSYC234) 8

Further elective:

PSYC354 Design and Analysis (PSYC232) 8

TOTAL 144

NB: Students intending to qualify for an honours year in Psychology should complete the extra subjects required.

For those enrolling from 2003, PSYC315 will be required.

Double Degrees with Bachelor of Medical Science, Bachelor of Psychology or Bachelor of Science (Health and Behavioural Sciences) majors

Students may combine their Health and Behavioural Sciences studies with studies in a number of other faculties and qualify for the award of two degrees. Double degrees are designed for students to complete two degrees in less time that it would normally take. Double degrees are offered with Commerce and Law, and may be available with other Faculties after consultation with the Sub-Deans.

- Students must seek advice and approval from both Faculties.
- Candidates must satisfy the entry requirements of both degree programs.
- Double degrees, where both degrees are normally of three years duration will be a minimum of 216 credit points and take a minimum of four years to complete.
- Double degrees, where one of the degrees is normally of four years duration will be a minimum of 264 credit points and take a minimum of five years to complete.
- Students may be given exemptions where equivalences exist between subjects.

For all double degrees, candidates are required to complete subjects from the Health and Behavioural Sciences schedule, including core subjects and subjects to satisfy the requirements of one of the Health and Behavioural Sciences majors or degrees. Candidates should be aware that the number of credit points required by each major varies.

Candidates must also satisfy the requirements for the second degree, which would usually include a major study.

HEALTH & BEHAVIOURAL SCIENCE SUBJECT DESCRIPTIONS

Note: Except where shown, all subjects are offered on the Wollongong Campus.

BIOMEDICAL SCIENCE

BEXS351 Exercise Prescription 1: Strength and Conditioning 8cp

Spring

Contact Hours: 5 hours per week

Pre-requisites: BMS203 and BMS242

Assessment: Exercise Program Examination 20%, Practical Examination 50%, Written Examination 30%

Subject Description: This subject applies knowledge from areas of functional anatomy, exercise physiology, biomechanics and exercise science practice to the design of safe, beneficial and functional resistance programs to healthy populations in the community and the work place.

Subject Objectives: To develop a body of knowledge in resistance training and conditioning; to develop a repertoire of practical skills in the application of exercise science in strength and conditioning; support the development of competent exercise physiologists, able to work in the community in a variety of clinical settings.

BEXS352 Exercise Prescription 2 - Aerobic Fitness 8cp

Autumn

Contact Hours: 5 hours per week

Pre-requisites: BMS242

Assessment: ECG Exam 10%; Assignment 40%; Oral Examination 50%

Subject Description: This subject addresses the range of skills and strategies appropriate for the design and implementation of exercise regimes in normal populations and selected pathological populations. It involves the design of programs to improve aerobic fitness and includes information related to exercise sequencing, and developing appropriate intensity of exercise on the basis of field and laboratory based test results. Strategies for prescribing exercise within specific populations will also be included within this subject material.

Subject Objectives: At the conclusion of this subject students should be able to: demonstrate a knowledge of general principles of exercise testing, assessment of results and exercise prescription; explain limitations and applications of results obtained from clinical testing; explain and demonstrate the use of periodisation in exercise prescription; describe the impact of selected medications on exercise performance and exercise prescription targeting the aerobic energy system and plan appropriate aerobic programs for specific populations.

BEXS401 Ergonomics 8cp

Autumn

Pre-requisites: BMS203 and BMS242

Assessment: Major Assignment 30%; Presentation 20%; Minor Assignment 10%; Exam 40%

Subject Description: This subject introduces students to the area of human factors in the design and safety of the work environment. Topics will include:- the scientific basis of ergonomics; human information processing; task design; equipment design; workplace design; environmental design and macroergonomics. The subject will be designed to complement the student's pre-existing knowledge in the areas of functional anatomy, biomechanics and exercise physiology.

BEXS402 Exercise For Special Populations 8cp

Spring

Contact Hours: 3 hours of Lectures, 5 hours of Seminars / Practicals per week

Pre-requisites: BEXS451 and BEXS452

Exclusions: For Bachelor of Exercise Science & Rehabilitation students and authorized Postgraduates

Assessment: Assignments & Reports 50%; Examination 50%

Subject Description: This subject assumes knowledge and skills covered in Advanced Exercise Physiology, Exercise Prescription I & II and extends information presented in Exercise Rehabilitation 1 & 2. The impact of selected pathologies on human performance and the effect of acute and chronic exercise on the pathology and on health of the individual require investigation and awareness by Exercise Scientists. Exercise test protocols and program delivery techniques specific to the needs of special populations in the community will be addressed. Techniques for planning and implementing interventions designed to address specific functional fitness problems in special populations will be explained. The relative merits of particular tests of physiological function in these populations will also be discussed.

Subject Objectives: The objective of this subject is to provide students with information relevant to the delivery of exercise interventions to the wider population, including those people with common pathologies. The subject material will inform students about the various pathologies Exercise Physiologists are likely to come into contact with, the impact of exercise on the pathology and of the effect of the pathology on acute and chronic exercise performance. Management strategies related to exercise as the intervention will also be explained.

BEXS411 Practicum in Exercise Science A 8cp

Annual

Contact Hours: 1 hour of Lectures, 2 hours of Seminars per week.

Pre-requisites: BEXS351 and BEXS352

Restrictions: For Exercise Science and Rehabilitation students plus authorised postgraduates

Assessment: Performance on placement 60%; Assessment 40%. Grade of Satisfactory/Unsatisfactory given.

Subject Description: This subject assumes knowledge and skills covered in the first three years of the Exercise Science degree and provides information related to the various environments in which Exercise Scientists operate.

Subject Descriptions

Consisting largely of a monitored placement within setting in which Exercise Science is delivered to members of the community, techniques for planning and implementing appropriate interventions will be applied. Exercise programs specific to the needs of these clients will thus be designed and managed by the student. Practical skills related to exercise testing, prescription and management of the entire exercise science intervention will be rehearsed, demonstrated and applied by students enrolled in this subject.

BEXS412 Practicum in Exercise Science B 8cp Spring

Contact Hours: 2 hours of Lectures, 3 hours of Seminars per week for nominated weeks and 150 hours placement

Pre-requisites: BEXS411

Co-requisites: BEXS402

Restrictions: For Exercise Science & Rehabilitation students plus authorized postgraduates

Assessment: Grade of Satisfactory or Unsatisfactory given

Subject Description: This subject assumes knowledge and skills covered in all areas of the Exercise Science degree. It consists of an extensive clinical placement which provides the student with the opportunity to utilise the skills and competencies developed over seven semesters at the University. Techniques for planning and implementing appropriate activity programs will be applied to a larger population of clients with increased heterogeneity of functional fitness and a range of pathologies. Exercise programs specific to the needs of a range of clients will thus be designed and managed by the student. Practical skills related to exercise testing, prescription and management of the entire process will be rehearsed and behaviours consistent with those often emerging professional will be demonstrated by students enrolled in this subject.

Subject Objectives: On successful completion of this subject students should be able to: 1. demonstrate the skills and competencies of a professional Exercise Scientist involved in the delivery of exercise science interventions to a range of people with selected pathologies; 2. manage simultaneously a number of clients with various pathologies. 3. work competently and professionally with other allied health professionals through demonstrating behaviours which display knowledge of ethics, confidentiality, accountability and responsibility appropriate to the placement setting.

BEXS451 Exercise Rehabilitation 1: 8cp Musculoskeletal

Autumn

Contact Hours: 2 hours of Lectures, 3 hours Practical per week

Pre-requisites: BEXS351 and BMS203

Restrictions: For Exercise Science & Rehabilitation students plus authorized postgraduates

Assessment: Theory Examination 25%; Clinical Examination 75%

Subject Description: This subject extends the study of exercise rehabilitation providing revision related to the structure and function of major joints and introduces common pathologies, mechanisms and outcomes. The subject covers information related to evaluation of the injured site and the design and management of appropriate exercise rehabilitative techniques designed to improve functional capabilities and prevent reinjury.

Subject Objectives: Subject objectives include: understanding of basic strength and conditioning principles and how they are applied to the injured populations; ability to perform a task analysis; thorough understanding of joint and muscle structure and function; competence movement analysis of isolated and combined movement; understanding of common musculoskeletal pathologies and intervention; competent in designing and implementing effective exercise programs to maximise the potential functional gain of patients with musculoskeletal pathologies.

BEXS452 Exercise Rehabilitation 2: 8cp Cardiorespiratory and Neurological

Autumn

Contact Hours: 2 hours of Lectures, 3 hours of Seminars per week.

Pre-requisites: BEXS352 and BMS346 and BMS344

Restrictions: For Exercise Science and Rehabilitation students plus authorised postgraduate students.

Assessment: Theory Examinations (2) 50%; Assignments (4) 50%

Subject Description: This subject investigates the use of exercise as a clinical rehabilitative tool for patients with cardiovascular or neurological pathologies. The subject covers information related to evaluation of the pathology site and the design and management of appropriate exercise rehabilitative techniques to improve functional capabilities and enhance quality of life.

Subject Objectives: The objective of this subject is to provide students with information relevant to the delivery of exercise interventions to the wider population, including those people with common cardiorespiratory and neurological pathologies. The subject material will inform students about the various pathologies Exercise Physiologists are likely to come into contact with, the impact of exercise on the pathology and of the effect of the pathology on acute and chronic exercise performance. Management strategies related to exercise as the intervention will also be explained.

BMS 101 Systemic Anatomy 6cp Autumn

Contact Hours: 2 hours of Lectures, 3 hours Practical per week.

Exclusions: EDUP131

Assessment: Practical Exam 50%; Theory Exam 50%

Subject Description: This subject provides an introduction to the area of human gross anatomy through the study of each of the major systems of the body. In weekly practical sessions, students are exposed to anatomical structure through examination of both cadaveric specimens, radiographic images, histological slides, audiovisual materials and anatomical models. Major topics include the skeletal, muscular, nervous, cardiovascular, respiratory, digestive and urogenital systems.

Subject Objectives: Students should be able to: identify gross anatomical structures on both models and human cadaveric material; understand the anatomical relationship between the systems of the body; understand the link between structure and function of anatomical structures.

BMS 103 Human Growth Nutrition and Exercise 6cp
Autumn

Contact Hours: 2 hours of Lectures, 1 hour Tutorial per week

Assessment: Final examination 60%; Practical/Tutorial Assignment and Presentation 40%

Subject Description: This subject will consider the relationship between growth (physical and maturational), nutritional health and exercise on various lifestyle performance indicators, such as motor skills and disease. The characteristics and determinants of growth, nutrition, health and exercise throughout the lifespan will be reviewed and will be examined from morphological, physiological and neural perspectives.

Subject Objectives: To develop a comprehensive and critical understanding of the: biological processes that characterise human growth and development, nutrition and exercise; normal patterns of growth from conception to birth and birth to maturity and their relationship to motor performance in postnatal life; relationship between physical activity, health, nutrition and growth at different ages through the human lifespan; influence of specific pathologies on growth and movement function.

BMS 112 Human Physiology 1: Principles and Systems 6cp
Spring

Contact Hours: 3 hours of Lectures, 3 hours Practical / Tutorials per week

Exclusions: EDUP132

Assessment: Theory Exam 65%; Practicals 35%

Subject Description: Following an introduction to the cellular, physiochemical and homeostatic principles essential to an understanding of physiology, specific systems will be investigated in detail. Specific topics will include: nervous, muscular, cardiovascular, respiratory systems and reproductive digestive processes and energy balance. The practicals will exemplify lecture material; tutorials will concentrate on concepts introduced in practicals and graphic analysis, data handling and simple analyses.

BMS 200 Histology 6cp
Autumn

Contact Hours: 5 hours per week (or equivalent)

Pre-requisites: BMS101 or BMS112

Restrictions: A quota may apply in any one year

Exclusions: BMS102

Assessment: Theory (Final Exam) 50%; Practical (Tests, Exam, Prac. mark, Assignments) 50%

Subject Description: This subject provides an introduction to the structure and function of mammalian cells, tissues and organs. The practicals and lectures will emphasise functional histology. Students will examine cell ultrastructure, gain an appreciation of histological methods and acquire a detailed understanding of the major tissue types and how these tissues are integrated to produce the functional characteristics of all the major organs/systems of the body. These include the cardiovascular, lymphatic, immune, integumentary, respiratory, digestive, urinary, endocrine and reproductive systems.

Subject Objectives: To recall, define, identify, explain and interpret microscopic structures and related functions within cells, tissues and organs of the body.

BMS 202 Human Physiology II: Control Mechanisms 6cp
Autumn

Contact Hours: 3 hours of Lectures, 3 hours Practical / Tutorials per week

Pre-requisites: BMS112 OR EDUP132

Assessment: Laboratory reports 15%; Mid-semester examination (Multiple choice) 20%; Laboratory attendance 5%; Final Examination (multiple choice and short answer) 60%

Subject Description: This subject is an extension of Human Physiology I (BMS112 or EDUP132) and covers material essential to the understanding of physiological control. While topics may vary from year to year, these will typically include the fundamentals of neurophysiological and endocrine control, with detailed treatment of cardiovascular, respiratory, metabolic and digestive system control. Control abnormalities accompanying certain pathological states are also emphasised.

Subject Objectives: The aim of this subject is to extend an understanding of human physiology to an appreciation and comprehension of how physiological systems are controlled during normal, abnormal and pathological states. While systems are frequently covered in isolation, some sections of this subject deal with system interactions during the maintenance of homeostasis.

BMS 203 Musculoskeletal Functional Anatomy 6cp
Spring

Contact Hours: 3 hours of Lectures, 3 hours Practical, 1 hour Tutorial fortnightly

Pre-requisites: BMS101 and BMS211

Exclusions: EDUP233

Assessment: Spot Tests 10%; Practical Exam 1 12%; Practical Exam 2 18%; Theory Exam 60%

Subject Description: This subject investigates the musculoskeletal system from a functional anatomical viewpoint. Topics include the anatomy and function of synovial joints and the role of skeletal muscle in the performance of movements such as walking, running and prehension. Emphasis will be placed upon integrating together the anatomical structures of the musculoskeletal system to better understand the principles of human motion. Students will be introduced to basic recording techniques for the assessment of musculoskeletal function including flexibility, strength and postural tests, movement analysis, anthropometry, gait analysis and electromyography.

Subject Objectives: The general objectives are to: develop an understanding of the structure and function of the musculoskeletal system in relation to both movement and posture; and provide the student with techniques useful in the kinesiological analysis of human movement.

BMS 204 Introduction to Pathophysiology 6cp
Spring

Contact Hours: 2 hours of Lectures, 2 hours Practical per week

Pre-requisites: BMS202

Assessment: Practical Assessment 30%; Seminar 10%; Final Exam 60%

Subject Description: This subject introduces the student to the study of the physiological basis of human disease states.

Subject Descriptions

There are four parts to this course including: pathophysiology at the cellular level; nutrition anaemias and lower digestive system; musculoskeletal system; and cardiovascular system. Topics include fluid and electrolyte imbalance acid/base imbalance and coeliac disease, ulcerative colitis, Crohn's disease, musculoskeletal system, dyslipidaemia and atherosclerosis.

Subject Objectives: Overall aim: to develop an understanding of the basic concepts relating to pathophysiology, and be able to relate these to the three main body systems covered, ie. digestive, musculoskeletal and cardiovascular systems.

BMS 211 Foundations of Biomechanics 6cp Autumn

Contact Hours: 5 hours per week

Pre-requisites: BMS101 or EDUP131

Exclusions: EDUP235

Assessment: Mid Session Examination 35%; Quiz 15%; Final Examination 50%

Subject Description: This subject introduces fundamental biomechanical principles to provide a basis for understanding the causes and effects of human motion. The subject is an extension of the basic principles of human structure and function studied in Systemic Anatomy and will include: (i) an introduction to analysis of movement; (ii) basic biomechanical principles of motion; and (iii) subjective analysis of movement.

Subject Objectives: On successful completion of this subject students should be able to: (i) describe and explain basic biomechanical principles of motion, and (ii) demonstrate an understanding of subjective methods for analysing human motion.

BMS 242 Exercise Physiology 6cp Spring

Contact Hours: 2 hours of Lectures, 3 hours Practical per week

Pre-requisites: BMS202

Exclusions: EDUP234

Assessment: Mid Semester Exam 25%; Group Assignment 25%; Final Exam 50%

Subject Description: This subject extends the study of human structure and function into the work and exercise domains. Areas to be studied include energy liberation and metabolism, applied muscle physiology and applied cardiorespiratory physiology.

BMS 300 Anatomy II (Regional Anatomy) 8cp Spring

Contact Hours: 2 hours of Lectures, 2 hours Practical per week

Pre-requisites: BMS101 or EDUP131

Assessment: Dissection 15%; Practical Exam 25%; Theory Exam 60%

Subject Description: This subject will teach detailed morphology and general pathology of human visceral organs. Clinical symptoms caused by visceral organ diseases will be explained in relation to particular region. It is a very practical course and leans towards advanced anatomy and common visceral organ diseases.

It provides a detailed morphology of the head, neck, thorax, abdomen, and pelvis with particular emphasis upon the viscera. Hence, it is a necessary pre-requisite for students to have knowledge of system anatomy (BMS101-Systemic Anatomy). Regional anatomy differs from systemic anatomy because it focuses on the specific region linking to the understanding of the clinical problems. Relevant visceral organ pathology and to certain extent histology are covered.

Subject Objectives: On successful completion of this subject, students should be able to: (1) gain a better understanding of visceral organ structures and general pathology; (2) explain common clinical problems of visceral organs; (3) dissect human cadaveric material to determine the gross structure.

BMS 302 Research Topics 8cp Autumn / Spring

Contact Hours: 1 semester at approx 1 day per week

Pre-requisites: BIOL214 and BMS202; or credit average and permission of subject coordinator.

Restrictions: A quota may apply in BMS302 each semester.

Exclusions: Quota may apply.

Assessment: Literature critique 20%; Final Research Poster (Group) 20%; Final Report (Individual) 60%

Subject Description: This subject provides an opportunity for students to participate in a research project in one of the discipline areas; Biomedical Science, Exercise Science and Rehabilitation, Nutrition and Dietetics or Occupational Health and Safety. Students will gain experience in experimental design, data collection, analysis and interpretation and report writing plus oral and poster presentation. The subject is particularly recommended for students intending to undertake further under- or post-graduate research based studies.

Subject Objectives: On the successful completion of this subject students should be able to critically evaluate scientific literature; plan, design and perform an experiment; collect and analyse data sets; evaluate data and synthesise into ideas and concepts; communicate research design, results and ideas to a general audience; place specific research area into a broader scientific setting; and acquire a better understanding of the scientific process through the experience of research.

BMS 303 Research Topics in Exercise Science 8cp Spring

Contact Hours: 1 semester at approx 1 day per week

Pre-requisites: BEXS351

Restrictions: A quota may apply depending upon demand.

Assessment: Literature Critique 20%; Research Poster 20%; Final Report 60%

Subject Description: This subject will provide an opportunity for students to conduct a research project in one of the following broad areas of Exercise Science: Exercise Physiology, Biomechanics, Functional Anatomy, Exercise Rehabilitation and Motor Control and Dysfunction. Topics covered will include: research design; development of research hypotheses and research proposal documents; data collection and analysis through use of wave form analysis statistical and spreadsheet software packages and the interpretation of research data within a final research report.

BMS 304 Research Topics in Nutrition and Dietetics 16cp**Spring****Contact Hours:** 2 hours of Tutorials, Weeks 1-4 and 11-13**Pre-requisites:** BMS312**Restrictions:** Quota may apply.**Assessment:** Report 80%, Poster 20%

Subject Description: The subject will introduce students to specific areas of research practice in the field of nutrition and dietetics. Topics will be negotiated based on the current research activities of the metabolic research centre and its associates. Students will join a particular project and undertake certain tasks under the supervision of a designated staff member. Students will be required to collect and analyse data and report on their findings to the research team.

BMS 310 Community and Public Health Nutrition 8cp**Autumn****Contact Hours:** 2 hours Seminars / Lectures per week**Pre-requisites:** POP222**Assessment:** Independent activity 40%; Media article 15%; In-class quizzes 45%

Subject Description: Key areas of community and public health nutrition include nutrition surveillance, food policy, program planning and health promotion. There will be a focus on community nutrition practice, covering such topics as maternal and infant nutrition, school based nutrition programs, diabetes education and the health of older people in the community.

BMS 311 Nutrients and Metabolism 8cp**Autumn****Contact Hours:** 4 hours of Lectures, 2 hours Practical per week**Pre-requisites:** BIOL214 and BMS202; or equivalent**Exclusions:** GHMA931**Assessment:** Examination 40%, practical assessment 20%, presentations 10% and reports 30%.

Subject Description: This subject covers the need for nutrients and how the human body metabolizes these nutrients. It begins with basic concepts such as bioavailability of nutrients from food. It then focuses on specific nutrients, namely carbohydrates, folate, plant sterols, phytoestrogens and fats, of which there is no recommended dietary intake (RDI). The overall aims are: 1. to understand the relationships between intake of nutrients and health status and 2. to develop an appreciation for the development of an RDI for a nutrient. Please note that this is a core subject for all of the University of Wollongong's nutrition degrees and hence it is tailored for nutrition students.

Subject Objectives: On successful completion of this subject students should be able to: 1. understand various concepts such as: bioavailability, recommended dietary intakes, dietary guidelines and basic metabolism; 2. discuss the importance of quality and types of fat, carbohydrate and dietary fibre; 3. search for relevant literature using various databases; critically evaluate the literature; 4. understand nutrient requirements that can then be expressed as food recommendations and whole diet recommendations; and 5. develop recommendations for a particular nutrient based on available scientific literature.

BMS 312 Research in Human Nutrition 8cp**Autumn / Annual****Contact Hours:** 8 x 4 hour workshops**Pre-requisites:** STAT151 or STAT252**Assessment:** Literature review 20%; scientific report 40%; presentation of proposal 20%; research proposal 20%

Subject Description: This subject will introduce students to a range of key areas of research in human nutrition. Beginning with an overview of nutrition research and the development of literature reviews, topics will include diet intake methodology, the use of nutrient databases, biomedical assays and indicators, epidemiological and ethnographic approaches as they relate to nutrition.

BMS 341 Clinical Biomechanics 8cp**Spring****Contact Hours:** 5 hours per week**Pre-requisites:** BMS211 or EDUP235, and BMS203**Exclusions:** A quota may apply in any one year.**Assessment:** Assignment 40%; Quiz 10%; Final Exam 50%

Subject Description: This subject aims to extend the student's knowledge of musculoskeletal functional anatomy and biomechanics attained in BMS203 and BMS211, respectively, and to apply this knowledge in learning how to quantitatively assess human movement. Emphasis within the subject will be directed towards developing the required knowledge and skills to be able to measure, analyse and interpret data characterising both normal and pathological human motion. The subject will consist of the following content: (1) measurement in exercise science; (2) quantitative methods of analysing human motion including anthropometry, kinematic analysis (still, video, and cine photography), kinetic analysis (dynamometry and inverse dynamics), electromyography, pressure measurement, and balance assessment; (3) theoretical and practical concerns in processing raw data characterising human motion; and (4) clinical applications of quantifying human motion.

Subject Objectives: As a result of participation in this subject, students should be able to: (1) describe and explain biomechanical principles and approaches used in quantitative assessment of human motion for the exercise scientist; (2) display competence in using selected quantitative tools to assess human motion; (3) explain how to process raw data characterising human motion; and (4) describe and explain appropriate methods of analysing a human motion task using quantitative techniques.

BMS 342 Advanced Exercise Physiology 8cp**Autumn****Contact Hours:** 2 hours Lectures, 3 hours Practical per week.**Pre-requisites:** BMS242**Assessment:** Mid-semester examination (multiple choice) 20%; Laboratory report 20%; Seminar 20%; Laboratory attendance 5%; Final examination (oral) 35%

Subject Description: While we are adapted to a more sedentary lifestyle, exercise provides a stimulus which pushes physiological function to extreme levels, providing a unique window through which the impact of stress upon human function may be explored.

Subject Descriptions

The knowledge of physiological function during rest and exercise stress, under various environmental conditions, is important as a basis for the optimisation of human existence, and, as such, forms an integral part of a sound physiological curriculum. The theme of this subject is to develop an understanding of physiological function under stress across the age and health spectra in groups which include the elderly, adolescent, the athlete and those with underlying pathology.

BMS 344 Cardiorespiratory Physiology 8cp Autumn

Contact Hours: 2 hours Lectures, 3 hours Practical per week

Pre-requisites: BMS202

Assessment: Group Presentation 15%; Written Assignment 20%; Laboratory Participation and Exercises 15%; Final Exam 50%

Subject Description: Typical content: Cardiovascular physiology including: structure; the ionic basis of cardiac electrical activity; the cardiac pump; the electrocardiogram; peripheral vascular system; control of cardiac function; vascular control and cardiovascular responses to stress within normal and abnormal function. Respiratory physiology including: structure; ventilation and diffusion; pulmonary blood flow; ventilation-perfusion relationships; gas transport to the periphery; the pulmonary pump; control of ventilation and responses to stress within normal and abnormal function.

BMS 345 Advanced Topics in Pathophysiology 8cp Spring

Contact Hours: 5 hours per week

Pre-requisites: BMS204

Restrictions: No less than credit average in 2nd year subjects.

Assessment: Assessment in this subject is based on a formal written examination (30%) and on four written assignments (70%). Note that completion of all assignments is required to pass this subject unless medical certificates or other relevant documentation are provided.

Subject Description: This subject introduces students to scientific research within the area of pathophysiology. Topics will vary from year to year depending upon the availability of staff but all will emphasise current literature investigating the physiological mechanisms underlying human disease states. The subject is particularly designed for exceptional students who may be contemplating entering a postgraduate research program at the completion of their degree.

Subject Objectives: During this subject students will be expected to develop and demonstrate: the abilities to learn independently; to analyse critically recent scientific research findings; and to present clear written reports of their work.

BMS 346 Motor Control and Dysfunction 8cp Spring

Contact Hours: 5 hours per week

Pre-requisites: BMS202 or BMS352

Assessment: Mid session and practical exams 45%; Final exam 55%

Subject Description: This subject will provide knowledge of the neurophysiological basis of the control of both normal, and dysfunctional human motion.

Topics covered will include an in-depth study of the anatomy and neurophysiology of the motor control system, the neurophysiological basis of the major disorders of human motion and techniques for the recording and analysis of normal and abnormal movement patterns.

Subject Objectives: On successful completion of this subject students should be able to: (1) explain the basic regulatory mechanism of human voluntary movements; (2) explain common clinical related problems of motor dysfunctions; (3) recognise motor function related gross structures on brain specimens and microstructures on tissue slides.

BMS 352 Fundamentals of Neuroscience 8cp Autumn

Contact Hours: 2 hours Lectures, 2 hours Practical per week

Pre-requisites: BIOL103 or BMS112

Assessment: Written Examinations 50%; Practical Examination 25%; Written Paper 25%

Subject Description: Students will gain familiarity with the physiology and the anatomy of the central nervous system. Labs will consist of a detailed study of the functional anatomy of the human brain, including tracing sensory and motor pathways and understanding neuroanatomical techniques. In addition to integrating anatomical function, lectures include aspects of neural development, molecular and cellular mechanisms of signal transmission, CNS coordination with autonomic and neuroendocrine systems and the study of the neural bases for selected behaviours and neurological disorders.

Subject Objectives: On successful completion of this subject, students should: 1. have a broad understanding of the scope of neuroscience, its neuroanatomical and neurophysiological bases; 2. be able to describe the functional organization of the central nervous system and identify, in detail, its neural and associated structures, trace major sensory and motor pathways and integrate their functions; 3. identify the gross and microscopic structures and cellular processes associated with movement and balance, vision, and memory; 4. acquire an understanding of the mechanisms of information transfer in the nervous system; 5. be familiar with our current understanding of the bases of selected behaviour and neurological disorders; 6. gain experience in accessing, synthesizing and integrating scientific literature in the neurosciences.

BMS 354 Practicum in Exercise Science 8cp Annual

Contact Hours: 1 hour per week Session 1; 2 hours per week plus Placement Session 2

Pre-requisites: BMS203 and BMS242

Co-requisites: BEXS351

Exclusions: For Bachelor of Exercise Science and Rehabilitation students only

Assessment: Seminar (verbal) 20%, Seminar (written) 20%, Report 60%. Satisfactory/Unsatisfactory grade awarded.

Subject Description: Students will gain practical experience and expertise in the application of the knowledge base acquired in Exercise Science. This practicum will emphasise the utilisation of exercise as an intervention to maintain and improve the health and fitness of apparently healthy individuals.

Specific problems related to human performance in the sport and health care industry, will be addressed using a multidisciplinary approach.

Subject Objectives: On successful completion of this subject students should be able to: demonstrate the skills and competencies of a professional Exercise Scientist involved in the delivery of selected knowledge skills and competencies; manage a small number of apparently healthy clients; work competently and appropriately within a community oriented setting; demonstrate essential interviewing skills and appropriate support skills; demonstrate basic counselling skills; discuss key components of the Workfit Model and demonstrate a thorough understanding of the medical, legal and insurance components of such a model; explain pharmaceutical interventions involved in antidepressant, anti-epilepsy and other key states and conditions related to the rehabilitative process.

BMS 401 Honours 48cp
Annual

Pre-requisites: Minimum credit average in the last year of the undergraduate program

Assessment: Final Seminar 15%; Thesis (including viva voce) 85%

Subject Description: The student will be required to write a research proposal and a thesis on an approved topic embodying the results of their supervised research. In addition, the student will be required to participate in a seminar program.

Subject Objectives: To demonstrate: 1. an excellence in research and a clear understanding of research question in relation to current knowledge. 2. an ability to plan, design and perform research; 3. an ability to collect and analyse data; 4. an ability to evaluate data and synthesise into ideas and concepts; 5. an ability to communicate design results and ideas. 6. an understanding of relevant OH&S principles.

BMS 402 Joint Honours in Biomedical Science and Another Discipline 24cp
Annual

Pre-requisites: Minimum credit average in final year of undergraduate program

Assessment: Biomedical Component - Final Seminar 15%; Thesis (including viva voce) 85%; or as arranged with other unit.

Subject Description: See BMS401.

BND 433 Communication in Health Care Practice 8cp
Annual

Contact Hours: 4 hours of Lectures / Seminars per week

Co-requisites: BND434 or GHMA934

Restrictions: For Nutrition and Dietetics students or authorized postgraduates.

Assessment: Small Group Assessment 35%; Counselling Assessment 35%; Team Assessment 30%

Subject Description: The subject will introduce students to the theory and practice of communication in the professional work environment, emphasising successful communication in a range of contexts. These include client counselling, small group education, community consultation, participation in meetings, working with the media and conflict resolution.

In order to promote teamwork and group skills, the subject is taught on a small group basis, and the student should prepare for each activity. In order to promote an understanding of how people learn in small groups, students are asked to keep a reflective journal and to critique the process at the completion of the subject.

Subject Objectives: On successful completion of this subject students should be able to: outline contemporary theory on how people learn, and apply this to the design of a small group education session in a healthcare setting; conduct and evaluate a small group education session; analyse the communication processes displayed in healthcare counselling; conduct a counselling session at a basic level; prepare for media interviews and write press releases; participate constructively in group discussions in a range of settings where healthcare providers have a significant role.

BND 434 Dietetics 8cp
Autumn

Contact Hours: 6 hours Lectures / Seminars per week

Pre-requisites: BMS311 and BMS312

Co-requisites: BMS310

Restrictions: For Nutrition and Dietetics students or authorized postgraduates.

Assessment: Ready reckoner assignment 10%; Food group assignment 15%; Case Studies 30%; Final Exam 45%

Subject Description: Dietetics concerns the manipulation of food and dietary data with the aim of supporting nutritional health. This subject focuses attention on the nutritional needs of individuals, in clinical and community health settings, where nutritional intervention will improve or support the quality of life. This subject will draw upon much of your undergraduate and postgraduate studies. In particular you should revise your understanding of nutrition through the life cycle, human physiology and metabolic biochemistry.

Subject Objectives: On successful completion of this subject, students should be able to: demonstrate knowledge sufficient to ensure safe practice of dietetics; interpret and translate scientific knowledge and principles related to nutrition into practical information; collect, organise and assess data relating to the health and nutritional status of individuals and groups.

BND 435 Food Services and Dietetics Management 8cp
Autumn

Contact Hours: 6 hours Lectures / Practicals / Seminars per week

Pre-requisites: BMS310 OR BMS311 OR BMS312

Restrictions: For Nutrition and Dietetics students or authorized postgraduates.

Assessment: Menu Planning Assignment 25%; Multiple Choice Quiz 10%; Group Consultancy Project 25%; Management Assignment 15%; Cookery Assignments 25%

Subject Description: The subject focuses on the development of small and large scale cooking skills, menu planning and standard recipe manipulation in keeping with dietetic modifications. There is some skills development in managing the provision of meals via an institutional food service. Aspects of organisational design, leadership, motivation, negotiation, resource management, decision making and power will be explored.

Subject Descriptions

BND 437 Practical Studies in Nutrition and Dietetics 24cp

Autumn / Spring / Annual / Spring 2003/Autumn 2004

Contact Hours: 16 weeks Full Time Practical Placement

Pre-requisites: BND433 and BND434 and BND435

Restrictions: For Nutrition and Dietetics students or authorized postgraduates.

Assessment: 100% practical experience. Grade of Satisfactory or Unsatisfactory given

Subject Description: This subject comprises a practicum of at least 16 weeks duration which is spent in hospitals, community health centres, and other food-related organisations. Students will be under the supervision of experienced practitioners appropriate to the placement requirements. This placement is designed to develop the student's skills and competencies in a range of areas including specialised therapeutic diets and the provision of community nutrition programs. It also provides the students with opportunities to rehearse and demonstrate both interviewing and counselling skills, as well as information and behaviours required to allow the Dietitian to operate as an independent professional. Awareness of, and behaviours consistent with the knowledge of ethics requirements, confidentiality, accountability and other responsibilities of the autonomous professional operating either independently or as a member of a multidisciplinary team should be demonstrated by the student.

EDUP131 Systemic Anatomy 6cp

Autumn

Contact Hours: 2 hours of Lectures, 3 hours Practical per week

Exclusions: BMS101

Assessment: Practical Exam 50%; Theory Exam 50%

Subject Description: This subject provides an introduction to the area of human gross anatomy through the study of each of the major systems of the body. In weekly practical sessions, students are exposed to anatomical structure through examination of both cadaveric specimens, radiographic images, histological slides, audiovisual materials and anatomical models. Major topics include the skeletal, muscular, nervous, cardiovascular, respiratory, digestive and urogenital systems.

Subject Objectives: On successful completion of this subject students should be able to: identify gross anatomical structures on both models and human cadaveric material; understand the anatomical relationship between the systems of the body; understand the link between structure and function of anatomical structures.

EDUP132 Physiology I 6cp

Spring

Contact Hours: 3 hours of Lectures, 3 hours Practical / Tutorials / Computer Lab per week

Exclusions: BMS112

Assessment: Theory Exam 65%; Practicals 35%

Subject Description: Following an introduction to the cellular, physicochemical and homeostatic principles essential to an understanding of physiology, specific systems will be investigated in detail. These topics will include: nervous, muscular, cardiovascular, respiratory and reproductive systems; digestive processes and energy balance.

The practicals will exemplify lecture material, tutorials will concentrate on concepts introduced in pracs, graphic analysis and data handling.

EDUP234 Exercise Physiology 6cp

Spring

Contact Hours: 2 hours of Lectures, 3 hours Practical, 1 hour Tutorial per week

Pre-requisites: EDUP132

Exclusions: BMS242

Assessment: Lab Manual 15%; Group Assignment 35%; Final Exam 50%

Subject Description: This subject extends the study of human structure and function into the work and exercise domains. Areas to be studied include: energy liberation and metabolism; applied muscle physiology and applied cardiorespiratory physiology.

EDUP235 Biomechanics For Educators 6cp

Autumn

Contact Hours: 5 hours per week

Pre-requisites: EDUP131 or BMS101

Exclusions: BMS211

Assessment: Mid Session Exam 35%; Quiz 15%; Final Examination 50%

Subject Description: This subject introduces fundamental biomechanical principles to provide a basis for understanding the causes and effects of human motion. The subject is an extension of the basic principles of human structure and function studied in Systemic Anatomy and will include: (1) an introduction to analysis of movement; (2) basic biomechanical principles of motion; and (3) subjective analysis of movement.

Subject Objectives: On successful completion of this subject the students should be able to: (1) describe and explain basic biomechanical principles of motion; (2) demonstrate an understanding of subjective methods for analysing human motion.

NURSING

NURS100 Foundation Studies 6cp

Bega Session 1 Bega Bega Education Access Centre

Intake B Bega Bega Education Access Centre

Intake C Bega Bega Education Access Centre

Intake D Bega Bega Education Access Centre

Restrictions: Certificate (Level IV) Enrolled Nurses only

Assessment: Major Assignment - Portfolio 60%, Minor Assignment 40%

Subject Description: The aim of this subject is to introduce students to different types and sources of knowledge that can be used in nursing. Specifically the issues dealt with will be examined in relation to the responsibility of a registered nurse and safe practice. Information literacy will be intertwined throughout the subject.

**NURS123 Introduction to Psychology 6cp
Autumn**

Contact Hours: 2 hours of Lectures, 1 hour Tutorials per week

Subject Description: This subject provides an introductory overview of areas of psychological investigation, introducing students to the study of individuals and human experience. It aims to acquaint non-psychology majors with the discipline, but may also provide additional background to students intending to specialize in psychology. Topics covered include learning, cognition, motivation, emotion, personality and life span development.

NURS140 Introductory Communication Studies 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject focuses on the fundamentals of communications, including interpersonal and crosscultural communication concepts. An introduction to word-processing is included.

NURS141 Introductory Psychology For Health Care Workers 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject introduces the way an individual's psychological system functions, factors that influence this, and how this relates to indigenous health. Topics include: consideration of both indigenous understanding and the psychological effects of colonisation, and current relevant mental health issues, including drug abuse, suicide and family breakdown.

NURS142 Indigenous Family Studies 1 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject focuses on Aboriginal family structure, Aboriginal kinship and kinship systems, gender roles, marriage, the "traditional Aboriginal community", the organisation aspects of the Aboriginal family, and health maintenance in the family context. It aims to articulate the cultural, economic, social and political functions of the Aboriginal family.

NURS143 Indigenous Health Patterns 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject examines the biomedical model of disease and then compares and contrasts it to indigenous models of health and illness practiced by the Aboriginal community. Focus will also be on structural and individual obstacles to crosscultural interactions and community empowerment.

NURS144 Indigenous Family Studies 2 6cp

Contact Hours: Not on offer in 2003

Subject Description: Examines the sources of Aboriginal family history. Methods of researching family history and the construction of a family chart are important aspects of this subject.

NURS162 Effective Communication in Health Care Relationships 6cp

Autumn

Contact Hours: 2 hours of Lectures, 2 hours Tutorials per week.

Exclusions: NURS122, NURS132

Assessment: Essay 20%, Journal Assignment 30%, End of Session Examination 50%

Subject Description: This subject aims to provide students with an introduction to theoretical concepts of interpersonal communication, an understanding of the importance of interpersonal skills in health care, beginning skills for relating to patients/clients and the fundamentals of professional presentation skills. An awareness of self, the concept of the professional relationship and the therapeutic use of self will also be important themes in this subject. The theory will be used to underpin the development of a range of interpersonal skills necessary for effective communications in contemporary health care settings.

NURS163 Fundamentals of Nursing 6cp

Autumn

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials, 2 hours Lab per week plus 2 weeks Practicum

Exclusions: NURS121, NURS132

Assessment: Vital Signs Assignment 20%, Client Assessment Assignment 30%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: This subject will provide a foundation for safe and effective nursing practice for all other nursing care subjects. It will introduce students to the roles and functions of the nurse and critical thinking skills. The theoretical foundation provided will promote the development of clinical skills and reflective practice. Application of these skills and practices will occur in supervised clinical practicum in appropriate areas.

NURS164 Patterns of Knowing in Nursing 6cp

Autumn

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials per week

Exclusions: NURS122, NURS132

Assessment: Minor Assignment 25%, Major Assignment 35%, Examination 40%.

Subject Description: The general aim of this subject is to introduce students to different types and sources of knowledge capable of being used in nursing. Specifically, this subject will deal with ethical issues in nursing and the fundamental knowledge of common law and legislation required for safe practice. Topics to be discussed include: ethical and legal responsibilities and nurses; tensions between personal ethical commitments and legal obligations; the relationship between nurses knowledge, and ethical and legal obligations.

Subject Descriptions

NURS165 Primary Health Care Nursing 6cp **Spring**

Contact Hours: 2 hours of Lectures, 2 hours Tutorials per week

Exclusions: NURS325

Assessment: Tutorial Presentations 20%, Health Promotion Project 30%, End of Session Examination 50%.

Subject Description: This subject will examine the Primary Health Care Model of health as described by the World Health Organisation, and will explore the nurse's role within the model. The focus of this subject will be the exploration of the nurse's role in the promotion of health for individuals, families and communities. Nurses will gain skills in health promotion and the planning and evaluation of health promotion activities.

NURS166 Medical/Surgical Nursing 1 6cp **Spring**

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials, 2 hours Lab per week plus 2 weeks Practicum

Pre-requisites: NURS163

Co-requisites: SCIE121 or BMS112, SCIE122 or BIOL103

Restrictions: None

Exclusions: NURS121, NURS132

Assessment: Spot Tests x 2 30%, Literature Retrieval and Critical Analysis Assignment 30%, End of Session Examination 40%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: This subject is designed to build upon the content of NURS163 Fundamentals of Nursing in that it examines the prescription of nursing care once client needs have been established using holistic nursing assessment criteria. In doing so it seeks to prepare participants for supervised clinical practice in medical/surgical settings throughout the total programme.

NURS227 Human Bioscience 3 6cp **Autumn**

Contact Hours: 4 hours of Lectures, 3 hours Practical per week

Pre-requisites: SCIE122

Subject Description: Gives students an understanding of the structure and functioning of the human body. The major emphasis is on physiology rather than anatomy. All the organ systems of the human body are studied and appropriate links are made with both pathophysiology and human development.

NURS240 Current Services in Aboriginal Health 6cp **Autumn**

Subject Description: Differences between rural and urban patterns of Aboriginal health, including community based and mainstream models of Aboriginal health service delivery will be examined.

NURS241 Contemporary Indigenous Health 6cp **Issues**

Contact Hours: Not on offer in 2003

Subject Description: An historical and contemporary review of Government policies relating to Aboriginal health, and their implication for family structure and cultural practice will be examined.

NURS242 Functional Community Structures 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject focuses on needs assessment techniques. Involves the analysis and planning of local program development, relevant health promotion strategies and program evaluation.

NURS243 Special Topic 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject examines social factors affecting illness patterns. Health area analyses, epidemiological considerations and relationships between health, illness and lifestyle. Submission preparation is addressed.

NURS262 Medical / Surgical Nursing 2 6cp **Autumn**

Pre-requisites: NURS 166, SCIE 121

Exclusions: NURS 222

Assessment: Assignment 50%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: Medical/Surgical Nursing 2 is a clinically orientated subject that will require the student to integrate concepts related to the biophysical, pathophysiological, pharmacological, psychosocial and cultural diversity dimensions of individuals and families. This subject will provide the student with an opportunity to apply their understanding of the control mechanisms of the body which maintain homeostasis and coordination and relate these to fluid and electrolyte balance, renal function, neurological and endocrine control and movement. This subject includes the study of normal and abnormal pathophysiology across the life span. This subject will also examine in detail the role of the nurse in assessing people with alterations in fluid and electrolyte balance, renal function, coordination, control and movement: identifying actual and potential problems for these people, making clinical decisions within a professional, ethical and legal framework; and collaborative care incorporating relevant diagnostics and therapeutics.

NURS263 Mental Health Nursing 1 6cp **Autumn**

Pre-requisites: NURS162, NURS166

Exclusions: NURS223

Assessment: Tutorial Presentation 20%, Essay 30%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of clinical competency profile, ANCI Competencies are also assessed.

Subject Description: This subject will introduce the students to the concept of mental health, mental disorders and the provision of care for people who are affected by these disorders. Students will be given an overview of the forces that have shaped mental health services in Australia today. The subject will cover the affects that various mental disorders and substance related disorders have on the population and the impact this has on nurses working in the health field.

NURS264 Reflection and Practice 6cp
Spring

Pre-requisites: NURS164

Exclusions: NURS327, NURS330

Assessment: Active Tutorial Participation 20%, Logical Argument Exercise 30%, Reflective Journal and related exercises 50%.

Subject Description: This subject has three main foci: the development of skills of reflection, not only directly on clinical nursing practice but within the student as a person in general; the development of critical thinking skills, particularly in relation to logical thought and the recognition of logical argument within the work of others; and, the development of skills in presenting logical arguments to others. It builds on skills dealt with earlier in the programme related to the identification, accessing and evaluation of clinically relevant literature. It therefore serves to provide an insight into the concept of "intellectual craftsmanship" and its relevance to nursing practice.

NURS265 Nursing Therapeutics 6cp
Spring

Pre-requisites: NURS166, SCIE121

Exclusions: NURS226

Assessment: Assignment 50%, End of Session Examination 50%

Subject Description: Nursing therapeutics further develops insights into the nurse's role in administering medications and the use of alternate therapies in care of the patient. Pharmacokinetics will serve as the basis for examining major drug groups with particular emphasis on patient education about drugs, side effects, toxic effects and manifestations, and drug interactions. Alternative therapies shall also be explored in relation to the amelioration of patient problems in collaboration with and separate from allopathic therapies. These alternative therapies will include herbal medications, vitamin and mineral supplementation, naturopathy, aromatherapy, therapeutic touch, meditation and acupuncture. Overall the intention is to enable students to consider ways in which the ethos underpinning alternative therapies (eg. Holism and client-centredness) can and should be expanded into care.

NURS266 Medical / Surgical Nursing 3 6cp
Spring

Pre-requisites: NURS262, SCIE121

Exclusions: NURS222

Assessment: Assignment 50%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: Medical/Surgical Nursing 3 is a clinically orientated subject that will require the student to integrate concepts related to the biophysical, pathophysiological, pharmacological, psychosocial and cultural diversity dimensions of individuals and families.

This subject will provide the student with an opportunity to apply their understanding of the control mechanisms of the body which maintain homeostasis and coordination and relate these to people with alterations in oxygenation, perfusion, ingestion and elimination. This subject includes the study of normal and abnormal pathophysiology across the life span. This subject will also examine in detail the role of the nurse in assessing people with alterations in oxygenation, perfusion, ingestion and elimination: identifying actual and potential problems for these people, making clinical decisions within a professional, ethical and legal framework; and collaborative care incorporating relevant diagnostics and therapeutics.

NURS267 Family and Maternal Health Nursing 6cp
Spring

Pre-requisites: NURS262

Exclusions: NURS131

Assessment: Case Study 35%, Mid-Session Quiz 15%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: The subject will introduce the student to concepts of family in its contemporary forms and to skills that will enable them to effectively care for women and their babies during the childbearing period, under the supervision of certified midwives. It will describe physical and psychological changes that occur in a variety of pregnancy circumstances. The nurse's role in the family's experience of pregnancy and childbirth will be explored and professional, legal, ethical and cultural diversity will be discussed. Factors affecting family health will be addressed in the context of the childbearing period and early childhood.

NURS321 Mental Health/Psychiatric Nursing: Theory and Practice 6cp

Autumn

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials per week

Pre-requisites: NURS222 and NURS223

Assessment: Essay 40%, Seminar 20%, Examination 40%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: This subject provides a theoretical and practical introduction to mental health, mental illness and the nurse's role in the care and management of people with psychiatric symptomatology. The subject explores the social and cultural aspects of mental illness, deinstitutionalisation, appropriate service delivery structures and the effectiveness of established management strategies.

NURS322 Developmental Disability: Theory and Practice 6cp

Autumn

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials per week

Pre-requisites: NURS222 and NURS223

Subject Descriptions

Assessment: Essay 40%, Tutorial Presentation 20%, Examination 40%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: This subject provides a theoretical and practical introduction to the field of developmental disability. Particular focus will be given to the concepts of normalisation and integration of people with disabilities into society.

NURS324 Preparation For Professional Practice 6cp Spring

Contact Hours: 2 hours of Lectures, 2 hours Tutorials per week

Pre-requisites: NURS222 and NURS223

Assessment: Assignment 55%, Tutorial Presentation 20%, Poster Presentation 25%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: This subject prepares the nursing student for professional practice by consolidating and extending the medical/surgical care students have undertaken in the previous two years of the course, and examines the role of the nurse as a professional innovator and as an agent for professional and social change.

NURS325 Community Development Nursing: 6cp Theory and Practice

Autumn

Contact Hours: 2 hours of Lectures, 2 hours Tutorials per week

Pre-requisites: NURS223

Assessment: Seminar Presentation 20%, Written Reflection of Seminar Presentation 20%, Health Promotion Report 60%.

Subject Description: This subject explores the factors involved in facilitating changes in behaviour which optimises health in line with the Ottawa Charter. The community development nursing role incorporates health promotion and teaching and is focused on people and groups wishing to achieve, maintain or defend their health situations. Students will participate actively in the assessment of community need and then develop a health educational/health promotional strategy and implement it to contribute to the solution of that community's needs.

NURS326 Community Health Nursing: Theory 6cp and Practice

Spring

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials per week.

Pre-requisites: NURS222 and NURS223

Assessment: Seminar Presentation and Written Reflection 30%, Clinical Assignment 20%, Seminar Participation 10%, Examination 40%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: During this subject students have the opportunity to transfer the concepts of clinical nursing gained in previous subjects, to the community care context. They will also be introduced to the role of nurses in public health and gain an awareness of the many diverse roles that community health nurses may undertake in a comprehensive health care system.

NURS327 Health and Human Ecology 6cp

Spring

Contact Hours: 1 hour of Lectures, 2 hours of Tutorials per week

Pre-requisites: NURS223

Exclusions: NURS313

Subject Description: This subject examines global health care issues that impact upon all open systems including human kind. Pathogenic social, political and economic processes that underlie health and health care are discussed, including their associations with air, water and noise pollution, malnutrition, high infant mortality and infections and modern population epidemics.

NURS328 Nursing Resources Management 6cp

Autumn

Contact Hours: 1 hour of Lectures, 2 hours of Tutorials per week

Pre-requisites: NURS223

Subject Description: This subject focuses on the working environment of the nurse, and a review is made of models of nursing intervention and of issues which have an impact upon work practices, including hospital evaluation, evaluation of nursing practice, and occupational health and safety.

NURS330 Research in Nursing 8cp

Annual

Contact Hours: 1 hour of Lectures, 2 hours of Tutorials per week

Pre-requisites: NURS222 and NURS223

Subject Description: This subject develops research appreciation and application skills, encompassing issues of research design, establishing the rigour of a research process, methods of data collection and analysis, the ethics of research and evaluating and writing research-based literature.

NURS331 Research For Registered Nurses 6cp

Spring or Autumn

Contact Hours: 1 hour of Lectures, 2 hours of Tutorials per week

Restrictions: Bachelor of Nursing (Conversion)(860) only

Subject Description: This subject introduces registered nurses, undertaking the certificate or diploma to bachelor of nursing conversion course, to research in nursing. Develops research appreciation and application skills, encompassing issues of research design, establishing the rigour of a research process, methods of data collection and analysis, the ethics of research and evaluating and writing research-based literature.

NURS341 Special Topic 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: NURS243

Subject Description: This subject enables students to focus on an area of policy, education or management of relevance to the functioning of Aboriginal families/communities. Strategies that take into account changing patterns of health service provision will be examined.

NURS343 Indigenous Community Development: Theory and Practice 6cp**Contact Hours:** Not on offer in 2003**Subject Description:** Students will apply the principles of primary health care to design and develop a project for an Indigenous community.**NURS361 Professional Nursing 6cp****Contact Hours:** Not on offer in 2003**Restrictions:** Entry on advice from Undergraduate Coordinator only**Subject Description:** This subject examines the theory which underpins the patterns of clinical practice. The major foci will include: clinical decision making, critical thinking, reflective practice, conflict resolution and critical analysis of clinical practice. Students will be guided to analyse practice and develop critical thinking skills that will encourage them to develop strategies for change in clinical areas.**NURS401 Nursing Honours 48cp****Annual****Contact Hours:** 3 hours per week**Pre-requisites:** Completion of the requirements for the Bachelor of Nursing degree**Subject Description:** This course is designed to provide supervision for a beginning researcher, through individual mentoring and group seminars. The major component of the course is to guide the student through the research process, including formulating testable questions from the research literature; devising appropriate methods to test these questions; obtaining ethics committee approval; data collection and analysis; oral presentation of results; and report writing. Students will develop and conduct a research project resulting in a thesis presentation.

3. debate the social and physical science bases of public health; 4. discuss basic principles of epidemiology and biostatistics and their application in public health practice; 5. describe the principles of evidence-based practice; 6. describe the main components of health care and health improvement services.

POP 102 Sex, drugs and rock'n'roll; public health perspectives 6cp**Autumn****Contact Hours:** 2 hours of Lectures, 1 hour of Tutorials per week**Assessment:** Three written assignments, Group presentation**Subject Description:** This subject introduces students to two important contemporary health areas; one related to licit and illicit drug use, including cannabis, ecstasy, alcohol and tobacco; and the other related to sexual and reproductive health in the era of HIV/AIDS. Looks at health consequences, the role of advertising, theories of addiction, law enforcement strategies, health prevention and promotion approaches, and the importance of gender in negotiating sexual relationships. Includes finding and evaluating current public health information.**Subject Objectives:** On successful completion of this subject students should be able to: 1. Find and evaluate current public health information; 2. Discuss theories of addiction; 3. Demonstrate an understanding of the health consequences of alcohol and other drug use; 4. Discuss legal and health approaches to alcohol and other drug use; 5. Discuss factors associated with ensuring sexual and reproductive health, such as access to contraception, current messages about safe sex and STDs; 6. Discuss the role of gender in negotiating sexual relationships.**POP 201 Contemporary population health problems 6cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** POP101**Subject Description:** Weekly seminars on current population health problems will be presented. Examples will be drawn from within Australia and internationally. Topics will illustrate themes such as the effects of poverty or inequity on health, the populations at risk, the meaning and proof of causality and the way that this information may inform preventive or treatment efforts. The concepts of risk of disease or illness and of burden of disease will be introduced and the possibility that these influence policy and resource allocation will be discussed.**Subject Objectives:** On successful completion of this subject students should be able to: 1. discuss concepts relating to public health such as the effects of poverty, inequality or inequity on health, the meaning and proof of causality (with respect to illness), the risk of disease or illness, the burden of disease, and (at a basic level) the scientific basis for illness prevention, with examples drawn from Australia and internationally; 2. discuss a number of common conditions which cause ill-health, understanding something of their causes (where known), their manifestations, and their incidence and prevalence; 3. describe the concepts underlying the measurement of disease burden and the cost of disease;

POPULATION HEALTH**POP 101 Population Health - current health issues and their determinants 6cp****Spring****Contact Hours:** 2 hours of Seminars, 1 hour of Tutorials per week**Assessment:** Assignments, Group presentation, Exam**Subject Description:** Weekly seminars on major population health issues in Australia will be presented by academic staff, leading health professionals and others, including community advocates and (from time to time) those with personal experience of the condition. The latest evidence on the determinants of health issues will be examined, together with implications for specific population groups (e.g. indigenous Australians and the elderly) and provision of services in rural and urban areas. Ways in which these health issues can be approached will be discussed. Weekly tutorials will examine the links between health and political, social and other factors.**Subject Objectives:** On successful completion of this subject students should be able to: 1. outline and discuss the social, biological, political and economic determinants of major public health issues; 2. identify and critique common sources of information on population health issues;

Subject Descriptions

4. discuss ways in which a public health approach to selected health problems (such as cancer, drugs of addiction, communicable diseases including HIV/AIDS, diseases which may arise from environmental contamination, major psychiatric illness and obesity/diabetes) may be formulated and implemented.

POP 202 Promoting Healthy Lifestyles 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: POP101, POP102 or BMS103

Subject Description: Health promotion is a risk management strategy that deals with the environmental and educational supports that can assist individuals, groups and communities to improve their health. Individuals, groups and populations will be considered. Theoretical and practical aspects of behaviour change and community development will be addressed. The problems of assessing public health interventions will be explored through an examination of evidence from health intervention studies and the options for such studies. Communication of risk is an essential component of health promotion and will receive particular emphasis in this subject.

Subject Objectives: On successful completion of this subject students should be able to: 1. discuss the primary concepts that underpin successful health promotion interventions; 2. compare and contrast behaviour change and community development theories applied in health promotion; 3. examine the evidence for health promotion interventions; 4. Describe factors considered in the development of effective risk communication; 5. Produce a short media release on a public health issue, using risk communication principles.

POP 203 Health policy and service structure 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: At least 12 credit points at 200 level

Subject Description: This subject examines health and health care from policy and structural perspectives. First, health policy at a number of levels (governmental and non-governmental) relating to health and health care services will be described and critiqued. Roles and responsibilities of agencies responsible for health matters in Australia will be examined. Second, health policy as a strategy for the management of population health risk will be explored using both theoretical approaches and practical examples. The processes of policy formation will be analysed. Key contemporary policy examples examined may include health care funding, food regulation, smoking restrictions and immunization.

Subject Objectives: On successful completion of this subject students should be able to: 1. Describe the structure of government in Australia; 2. Describe the responsibilities of health services as they exist in the Australian Health Care System including the roles of Commonwealth and State, public, private and voluntary agencies; 3. Describe major approaches to policy formulation and political processes, including incrementalism, mixed scanning, policy streams, policy coalitions and the role of champions/policy entrepreneurs; 4. Analyse selected health policies using multiple stakeholder perspectives.

POP 204 Epidemiology 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: STAT151, PSYC123 or STAT131

Subject Description: The epidemiological approach to the study of disease and illness will be taught. The level of evidence of a number of study types (e.g. cross-sectional, case control, cohort, intervention studies) will be presented in the context of public health problems. Sources of bias (confounding and effect modification) and causality will be covered. Screening for disease, and associated concepts (sensitivity, specificity, predictive value, ROC curves) will be discussed.

Subject Objectives: On successful completion of this subject students should be able to: 1. Know the various epidemiological approaches, comprehend their relative strengths and weakness and analyse a study for its epidemiological characteristics; 2. Value the potential problems in epidemiological studies and formulate an opinion regarding the correct application of epidemiological theories; 3. Apply a limited range of epidemiological techniques in not overly complicated case-studies.

POP 220 Mass media and population health 6cp Autumn

Contact Hours: 3 hour seminar per week

Assessment: Two essays, written project, oral presentation.

Subject Description: This unit examines the effects of media on population health - from the negative impact of advertisements for cigarettes, alcohol and junk food to the (hopefully) positive impact of public health campaigns. The subject covers commercial and social advertising, program and editorial content, media advocacy, and social marketing; and presents case studies of current media coverage and advertising campaigns to demonstrate the effects of media on health and social behaviour. Students will develop skills in media analysis, the development of communication campaigns, and dealing with the media.

Subject Objectives: On successful completion of this subject students should be able to: 1. Describe, compare and evaluate the types of mass media; 2. Analyse and critique media coverage of health issues; 3. Analyse and evaluate media-based health promotion campaigns; 4. Understand the principles and processes of social marketing; 5. Analyse and critique health-related commercial and social advertising; 6. Demonstrate basic media skills - including writing for the media and media interview techniques. 7. Understand and evaluate the impact of mass media on population health.

POP 221 Behaviour change for population health 6cp

Spring

Contact Hours: 3 hour seminar per week

Assessment: Two essays, written project, oral presentation.

Subject Description: This subject introduces students to the theories and strategies of health behaviour change at the levels of the individual, the group or community and the population. The subject also reviews the ethical and practical issues inherent in endeavouring to persuade people to change their health-related behaviours.

Subject Objectives: On successful completion of this subject students should be able to: 1. Understand the practical and ethical issues associated with health behaviour change;

2. Describe and critique the various models of individual behaviour change; 3. Identify which model(s) are best suited to a specific health behaviour issue and target group; 4. Describe the different settings used for health behaviour change at the group level, and identify their relative strengths and limitations; 5. Understand the differences between individual, group, and population strategies for behaviour change; 6. Develop a theoretically-sound, and practical, program for health behaviour change; 7. Understand and discuss environmental and regulatory strategies for health behaviour change.

POP 222 Current Issues in Food and Nutrition 6cp
Spring

Assessment: A combination of three in-class quizzes, an independent activity and an assignment.

Subject Description: This subject incorporates an overview of nutrients important to human health and their metabolism. It introduces students to ideas on the causes, nature and effect of a number of current food and nutrition issues. Examples will be drawn from Australia and overseas. Students will critically discuss the role of influential factors, including: interaction of biological, lifestyle and sociocultural aspects of human behaviour; changes in the nature of the food system; role of government and professional groups; and consumer interests. Students are required to access the Internet. This can be either from home or via campus computers.

Subject Objectives: On successful completion of this subject students should be able to: 1. Describe the major nutrients important to human health and discuss the metabolism and sources of these nutrients; 2. Describe the nutritional needs of people at different stages of life; 3. Discuss the nature of current food and nutrition issues, including the role of influential factors such as biology, socio-cultural influences, the nature of the food supply and key stakeholder groups; 4. Describe the major causes of food-borne illnesses and how the pattern of food-borne illnesses is changing.

POP 301 Analysis and interpretation of evidence 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: POP201, POP204

Subject Description: This subject develops skills in analysing evidence for health care questions. Concepts of evidence based practice and systematic reviews will be taught. Topics will include, defining a question, systematic reviews, pitfalls in critical appraisal, meta-analysis, calculation of effect sizes, evaluating effectiveness, implementing evidence-based practice. Students will undertake systematic reviews for frequency of disease, diagnosis and prognosis, practice guidelines and management of disease.

Subject Objectives: On successful completion of this subject students should be able to: 1. Discuss the concepts of evidence based practice and systematic reviews; 2. Define a health care question, find existing literature, critically appraise its quality and evaluate effectiveness; 3. Demonstrate skills in carrying out a meta analysis; 4. Describe strategies for implementing evidence based practice; 5. Discuss methods for diagnosis and prognosis, guidelines and economic analysis.

POP 302 Project and program design, management and evaluation 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: POP201, POP203

Subject Description: This subject will examine the process of planning and design (identification of core information, analysis of need, setting goals, objectives, strategies, budgets, resource considerations) for health projects. Program evaluation concepts, development of monitoring and evaluation plans and data management will be discussed. Students will critique project proposals and develop skills in proposal writing and presentation.

Subject Objectives: On successful completion of this subject students should be able to: 1. Describe the key elements of project planning and project management; 2. Produce a project plan using Microsoft Project manager which meets standards of good practice in the health industry; 3. Discuss the principles of project evaluation; 4. Produce a project proposal with an evaluation plan to address a health problem; 5. Make a formal verbal presentation of a project proposal.

POP 325 Aboriginal Health Issues 8cp
Autumn

Contact Hours: 2 hours of Seminars per week

Pre-requisites: 24 credit points at 200 level

Assessment: Three written assignments and a seminar presentation

Subject Description: This subject examines the health status of Aboriginal Australians from a historical perspective, using relevant insights from the experiences of other indigenous populations; explores the causes of Aboriginal health problems, the political and economic context of health, the role of culture, and access to health services and critiques current strategies to improve health.

Subject Objectives: On successful completion of this subject students should be able to: 1. Demonstrate knowledge of the health status of Aboriginal people compared to other indigenous populations; 2. Critically examine and discuss the causes of Aboriginal health problems; 3. Discuss government policies towards Aboriginal people from a historical perspective; 4. Critique current strategies to improve Aboriginal health.

POP 331 Population Health Project A 24cp

Contact Hours: Not on offer in 2003

Pre-requisites: POP301, POP302

Restrictions: Entry will be by selection and dependent on availability of appropriate projects and supervision.

Subject Description: Students with a credit average or above will be able to choose from a list of projects nominated each year by academic staff who will act as supervisors. These projects may include involvement in a population health program, gaining practical skills in program development, implementation or evaluation, or in other applied research projects, such as policy development or analysis. Other projects may involve investigating a population health problem or issue using appropriate methodologies. Projects may be located within health services or related organisations. Opportunities to locate in rural areas will be actively supported.

Subject Descriptions

Subject Objectives: On successful completion of this subject students should be able to: 1. Write a project or research proposal; 2. Critically evaluate the relevant literature; 3. Gather and analyse data and other information as proposed; 4. Produce a written report or article in an appropriate format; 5. Present and explain the results in an oral presentation.

POP 332 Population Health Project B 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: POP301, POP302

Subject Description: Students will be able to undertake a limited project, focussing on either the analysis of an existing data set or the analysis of policy documents, or a critical review of the literature addressing a current population health problem or question. Suitable projects will be nominated each year by academic staff who will act as supervisors.

Subject Objectives: On successful completion of this subject students should be able to: 1. Write a brief project proposal, stating aims, objectives, and methods of data collection and analysis; 2. Gather and critically analyse the literature, or data, or other information as proposed; 3. Produce a written report or article in an appropriate format; 4. Present and explain the results in an oral presentation.

POP 401 Honours 48cp Annual

Pre-requisites: An undergraduate degree in a relevant discipline approved by the Head of the Graduate School of Public Health. Some coursework may be included to correct deficiencies in the academic background of the candidate. Relevant studies will be specified by the Honours Committee at the time of admission.

Assessment: Thesis 70%, other written work 30% plus two presentations.

Subject Description: The Honours program is an individual research endeavour under supervision. The candidate is encouraged to research a contemporary issue within the research area of members of the Graduate School of Public Health. It is expected that there be both a theoretical and empirical content to the project. Guidelines for this subject are available from the Coordinator. Seminars are held in both sessions to evaluate the research proposal and to assess progress. The student is required to pass an examination of the detailed research proposal before about one third of the research time has passed. The final assessment of the subject combines an oral presentation with the written thesis.

Subject Objectives: On successful completion of this subject students should be able to: design, plan and implement a substantial piece of research; exercise creative intellectual enquiry; personally initiate self-directed learning; work in teams and groups and present to and exchange ideas with peers and colleagues in an appropriate manner; present the results in an appropriate professional format (both oral and written).

PSYCHOLOGY

PSYC101 Introduction to Behavioural Science 6cp Autumn

Contact Hours: 2 hours of Lectures, 1 hour of Tutorial per week

Subject Description: This subject provides an introductory overview of areas of psychological investigation. It aims to acquaint non-psychology majors with the discipline, but may also provide additional background to students intending to specialise in psychology. Topics covered include learning, cognition, motivation, emotion, personality and lifespan development.

PSYC121 Foundations of Psychology A 6cp Autumn

Contact Hours: 2 hours of Lectures, 1 hour of Tutorial per week

Subject Description: This subject is a prerequisite for enrolment in second year psychology subjects. The subject introduces students to the science of psychology. The content will focus on the way the individual's biological and psychological systems function. In particular, the subject will examine the biological bases of human behaviour, lifespan development, motivation and emotion, personality, and consciousness.

PSYC122 Foundations of Psychology B 6cp Spring

Contact Hours: 2 hour of Lectures, 1 hours of Tutorial per week

Co-requisites: PSYC123

Subject Description: This subject is a prerequisite for enrolment in second year psychology subjects. The subject examines the way in which individuals perceive and learn about their world, the ways in which group membership influences behaviour, the nature of psychological dysfunction, and the role of psychology in influencing health. Topics covered include learning, perception, memory, cognition, psychology of abnormality, social psychology, and human relations.

PSYC123 Theory Design and Statistics in Psychology 6cp

Spring

Contact Hours: 2 hour of Lectures, 1 hour of Tutorial per week

Subject Description: This subject is a prerequisite for enrolment in second year psychology subjects. The subject introduces students to scientific methods, the design of psychological research, data analysis and interpretation. Emphasis will be placed on the acquisition of fundamental statistical skills and a capacity for critical evaluation of research design, in both experimental and non-experimental applications. The link between psychological theory, method and analysis will be explored. Ethical issues in psychological research will be addressed.

PSYC216 Psychology of Physical Activity 6cp**Autumn****Contact Hours:** 2 hour of Lectures, 1.5 hours of Tutorials per week.**Pre-requisites:** (PSYC101) OR (PSYC121) OR (PSYC122) OR (PSYC123)

Subject Description: PSYC 216 examines evidence on the health benefits of physical activity; how physical activity habits may be measured; how physical activity is distributed in populations; its major determinants; how psychological theories or models can guide interventions to promote physical activity; the evidence base on which interventions can be developed; and evidence on the outcomes of trials of interventions, including community, mass-media and public health policy initiatives.

PSYC231 Personality 6cp**Autumn****Contact Hours:** 2 hour of Lectures, 1.5 hours of Lab per week.**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: This subject provides overviews of, and bases of comparison between, many of the major approaches to personality. These include psychoanalysis, behaviourism, existentialism, personal construct psychology, neo-Freudian approaches, trait theory, social learning theory and humanistic psychology. Coverage includes both accounts of normal and abnormal personalities, individual differences, developmental dimensions, relevant research and therapeutic relevance where appropriate.

PSYC232 Research Methods & Statistics 6cp**Autumn****Contact Hours:** 2 hours of Labs per fortnight, 5 hours of on-line activities per session**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: This subject provides students with the skills necessary to understand variability, and probabilistic behaviours, developed around an understanding of experimental and quasi-experimental methods. It focuses on an understanding of experimental methods and choice of appropriate statistical analysis for a given experimental design. The conceptual rationale underlying each analysis covered in the course is explained, as is its application to research in the behavioural sciences. Students will experience extensive use of the SPSS statistical package.

PSYC234 Biological Psychology and Learning 6cp**Autumn****Contact Hours:** 2 hours of Lectures, 1.5 hours of Labs per week**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: This subject introduces the physiological mechanisms underlying behaviour and changes in behaviour brought about by experience, as well as the psychophysiological measures frequently employed to study these processes. Topics include the nervous and endocrine systems, arousal, attention, learning, memory, language, Pavlovian and instrumental conditioning, and habituation.

Laboratory classes introduce the techniques and experimental methods used in the study of learning and psychophysiology, including the recording of the electrocardiograph, skin conductance and the electroencephalograph.

PSYC235 Introduction to Psychological Assessment 6cp**Spring****Contact Hours:** 2 hours of Lectures, 1.5 hours of Labs per week**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: This course focuses on the assessment of human psychological dispositions and behaviour. It explains the conceptual rationale underlying psychological assessment, and the practical aspects of using psychological tests. Discussion includes the psychometric basis of tests and ethical issues related to psychological testing and assessment. Tutorial classes focus on the practical aspects of test administration and interpretation, and examine the psychometric properties of specific tests. Students use the SPSS statistical package for the psychometric data analysis.

PSYC236 Cognition and Perception 6cp**Spring****Contact Hours:** 2 hours of Lectures, 1.5 hours of Labs per week.**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: This subject provides an overview of two broad content areas in experimental psychology. Perception is the study of how information is acquired from the environment through sensory organs. Cognition is concerned with the storage, manipulation and retrieval of such information. Lectures draw upon findings from both behavioural and neuropsychological studies. Topics covered include visual and auditory perception, memory, language, categorisation and reasoning. Students learn how to conduct, analyse and interpret experimental research.

PSYC241 Developmental and Social Psychology 6cp**Spring****Contact Hours:** 2 hour of Lectures, 1.5 hours of Lab per week.**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: The developmental component of the subject addresses the perceptual, cognitive, and social development of the child through childhood. It provides an introduction to the biological, cognitive, behavioural and sociocultural perspectives on development and reviews theory and research on key topics in the field. The social component of the subject forms the foundation for considering a range of topics about the individual in the group setting. The focus is on the individual in the social context and topics such as social cognition, attitudes, prejudice and group behaviour are considered.

Subject Descriptions

PSYC246 Special Research Topic 6cp
Autumn / Spring / Annual
Pre-requisites: Prior approval by Head of Department required.
Co-requisites: Not to be counted with more than one other 200 level psychology subject.
Subject Description: On successful completion of this subject students will be able to identify the major steps necessary to carry out a research project in Psychology, including problem specification, surveying the existing literature, appropriate data collection and analysis techniques, and report writing. Students will understand the importance of team work and have demonstrated small group presentation techniques.

PSYC315 Psychology of Abnormality 8cp
Spring
Contact Hours: 2 hour of Lectures, 1.5 hours of Lab per week
Pre-requisites: 24 cp of PSYC at 200 level (excluding PSYC216) including PSYC231
Subject Description: This subject involves a systematic examination of the variety of mental disorders found in adults and children. In addition to the descriptive psychopathology, necessary to identify the disorders, contemporary issues relating to theories of causation and treatment are examined. In addition, clinical assessment and methods of therapeutic intervention make up an important component of this course.

PSYC345 Advanced Cognition 8cp
Autumn
Contact Hours: 2 hour of Lectures, 1.5 hours of Tutorials per week.
Pre-requisites: 24 cp of PSYC at 200 level (excluding PSYC216) including (PSYC232 and PSYC236)
Subject Description: This subject will extend students knowledge of cognitive psychology from the framework acquired in PSYC236. It provides a detailed examination of four areas: (1) short-term memory, (2) reasoning, (3) the psychology of reading, and (4) connectionism. Students working in groups will be required to carry out a small original research project on a topic relevant to the course. In addition there will be a full program of experimental laboratory classes.

PSYC347 Assessment and Intervention 8cp
Autumn
Contact Hours: 2 hours of Lectures, 1.5 hours of Labs per week.
Pre-requisites: 24 cp of PSYC at 200 level (excluding PSYC216)
Assessment: Agency visit and report, seminar, final exam.
Subject Description: This subject is meant to provide students with an overview of the assessment procedures and intervention programmes commonly used, and the efficacy of these programmes for common psychological problems including anxiety, depression, eating, substance abuse, and common disorders among children. While different approaches to therapy will be briefly discussed, the strategies used in cognitive-behavioural assessment and therapy will be covered more extensively.

PSYC348 History and Metatheory of Psychology 8cp
Spring
Contact Hours: 2 hours of Lectures, 1.5 hours of Labs per week
Pre-requisites: 24 cp of PSYC at 200 level (excluding PSYC216)
Subject Description: This subject introduces (1) the origins and development of major approaches in modern psychology, and (2) important conceptual issues in psychology. It discusses the concepts needed to evaluate the theories, methods, accounts and practices that we encounter in psychology, and applies these concepts to various psychological problems. Topics include materialist and causal views of psychology, behaviourist analyses of mental processes, psychoanalytic explanation, rationalist and phenomenological accounts of mind and ethical and ideological considerations in psychology.

PSYC349 Visual Perception 8cp
Autumn
Contact Hours: 2 hours of Lectures, 1.5 hours of Labs per week
Pre-requisites: 24 cp of PSYC at 200 level (excluding PSYC216) including (PSYC232 and PSYC236)
Subject Description: This subject covers the following aspects of visual perception - lightness and colour; motion; shape and object perception; depth and stereopsis; spatial and temporal resolution - and the applications of each, uniting them by focusing on the environmental variables to which the visual system is sensitive, and the neural mechanisms underlying these sensitivities.

PSYC350 Social Behaviour and Individual Differences 8cp
Autumn
Contact Hours: 2 hours of Lectures, 1.5 hours of Labs per week
Pre-requisites: 24 cp of PSYC at 200 level (excluding PSYC216) including (PSYC232 and PSYC241)
Subject Description: This subject allows students to study selected topics in social psychology in more detail. The emphasis is on the extent to which one can explain social behaviours (eg. prejudice, crime, close relationships, particular adolescent behaviours) in terms of individual differences and personality traits. An integral part of the subject will include the formulation of a research proposal by each student.

PSYC352 Psychophysiology 8cp
Spring
Contact Hours: 2 hour of Lectures, 2 hours of Labs per week.
Pre-requisites: 24 cp of PSYC at 200 level (excluding PSYC216) including (PSYC232 and PSYC234)
Subject Description: This subject concentrates on psychophysiology as the systematic examination of peripheral and central physiological correlates of perceptual and cognitive functioning.

Students will attain a basic level of proficiency in the electrical recording and assessment of a range of autonomic measures (including muscle, respiratory, cardiovascular, and electrodermal activity), as well as the traditional central indicators (EEG and event related potentials). Current research using these techniques will be examined.

PSYC354 Design and Analysis 8cp

Spring

Contact Hours: 2 hour of Lectures, 1.5 hours of Tutorials per week

Pre-requisites: 24 cp of PSYC at 200 level (excluding PSYC216) including PSYC232

Subject Description: PSYC354 develops skills in the design and analysis of research investigations involving statistics. It is a pre-requisite for Psychology IV Honours. Statistical computing is an essential part of the course. Topics covered: statistical techniques in psychological research, experimental and observational research designs, analysis of survey data; analysis of variance and covariance; regression; factor analysis; multivariate analysis.

PSYC498 Psychology IV 48cp

Annual

Subject Description: Building on the first three years of the Bachelor of Psychology course, this subject will cover principal theoretical, empirical, and practical aspects of the areas in psychology that prepare students for work as psychologists: health psychology; counselling skills, in both client-centred and cognitive-behavioural orientations; child and adolescent psychology; psychological assessment; and professional skills for the psychologist. In addition, students will undertake an empirical research project of 9,000 words, under the supervision of an academic staff member.

PSYC499 Psychology IV Honours 48cp

Annual

Subject Description: Candidates will generally complete: a supervised 15,000 word Empirical Thesis; a supervised 6,000 word minor Theoretical Thesis, and three compulsory seminars in research, advanced methodology, and professional skills. Students may choose to replace the 6,000 word theoretical Thesis with an optional subject chosen from the following list: Assessment in Applied Psychology; Child and Adolescent Psychology; Cognitive and Affective Neuroscience; Counselling Psychology; Health Psychology; Models of the Human Brain and their Applications

Faculty of Informatics

Member Units

Electrical, Computer and Telecommunications Engineering

Information Technology and Computer Science

Mathematics and Applied Statistics

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Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Computer Bioinformatics

Course Requirements

To qualify for the award of the degree Bachelor of Computer Bioinformatics (BCompBioinf), students must complete 198 credit points as detailed, over four years full-time (or equivalent part-time). Students achieving a WAM of greater than 67.5 will undertake the Honours strand in their final year, while other students will continue in the non-Honours strand.

Program of Study

Year 1

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry	6

or

CHEM104	Chemistry 1D (Introductory Chemistry)	6
CHEM102	Chemistry 1B: Introductory Organic & Physical Chemistry	6

or

CHEM105	Chemistry 1E (Introductory Chemistry)	6
CSCI111	Computer Science 1 A	6
CSCI121	Computer Science 1 B	6
MATH141	Mathematics 1C Part 1	6

or

MATH187	Mathematics 1A Part 1	6
MATH142	Mathematics 1C Part 2	6

or

MATH188	Mathematics 1A Part 2	6
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Year 2

BIOL213	Principles of Biochemistry	6
BIOL215	Introductory Genetics	6
CSCI203	Data Structures, Algorithms, Systems	6
CSCI213	Java Programming & Internet	6
CSCI235	Databases	6
MATH111	Applied Mathematical Modelling 1	6
MATH283	Mathematics 2E for Engineers Part 1	6

or

MATH203	Linear Algebra	6
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Plus one CSCI 200 level elective.

Year 3

BIOL303	Biotechnology: Applied Molecular and Cell Biology	8
CHEM320	Bioinformatics: From Genome to Structure	8
CSCI311	Software Process Management	6
CSCI315	Database Design and Implementation	6
CSCI321	Project	12
STAT231	Probability and Random Variables	6
STAT304	Operations Research and Applied Probability	6

or

CSCI323	Artificial Intelligence	6
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Year 4 (Honours) - WAM >67.5

BIOL320	Molecular Cell Biology	8
INFO403	Computer Bioinformatics Honours Project	24
INFO411	Data Mining and Knowledge Discovery	6
STAT304	Operations Research and Applied Probability	6

or

CSCI464	Neural Computing	6
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300/400 Level elective chosen from the Biology, Computer Science or Mathematics Schedule.

Year 4 (Non-Honours)

BIOL320	Molecular Cell Biology	8
INFO411	Data Mining and Knowledge Discovery	6
STAT304	Operations Research and Applied Probability	6

or

CSCI464	Neural Computing	6
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Plus 30 credit points of 300/400 level electives chosen from the Biology, Computer Science or Mathematics Schedule, of which at least 24 credit points must be at 400 level.

Bachelor of Computer Geoinformatics

Course Requirements

To qualify for the award of the degree of Bachelor of Computer Geoinformatics, students must satisfactorily complete 192 credit points, as detailed, over four years full-time (or equivalent part-time). Students achieving a WAM of greater than 67.5 will undertake the Honours strand in their final year, while other students will continue in the non-Honours strand.

Program of Study

Year 1

CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
MATH122	Probability and Logic	6

Plus three of the following:

GEOS102	Earth Environments and Resources	6
GEOS111	Planet Earth	6
GEOS112	Physical Environments	6
GEOS142	The Human Environment: Problems and Change	6

Plus one of the following:

MATH141	Mathematics 1C Part 1	6
MATH161	Mathematics 1E Part 1	6
MATH187	Mathematics 1A Part 1	6

Year 2

CSCI204	Programming: The C Family and Unix	6
CSCI213	Java Programming and the Internet	6
CSCI235	Databases	6
STAT252	Statistics for the Natural Sciences	6
GEOS217	Field and Spatial Techniques	6
GEOS239	Remote Sensing of the Environment	6
Plus any two 200 level Geosciences subjects		12

Note: a credit or higher in STAT252 is required before enrolling in STAT355.

Year 3

CSCI315	Database Design and Implementation	6
CSCI336	Computer Graphics	6
STAT335	Sample Surveys and Experimental Design	6
GEOS339	Geographic Information Systems	8
Plus any 300 level CSCI subject		6
Plus any two 300 level Geosciences subjects		16

Year 4 (Honours) - WAM > 67.5

INFO411	Data Mining and Knowledge Discovery	6
GEOS403	Geoinformatics Honours	36
	Plus any 400 level INFO or IACT subject	6

Year 4 (Non-Honours)

INFO411	Data Mining and Knowledge Discovery	6
	Plus 42 credit points of 300/400 level electives chosen from the Geosciences, Computer Science and/or Mathematics Schedules. At least 24 credit points must be at 400 level from the Computer Science and/or Mathematics Schedule.	

Bachelor of Computer Science**Course Requirements**

To qualify for the award of the degree of Bachelor of Computer Science, candidates must satisfactorily complete at least 144 credit points from either or both the Computer Science Schedule and the General Schedule (see the list of recommended subjects from the General Schedule).

The 144 credit points must include;

1. the following core subjects:

CSCI101	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
CSCI204	Programming: The C Family and Unix	6
CSCI213	Java Programming and the Internet	6
MATH122	Probability and Logic	6

2. 24cp of 200 level CSCI or IACT subjects.

3. at least 36 credit points of 300-level subjects of which 24 credit points must be CSCI subjects, including CSCI321; 24 credit points at 300-level must be at the pass grade or better;

4. at least 90 credit points of Computer Science Schedule subjects;

5. if an approved double major is attempted, then only 78 credit points of Computer Science subjects need be taken;

6. no more than 24 credit points (ie 1/6) of subjects to be at PC grade;

7. no more than 60 credit points at 100-level.

Major Studies Available in BCompSc

Students enrolled in this degree can major in:

- Computer Science (CS18),
- Secure Distributed Systems (CS19), or
- Software Development (CS20).

Students wishing to major in Secure Distributed Systems should complete the core subjects as well as CSCI212, CSCI214, CSCI399 and CSCI322.

Students wishing to major in Software Development should complete the core subjects as well as CSCI205, CSCI235, CSCI311 and CSCI325.

Double majors are also available. Please consult *Suggested Double Major Programs in Computer Science* (over page) for further details.

Computer Science Schedule

CSCI101	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
MATH122	Probability and Logic	6
CSCI112	Fundamentals of Computer Science	6
CSCI121	Computer Science 1B	6
CSCI131	Introduction to Computer Systems	6
CSCI203	Data Structures, Algorithms, Systems	6
CSCI204	Programming: The C Family and Unix	6
CSCI205	Development Methods and Tools	6
CSCI212	Operating Systems	6
CSCI213	Java Programming and the Internet	6
CSCI214	Distributed Systems	6
CSCI235	Databases	6
CSCI236	3D Modelling & Animation	6
CSCI311	Software Process Management	6
CSCI313	Professional Programming Practices	6
CSCI315	Database Design and Implementation	6
CSCI321	Project	12
CSCI322	Systems Administration	6
CSCI323	Artificial Intelligence	6
CSCI324	Human Computer Interface	6
CSCI325	Software Engineering Formal Methods	6
CSCI333	Compilers	6
CSCI334	Interfacing and Real Time Programming	6
CSCI336	Computer Graphics	6
CSCI337	Organisation of Programming Languages	6
CSCI361	Computer Security	6
CSCI365	Computer Science Honours Preliminary	6
CSCI370	Special Topics in Computer Science A	6
CSCI371	Special Topics in Computer Science B	6
CSCI372	Special Topics in Computer Science C	6
CSCI373	Special Topics in Computer Science D	6
CSCI399	Server Technology	6
CSCI407	Corba & Enterprise Java	6
CSCI408	Distributed Java	6
CSCI425	Topics in Software Engineering	6
CSCI444	Perception and Planning	6
CSCI445	Parallel Computing	6
CSCI446	Multi-Media Studies	6
CSCI450	Software Engineering Requirements & Specifications	6
CSCI457	Advanced Topics in Database Management	6
CSCI463	Advanced Computer Graphics	6
CSCI464	Neural Computing	6
CSCI465	Design and Analysis of Algorithms	6
CSCI466	Coding for Secure Communication	6
CSCI467	Complexity Theory	6
CSCI468	Network Security	6
CSCI471	Advanced Computer Security	6
INFO411	Data Mining and Knowledge Discovery	6
INFO412	Mathematics for Cryptography	6
INFO413	Information Theory	6
IACT201	Information Technology and Citizens' Rights	6
IACT202	The Structure and Organisation of Telecommunications	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6
IACT303	World Wide Networking	6

Course Structures

IACT304	eBusiness Fundamentals*	6
IACT305	eBusiness Technologies*	6
ITCS429	Introduction to Health Informatics	6
ITCS430	Concepts and Issues in Healthcare Computing	6
ITCS431	Advanced Web Application Development	6
ITCS432	Web Design	6
ITCS436	Detailed Design of Integrated Solutions for eBusiness	6
ITCS437	Security, Risk Management and Control in Electronic Commerce	6
ITCS450	Patterns for eBusiness	6
ITCS451	Web Services for Dynamic eBusiness	6
STAT131	Understanding Variation and Uncertainty	6
MATH141	Mathematics 1C - Part I	6
MATH142	Mathematics 1C - Part II	6
MATH187	Mathematics 1A - Part 1	6
MATH188	Mathematics 1A - Part 2	6
MATH203	Linear Algebra	6

* Students may not attempt both IACT304 and IACT305.

Recommended Subjects from the General Schedule for Bachelor of Computer Science Candidates

CCS105	Introduction to Communication and Cultural Studies	6
CREA102	Professional Practices I	6
ECTE195	Design and Management	6
ECTE196	Introduction to Internet Technology	6
ECTE233	Digital Hardware 1	6
EDIT102	Information Technology for Learning	6
EDUE313	Interactive Multimedia by Design	6
EDUE314	Interactivity and the Web (Designing Hypertext Multimedia)	6
ELS151	English for Academic Purposes: A Second Language Perspective	6
ELS161	English for Academic Purposes: A First Language Perspective	6
ENGG154	Engineering Design and Innovation	6
LANG110	An Introduction to Linguistics: The English Language	6
MATH111	Applied Mathematical Modelling 1	6
MGMT215	Small Business Management	6
PHIL112	Logic A	6
STS128	Computers in Society	6
WRIT101	Introduction to Writing	6
WRIT210	Writing for the Internet	6

Suggested Double Major Programs in Computer Science

The following information is intended as a guideline to the candidate in selecting suitable supplementary subjects to make a reasonable pattern for Computer Science degrees.

All candidates are expected to consult with the School and Faculty advisers before committing themselves completely to any particular pattern, whether outlined below or not.

It is emphasised that the following programs are based on the usual 48 credit points per year, totalling 144 credit points over 3 years.

A major study in Computer Science, Secure Distributed Systems or Software Development can be combined with any of the following:

Mathematics (CS01)
 Electronic Commerce (CS29, CS30 or CS36)
 Electronics (CS37, CS38 or CS39)
 Management (CS09)
 Marketing (CS10)
 Biomedical Sciences (CS32)
 Business Information Systems (CS35)
 English Language Studies (CS08)
 Biological Sciences (CS32)
 Chemistry (CS33)
 Geosciences (CS34)

Students may also combine a major study in Software Development with a major study in Secure Distributed Systems (CS28).

Major Study in Computer Science and Mathematics (code CS01)

Candidates wishing to combine a major study in Computer Science with a major study in Mathematics are advised to complete at least 60 credit points of Mathematics subjects, including at least 24 credit points of 300-level Mathematics and/or Applied Statistics and 18 credit points of 200-level Mathematics and/or Applied Statistics.

Major study in Computer Science (code CS36), Secure Distributed Systems (code CS30) or Software Development (code CS29), and Electronic Commerce

Candidates wishing to combine a major study in Computer Science with a major study in Electronic Commerce (EC) are advised to complete the following 54 credit points of study, in addition to the course requirements for the BCompSc.

IACT201 Information Technology and Citizens' Rights
 IACT303 World Wide Networking

Plus 18 credit points of 200 level Electronic Commerce subjects;

Plus 18 credit points of 300 or 400 level Electronic Commerce subjects;

and

Plus 6 credit points of 200 or 300 level Electronic Commerce subjects.

Subjects taken in this major are not to be counted in the 78 credit points required for the Computer Science major (See degree requirement number 4 for double majors in BCompSc).

Note: Students should choose electives carefully if they wish to follow this major study as many of the following subjects have pre-requisites.

Electronic Commerce (EC) Subjects

ACCY231	Information Systems in Accounting	6
ACCY332	Advanced Information Systems in Accounting	6
ACCY335	Systems Analysis and Design in Accounting and Finance	6
FIN353	Global Electronic Finance	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
CSCI213	Java Programming and the Internet	6
CSCI214	Distributed Systems	6
CSCI311	Software Process Management	6
CSCI361	Computer Security	6
CSCI399	Server Technology	6
ECON230	Quantitative Analysis for Decision Making	6
ECON312	Industrial Economics	6
ECON319	Electronic Commerce and the Economics of Information	6
IACT201	Information Technology and Citizens' Rights	6
IACT406	Strategic eBusiness Solutions	6
IACT417	Information Management	6
IACT419	Online Information Services	6
LAW210	Contract Law	6
LAW317	E-Commerce Law	6
LAW331	Intellectual Property Law	6
MARK301	Marketing on the Internet	6
MGMT200	Management and Electronic Business	6
MGMT300	Innovation and Electronic Commerce	6

Major study in Computer Science and Management (code CS09)

Candidates wishing to combine a major study in Computer Science with a major study in Management are advised to undertake the following subjects (60 credit points in total):

ACCY100	Accounting 1A	6
ACCY102	Accounting 1B	6
MGMT102	Business Communications	6
MGMT110	Introduction to Management	6
MGMT201	Organisational Behaviour	6
MGMT213	Introduction to Marketing	6
MGMT314	Business Policy	6
MGMT398	Human Resource Management	6

Plus 12 credit points from 300-level subjects offered by the School of Management, Marketing and Employment Relations.

Major study in Computer Science and Marketing (code CS10)

Candidates wishing to combine a major study in Computer Science with a major study in Marketing are advised to undertake the following subjects (48 credit points in total):

Compulsory subjects

MARK101	Introduction to Marketing	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK319	Applied Marketing Research	6
MARK333	Advertising And Promotions Strategy	6
MARK344	Marketing Strategy	6

Plus two subjects (12 credit points) from the following:

MARK240	Marketing and Consumer Behaviour in East and South East Asia	6
MARK270	Services Marketing	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

Major study in Computer Science (code CS37), Secure Distributed Systems (code CS38) or Software Development (code CS39), and Electronics

Current BCompSc degree rules plus the completion of the following subjects:

100 level (18cp)

ECTE101	Electrical Engineering 1	6
MATH187	Mathematics 1A Part 1 or MATH141 or MATH161	6
MATH188	Mathematics 1A Part 2 or MATH142 or MATH162	6

200 level (24cp)

ECTE202	Circuits And Systems	6
ECTE212	Electronics And Communications	6
ECTE233	Digital Hardware 1	6
MATH283	Mathematics 2E For Engineers Part 1	6

300 level (24cp)

ECTE301	Digital Signal Processing 1	6
or		
ECTE363	Communication Theory	6
ECTE313	Electronics	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6

Major study in Computer Science and Biomedical Sciences (code CS02)

Candidates wishing to combine a major study in Computer Science with a major study in Biomedical Sciences are advised to undertake the following subjects (54 credit points in total) from within the Department of Biomedical Sciences.

BMS101	Systemic Anatomy	6
BMS112	Human Physiology I: Principles and Systems	6
BMS202	Human Physiology II: Control Mechanisms	6
BMS242	Exercise Physiology	6
BMS342	Advanced Exercise Physiology	8
BMS344	Cardiorespiratory Physiology	8
and either		
BMS211	Foundations of Biomechanics	6
or		
BMS252	Introduction to Neuroscience	6
and either		
BMS341	Clinical Biomechanics	8
or		
BMS346	Motor Control and Dysfunction	8

Major study in Computer Science and Business Information Systems (code CS35)

Candidates wishing to combine a major study in Computer Science with a major study in Business Information Systems are advised to undertake the following subjects (48 credit points in total):

BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS215	Business Programming III	6
BUSS311	Advanced Database Management Systems	6
or		
BUSS312	Distributed Information Systems	6
and		
BUSS315	Knowledge Based Information Systems	6
BUSS316	Information Systems Development Methodologies	6
BUSS317	Business Programming IV	6

Major study in Computer Science and English Language Studies (code CS08)

Non-English Speaking Background (NESB) Student Stream

Candidates wishing to combine a major study in Computer Science with a major study in English Language Studies are advised to undertake the following subjects (66 credit points in total):

ELS151	English for Academic Purposes: A Second Language Perspective	6
ELS152	English Language Studies 1	6
LANG110	An Introduction to Linguistics: The English Language	8
ELS261	English Language Studies 2	8
ELS262	English Language Studies 3	8
LANG210	Communicating in a Foreign Language	8

Native English Speaking Background Student Stream

A major study in English Language Studies will comprise of 60 credit points for native speakers of English.

ELS161	English for Academic Purposes: A First Language Perspective	6
LANG110	An Introduction to Linguistics: The English Language	8
ELS261	English Language Studies 2	8
ELS262	English Language Studies 3	8
LANG210	Communication in a Foreign Language	8

Major study in Computer Science and Biological Sciences (code CS32)

Environmental and Ecological Strand

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6
BIOL240	Organisms and their Life Cycles	6
BIOL241	Biodiversity: Classification and Sampling	6
BIOL251	Principles of Ecology and Evolution	6
STAT252	Statistics for the Natural Sciences	6
BIOL332	Comparative Physiology: Adaptation and Environment	8

BIOL351	Conservation Biology: Marine and Terrestrial Populations	8
BIOL355	Marine and Terrestrial Ecology	8
Cell and Molecular Strand		
BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry	6
BIOL213	Principles of Biochemistry	6
BIOL215	Introductory Genetics	6
BIOL320	Molecular Cell Biology	8
BIOL303	Biotechnology	8
BIOL321	Cellular and Molecular Immunology	8

Major study in Computer Science and Chemistry (code CS33)

CHEM101	Chemistry 1A: Introductory Physical and General Chemistry	6
CHEM104	Chemistry 1D (Introductory Chemistry)	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry	6
CHEM105	Chemistry 1E (Introductory Chemistry)	6
CHEM211	Inorganic Chemistry II	6
CHEM212	Organic Chemistry II	6
CHEM213	Molecular Structure, Reactivity and Change	6
CHEM214	Analytical and Environmental Chemistry	6

At least 3 subjects taken from the following

CHEM311	Inorganic Chemistry III	8
CHEM314	Instrumental Analysis	8
CHEM320	Biological Chemistry	8
CHEM321	organic Synthesis and Reactivity	8
CHEM327	Environmental Chemistry	8
CHEM340	Chemistry Laboratory Project	8
CHEM364	Molecular Structure and Spectroscopy	8

Major study in Computer Science and Geosciences (code CS34)

Two 100-level subjects chosen from the following

GEOS102	Earth Environments and Resources	6
GEOS111	Planet Earth	6
GEOS112	Physical Environments	6
GEOS142	The Human Environment	6
GEOS239	Remote Sensing of the Environment (recommended)	6
GEOS339	Geographic Information Systems (recommended)	6

Plus 18 credit points of 200-level GEOS subjects, depending on 100-level choice.

Plus 16 credit points of 300-level GEOS subjects, depending on 200-level choice.

Bachelor of Computer Science (Honours)

Candidates who achieve a credit average or better in the Bachelor of Computer Science or a major in computer science in another degree are eligible to enrol in an additional year of study towards a Bachelor of Computer Science (Honours) (BCompSc(Hons)).

To qualify for the award of the Bachelor of Computer Science (Honours), candidates must complete CSCI401. The level of honours awarded at the completion of the course is determined in accordance with University Course Rule 8.4(2).

The program of study for BCompSc(Hons), (ie CSCI401 Computer Science IV Honours) is 48 credit points and will include:

1. an 18 credit point project;
2. 30 credit points of 400-/900-level Postgraduate Computer Science subjects;
3. with the permission of the Head of School, candidates may substitute up to 12 credit points of subjects with 300-level Computer Science subjects or 400-level subjects from another discipline;
4. attendance at a series of seminars on research methodology in Autumn Session is compulsory (including quantitative and qualitative analysis). Seminars will cover the purpose of research, formulating a research question, conducting a literature review and writing a research proposal. Students will learn how to design an appropriate research plan; requirements for scholarly writing will also be discussed and the process of undertaking a research project will be analysed.

Note

Individual results for subjects attempted will not be released. Instead, the final result for CSCI401 will be calculated from the total results for the project and subjects. Set out below are a sample of subjects which may be taken as part of the BCompSc(Hons).

Topics in Software Engineering

Perception and Planning

Parallel Architectures and Algorithms

Multi-Media Studies

Advanced Topics in Database Management

Advanced Computer Graphics

Neural Computing

Design and Analysis of Algorithms

Coding for Secure Communication

Complexity Theory

Network Security

Advanced Computer Security

Joint Honours with Computer Science

There is a number of high achieving students undertaking double majors in the BCompSc. Many of these students wish to continue on to honours.

It is desirable that there be provision made for these students to be able to undertake a joint honours project. CSCI405: Computer Science Joint Honours provides for these students.

The thesis is usually integrated with the other academic unit. The subject CSCI405 comprises one half of CSCI401. A topic for the thesis will be determined in consultation with the other academic unit.

Bachelor of Engineering

The School of Electrical, Computer and Telecommunications Engineering offers courses leading to a Bachelor of Engineering in each of the following major study areas:

- Computer Engineering
- Electrical Engineering
- Internet Engineering
- Telecommunications Engineering

The degree may be completed in a minimum of four years of full-time study, however, subjects are scheduled so that it may also be undertaken on a part-time basis, in which case the duration will depend upon the particular circumstances of the student. Progression is by subject but the various subject pre- and co-requisites must be satisfied.

There is a recommended program for a full-time four year minimum course and a preferred part-time program for students in approved, full-time professional employment. For holders of TAFE Certificates and Associate Diplomas, programs will be determined on an individual basis but exemptions of up to 48 credit points may apply.

For the recommended full-time program, students are required to complete satisfactorily the first year before beginning the third year and to complete satisfactorily the second year before beginning the fourth year. With the approval of the Head of School, these requirements may be waived.

For the recommended part-time program, students are required to complete satisfactorily the first two stages before beginning the fourth stage and to complete satisfactorily the third stage before beginning the sixth stage. With the approval of the Head of School, these requirements may be waived.

All BE students must sit for and perform satisfactorily in an English Literacy Test organised by the School in association with the Student Learning Development Centre. The test will be held during the first session of a student's enrolment at the University. It is a requirement of the degree that the student perform satisfactorily in at least one such test prior to enrolment in ECTE457 Thesis.

Students who are deemed to require tuition in literacy in order to complete this requirement will be advised accordingly and will be required to repeat the literacy test the following year. Enrolment in and attendance at literacy courses will be the individual responsibility of the students concerned.

Professional Experience

Full-time BE students must accumulate at least 12 weeks of approved professional experience, documented in the form of employment reports and preferably in the period between third and fourth years.

Honours

The degree of Bachelor of Engineering (Honours) is awarded for meritorious performance over the course and particularly in the final year. The classes of honours awarded are defined in the Course Rules.

Bachelor of Engineering (Computer Engineering)

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
 MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
ECTE250	Engineering Design and Management 2	6
ENGG291	Engineering Fundamentals	6
MATH283	Mathematics 2E for Engineers Part 1	6

Year 3

CSCI205	Development Methods and Tools	6
ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Computer Option	6

Year 4

CSCI311	Software Process Management	6
ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
ECTE457	Thesis	18

Plus 6 Final Year Specialisation Subjects 18

Final Year Specialisation Subjects

These will be selected from the following list of subjects. Unless class numbers warrant, only eight subjects will be offered in any year.

Note: A pre-requisite of "all year 2 subjects or equivalent" applies to EACH Final Year Specialisation Subject in addition to any other pre- or co-requisite given.

ECTE401	Fast Signal Processing Algorithms	3
ECTE402	Stochastic Signal Processing	3
ECTE403	Image and Video Processing	3
ECTE404	Adaptive Signal Processing	3
ECTE405	Speech and Audio Processing	3
ECTE411	AC-Sourced Power Electronics	3
ECTE412	DC-Sourced Power Electronics	3
ECTE413	Micro-Electronics	3
ECTE421	Power Quality	3
ECTE422	Power Quality Monitoring	3
ECTE423	Power Systems	3
ECTE424	Power System Abnormalities	3
ECTE425	Industrial Drives and Actuators	3
ECTE426	Power Equipment Design	3
ECTE441	Intelligent Control	3
ECTE442	Computer Controlled Systems	3
ECTE443	Digital Control	3
ECTE444	Identification and Optimal Control	3
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
ECTE463	Transmission Systems	3
ECTE464	Antennas and Propagation	3
ECTE465	Wireless Communications	3
ECTE466	Spread Spectrum Communications	3
ECTE467	Mobile Networks	3
ECTE468	Error Control Coding	3
ECTE471	Robotics Manipulators	3
ECTE472	Robotics Sensory Control	3
ECTE481	Internet Protocols	3
ECTE482	Internet Engineering	3
ECTE483	Computer Networking	3
ECTE484	Network Design and Analysis	3
ECTE485	Internet Communications	3
ECTE486	Telecommunications Network Management	3

Computer Option

Year 3/Stage 4:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER:
 - (i) the School of Information Technology and Computer Science (CSCI, IACT or ITCS) ; or
 - (ii) the School of Mathematics and Applied Statistics (MATH or STAT).
- OR
- (b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Recommended Part-Time Program for Students in Full-Time, Approved Professional Employment

Stage 1

ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Stage 2

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE233	Digital Hardware 1	6

Stage 3

CSCI204	Programming: The C Family and Unix	6
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or

CSCI213	Java Programming and the Internet	6
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Plus

ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
MATH283	Mathematics 2E for Engineers Part 1	6

Stage 4

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
Plus	Computer Option	6

Stage 5

CSCI205	Development Methods and Tools	6
ECTE301	Digital Signal Processing 1	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6

Stage 6

CSCI311	Software Process Management	6
ECTE313	Electronics	6
ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
Plus	4 Final Year Specialisation Subjects	12

Stage 7

ECTE457	Thesis	18
Plus	2 Final Year Specialisation Subjects	6

Bachelor of Engineering (Electrical Engineering)

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
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or

CSCI213	Java Programming and the Internet	6
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Plus

ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
ECTE250	Engineering Design and Management 2	6
ENGG291	Engineering Fundamentals	6
MATH283	Mathematics 2E for Engineers Part 1	6

Year 3

ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE323	Power Engineering 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Electrical Option	6

Year 4

ECTE457	Thesis	18
Plus	10 Final Year Specialisation Subjects	30

Final Year Specialisation Subjects

These will be selected from the following list of subjects. Unless class numbers warrant, only 12 subjects will be offered in any year.

Note: A pre-requisite of 'all Year 2 subjects or equivalent' applies to EACH Final Year Specialisation Subject in addition to any other pre- or co-requisite given.

ECTE401	Fast Signal Processing Algorithms	3
ECTE402	Stochastic Signal Processing	3
ECTE403	Image and Video Processing	3
ECTE404	Adaptive Signal Processing	3
ECTE405	Speech and Audio Processing	3
ECTE411	AC-Sourced Power Electronics	3
ECTE412	DC-Sourced Power Electronics	3
ECTE413	Micro-Electronics	3
ECTE421	Power Quality	3
ECTE422	Power Quality Monitoring	3
ECTE423	Power Systems	3
ECTE424	Power System Abnormalities	3
ECTE425	Industrial Drives and Actuators	3
ECTE426	Power Equipment Design	3
ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
ECTE441	Intelligent Control	3
ECTE442	Computer Controlled Systems	3
ECTE443	Digital Control	3
ECTE444	Identification and Optimal Control	3
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
ECTE463	Transmission Systems	3
ECTE464	Antennas and Propagation	3
ECTE465	Wireless Communications	3
ECTE466	Spread Spectrum Communications	3
ECTE467	Mobile Networks	3
ECTE468	Error Control Coding	3

Course Structures

ECTE471	Robotics Manipulators	3
ECTE472	Robotics Sensory Control	3
ECTE481	Internet Protocols	3
ECTE482	Internet Engineering	3
ECTE483	Computer Networking	3
ECTE484	Network Design and Analysis	3
ECTE485	Internet Communications	3
ECTE486	Telecommunications Network Management	3

With the approval of the School Head, two Electrical Engineering Specialisation Subjects may be replaced by a suitable equivalent subject offered by another Department or School.

Electrical Option

Year 3/Stage 5:

With the approval of the Head of School, students may select:

- one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by the School of Mathematics and Applied Statistics (MATH or STAT); or
- one of the following subjects: ECTE281 Embedded Internet Systems, ECTE291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Recommended Part-Time Program for Students in Full-Time, Approved Professional Employment

Stage 1

ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Stage 2

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE233	Digital Hardware 1	6

Stage 3

CSCI204	Programming: The C Family and Unix	6
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or

CSCI213	Java Programming and the Internet	6
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Plus

ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
MATH283	Mathematics 2E for Engineers Part 1	6

Stage 4

ECTE323	Power Engineering 2	6
ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6

Stage 5

ECTE301	Digital Signal Processing 1	6
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ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Electrical Option	6

Stage 6

ECTE313	Electronics	6
Plus	8 Final Year Specialisation Subjects	24

Stage 7

ECTE457	Thesis	18
Plus	2 Final Year Specialisation Subjects	6

Bachelor of Engineering (Internet Engineering)

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
ECTE191	WWW Engineering	6
ECTE196	Internet Technology 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
ECTE250	Engineering Design and Management 2	6
ECTE291	Internet Systems	6
ECTE292	Internet Technology 2	6
MATH283	Mathematics 2E for Engineers Part 1	6

Year 3

ECTE281	Embedded Internet Systems	6
ECTE301	Digital Signal Processing 1	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
ECTE364	Telecommunication Networks 1	6
ECTE381	Internet Engineering 1	6
Plus	Internet Options	12

Year 4

ECTE457	Thesis	18
ECTE481	Internet Protocols	3
ECTE482	Internet Engineering	3
Plus	8 final year specialisation subjects	24

Internet Options

With the approval of the Head of School, students may select two six credit point, 300-level subjects offered by:

- the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
- the School of Mathematics and Applied Statistics (MATH or STAT); or
- the School of Electrical, Computer and Telecommunications Engineering (ECTE).

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Final Year Specialisation Subjects

These will be selected from the following list of subjects. Unless class numbers warrant, only ten subjects will be offered in any year.

ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
ECTE441	Intelligent Control	3
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
ECTE465	Wireless Communications	3
ECTE466	Spread Spectrum Communications	3
ECTE467	Mobile Networks	3
ECTE468	Error Control Coding	3
ECTE484	Network Design and Analysis	3
ECTE486	Telecommunications Network Management	3

Bachelor of Engineering (Telecommunications Engineering)**Recommended Full-Time Program****Year 1**

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
ECTE250	Engineering Design and Management 1	6
ENGG291	Engineering Fundamentals	6
MATH283	Mathematics 2E for Engineers Part 1	6

Year 3

ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ECTE350	Engineering Design and Management 1	6
ECTE363	Communication Theory	6
ECTE364	Telecommunication Networks 1	6
Plus	Telecommunications Option	6

Year 4

ECTE457	Thesis	18
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
Plus	6 Final Year Specialisation Subjects	18
Plus	Telecommunications Option	6

Final Year Specialisations Subjects

These will be selected from the following list of subjects. Unless class numbers warrant, only eight subjects will be offered in any year.

Note: A pre-requisite of 'all Year 2 subjects or equivalent' applies to EACH Final Year Specialisation Subject in addition to any other pre- or co-requisite given.

ECTE401	Fast Signal Processing Algorithms	3
ECTE402	Stochastic Signal Processing	3
ECTE403	Image and Video Processing	3
ECTE404	Adaptive Signal Processing	3
ECTE405	Speech and Audio Processing	3
ECTE412	DC-Sourced Power Electronics	3
ECTE413	Micro-Electronics	3
ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
ECTE441	Intelligent Control	3
ECTE463	Transmission Systems	3
ECTE464	Antennas and Propagation	3
ECTE465	Wireless Communications	3
ECTE466	Spread Spectrum Communications	3
ECTE467	Mobile Networks	3
ECTE468	Error Control Coding	3
ECTE481	Internet Protocols	3
ECTE482	Internet Engineering	3
ECTE484	Network Design and Analysis	3
ECTE486	Telecommunications Network Management	3

Telecommunications Options

Year 3 /Stage 5/ Year 4/ Stage 6:

With the approval of the Head of School, students may select:

(a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER:

- (i) the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
- (ii) the School of Mathematics and Applied Statistics (MATH or STAT).

OR

(b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Recommended Part-Time Program for Students in Full-Time, Approved Professional Employment**Stage 1**

ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Stage 2

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6

Course Structures

ECTE101	Electrical Engineering 1	6
ECTE233	Digital Hardware 1	6
Stage 3		
CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
MATH283	Mathematics 2E for Engineers, Part 1	6
Stage 4		
ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
Plus		
	Telecommunications Option	6
Stage 5		
ECTE301	Digital Signal Processing 1	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
ECTE364	Telecommunication Networks 1	6
Stage 6		
ECTE313	Electronics	6
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
Plus		
	4 Final Year Specialisation Subjects	12
Plus		
	Telecommunications Option	6
Stage 7		
ECTE457	Thesis	18
Plus		
	2 Final Year Specialisation Subjects	6

Bachelor of Information and Communication Technology

Course Requirements

A candidate must satisfactorily complete the following requirements to be eligible for the award of the degree of Bachelor of Information and Communication Technology.

1. Candidates must satisfactorily complete at least 192 credit points of subjects prescribed in one of the major studies listed below. The programs listed below are guidelines as to how best to proceed through the course. Candidates may enrol as they see fit, but must satisfactorily complete all prescribed compulsory subjects, and the credit points prescribed for electives, and satisfy all other requirements listed below to be eligible for the award.
2. No more than 60 credit points may be 100-level subjects.
3. At least 36 credit points must be 300-level subjects.
4. At least 42 credit points must be chosen from the IACT 400 level subject list.
5. To be eligible for the award of honours, candidates must satisfactorily complete IACT441 and IACT450 within the 42 credit points prescribed in requirement 4.

General Subject Pre-requisite Requirements

6. Subject to any other individual subject pre- and co-requisites, entry into 400-level IACT subjects will be permitted upon satisfactory completion of 120 credit points of subjects approved in this program.
7. Entry to IACT441 will be based on:
 - a) overall academic performance,
 - b) a weighted average mark (WAM) of at least 67.5, and
 - c) approval from the Head of School.

Candidates should refer to the Course Rules for calculations of WAMs.

Students intending to do Honours should apply and be accepted by the end of December of the previous year. (See Sonia Jennings for application form).

Sequence of Subjects

For subjects chosen from the 'additional subjects list', it is recommended students examine sequences suggested in the handouts produced by the School. Check subject information to ensure that pre- and co-requisites are met.

Professional Experience

BlInfoTech students must satisfactorily complete two 10 week periods of approved professional experience, assessed in the form of written reports. These are normally undertaken in the summer sessions at the end of second and third year.

In exceptional circumstances where a student has proven substantive work experience in relevant industry they may apply to be exempted from Professional Experience placement, but, if approved, will be required to undertake an alternative task(s) as specified by the Head of School.

Major Study Areas

The major study that a student may enrol in depends on the UAC code they were offered a place in:

Software Engineering UAC code: 754115
 Network Management UAC code: 754112
 Telecommunications UAC code: 754113
 Business Information Systems UAC code: 754111

Approved Major Studies and combined major studies in the BlInfoTech:

ITE	Software Engineering
ITB	Network Management
ITC	Telecommunications
ITD	Business Information Systems
ITEB	Software Engineering / Network Management
ITED	Software Engineering / Business Information Systems
ITBD	Network Management / Business Information Systems
ITEE	Software Engineering / Marketing
ITBE	Network Management / Marketing
ITCE	Telecommunications / Marketing
ITDE	Business Information Systems / Marketing
ITEF	Software Engineering / Data Analysis
ITBF	Network Management / Data Analysis

ITCF	Telecommunications / Data Analysis
ITDF	Business Information Systems / Data Analysis
ITEG	Software Engineering / Modelling
ITBG	Network Management / Modelling
ITCG	Telecommunications / Modelling
ITDG	Business Information Systems / Modelling
ITEH	Software Engineering / Electronic Commerce
ITBH	Network Management / Electronic Commerce
ITCH	Telecommunications / Electronic Commerce
ITDH	Business Information Systems / Electronic Commerce

BlInfoTech - Software Engineering

(only available to candidates with UAC code 754115 offer)

Year 1

CSCI111	Computer Science IA	6
CSCI121	Computer Science IB	6
MATH122	Probability and Logic	6
CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
ECTE196	Internet Technology I	6

Plus 12 credit points at 100-level from the additional subjects list or second major study subjects.

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with another 6cp 100 level subject from the Additional Subjects List.

Year 2

CSCI204	Programming: The C Family and Unix	6
CSCI205	Development Methods and Tools	6
CSCI235	Databases	6
CSCI213	Java Programming and the Internet	6
IACT201	Information Technology and Citizens' Rights	6
IACT202	The Structure and Organisation of Telecommunications	6

Plus 12 credit points from the additional subjects list at 200-level, or second major study subjects.

Year 3

CSCI311	Software Process Management	6
CSCI321	Project	12
CSCI325	Software Engineering Formal Methods	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6

Plus 12 credit points from the additional subjects list at 200-level or 300-level, or second major study subjects.

Year 4 (Non-Honours)

At least 42 credit points of IACT400 level subjects which must include two subjects chosen from CSCI425, CSCI450 or IACT402.

If only 42 credit points of IACT400 level subjects are taken, then the extra 6 credit points must be taken from the list of additional subjects in accordance with course requirements.

Year 4 (Honours)

To be eligible for honours, candidates must satisfactorily complete IACT450 and IACT441 and at least 18 credit points of IACT400 level subjects which must include two subjects chosen from CSCI425, CSCI450 or IACT402. If only 42 credit points of IACT400 level subjects are taken, then the extra 6 credit points must be taken from the list of additional subjects in accordance with course requirements.

Entry to IACT441 will be based on overall academic performance, a written proposal, a weighted average mark (WAM) of at least 67.5 and approval from the Head of School. A grade of 75% or better in IACT441 is required for entry to IACT450. Students should refer to the University Course Rules for calculations of WAMs.

BlInfoTech - Network Management

(only available to candidates with UAC code 754112 offer)

Year 1

CSCI111	Computer Science IA	6
CSCI121	Computer Science IB	6
MATH122	Probability and Logic	6
CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6

Plus 18 credit points at 100-level from the additional subjects list, or second major study subjects.

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with another 6cp 100 level subject from the Additional Subjects List.

Year 2

CSCI204	Programming: The C Family and Unix	6
CSCI212	Operating Systems	6
CSCI213	Java Programming and the Internet	6
CSCI214	Distributed Systems	6
IACT201	Information Technology and Citizens' Rights	6
IACT202	The Structure and Organisation of Telecommunications	6

Plus 12 credit points from the additional subjects list at 200-level, or second major study subjects.

Year 3

CSCI321	Project	12
CSCI322	Systems Administration	6
CSCI399	Server Technology	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6

Plus 12 credit points from the additional subjects list at 200-level or 300-level, or second major study subjects.

Year 4 (Non-Honours)

At least 42 credit points of IACT400 level subjects.

If only 42 credit points of IACT400 level subjects are taken, then the extra 6 credit points must be taken from the list of additional subjects in accordance with course requirements.

Year 4 (Honours)

To be eligible for honours, candidates must satisfactorily complete IACT450 and IACT441 and at least 18 credit points of IACT400 level subjects. If only 42 credit points of IACT400 level subjects are taken, then the extra 6 credit points must be taken from the list of additional subjects in accordance with course requirements.

Entry to IACT441 will be based on overall academic performance, a written proposal, a weighted average mark (WAM) of at least 67.5 and approval from the Head of School. A grade of 75% or better in IACT441 is required for entry to IACT450. Students should refer to the University Course Rules for calculations of WAMs.

BlinfoTech - Telecommunication

(only available to candidates with UAC code 754113 offer)

Year 1

CSCI111	Computer Science 1A	6
ECTE101	Electrical Engineering 1	6
CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
STAT131	Understanding Variation and Uncertainty	6
PHYS142	Fundamentals of Physics B	6

And either

MATH187	Mathematics 1A Part 1	6
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and

MATH188	Mathematics 1A Part 2	6
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or

MATH141	Mathematics 1C Part 1	6
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and

MATH142	Mathematics 1C Part 2	6
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* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with another 6cp 100 level subject from the Additional Subjects List.

Year 2

CSCI131	Introduction to Computer Systems	6
ECTE233	Digital Hardware 1	6
IACT201	Information Technology and Citizens' Rights	6

IACT202	The Structure and Organisation of Telecommunications	6
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ECTE333	Digital Hardware 2	6
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Plus 6 cp at 100 level subjects and at least 12 credit points from the additional subjects list at 200-level or second major study subjects.

Year 3

ECTE363	Communication Theory	6
IACT302	Corporate Network Planning	6
ECTE364	Telecommunication Networks	6
IACT301	Information and Communication Security Issues	6

Plus at least 24 credit points from the additional subjects list of which at least 12 credit points must be at 300-level, or second major study subjects

Year 4 (Non-Honours)

At least 42 credit points of IACT400 level subjects.

If only 42 credit points of IACT400 level subjects are taken, then the extra 6 credit points must be taken from the list of additional subjects in accordance with course requirements.

Year 4 (Honours)

To be eligible for honours, candidates must satisfactorily complete IACT450 and IACT441 and at least 18 credit points of IACT400 level subjects. If only 42 credit points of IACT400 level subjects are taken, then the extra 6 credit points must be taken from the list of additional subjects in accordance with course requirements.

Entry to IACT441 will be based on overall academic performance, a written proposal, a weighted average mark (WAM) of at least 67.5 and approval from the Head of School. A grade of 75% or better in IACT441 is required for entry to IACT450. Students should refer to the University Course Rules for calculations of WAMs.

BlinfoTech - Business Information Systems

(only available to candidates with UAC code 754111 offer)

Year 1

BUSS111	Business Programming I	6
CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
STAT131	Understanding Variation and Uncertainty	6

Plus 24 credit points at 100-level from the Additional Subjects List or second major study subjects.

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with another 6cp 100 level subject from the Additional Subjects List.

Year 2

BUSS211	Requirements Determination and Systems Analysis	6
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BUSS212	Database Management Systems	6
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BUSS214	Business Programming II	6
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IACT201	Information Technology and Citizens' Rights	6
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IACT202	The Structure and Organisation of Telecommunications	6
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Plus at least 18 credit points from the Additional Subjects List, of which at least 12 credit points must be at 200-level, or second major study subjects. If a second major is not attempted, then BUSS218 Systems Design & Architecture is strongly recommended as an elective.

Year 3

BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6
BUSS317	Business Programming IV	6
or		
BUSS308	Computer Systems Management	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6

Plus at least 12 credit points of either 200- or 300-level subjects from the Additional Subjects List or second major study subjects

Year 4 (Non- Honours)

At least 42 credit points of IACT400 level subjects.

If only 42 credit points of IACT400 level subjects are taken, then the extra 6 credit points must be taken from the list of additional subjects in accordance with course requirements.

Year 4 (Honours)

To be eligible for honours candidates must satisfactorily complete IACT450 and IACT441 and at least 18 credit points of IACT 400 level subjects.

If only 42 credit points of IACT400 level subjects are taken, then the extra 6 credit points must be taken from the list of additional subjects in accordance with course requirements.

Entry to IACT441 will be based on overall academic performance, a written proposal, a weighted average mark (WAM) of at least 67.5 and approval from the Head of School. A grade of 75% or better in IACT441 is required for entry to IACT450. Students should refer to the University Course Rules for calculations of WAMs.

Marketing Combined Major Study (ITEE, ITBE, ITCE OR ITDE)

In order to take a Combined Major study with Marketing, students must complete the subjects in Program ITE, ITB, ITC or ITD plus the following subjects:

Compulsory Subjects

MARK101	Introduction to Marketing	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6

Plus two subjects (12 credit points) from the following:

MARK240	Marketing and Consumer Behaviour in East and South East Asia	6
MARK270	Services Marketing	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6

MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

Data Analysis Combined Major study (ITEF, ITBF, ITCF OR ITDF)

In order to take a Combined Major study with Data Analysis, students must complete the subjects in Program ITE, ITB, ITC or ITD plus the following subjects:

Year 1

MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
STAT131	Understanding Variation and Uncertainty	6

Year 2

STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6
MATH203	Linear Algebra	6

Year 3

STAT332	Multiple Regression and Time Series	6
STAT335	Sample Surveys and Experimental Design	6
STAT304	Operations Research and Applied Probability	6

and either MATH203 or MATH262

Modelling Combined Major study (ITEG, ITBG, ITCG OR ITDG)

In order to take a Combined Major study with Modelling, students must complete the subjects in Program ITE, ITB, ITC or ITD plus the following subjects:

Year 1

MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
STAT131	Understanding Variation and Uncertainty	6

Year 2

MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH212	Applied Mathematical Modelling 2	6

Year 3

MATH302	Differential Equations 3	6
MATH312	Applied Mathematical Modelling 3	6
MATH313	Industrial Mathematical Modelling	6

Electronic Commerce Combined Major study (ITEH, ITBH, ITCH OR ITDH)

In order to take a Combined Major study with Electronic Commerce, students must complete the subjects in Program ITE, ITB, ITC or ITD together with the following:

IACT303;

18 credit points of 200 level Electronic Commerce subjects;

18 credit points of 300 level Electronic Commerce subjects; and

6 credit points of 400 level Electronic Commerce subjects.

Course Structures

Electronic Commerce (EC) Subjects

ACCY231	Information Systems in Accounting	6	CSCI204	Programming: The C Family and Unix	6
ACCY332	Advanced Information Systems in Accounting	6	CSCI205	Development Methods and Tools	6
ACCY335	Systems Analysis and Design in Accounting and Finance	6	CSCI212	Operating Systems	6
FIN353	Global Electronic Finance	6	CSCI213	Java Programming and The Internet	6
BUSS211	Requirements Determination and Systems Analysis	6	CSCI214	Distributed Systems	6
BUSS212	Database Management Systems	6	CSCI235	Databases	6
BUSS311	Advanced Database Management Systems	6	CSCI236	3D Modelling and Animation	6
BUSS312	Distributed Information Systems	6	CSCI311	Software Process Management	6
CSCI213	Java Programming and the Internet	6	CSCI313	Professional Programming Practices	6
CSCI214	Distributed Systems	6	CSCI315	Database design and Implementation	6
CSCI236	3D Modelling and Animation	6	CSCI321	Software Project	12
CSCI311	Software Process Management	6	CSCI322	Systems Administration	6
CSCI361	Computer Security	6	CSCI325	Software Engineering Formal Methods	6
CSCI399	Server Technology	6	CSCI333	Compilers	6
ECON230	Quantitative Analysis for Decision Making II	6	CSCI334	Interfacing and Real Time Programming	6
ECON312	Industrial Economics	8	CSCI336	Computer Graphics	6
ECON319	Electronic Commerce and the Economics of Information	6	CSCI337	organisation of Programming Languages	6
IACT201	Information Technology and Citizens' Rights	6	CSCI361	Computer Security	6
IACT406	Strategic eBusiness Solutions	6	CSCI399	Server Technology	6
IACT417	Information Management	6	ECON101	Macroeconomic Essentials for Business	6
IACT419	Online Information Services	6	ECON111	Introductory Microeconomics	6
LAW210	Contract Law	6	ECON215	Microeconomic Theory and Policy	8
LAW317	E-Commerce Law	6	ECON319	Electronic Commerce and the Economics of Information	8
LAW331	Intellectual Property Law	6	EDUE313	Interactive Multimedia by Design	6
MARK301	Marketing on the Internet	6	EDUE314	Interactivity and The Web	6
MGMT200	Management and Electronic Business	6	EDUE413	Managing Multimedia Resources	6
MGMT300	Innovation and Electronic Commerce	6	EDUE414	Cognition, Interface and Interactivity	6
			ECTE101	Electrical Engineering 1	6
			ECTE195	Design and Management	6
			ECTE196	Internet Technology 1	6
			ECTE233	Digital Hardware I	6
			ECTE291	Internet Systems	6
			ECTE292	Internet Technology II	6
			ECTE333	Digital Hardware II	6
			ECTE363	Communication Theory	6
			ECTE364	Telecommunications Networks 1	6
			ECTE491	Computer Architectures	6
			ELS151	Introduction to English for Academic Purposes: Second Language Perspective	6
			ELS152	English Language Studies	6
			ELS161	English for Academic Purposes: First Language Perspective	6
			IACT303	World Wide Networking	6
			IACT304	eBusiness Fundamentals*	6
			IACT305	eBusiness Technologies*	6
			LAW100	Law in Society	6
			LAW210	Contract Law	6
			LAW331	Intellectual Property Law	6
			LAW348	Media Law	6
			MATH121	Discrete Mathematics	6
			MATH122	Probability and Logic	6
			MATH141	Mathematics 1C Part 1	6
			MATH142	Mathematics 1C Part 2	6
			MATH161	Mathematics 1E Part 1	6
			MATH162	Mathematics 1E Part 2	6
			MATH187	Mathematics 1A Part 1	6
			MATH188	Mathematics 1A Part 2	6
			MATH201	Multivariate and Vector Calculus	6
			MATH202	Differential Equations 2	6
			MATH203	Linear Algebra	6
			MATH212	Applied Mathematical Modelling 2	6
			MATH302	Differential Equations 3	6
			MATH312	Applied Mathematical Modelling 3	6
			MATH313	Industrial Mathematical Modelling	6
			MGMT102	Business Communications	6

Additional Subjects List for BInfoTech (all majors)

ACCY100	Accounting I A	6			
ACCY102	Accounting I B	6			
ACCY231	Information Systems in Accounting	6			
ACCY380	Accounting for Information Technology	6			
BUSS102	Computer Systems	6			
BUSS111	Business Programming I (not to count with CSCI111)	6			
BUSS201	User-Centered Business Programming	6			
BUSS211	Requirements Determination and Systems Analysis	6			
BUSS212	Database Management Systems	6			
BUSS213	Multimedia in Organisations	6			
BUSS214	Business Programming II	6			
BUSS215	Business Programming III	6			
BUSS218	Systems Design and Architecture	6			
BUSS308	Computer Systems Management	6			
BUSS311	Advanced Database Management Systems	6			
BUSS312	Distributed Information Systems	6			
BUSS315	Knowledge-Based Information Systems	6			
BUSS316	Information Systems Development Methodologies	6			
BUSS317	Business Programming IV	6			
CCS105	Introduction to Communications and Cultural Studies	6			
CCS109	Communication, Media and Society	6			
CSCI111	Computer Science IA (not to count with BUSS111)	6			
CSCI112	Fundamentals of Computer Science	6			
CSCI121	Computer Science IB	6			
CSCI131	Introduction to Computer Systems	6			
CSCI203	Data Structures, Algorithms, Systems	6			

MGMT110	Introduction to Management	6	IACT432	Special Topics in Information and Communication Technology - B	6
MGMT200	Management and Electronic Business	6	IACT433	Special Topics in Telecommunications Issues	6
MGMT201	Organisational Behaviour	6	IACT441	IT Research Methodology	6
MGMT202	Management of Change	6	IACT450	Research Report	18
MGMT220	Organisational Analysis	6	CSCI407	Corba & Enterprise Java	6
MGMT300	Innovation and Electronic Commerce	6	CSCI408	Distributed Java	6
MGMT314	Business Policy	6	CSCI425	Topics in Software Engineering	6
MGMT321	Management of Occupational Health and Safety	6	CSCI444	Perception and Planning	6
MGMT351	Business Ethics	6	CSCI445	Parallel Computing	6
MGMT398	Human Resource Management	6	CSCI446	Multi-media Studies	6
MARK101	Introduction to Marketing	6	CSCI450	Software Engineering Requirements and Specifications	6
MARK217	Consumer Behaviour	6	CSCI457	Advanced Topics in Database Management	6
MARK270	Services Marketing	6	CSCI463	Advanced Computer Graphics	6
MARK301	Marketing on the Internet	6	CSCI464	Neural Computing	6
MARK317	Business to Business Marketing	6	CSCI465	Design and Analysis of Algorithms	6
MARK343	International Marketing	6	CSCI466	Coding for Secure Communication	6
MARK344	Marketing Strategy	6	CSCI467	Complexity Theory	6
MARK356	New Product Marketing	6	CSCI468	Network Security	6
MARK359	Sales Management	6	CSCI471	Advanced Computer Security	6
MARK397	Retail Marketing Management	6	INFO411	Data Mining & Knowledge Discovery	6
PHYS142	Fundamentals of Physics B	6	INFO412	Mathematics for Cryptography	6
POL111	Introduction to Politics	6	INFO413	Information Theory	6
POL224	Politics and the Media	8	ITCS429	Concept and Issues in Healthcare Computing	6
POL225	International Relations: An Introduction	8	ITCS430	Introduction to Health Informatics	6
SOC241	Culture and Communication	8	ITCS431	Advanced Web Application Development	6
STAT131	Understanding Variation and Uncertainty	8	ITCS432	Web Design	6
STAT231	Probability and Random Variables	6	ITCS436	Detailed Design of Integrated Solutions for eBusiness	6
STAT232	Estimation and Hypothesis Testing	6	ITCS437	Security, Risk Management and Control in Electronic Commerce	6
STAT332	Multiple Regression And Time Series	6	ITCS450	Patterns for eBusiness	6
STAT304	Operations Research and Applied Probability	6	ITCS451	Web Services for Dynamic eBusiness	6
STS100	Social Aspects of Science and Technology	6			
STS116	Environment in Crisis: Technology and Society	6			
STS221	Technology in Society: East and West	6			
STS228	Computers in Society II	8			
STS241	Information and Communication Theory	6			

Note: Not all subjects available every year.

or any subject approved by the Head of School

* Students may not attempt both IACT304 and IACT305.

IACT 400 level Subjects

(pre-requisites for all 400-level subjects is a minimum of 24 credit points at 300-level)

IACT401	IT Strategic Planning	6
IACT402	Applied Project Management	6
IACT403	Human Computer Interface	6
IACT404	International Telecommunications Policy Issues	6
IACT405	Information Technology and Innovation	6
IACT406	Strategic eBusiness Solutions	6
IACT416	Organisational Issues in Information Technology	6
IACT417	Information Management	6
IACT418	Corporate Network Management	6
IACT419	On-Line Information Services	6
IACT422	Case Studies in Information Technology Applications	6
IACT424	Corporate Network Design and Implementation	6
IACT426	Information Society, Knowledge Work and Information Technology	6
IACT430	Special Topics in Information and Communication Technology	6
IACT431	Special Topics in Information and Communication Technology - A	6

Bachelor of Information Technology

This three-year full-time degree is designed for offshore delivery. Entry into Year 2 or 3 (on-shore Wollongong Campus) is possible for students who have completed a recognised off-shore program, or who have at least 48 credit points of appropriate advanced standing, including specified credit for all Year 1 core subjects, from another recognised institution.

The degree has two major studies: Information Systems and Computing.

Course requirements

To qualify for the award of the degree of Bachelor of Information Technology, candidates must satisfactorily complete at least 144 credit points as set out in one of the course structures below. Note that no more than 24 credit points (ie 1/6) of subjects can be at PC grade.

Course Structure

Year 1 -(not available onshore) both Majors

CSCI101	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
MATH122	Probability and Logic	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6

Course Structures

Plus 18 credit points at 100-level chosen from the BIT electives Schedule or the UOW General Schedule.

Year 2 - Computing Major study

CSCI204	Programming: The C Family and Unix	6
IACT201	Information Technology and Citizens Rights	6
CSCI212	Operating Systems	6
CSCI213	Java Programming and the Internet	6
CSCI205	Development Methods and Tools	6
CSCI235	Databases	6
IACT202	The Structure and Organisation of Telecommunications	6

Plus 6 credit points at 100- or 200-level chosen from the BIT Elective Schedule.

Year 3 - Computing Major study

CSCI321	Project	12
CSCI311	Software Process Management	6
IACT302	Corporate Network Planning	6
CSCI315	Database Design and Implementation	6
IACT301	Information and Communication Security Issues	6

Plus 12 credit points at 200- or 300-level chosen from the BIT Elective Schedule.

Year2 - Information Systems Major study

BUSS201	User-Centred Business Programming	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS214	Business Programming II	6
IACT201	Information Technology and Citizens' Rights	6
BUSS212	Database Management Systems	6
BUSS213	Multimedia in Organisations	6
BUSS215	Business Programming III	6
IACT202	The Structure and Organisation of Telecommunications	6

Year 3 - Information Systems Major study

BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS315	Knowledge-Based Information Systems	6
IACT302	Corporate Network Planning	6
BUSS316	Information Systems Development Technologies	6
BUSS317	Business Programming IV	6
BUSS318	Information Systems Project	6
IACT301	Information and Communication Security Issues	6

BIT Electives Schedule

BUSS201	User-Centred Business Programming	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS213	Multimedia in Organisations	6
BUSS214	Business Programming II	6
BUSS215	Business Programming III	6
BUSS218	Systems Design and Architecture	6
BUSS308	Computer Systems Management	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS315	Knowledge-Based Information Systems	6
BUSS316	Information Systems Development Technologies	6
BUSS317	Business Programming IV	6
BUSS318	Information Systems Project	6
CSCI112	Fundamentals of Computer Science	6
CSCI131	Introduction to Computer Systems	6

CSCI203	Data Structures, Algorithms, Systems	6
CSCI204	Programming: The C Family and Unix	6
CSCI205	Development Methods and Tools	6
CSCI212	Operating Systems	6
CSCI213	Java Programming and the Internet	6
CSCI214	Distributed Systems	6
CSCI214	Distributed Systems	6
CSCI235	Databases	6
CSCI236	3D Modelling and Animation	6
CSCI311	Software Process Management	6
CSCI315	Database Design and Implementation	6
CSCI322	Systems Administration	6
CSCI324	Human Computer Interface	6
CSCI325	Software Engineering Formal Methods	6
CSCI334	Interface Real Time Programming	6
CSCI336	Computer Graphics	6
CSCI361	Computer Security	6
CSCI399	Server Technology	6
IACT201	Information Technology and Citizens Rights	6
IACT202	The Structure and Organisation of Telecommunications	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6
IACT303	World Wide Networking	6

Bachelor of Internet Science and Technology

The Bachelor of Internet Science and Technology (BIST) course has four major study areas:

- A Internet Technology
- B Internet Applications
- C Internet Commerce
- D Internet Science

Course Requirements

To be eligible for the award of the degree of Bachelor of Internet Science and Technology, candidates must:

- a) satisfactorily complete at least 144 credit points of subjects prescribed in one of the majors listed below
- b) undertake no more than 60 credit points at 100-level
- c) undertake at least 36 credit points at 300-level

Sequence of Subjects

The programs listed below are guidelines as to how best to proceed through the course. Subjects can be undertaken in a different order, however all subjects must be successfully completed to be awarded the degree.

A Internet Technology

Year 1 - Core

CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE195	Design and Management	6
ECTE196	Internet Technology 1	6

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with the following subject:

ECTE191 WWW Engineering 6

Students must choose one of the following subjects:

MATH122 Probability and Logic 6
STAT131 Understanding Variation and Uncertainty 6

One of the following subjects is recommended, but may be replaced by an approved BIST Year 1 Elective subject:

MATH141 Mathematics 1C Part 1 6
MATH161 Mathematics 1E Part 1 6
MATH187 Mathematics 1A Part 1 6

Year 1 - Electives

ACCY100 Accounting 1A 6
ACCY102 Accounting 1B 6
CSCI131 Introduction to Computer Systems 6
ECON101 Macroeconomic Essentials for Business 6
ECON111 Introductory Micro Economics 6
LAW100 Law in Society 6
MARK101 Introduction to Marketing 6
MATH151 General Mathematics 1A 6
MGMT110 Introduction to Management 6

Year 2

CSCI213 Java Programming and the Internet 6
ECTE233 Digital Hardware I 6
ECTE291 Internet Systems 6
ECTE292 Internet Technology 2 6
INFO202 Project 6

Plus three Year 2 Electives (18 credit points).

Year 2 - Electives

CSCI204 Programming: the C Family and Unix 6
CSCI214 Distributed Systems 6
CSCI235 Databases 6
DESN211 Introduction to Web Design 6
DESN212 Advanced Web Design 6
IACT201 Information Technology and Citizens' Rights 6
IACT202 The Structure and Organisation of Telecommunications 6
MATH141 Mathematics 1C Part 1 6
MATH161 Mathematics 1E Part 1 6
MATH187 Mathematics 1A Part 1 6
STAT252 Statistics for the Natural Sciences 6

Year 3

ECTE333 Digital Hardware 2 6
ECTE364 Telecommunication Networks 1 6
ECTE392 Wireless Internet 6
IACT303 World Wide Networking 6

Students must choose one of the following subjects:

CSCI399 Server Technology 6
ECTE281 Embedded Internet Systems 6

Plus three Year 3 Elective subjects, or a combination of INFO303, ECTE391 and/or Year 3 elective subjects to equal 18 credit points.

Students with a WAM of 70 + at 200 level are strongly recommended to take:

INFO303 Advanced Project 12

Students with a WAM of 70 + at 200 level may choose to take:

ECTE391 Internet Technology Project 6

Year 3 - Electives

CSCI311 Software Process Management 6
CSCI313 Object oriented Programming 6
CSCI315 Database Design and Implementation 6
CSCI324 Human Computer Interface 6
CSCI361 Computer Security 6
CSCI446 Multimedia Studies 6
DESN321 New Media Theory 6

ECTE301 Digital Signal Processing 1 6

ECTE363 Communication Theory 6

IACT302 Corporate Network Planning 6

IACT406 Strategic eBusiness Solutions 6

ITCS432 Web Design 6

Note that because of pre-requisites, some third year electives are dependent on the choice of electives at second year.

B Internet Applications

Year 1

CSCI101* Introduction to Information Technology A 6
CSCI102 Introduction to Information Technology B 6
CSCI111 Computer Science 1A 6
CSCI121 Computer Science 1B 6
ECTE195 Design and Management 6
ECTE196 Internet Technology 1 6
MATH122 Probability and Logic 6

Plus one Year 1 Elective subject.

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with a 6cp Year 1 Elective subject.

Year 1 - Electives

ACCY100 Accounting 1A 6
ACCY102 Accounting 1B 6
CSCI131 Introduction to Computer Systems 6
ECON101 Macroeconomic Essentials for Business 6
ECON111 Introductory Micro-Economics 6
ECTE191 WWW Engineering 6
LAW100 Law in Society 6
MARK101 Introduction to Marketing 6
MATH151 General Mathematics 1A 6
MGMT110 Introduction to Management 6

Year 2

CSCI213 Java Programming and the Internet 6
ECTE291 Internet Systems 6
IACT201 Information Technology and Citizens' Rights 6
INFO202 Project 6

Plus four Year 2 Elective subjects.

Course Structures

Year 2 - Electives

CSCI204	Programming: The C Family and Unix	6
CSCI205	Development Methods and Tools	6
CSCI214	Distributed Systems	6
CSCI235	Databases	6
DESN211	Introduction to Web Design	6
DESN212	Advanced Web Design	6
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE233	Digital Hardware 1	6
ECTE281	Embedded Internet Systems	6
ECTE292	Internet Technology 2	6
IACT202	The Structure and Organisation of Telecommunications	6
STAT252	Statistics for the Natural Sciences	6

Note that the availability of electives in Year 3 depends on the choices made in Year 2. To have maximum flexibility it is recommended that students choose CSCI204.

Year 3

IACT303	World Wide Networking	6
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Plus seven Year 3 Elective subjects, or five Year 3 Elective subjects if students complete INFO303.

Students with a WAM of 70+ at 200 level are strongly recommended to take:

INFO303	Advanced Project	12
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Year 3 - Electives

CSCI212	Operating Systems	6
CSCI311	Software Process Management	6
CSCI315	Database Design and Implementation	6
CSCI322	Systems Administration	6
CSCI324	Human Computer Interface	6
CSCI336	Computer Graphics	6
CSCI399	Server Technology	6
CSCI407	Corba & Enterprise Java	6
CSCI408	Distributed Java	6
CSCI446	Multimedia Studies	6
DESN311	Interactive Multimedia Design	6
ECTE333	Digital Hardware 2	6
ECTE364	Telecommunications Networks 1	6
ECTE392	Wireless Internet	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6
IACT304	eBusiness Fundamentals*	6
IACT305	eBusiness Technologies*	6
IACT406	Strategic eBusiness Solutions	6
ITCS432	Web Design	6
ITCS450	Patterns for eBusiness	6
ITCS451	Web Services for Dynamic eBusiness	6

*Students may not attempt both IACT304 and IACT305.

C Internet Commerce

Students enrolling in this major may need to make a choice about 3rd year electives during the first year. If they wish to study 300 level Accounting or Finance subjects, then they must study both ACCY100 and ACCY102 in the first year and FIN221 and/or ACCY231 in the second year.

In the standard program (see below) this would be possible only for students who are exempt from CSCI101 or who are willing to study in summer session (for example CSCI121).

Accordingly a modified program is also presented. This has the disadvantage of restricting some of the choices of CSCI subjects at 300 level.

Year 1 (Standard Program)

CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE195	Design and Management	6
ECTE196	Internet Technology 1	6
STAT131	Understanding Variation and Uncertainty	6

Plus one Year 1 Elective subject.

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with a 6cp Year 1 Elective subject.

Year 1 - Electives

ACCY100	Accounting 1A	6
ACCY102	Accounting 1B	6
CSCI131	Introduction to Computer Systems	6
ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Micro-Economics	6
ECTE191	WWW Engineering	6
LAW100	Law in Society	6
MARK101	Introduction to Marketing	6
MATH151	General Mathematics 1A	6
MGMT110	Introduction to Management	6

Year 2 (Standard Program)

CSCI213	Java Programming and the Internet	6
ECTE291	Internet Systems	6
IACT201	Information Technology and Citizens' Rights	6
INFO202	Project	6

Plus 4 Year 2 Elective subjects.

Year 2 - Electives

FIN221	Business Finance 1	6
ACCY231	Information Systems in Accounting	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS213	Multimedia in Organisations	6
CSCI204	Programming: The C Family and Unix	6
CSCI205	Development Methods and Tools	6
CSCI214	Distributed Systems	6
CSCI235	Databases	6
DESN211	Introduction to Web Design	6
DESN212	Advanced Web Design	6
ECTE281	Embedded Internet Systems	6
IACT202	The Structure and Organisation of Telecommunications	6
LAW210	Contract Law	6
MGMT200	Management and Electronic Business	6
STAT252	Statistics for the Natural Sciences	6

Year 3 (Standard Program)

IACT303	World Wide Networking	6
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Plus at least one of:

CSCI446	Multimedia Studies	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6
IACT406	Strategic eBusiness Solutions	6

Plus six Year 3 Elective subjects, or five Year 3 Elective subjects if students complete INFO303.

Students with a WAM of 70+ at 200 level are strongly recommended to take:

INFO303	Advanced Project	12
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Year 3 - Electives

ACCY332	Advanced Information Systems in Accounting	6
ACCY335	System Analysis and Design in Accounting and Finance	6
FIN353	Global Electronic Finance	6
BUSS308	Computer Systems Management	6
BUSS312	Distributed Information Systems	6
COMM300	Innovation and Electronic Commerce	6
CSCI311	Software Process Management	6
CSCI315	Database Design and Implementation	6
CSCI324	Human Computer Interface	6
CSCI336	Computer Graphics	6
CSCI399	Server Technology	6
CSCI407	Corba & Enterprise Java	6
CSCI408	Distributed Java	6
CSCI446	Multimedia Studies	6
DESN311	Interactive Multimedia Design	6
ECON319	Electronic Commerce and the Economics of Information	6
ECTE392	Wireless Internet	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6
IACT304	eBusiness Fundamentals*	6
IACT305	eBusiness Technologies*	6
IACT406	Strategic eBusiness Solutions	6
ITCS432	Web Design	6
ITCS450	Patterns for eBusiness	6
ITCS451	Web Services for Dynamic eBusiness	6
LAW331	Intellectual Property Law	6
MARK301	Marketing on the Internet	6

*Students may not attempt both IACT304 and IACT305.

The following modified program is designed to allow easy access to 300 level Accounting or Finance subjects.

Year 1 (Modified Program)

ACCY100	Accounting 1A	6
ACCY102	Accounting 1B	6
CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
ECTE195	Design and Management	6
ECTE196	Internet Technology 1	6
STAT131	Understanding Variation and Uncertainty	6

Plus one Year 1 Elective subject.

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with a 6cp Year 1 Elective subject.

Year 1 - Electives

ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Micro-Economics	6
ECTE191	WWW Engineering	6
LAW100	Law in Society	6
MARK101	Introduction to Marketing	6
MATH151	General Mathematics 1A	6
MGMT110	Introduction to Management	6

Year 2 (Modified Program)

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE291	Internet Systems	6
IACT201	Information Technology and Citizens' Rights Project	6
INFO202	Project	6

Plus three Year 2 Elective subjects.

Year 2 - Electives

FIN221	Business Finance 1	6
ACCY231	Information Systems in Accounting	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS213	Multimedia in Organisations	6
DESN211	Introduction to Web Design	6
DESN212	Advanced Web Design	6
ECTE281	Embedded Internet Systems	6
IACT202	The Structure and Organisation of Telecommunications	6
LAW210	Contract Law	6
MGMT200	Management and Electronic Business	6
STAT252	Statistics for the Natural Sciences	6

Note that students must choose one or both FIN221 and ACCY231 in order to study ACCY or FIN subjects at 300 level.

Year 3 (Modified Program)

CSCI213	Java Programming and the Internet	6
IACT303	World Wide Networking	6

Plus at least one of:

CSCI446	Multimedia Studies	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6
IACT406	Strategic eBusiness Solutions	6

Plus five Year 3 Elective subjects, or three Year 3 Elective subjects if students complete INFO303.

Students with a WAM of 70+ at 200 level are strongly recommended to take:

INFO303	Advanced Project	12
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Year 3 - Electives

ACCY332	Advanced Information Systems in Accounting	6
ACCY335	System Analysis and Design in Accounting and Finance	6
FIN353	Global Electronic Finance	6
BUSS308	Computer Systems Management	6
BUSS312	Distributed information Systems	6
CSCI204	Programming: The C Family and Unix	6
CSCI205	Development Methods and Tools	6
CSCI214	Distributed Systems	6
CSCI235	Databases	6

Course Structures

CSCI311	Software Process Management	6	CSCI205	Development Methods and Tools	6
CSCI315	Database Design and Implementation	6	CSCI214	Distributed Systems	6
CSCI324	Human Computer Interface	6	CSCI235	Databases	6
CSCI336	Computer Graphics	6	DESN211	Introduction to Web Design	6
CSCI399	Server Technology	6	DESN212	Advanced Web Design	6
CSCI407	Corba & Enterprise Java	6	ECTE281	Embedded Internet Systems	6
CSCI408	Distributed Java	6	IACT202	The Structure and Organisation of Telecommunications	6
CSCI446	Multimedia Studies	6	MATH121	Discrete Mathematics	6
DESN311	Interactive Multimedia Design	6	MATH201	Multivariate and Vector Calculus	6
ECON319	Electronic Commerce and the Economics of Information	6	MATH204	Complex Variables and Group Theory	6
IACT301	Information Communication Security Issues	6	MATH222	Continuous and Finite Mathematics	6
IACT302	Corporate Network Planning	6	STAT131	Understanding Variation and Uncertainty	6
IACT304	eBusiness Fundamentals*	6	STAT232	Estimation and Hypothesis Testing	6
IACT305	eBusiness Technologies*	6	STAT252	Statistics for the Natural Sciences	6
IACT406	Strategic eBusiness Solutions	6			
ITCS432	Web Design	6	Year 3		
ITCS450	Patterns for eBusiness	6	IACT303	World Wide Networking	6
ITCS451	Web Services for Dynamic eBusiness	6	IACT413	Information Theory	6
LAW331	Intellectual Property Law	6			
MARK301	Marketing on the Internet	6			
MGMT300	Innovation and Electronic Commerce	6			

*Students may not attempt both IACT304 and IACT305.

D Internet Science

Year 1

CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE195	Design and Management	6
ECTE196	Internet Technology 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with a 6cp Year 1 Elective subject.

Year 1 – Electives

ACCY100	Accounting 1A	6
ACCY102	Accounting 1B	6
CSCI131	Introduction to Computer Systems	6
ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Micro-Economics	6
ECTE191	WWW Engineering	6
LAW100	Law in Society	6
MARK101	Introduction to Marketing	6
MGMT110	Introduction to Management	6

Year 2

CSCI213	Java Programming and the Internet	6
ECTE291	Internet Systems	6
IACT201	Information Technology and Citizens' Rights	6
INFO202	Project	6
STAT231	Probability and Random Variables	6

Plus 4 Year 2 Elective subjects.

Year 2 - Electives

CSCI204	Programming: The C Family and Unix	6
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CSCI205	Development Methods and Tools	6
CSCI214	Distributed Systems	6
CSCI235	Databases	6
DESN211	Introduction to Web Design	6
DESN212	Advanced Web Design	6
ECTE281	Embedded Internet Systems	6
IACT202	The Structure and Organisation of Telecommunications	6
MATH121	Discrete Mathematics	6
MATH201	Multivariate and Vector Calculus	6
MATH204	Complex Variables and Group Theory	6
MATH222	Continuous and Finite Mathematics	6
STAT131	Understanding Variation and Uncertainty	6
STAT232	Estimation and Hypothesis Testing	6
STAT252	Statistics for the Natural Sciences	6

Year 3

IACT303	World Wide Networking	6
IACT413	Information Theory	6

Plus six Year 3 Elective subjects, or four Year 3 Elective subjects if students complete INFO303.

Students with a WAM of 70+ at 200 level are strongly recommended to take:

INFO303	Advanced Project	12
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Year 3 - Electives

CSCI311	Software Process Management	6
CSCI315	Database Design and Implementation	6
CSCI324	Human Computer Interface	6
CSCI336	Computer Graphics	6
CSCI399	Server Technology	6
CSCI407	Corba & Enterprise Java	6
CSCI408	Distributed Java	6
CSCI446	Multimedia Studies	6
DESN311	Interactive Multimedia Design	6
ECTE363	Communication Theory	6
IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6
IACT304	eBusiness Fundamentals*	6
IACT305	eBusiness Technologies*	6
IACT406	Strategic eBusiness Solutions	6
INFO412	Mathematics for Cryptography	6
ITCS432	Web Design	6
ITCS450	Patterns for eBusiness	6
ITCS451	Web Services for Dynamic eBusiness	6
MATH203	Linear Algebra	6
MATH372	Special Topics in Mathematical Analysis 3	6

*Students may not attempt both IACT304 and IACT305.

Bachelor of Internet Science and Technology (Honours)

Candidates who achieve a credit average or better in the Bachelor of Internet Science and Technology are eligible to enrol in an additional year's study towards a Bachelor of Internet Science and Technology (Honours) (BIST(Hons)).

To qualify for the award of Bachelor of Internet Science and Technology (Honours), candidates must complete BIST400. The level of honours awarded at the completion of the course is determined in accordance with the University Course Rule 8.4(2).

The program of study for BIST(Hons), (i.e., BIST400 Internet Science & Technology IV Honours) is 48 credit points and will normally include:

1. an 18 credit point project; and
2. 30 credit points of coursework. This coursework component will consist of individual subjects, including:
 - (a) a research methodology subject, as determined by the Course Coordinator and
 - (b) other subjects, of which 18 credit points must be at 400 level, as approved by the Course Coordinator.

Note: Individual results for the coursework subjects attempted and the project will not be released.

Instead, the final result for BIST400 will be calculated by weighting the coursework and project components according to their credit point value.

Bachelor of Mathematics

Requirements

The following requirements for the Bachelor of Mathematics degree are to be read in conjunction with University Course Rule 108.

To qualify for the award of the degree of Bachelor of Mathematics, candidates must satisfactorily complete at least 144 credit points from either or both the subjects prescribed for the Bachelor of Mathematics and the General Schedule, including:

- 1) MATH187 Mathematics 1A Part 1 and MATH188 Mathematics 1A Part 2,
- 2) MATH111 Applied Mathematical Modelling 1 or MATH212 Applied Mathematical Modelling 2,
- 3) MATH121 Discrete Mathematics or MATH222 Continuous and Finite Mathematics,
- 4) STAT131 Understanding Variation and Uncertainty, or STAT231 Probability and Random Variables,
- 5) CSCI111 Computer Science 1A
- 6) each of the subjects
MATH201 Multivariate and Vector Calculus
MATH202 Differential Equations 2,
MATH203 Linear Algebra and
MATH204 Complex Variables and Group Theory,
- 7) at least one of the subjects
MATH212 Applied Mathematical Modelling 2
MATH222 Continuous and Finite Mathematics or
STAT231 Probability and Random Variables (not additional to 2. or 3. or 4.),
- 8) 300-level subjects from the Bachelor of Mathematics subjects with a value of at least
 - a) 36 credit points, or
 - b) 24 credit points, should a major study in Computer Science also be satisfactorily completed, or

c) 30 credit points, should any other major study also be satisfactorily completed,

9) within requirements 1. to 8., a major study in either Mathematics or Applied Statistics, and

10) no more than 60 credit points at the 100-level.

Bachelor of Mathematics Subjects

Set out below are those subjects referred to in Rule 108 which may be taken in the Bachelor of Mathematics degree.

100-Level

MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
MATH111	Applied Mathematical Modelling 1	6
MATH121	Discrete Mathematics	6

CSCI111	Computer Science 1A	6
STAT131	Understanding Variation and Uncertainty	6

200-Level

MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6
MATH212	Applied Mathematical Modelling 2	6
MATH222	Continuous and Finite Mathematics	6
STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6

300-Level

MATH302	Differential Equations 3	6
MATH305	Partial Differential Equations	6
MATH312	Applied Mathematical Modelling 3	6
MATH313	Industrial Mathematical Modelling	6
MATH316	Applied Dynamics	6
MATH317	Financial Calculus and Logistics	6
MATH321	Numerical Analysis	6
MATH322	Algebra	6
MATH323	Topology and Chaos	6
MATH324	Analysis	6
MATH371	Special Topics in Industrial and Applied Mathematics 3	6
MATH372	Special Topics in Mathematical Analysis 3	6
STAT304	Operations Research and Applied Probability	6
STAT332	Multiple Regression and Time Series	6
STAT333	Statistical Inference and Multivariate Analysis	6
STAT335	Sample Surveys and Experimental Design	6
STAT373	Special Topics in Probability and Statistics 3	6

400-Level

MATH401	Mathematics 4 (Honours)	48
STAT401	Statistics 4 (Honours)	48

Areas of Major Study

Within the Bachelor of Mathematics, a major study in either Mathematics or Applied Statistics can be combined with a major study in the following disciplines:

Computer Science
Economics
Accountancy
Business Systems
Management
Marketing

Course Structures

Finance

Biomedical Sciences

Candidates wishing to major in Mathematics and/or Applied Statistics and a discipline not listed above are advised to first consult with the Sub-Dean of the Faculty of Informatics for verification of their intended program.

Candidates may also study a major in the following areas of science, but this will necessitate completing more than the standard 144 credit points in the degree:

Biological Sciences

Chemistry

Geology

Human Geography

Physical Geography

Geoscience

Physics

Major Study in Mathematics (code MATH)

Major Study in Applied Statistics (code STAT)

Major Study in Mathematics and Applied Statistics (code MAST)

To satisfy the requirements for a major study in Mathematics, a student shall satisfactorily complete (at a grade of Pass or better) any MATH or STAT subjects listed below, to a total of at least 48 credit points; of which at least 18 credit points must be at 200 level and at least 24 credit points must be at 300 level.

To satisfy the requirements for a major study in Applied Statistics, a student shall satisfactorily complete (at a grade of Pass or better) any MATH or STAT subjects listed below, to a total of at least 48 credit points; of which at least 12 credit points must be at 200 level and must include STAT231 and STAT232; and at least 24 credit points must be of 300 level STAT subjects.

100-Level

MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
MATH111	Applied Mathematical Modelling 1	6
MATH121	Discrete Mathematics	6
STAT131	Understanding Variation and Uncertainty	6

200-Level

MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6
MATH212	Applied Mathematical Modelling 2	6
MATH222	Continuous and Finite Mathematics	6
STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6

300-Level

MATH302	Differential Equations 3	6
MATH305	Partial Differential Equations	6
MATH312	Applied Mathematical Modelling 3	6
MATH313	Industrial Mathematical Modelling	6
MATH316	Applied Dynamics	6
MATH317	Financial Calculus and Logistics	6
MATH321	Numerical Analysis	6
MATH322	Algebra	6
MATH323	Topology and Chaos	6

MATH324	Analysis	6
MATH371	Special Topics in Industrial and Applied Mathematics 3	6
MATH372	Special Topics in Mathematical Analysis 3	6
STAT304	Operations Research and Applied Probability	6
STAT332	Multiple Regression and Time Series	6
STAT333	Statistical Inference and Multivariate Analysis	6
STAT335	Sample Surveys and Experimental Design	6
STAT373	Special Topics in Probability and Statistics 3	6

400-Level

MATH401	Mathematics 4 (Honours)	48
STAT401	Statistics 4 (Honours)	48
INFO411	Data Mining and Knowledge Discovery	6
INFO412	Mathematics for Cryptography	6

Mathematics and Computer Science (code MA01)

Applied Statistics and Computer Science (code ST01)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Computer Science are advised of the following approved major study (48 credit points total) from within the School of Information Technology and Computer Science.

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
CSCI204	Programming: The C Family and Unix	6
either		
CSCI205	Development Methods and Tools	6
or		
CSCI203	Data Structures, Algorithms, Systems	6
CSCI321	Project	12

together with any other 12 credit points for 300-level Computer Science subjects.

Major study in Mathematics or Applied Statistics and Economics

Mathematics and Economics (code MA03)

Applied Statistics and Economics (code ST03)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Economics are advised of the following approved major study (52 credit points total) from within the School of Economics and Information Systems. Alternatively candidates may wish to consider enrolling in the Bachelor of Mathematics and Economics or the Bachelor of Mathematics and Finance.

ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
either		
ECON205	Macroeconomic Theory and Policy	8
or		
ECON215	Microeconomic Theory and Policy	8
ECON322	Mathematical Economics	8

Together with any 24 credit points of 300-level Economics subjects.

Major study in Mathematics or Applied Statistics and Econometrics

Mathematics and Econometrics (code MA04)

Applied Statistics and Econometrics (code ST04)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Econometrics are advised of the following approved major study (48 credit points total) from within the School of Economics and Information Systems.

ECON221	Econometrics	8
ECON231	Business Statistics and Forecasting	8
ECON228	Quantitative Analysis for Decision Making	8
ECON322	Mathematical Economics	8
ECON327	Advanced Econometrics	8

together with another 8 credit points of 300-level Economics subjects.

Major study in Mathematics or Applied Statistics and Accountancy

Mathematics and Accountancy (code MA05)

Applied Statistics and Accountancy (code ST05)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Accountancy are advised of the following approved major study (54 credit points total) from within the School of Accounting and Finance.

ACCY100	Accounting 1A	6
ACCY102	Accounting 1B	6
ACCY201	Financial Accounting 2B	6
ACCY202	Financial Accounting 2A	6
ACCY211	Management Accounting 2	6
ACCY302	Financial Accounting 3	12
ACCY312	Management Accounting 3	12

except that candidates may replace

a) either ACCY302 or ACCY312 by any 12 credit points 300-level ACCY subject, or

b) either ACCY302 or ACCY312 by a 6 credit point 300-level ACCY subject together with not less than 6 credit points at the 300-level selected from the General Schedule and approved by the Head of the School of Accounting and Finance.

Candidates are advised that further subjects must be taken to satisfy the requirements of the professional accounting bodies.

Major study in Mathematics or Applied Statistics and Business Systems

Mathematics and Business Systems (code MA06)

Applied Statistics and Business Systems (code ST06)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Business Systems are advised of the following approved major study (60 credit points total) from within the School of Economics and Information Systems.

BUSS110	Introduction to Business Information Systems	6
BUSS111	Business Programming I	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS214	Business Programming II	6
BUSS215	Business Programming III	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS316	Information Systems Development Methodologies	6
BUSS317	Business Programming IV	6
CSCI111	Computer Science 1A may substitute for BUSS111	

Major study in Mathematics or Applied Statistics and Management

Mathematics and Management (code MA12)

Applied Statistics and Management (code ST12)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Management are advised of the following approved major study (60 credit points total) from within the School of Management, Marketing and Employment Relations.

ACCY100	Accounting 1A	6
ACCY102	Accounting 1B	6
MGMT110	Introduction to Management	6
MGMT201	Organisational Behaviour	6
MARK101	Introduction to Marketing	6
MGMT314	Strategic Management	6
MGMT398	Human Resource Management	6

Plus 12 credit points of 300-level MGMT subjects.

Major study in Mathematics or Applied Statistics and Marketing

Mathematics and Marketing (code MA13)

Applied Statistics and Marketing (code ST13)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Marketing are advised of the following approved major study (48 credit points total) from within the School of Management, Marketing and Employment Relations.

MARK101	Introduction to Marketing	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK344	Marketing Strategy	6

Plus 12 credit points from the following:-

MARK240	Marketing and Consumer Behaviour in East and South East Asia	6
MARK270	Services Marketing	6
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK343	International Marketing	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6

MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

Major study in Mathematics or Applied Statistics and Finance

Mathematics and Finance (code MA14)

Applied Statistics and Finance (code ST14)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Finance are advised of the following approved major study (54 credit points total) from within the School of Accounting and Finance. Alternatively candidates may wish to consider enrolling in the Bachelor of Mathematics and Economics or the Bachelor of Mathematics and Finance.

ACCY100	Accounting 1A	6
ACCY102	Accounting 1B	6
FIN221	Business Finance 1	6
FIN223	Investment I	6
FIN322	Business Finance II	6
FIN323	Investments II	6

Plus 2 other 300-level subjects offered by the School of Accounting and Finance (eg. FIN324, FIN325, etc).

Major study in Mathematics or Applied Statistics and Biomedical Sciences

Mathematics and Biomedical Sciences (code MA15)

Applied Statistics and Biomedical Sciences (code ST15)

Candidates wishing to combine a major study in either Mathematics or Applied Statistics with a major study in Biomedical Sciences are advised of the following approved major study (54 credit points total) from within the Department of Biomedical Sciences.

BMS101	Systemic Anatomy	6
BMS112	Human Physiology 1: Principles and Systems	6
BMS202	Human Physiology 2: Control Mechanisms	6
BMS242	Exercise Physiology	6
BMS342	Advanced Exercise Physiology	8
BMS344	Cardiorespiratory Physiology	8

and either

BMS211	Foundations of Biomechanics	6
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or

BMS352	Fundamentals of Neuroscience	6
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and either

BMS341	Clinical Biomechanics	8
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or

BMS346	Motor Control and Dysfunction	8
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Major Studies in Mathematics/Statistics and Various Sciences

Students should refer to an Academic Adviser in the school of Maths and Applied Statistics for assistance with choice of subjects.

code MA07	Mathematics and Biology
code MA08	Mathematics and Chemistry
code MA02	Mathematics and Geography
code MA09	Mathematics and Geology
code MA10	Mathematics and Physics
code MA11	Mathematics and Ecology and Biogeography
code ST07	Applied Statistics and Biology
code ST08	Applied Statistics and Chemistry
code ST02	Applied Statistics and Geography
code ST09	Applied Statistics and Geology
code ST10	Applied Statistics and Physics
code ST11	Applied Statistics and Ecology and Biogeography

The Faculty suggests the following Undergraduate Degree programs for students wishing to undertake particular Mathematical careers:

The following information is intended as a guideline to the candidate in selecting suitable supplementary subjects to make a reasonable pattern for Mathematics degrees in the various fields of Mathematics.

All candidates are expected to consult with the School and Faculty advisers before committing themselves completely to any particular pattern, whether outlined below or not.

It is emphasised that the following programs are based on the usual 48 credit points per year, totalling 144 credit points over 3 years.

Industrial and Applied Mathematics (including Numerical Analysis)

First Year MATH187, MATH188, MATH111, MATH121, STAT131 and CSCI111 (and 12 other credit points possibly being PHYS141 and PHYS142)

Second Year MATH201, MATH202, MATH203, MATH204 and MATH212 (and 18 other credit points from the General Schedule, possibly including further Mathematics subjects)

Third Year MATH302, MATH305, and at least 2 of MATH312, MATH313, MATH316, MATH317 and MATH321 (and up to 12 other credit points from the Mathematics Schedule, and 12 other credit points)

Mathematical Analysis

First Year MATH187, MATH188, MATH111, MATH121, STAT131 and CSCI111 (and 12 other credit points)

Second Year MATH201, MATH202, MATH203, MATH204 and MATH222 (and 18 other credit points from the General Schedule, possibly including further Mathematics subjects)

Third Year MATH302 and at least 3 of MATH321, MATH322, MATH323 and MATH324# (and 12 other credit points from the Mathematics Schedule and 12 other credit points)

Only run in odd numbered years.

Applied Statistics

First Year MATH187, MATH188, MATH111, MATH121, STAT131 and CSCI111 (and 12 other credit points)

Second Year MATH201, MATH202, MATH203, MATH204, STAT231 and STAT232 (and 12 other credit points from the General Schedule, possibly including further Mathematics subjects)

Third Year STAT304, STAT332, STAT333, and STAT335 (and 12 other credit points from the Mathematics Schedule and 12 other credit points)

Mathematics Teachers

First Year MATH187, MATH188, MATH111, MATH121, STAT131 and CSCI111 (and 12 other credit points)

Second Year MATH201, MATH202, MATH203 and MATH204, and 12 credit points of 200-level Mathematics subjects selected from the Mathematics Schedule (and 12 other credit points from the General Schedule, possibly including further Mathematics subjects)

Third Year 36 credit points of 300-level subjects selected from the Mathematics Schedule (and 12 other credit points from the General Schedule, possibly including further Mathematics subjects)

The minimum requirement for employment as a Mathematics teacher is 60 credit points of Mathematics, including a major study at 300-level, although a candidate is encouraged to do a Mathematics degree.

Bachelor of Mathematics (Advanced)

Degree Regulations

To qualify for the award of the degree of Bachelor of Mathematics (Advanced), candidates must satisfactorily complete at least 144 credit points from either or both the Mathematics and the General Schedule including:

- (i) MATH110
- (ii) CSCI111
- (iii) Each of the subjects MATH201, MATH202, MATH203 and MATH204
- (iv) Each of the subjects MATH212, MATH222 and STAT231
- (v) the subject MATH235 or STAT235
- (vi) the subject MATH345 or STAT345
- (vii) 300 level subjects from the Mathematics Schedule with a value of at least:
 - 36 credit points, or
 - 24 credit points, if there is a major study in Computer Science
 - 30 credit points, if there is any other major study
- (viii) a major study in Mathematics or Statistics (apart from MATH345 and STAT345)
- (ix) no more than 60 credit points at 100 level.

Enrolment Patterns

Note that a student could do some 300 level subjects in second year.

1. Program in Mathematics, Statistics plus another discipline

The following is a possible enrolment program for someone doing a "major" in a discipline other than Mathematics, Statistics or Computer Science. [NOTE that a program like this does not mean that the formal requirements for a major in the other discipline will be satisfied. Candidates are advised to check the requirements for a major in other disciplines listed under the Bachelor of Mathematics degree regulations.] Considerable variation is possible.

First year

MATH110	Advanced Mathematics 1	6
MATH201	Multivariate and Vector Calculus	6
MATH203	Linear Algebra	6
MATH202	Differential Equations 2	6
CSCI111	Computer Science 1A	6

Plus 18 other Credit points

Second year

MATH235/		
STAT235	Project A	6
STAT231	Probability and Random Variables	6
MATH204	Complex Variables and Group Theory	6
MATH212	Applied Mathematical Modelling 2	6
MATH222	Continuous and Finite Mathematics	6

Plus 18 other credit points

Third year

24 credit points of Math/Stat 300 subjects

Plus

MATH345/		
STAT345	Project B	6

Plus

18 credit points of other subject major

2. Program in Industrial and Applied Mathematics

First year

MATH110	Advanced Mathematics 1	6
MATH201	Multivariate and Vector Calculus	6
MATH203	Linear Algebra	6
MATH202	Differential Equations 2	6
CSCI111	Computer Science 1A	6

Plus 18 other Credit points

Second year

MATH235	Project A	6
STAT231	Probability and Random Variables	6
MATH204	Complex Variables and Group Theory	6
MATH212	Applied Mathematical Modelling 2	6
MATH222	Continuous and Finite Mathematics	6

Plus 18 other credit points

Third year

MATH302	Differential Equations 3	6
MATH305	Partial Differential Equations	6

At least 2 of MATH312, MATH313, MATH316 and MATH321.

MATH345	Project B	6
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Plus 18 other credit points

3. Program in Mathematical Analysis

First year

MATH110	Advanced Mathematics 1	6
MATH201	Multivariate and Vector Calculus	6
MATH203	Linear Algebra	6

Course Structures

MATH202	Differential Equations 2	6
CSCI111	Computer Science 1A	6

Plus 18 other Credit points

Second year

STAT231	Probability and Random Variables	6
MATH204	Complex Variables and Group Theory	6
MATH212	Applied Mathematical Modelling 2	6
MATH222	Continuous and Finite Mathematics	6
MATH235	Project A	6

Plus 18 other credit points

Third year

MATH302	Differential Equations 3	6
At least 3 of MATH321, MATH322, MATH323 and MATH324.		

MATH345	Mathematics Project B	6
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Plus 18 other credit points

4. Program in Applied Statistics

First year

MATH110	Advanced Mathematics 1	6
MATH201	Multivariate and Vector Calculus	6
MATH203	Linear Algebra	6
MATH202	Differential Equations 2	6
CSCI111	Computer Science 1A	6

Plus 18 other Credit points

Second year

STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6
STAT235	Statistics Project A	6
MATH204	Complex Variables and Group Theory	6
MATH212	Applied Mathematical Modelling 2	6
MATH222	Continuous and Finite Mathematics	6

Plus 12 other credit points

Third year

STAT304	Operations Research and Applied Probability	6
STAT332	Multiple Regression and Time Series	6
STAT333	Statistical Inference and Multivariate Analysis	6
STAT335	Sample Surveys and Experimental Design	6
STAT345	Statistics Project B	6

Plus 18 other credit points

Bachelor of Mathematical Sciences

To qualify for the award of the degree of Bachelor of Mathematical Sciences a candidate shall satisfactorily complete the requirements of one of the five prescribed strands.

The five strands are:

Mathematics-Statistics/Science,
Mathematics/Ecology,
Mathematics/Geoscience,
Statistics/Ecology and
Statistics/Public Health.

Recommended Programs

The following programs of study are recommended to satisfy the requirements in minimum time.

The subjects listed in the Recommended Programs are compulsory, save that, in any program, no more than 66 credit points shall be for 100 level subjects.

Note: The following recommended programs are only available in a given year subject to suitability with respect to the University Timetable.

Mathematics-Statistics/Science Strand

code MA07	Mathematics and Biology
code MA08	Mathematics and Chemistry
code MA02	Mathematics and Geography
code MA09	Mathematics and Geology
code MA10	Mathematics and Physics
code MA11	Mathematics and Ecology
code ST07	Applied Statistics and Biology
code ST08	Applied Statistics and Chemistry
code ST02	Applied Statistics and Geography
code ST09	Applied Statistics and Geology
code ST10	Applied Statistics and Physics
code ST11	Applied Statistics and Ecology

Candidates for the degree of Bachelor of Mathematical Sciences, and taking the Mathematics-Statistics/Science strand, must, in addition to the general requirements, satisfy the following additional requirements:

- a major study in Mathematics shall be completed satisfactorily;
- no more than 66 credit points shall be for 100-level subjects;
- for the Non-honours program, at least 60 credit points shall be for 300- and/or 400 -level subjects; and
- for the Honours program, at least 72 credit points shall be for 300- and/or 400-level subjects.

1st Year

MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
MATH111	Applied Mathematical Modelling 1	6
MATH121	Discrete Mathematics	6
STAT131	Understanding Variation and Uncertainty	6

Plus either

BUSS111	Business Programming I	6
or		
CSCI111	Computer Science 1A	6

Plus 12 credit points from 100-level CSCI subjects and/or 100-level BIOL, CHEM, GEOS, PHYS, or BMS subjects selected from the Science Schedule and/or the Health and Behavioural Sciences Schedule.

2nd Year

MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6

Plus at least 6 credit points being one or more of the subjects MATH212, MATH222 or STAT231.

Plus at least 18 credit points selected from STAT232 and 100- or 200-level BIOL, CHEM, GEOS, PHYS, or BMS subjects from the Science Schedule and/or the Health and Behavioural Sciences Schedule.

3rd Year

At least 30 credit points of 300-level MATH and/or STAT subjects.

Plus at least 18 credit points from 200- or 300-level CSCI subjects and/or 200- or 300-level BIOL, CHEM, GEOS, PHYS, or BMS subjects selected from the Science Schedule and/or the Health and Behavioural Sciences Schedule.

Plus (for those planning to proceed to honours in year 4)

STS217 Scientific Revolution: History Philosophy and Politics of Science 8

4th Year (Non Honours Program)

STS217 Scientific Revolution: History Philosophy and Politics of Science 8

Plus at least 18 credit points from 100- or 200- or 300-level subjects selected from MATH and/or STAT subjects.

Plus at least 18 credit points from 300-level CSCI subjects and/or 300-level BIOL, CHEM, GEOS, PHYS, or BMS subjects selected from the Science Schedule and/or the Health and Behavioural Sciences Schedule.

Plus at least 6 credit points for a MATH and/or STAT subject, or for a 300-level CSCI subject, or for a 300-level BIOL, CHEM, GEOS, or BMS subject selected from the Science Schedule and/or the Health and Behavioural Sciences Schedule, or for an STS subject from the Arts Schedule.

4th Year (Honours Program)

Entry to this program is restricted to candidates who satisfy the pre-requisite for MATH411 or STAT411.

At least 12 credit points of 300- or 400-level subjects selected from MATH and/or STAT subjects, and/or CSCI subjects, and/or BIOL, CHEM, GEOS, PHYS, or BMS subjects selected from the Science Schedule and/or the Health and Behavioural Sciences Schedule, but may include one STS subject from the Arts Schedule.

Plus either the following Mathematics subjects:

MATH411	Mathematical Sciences Honours Project A	12
MATH471	Honours Topics in Mathematics A	6
MATH472	Honours Topics in Mathematics B	6
MATH473	Honours Topics in Mathematics C	6
MATH474	Honours Topics in Mathematics D	6

Or the following Statistics subjects:

STAT411	Mathematical Sciences Honours Project B	12
STAT471	Honours Topics in Statistics A	6
STAT472	Honours Topics in Statistics B	6
STAT473	Honours Topics in Statistics C	6
STAT474	Honours Topics in Statistics D	6

Mathematics/Ecology Strand

code MS01 Mathematics and Ecology

1st Year

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution Biodiversity and Environment	6
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry	6
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6

MATH111	Applied Mathematical Modelling 1	6
Plus either		
BUSS111	Business Programming I	6
or		
CSCI111	Computer Science IA	6

2nd Year

BIOL241	Biodiversity: Classification and Sampling	6
BIOL251	Principles of Ecology and Evolution	6
GEOS112	Physical Environments	6
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH212	Applied Mathematical Modelling 2	6

Plus either

STAT252	Statistics for the Natural Sciences	6
or		
STAT131	Understanding Variation and Uncertainty	6

3rd Year

BIOL351	Conservation Biology: Marine and Terrestrial Populations	8
BIOL355	Marine and Terrestrial Ecology	8
GEOS239	Remote Sensing of the Environment	6
GEOS222	Biogeography	6
MATH204	Complex Variables and Group Theory	6
MATH302	Differential Equations 3	6
MATH312	Applied Mathematical Modelling 3	6
MATH321	Numerical Analysis	6

4th Year (Non Honours Program)

STS300	The Environmental Context	8
GEOS339	Geographic Information Systems	8
MARE322	Global Environmental Change	8
MATH305	Partial Differential Equations	6

Plus at least 18 credit points of MATH and/or STAT subjects, with up to 8 credit points being able to be substituted by an STS subject from the Arts Schedule.

4th Year (Honours Program)

Entry to this program is restricted to candidates who satisfy the pre-requisite to MATH412

STS300	The Environmental Context	8
GEOS339	Geographic Information Systems	8
MARE322	Global Environmental Change	8
MATH305	Partial Differential Equations	6
MATH412	Mathematical Sciences Environmental Honours Project A	12

Plus two of

MATH471	Honours Topics in Mathematics A	6
MATH472	Honours Topics in Mathematics B	6
MATH473	Honours Topics in Mathematics C	6
MATH474	Honours Topics in Mathematics D	6

Mathematics/Geoscience Strand

code MS02 Mathematics and Geosciences

1st Year

MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
MATH111	Applied Mathematical Modelling 1	6
PHYS132	Physics for the Environmental and Life Sciences B	6
GEOS111	Planet Earth	6
GEOS102	Earth Environments and Resources	6
GEOS112	Physical Environments	6

Course Structures

Plus either					
BUSS111	Business Programming I	6			
or					
CSCI111	Computer Science 1A	6			
2nd Year					
MATH201	Multivariate and Vector Calculus	6			
MATH202	Differential Equations 2	6			
MATH203	Linear Algebra	6			
MATH212	Applied Mathematical Modelling 2	6			
GEOS220	Climate and Natural Hazards	6			
GEOS219	The Earth in Crisis	6			
GEOS217	Field and Spatial Techniques	6			
STAT252	Statistics for the Natural Sciences	6			
3rd Year					
MATH204	Complex Variables and Group Theory	6			
MATH302	Differential Equations 3	6			
MATH312	Applied Mathematical Modelling 3	6			
MATH321	Numerical Analysis	6			
Plus either					
GEOS321	Fluvial Geomorphology, Sedimentology and River Management	8			
or					
MARE323	Coastal Environments: Process and Management	8			
Plus either					
GEOS302	Basin Resources	8			
or					
GEOS307	Mineral Resources	8			
Plus, only for students proceeding to honours in year 4,					
MATH305	Partial Differential Equations	6			
Plus at least 6 credit points of 200- or 300-level GEOS subjects					
4th Year (Non Honours Program)					
MATH305	Partial Differential Equations	6			
GEOS239	Remote Sensing of the Environment	6			
GEOS339	Geographic Information Systems	8			
STS300	The Environmental Context	8			
Plus either					
GEOS321	Fluvial Geomorphology, Sedimentology and River Management	8			
or					
MARE323	Coastal Environments: Process and Management	8			
Plus either					
GEOS302	Basin Resources	8			
or					
GEOS307	Mineral Resources	8			
Plus at least 6 credit points of either a MATH or STAT subject, or an STS subject from the Arts Schedule.					
4th Year (Honours Program)					
Entry to this program is restricted to candidates who satisfy the prerequisite to MATH412					
MATH412	Mathematical Sciences Environmental Honours Project A	12			
GEOS239	Remote Sensing of the Environment	6			
GEOS339	Geographic Information Systems	8			
STS300	The Environmental Context	8			
Plus either					
MARE323	Coastal Environments: Process and Management	8			
GEOS321	Fluvial Geomorphology, Sedimentology and River Management	8			
Plus two of					
MATH471	Honours Topics in Mathematics A	6			
and					
MATH472	Honours Topics in Mathematics B	6			
and					
MATH473	Honours Topics in Mathematics C	6			
Statistics/Ecology Strand					
Code MS31 Statistics and Ecology					
1st Year					
BIOL103	Molecules, Cells and Organisms	6			
BIOL104	Evolution Biodiversity and Environment	6			
CHEM101	Chemistry 1A: Introductory Physical and General Chemistry	6			
CHEM102	Chemistry 1B: Introductory Organic and Physical Chemistry	6			
MATH187	Mathematics 1A Part 1	6			
MATH188	Mathematics 1A Part 2	6			
STAT131	Understanding Variation and Uncertainty	6			
Plus either					
BUSS111	Business Programming I	6			
or					
CSCI111	Computer Science IA	6			
2nd Year					
BIOL241	Biodiversity: Classification and Sampling	6			
BIOL251	Principles of Ecology and Evolution	6			
GEOS112	Physical Environments	6			
MATH201	Multivariate and Vector Calculus	6			
MATH202	Differential Equations 2	6			
MATH203	Linear Algebra	6			
STAT231	Probability and Random Variables	6			
STAT232	Estimation and Hypothesis Testing	6			
3rd Year					
BIOL351	Conservation Biology: Marine and Terrestrial Populations	8			
BIOL355	Marine and Terrestrial Ecology	8			
GEOS239	Remote Sensing of the Environment	6			
GEOS222	Biogeography	6			
MATH204	Complex Variables and Group Theory	6			
STAT332	Multiple Regression and Time Series	6			
STAT333	Statistical Inference and Multivariate Analysis	6			
STAT335	Sample Surveys and Experimental Design	6			
4th Year (Non Honours Program)					
STS300	The Environmental Context	8			
GEOS339	Geographic Information Systems	8			
MARE322	Global Environmental Change	8			
MATH302	Differential Equations 3	6			
Plus at least 12 credit points of 300-level MATH and/or STAT subjects.					
Plus at least 6 credit points of MATH and/or STAT subjects, or an STS subject from the Arts Schedule.					
4th Year (Honours Program)					
Entry to this program is restricted to candidates who satisfy the pre-requisite to STAT412					
GEOS339	Geographic Information Systems	8			
MARE322	Global Environmental Change	8			

MATH302	Differential Equations 3	6
STS300	The Environmental Context	8
STAT412	Mathematical Sciences Environmental Honours Project B	12
Plus either		
BUSS111	Business Programming I	6
or		
CSCI111	Computer Science IA	6
Plus two of		
STAT471	Honours Topics in Statistics A	6
and		
STAT472	Honours Topics in Statistics B	6
and		
STAT474	Honours Topics in Statistics D	6

Statistics/Public Health Strand

code MS32 Statistics and Public Health

This program is currently under review. Please consult the School of Mathematics and Applied Statistics, and the Faculty of Health and Behavioural Sciences for further details.

Bachelor of Mathematics and Economics

To qualify for the award of the degree of Bachelor of Mathematics and Economics a candidate shall satisfactorily complete at least 192 credit points of prescribed subjects, together with the requirements prescribed for this program.

Recommended Programs

The following programs of study are recommended to satisfy the requirements in minimum time. The subjects listed in the Recommended Programs are compulsory.

Year 1

ACCY100	Accounting 1A	6
ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
MATH111	Applied Mathematical Modelling 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
STAT131	Understanding Variation and Uncertainty	6

Plus either

BUSS111	Business Programming I	6
or		
CSCI111	Computer Science 1A	6

Year 2

ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6

Plus at least 12 credit points of 200-level MATH and/or STAT subjects from the List of Electives, plus one 6 or 8 credit point ACCY or ECON subject from the list of electives.

Note: Statistics sub-majors are recommended to take STAT231, STAT232 and STAT332.

Year 3

ECON221	Econometrics	8
ECON322	Mathematical Economics	8
MATH302	Differential Equations 3	6
MATH317	Financial Calculus and Logistics	6

Plus either one 8 credit point 300-level ECON subject from the List of Electives or STAT232, plus choice of one 6 credit point 300-level MATH or STAT subject from list of electives, plus a further 6 or 8 credit point ACCY, BUSS or ECON subject from the list of electives.

Year 4 (Non Honours Strand)

ECON327	Advanced Econometrics	6
MGMT308	Introduction to Management for Professionals A	6

Plus either 16 credit points of 300-level ECON subjects from the List of Electives, or 8 credit points of 300-level ECON subjects from the List of Electives and STAT232.

Plus at least 24 credit points of 300- and/or 400-level INFO and/or MATH and/or STAT subjects from the List of Electives.

Year 4 (Honours Strand)

Entry to this program is restricted to candidates who satisfy the pre-requisite to INFO402

ECON327	Advanced Econometrics	8
MATH471	Honours Topics in Mathematics A (see Note 1)	6
MATH472	Honours Topics in Mathematics B (see Note 1)	6
INFO402	Mathematics and Economics Honours Project (see Note 2)	6
MGMT308	Introduction to Management for Professionals A	6

Plus at least 8 credit points of 300 ECON subjects from the List of Electives.

Plus at least 6 credit points of 300-or 400-level INFO and/or MATH and/or ECON and/or STAT subjects from the List of Electives.

Note 1: Enrolment in MATH471 or MATH472 is restricted to those candidates who have a WAM greater than or equal to 67.5 on satisfactory completion of 144 credit points of the course, or permission of the Head of the School of Mathematics and Applied Statistics.

Note 2: Enrolment in INFO402 is restricted to those candidates who have a WAM greater than or equal to 67.5 on satisfactory completion of 144 credit points of the course, or permission of Course Coordinator.

List of Electives

ACCY102	Accounting 1B	6
FIN241	International Financial Management	6
BUSS110	Introduction to Business Information Systems	6
BUSS201	User-Centred Business Programming	6
BUSS211	Requirements Determination and Systems Analysis	6
ECON207	Economic Policy	8
ECON301	Monetary Economics	8
ECON309	Environmental Economics	8
ECON310	Cost Benefit Analysis	8
ECON317	Economics of Health Care	8
ECON322	Mathematical Economics	8

Course Structures

ECON331	Financial Economics	8	MATH188	Mathematics 1A Part 2	6
INFO411	Data Mining and Knowledge Discovery	6	MATH111	Applied Mathematical Modelling 1	6
INFO412	Mathematics for Cryptography	6	STAT131#	Understanding Variation and Uncertainty	6
MATH204	Complex Variable and Group Theory	6	Plus either		
MATH212	Applied Mathematical Modelling 2	6	BUSS111	Business Programming I	6
MATH222	Continuous and Finite Mathematics	6	or		
MATH305	Partial Differential Equations	6	CSCI111	Computer Science 1A	6
MATH321	Numerical Analysis	6	Note 3: NSW HSC 2U Mathematics (at least 72 out of 100) or 3U Mathematics (at least 33 out of 50) or 4U Mathematics.		
MATH322	Algebra	6	# Not compulsory, but still recommended. Students may select an alternative subject from the List of Electives or enrol in a compulsory subject from a later year of the program.		
MATH323	Topology and Chaos	6	Year 2		
MATH324	Analysis	6	FIN221	Business Finance I	6
MATH371	Special Topics in Industrial and Applied Mathematics 3	6	ECON111	Introductory Microeconomics	6
MATH372	Special Topics in Mathematical Analysis 3	6	MATH201	Multivariate and Vector Calculus	6
MATH473	Honours Topics in Mathematics C	6	MATH202	Differential Equations 2	6
MATH474	Honours Topics in Mathematics D	6	FIN223	Investment I	6
STAT231	Probability and Random Variables	6	STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6	STAT232	Estimation and Hypothesis Testing	6
STAT304	Operation Research and Applied Probability	6	Plus choice of at least 6 credit points of subjects from the List of Electives		
STAT332	Multiple Regression and Time Series	6	Year 3		
STAT333	Statistical Inference and Multivariate Analysis	6	FIN322	Business Finance II	6
STAT335	Sample Surveys and Experimental Design	6	FIN323	Investments II	6
STAT373	Special Topics in Probability and Statistics 3	6	ECON331	Financial Economics	8
STAT471	Honours Topics in Statistics A	6	MATH203	Linear Algebra	6
STAT472	Honours Topics in Statistics B	6	MATH317	Financial Calculus and Logistics	6
			STAT332	Multiple Regression and Time Series	6

Bachelor of Mathematics and Finance

Requirements

To qualify for the award of the degree of Bachelor of Mathematics and Finance a candidate shall satisfactorily complete at least 192 credit points of prescribed subjects, together with the requirements prescribed for the program.

Of the 192 credit points:

- i) the subjects listed in the Recommended Programs are compulsory unless explicitly stated otherwise;
- ii) at least 168 credit points shall be for MATH, STAT, ACCY, ECON and MGMT subjects;
- iii) no more than 66 credit points shall be for 100-level subjects;
- iv) for the non-Honours strand, at least 60 credit points shall be for 300- and/or 400-level subjects; including at least 24 credit points of MATH and STAT subjects and at least 24 credit points of ACCY subjects and
- v) for the Honours strand, at least 72 credit points shall be for 300- and/or 400-level subjects, including at least 24 credit points of MATH and/or STAT subjects and at least 24 credit points of ACCY subjects. At least 36 of these 72 credit points shall be for 400-level subjects including at least one 6 credit point MATH or STAT subject.

Recommended Programs

The following programs of study are recommended to satisfy the requirements in minimum time.

Year 1

ACCY100	Accounting 1A	6
ACCY102	Accounting 1B	6
ECON101	Macroeconomic Essentials for Business	6
MATH187	Mathematics 1A Part 1 (see Note 3)	6

ACCY201	Financial Accounting 2B	6
ACCY202	Financial Accounting 2A	6
ACCY407	Empirical Research Methods in Accounting	6
BUSS110	Introduction to Business Information Systems	6

BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
CSCI102	Introduction to Information and Communication Technology B	6
CSCI121	Computer Science 1B	6
CSCI204	Programming: The C Family and Unix	6
CSCI235	Data Bases	6
ECON207	Economic Policy	8
ECON215	Microeconomic Theory and Policy	8
ECON216	International Trade Theory and Policy	8
ECON301	Monetary Economics	8
ECON307	International Monetary Economics	8
FIN226	Financial Institutions	6
FIN324	Financial Statement Analysis	6
FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN351	International Business Finance	6
FIN359	Selected Issues in Finance	6
FIN422	Investment Analysis	6
FIN423	Investment Management	6
FIN424	Corporate Financial Information Analysis	6
FIN425	Banking Theory and Practice	6
FIN426	Studies in Business Finance	6
FIN487	Special Topic in Finance	6
IACT201	Information Technology and Citizens' Rights	6
IACT423	IT and Small Business	6
INFO411	Data Mining and Knowledge Discovery	6
INFO412	Mathematics for Cryptography	6
LAW100	Law in Society	6
LAW210	Contract Law	6
MATH121	Discrete Mathematics	6
MATH204	Complex Variables and Group Theory	6
MATH222	Continuous and Finite Mathematics	6
MATH302	Differential Equations 3	6
MATH305	Partial Differential Equations	6
MATH321	Numerical Analysis	6
MATH322	Algebra	6
MATH323	Topology and Chaos	6
MATH324	Analysis (This subject will only run in odd years: next in 2003)	6
MATH371	Special Topics in Industrial and Applied Mathematics 3	6
MATH372	Special Topics in Mathematical Analysis 3	6
MATH471	Honours Topics in Mathematics A	6
MATH472	Honours Topics in Mathematics B	6
MGMT308	Introduction to Management for Professionals A	6
STAT131	Understanding Variation and Uncertainty	6
STAT304	Operations Research and Applied Probability	6
STAT333	Statistical Inference and Multivariate Analysis	6
STAT335	Sample Surveys and Experimental Design	6
STAT373	Special Topics in Probability and Statistics 3	6
STAT471	Honours Topics in Statistics A	6
STAT472	Honours Topics in Statistics B	6

Bachelor of Mathematics Education

Refer to the Faculty of Education section for details of this program.

Bachelor of Engineering – Bachelor of Arts

The School of Electrical, Computer and Telecommunications Engineering, in conjunction with the Faculty of Arts, offers a double degree course leading to the Bachelor of Engineering - Bachelor of Arts. The program, which may be completed in five years of full-time study, offers the opportunity for students to include additional arts subjects with their studies in computer, electrical or telecommunications engineering. It is likely to be of particular interest to those students who wish to undertake a career in research. The BE degree with Honours is awarded for meritorious performance over the course and particularly in the final year thesis subject. The classes of honours awarded are defined in the Course Rules.

With the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering and the Sub-Dean of the Faculty of Arts, students who have completed the recommended first year program of the Bachelor of Engineering (Computer Engineering or Electrical Engineering or Telecommunications Engineering) course and who have gained a weighted average mark of 67.5% or better may transfer to the BE,BA. It is a requirement of the BE,BA that all students enrolled maintain this level of achievement throughout the course or they will be transferred to the BE Course.

All BE,BA students must sit for and perform satisfactorily in an English Literacy Test organised by the School in association with the Student Learning Development Centre.

The test will be held during the first session of a student's enrolment at the University. It is a requirement of the BE degree that the student perform satisfactorily in at least one such test prior to enrolment in ECTE457 Thesis. Students who are deemed to require tuition in literacy in order to complete this requirement will be advised accordingly and will be required to repeat the literacy test the following year. Enrolment in and attendance at literacy courses will be the individual responsibility of the students concerned.

As indicated in the individual subject pre-requisites, students are required to complete satisfactorily the recommended first year before beginning the recommended third year and to complete satisfactorily the recommended second year before beginning the recommended fifth year. With the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering, these requirements may be waived.

Note: Normally a double degree program requires students to complete 264 credit points, in some cases, however, depending upon the program of study chosen this number may be exceeded.

Course Structures

Generally, there is a minimum requirement of 72 credit points in subjects from the Arts Schedule for the BA. In most cases, however, students should expect to be required to take up to 90 credit points from the Arts Schedule.

The choice of Arts subjects will be constrained by the requirements for a BA degree as set out in the Course Rules and is subject to the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering and the Sub-Dean of the Faculty of Arts.

Professional Experience

All BE,BA students must accumulate at least 12 weeks of approved professional engineering experience, documented in the form of employment reports and preferably in the period between fourth and fifth years.

Bachelor of Engineering (Computer Engineering) – Bachelor of Arts

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Computer Engineering) and Bachelor of Arts, a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Computer Engineering), (except the Computer Option) having a value of 186 credit points; and
- (b) the requirements for the Bachelor of Arts.

To qualify for the award of the degree of Bachelor of Arts only, a candidate must satisfy requirements stipulated in Course Rule 105.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH283	Mathematics 2E for Engineers Part 1	6
Plus	Choice of 100/200-level Arts Subjects	18

Year 3

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
Plus	Choice of 200/300-level Arts Subjects	30

Year 4

CSCI205	Development Methods and Tools	6
ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Choice of 200/300-level Arts Subjects	32

Year 5

CSCI311	Software Process Management	6
ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
ECTE457	Thesis	18
Plus	6 Final Year Specialisation Subjects	24
Plus	Choice of 300-level Arts Subjects	8

Bachelor of Engineering (Electrical Engineering) - Bachelor of Arts

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Electrical Engineering) and Bachelor of Arts a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Electrical Engineering), (except the Electrical Option) and having a value of 186 credit points; and
- (b) the requirements for the Bachelor of Arts.

To qualify for the award of the degree of Bachelor of Arts only, a candidate must satisfy requirements stipulated in Course Rule 105.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6

MATH283	Mathematics 2E for Engineers Part 1	6
Plus	Choice of 100/200-level Arts Subjects	18
Year 3		
ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
Plus	Choice of 200/300-level Arts Subjects	30
Year 4		
ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE323	Power Engineering 2	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Choice of 200/300-level Arts Subjects	32
Year 5		
ECTE457	Thesis	18
Plus	10 Final Year Specialisation Subjects	30
Plus	Choice of 300-level Arts Subjects	8

Bachelor of Engineering (Telecommunications Engineering) - Bachelor of Arts

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Telecommunications Engineering) and Bachelor of Arts a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Telecommunications Engineering), (except one Telecommunications Option and replacing one Telecommunications Option with an Informatics Option) and having a value of 186 credit points; and
- (b) the requirements for the Bachelor of Arts.

To qualify for the award of the degree of Bachelor of Arts only, a candidate must satisfy requirements stipulated in Course Rule 105.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6

ECTE233	Digital Hardware 1	6
MATH283	Mathematics 2E for Engineers, Part 1	6
Plus	Choice of 100/200-level Arts Subjects	18

Year 3

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
Plus	Choice of 200/300-level Arts Subjects	30

Year 4

ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
ECTE364	Telecommunication Networks 1	6
Plus	Choice of 200/300-level Arts Subjects	32

Year 5

ECTE457	Thesis	18
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
Plus	Informatics Option	6
Plus	6 Final Year Specialisation Subjects	24
Plus	Choice of 300-level Arts Subjects	8

Informatics Option

Year 5:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER:
- the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
 - the School of Mathematics and Applied Statistics (MATH or STAT).

OR

- (b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE 291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Bachelor of Engineering – Bachelor of Commerce

The School of Electrical, Computer and Telecommunications Engineering, in conjunction with the Faculty of Commerce, offers a double degree course leading to the Bachelor of Engineering - Bachelor of Commerce. The program, which may be completed in five years of full-time study, offers the opportunity for students to include additional commerce subjects with their studies in computer, electrical or telecommunications engineering. It is likely to be of particular interest to those students who wish to undertake a career in management. The BE degree with Honours is awarded for meritorious performance over the course and particularly in the final year thesis subject. The classes of honours awarded are defined in the Course Rules.

With the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering and the Sub-Dean of the Faculty of Commerce, students who have completed the recommended first year program of the Bachelor of Engineering (Computer Engineering or Electrical Engineering or Telecommunications Engineering) course and who have gained a weighted average mark of 67.5% or better may transfer to the BE,BCom. It is a requirement of the BE,BCom that all students enrolled maintain this level of achievement throughout the course or they will be transferred to the BE Course.

All BE,BCom students must sit for and perform satisfactorily in an English Literacy Test organised by the School in association with the Student Learning Development Centre. The test will be held during the first session of a student's enrolment at the University. It is a requirement of the BE degree that the student perform satisfactorily in at least one such test prior to enrolment in ECTE457 Thesis. Students who are deemed to require tuition in literacy in order to complete this requirement will be advised accordingly and will be required to repeat the literacy test the following year. Enrolment in and attendance at literacy courses will be the individual responsibility of the students concerned.

As indicated in the individual subject pre-requisites, students are required to complete satisfactorily the recommended first year before beginning the recommended third year and to complete satisfactorily the recommended second year before beginning the recommended fifth year. With the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering, these requirements may be waived.

Normally a double degree program require students to complete 264 credit points, in some cases, however, depending upon the program of study chosen this number may be exceeded.

Some Commerce Majors will be more than 90 credit points. To assist students to complete their program, some Commerce subjects are available in Summer Session. Students should consult the Calendar for details.

The choice of Commerce subjects will be constrained by the requirements for a BCom degree as set out in the Course Rules and is subject to the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering and the Sub-Dean of the Faculty of Commerce.

Professional Experience

All BE,BCom students must accumulate at least 12 weeks of approved professional engineering experience, documented in the form of employment reports and preferably in the period between fourth and fifth years.

Bachelor of Engineering (Computer Engineering) - Bachelor of Commerce

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Computer Engineering) and Bachelor of Commerce a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Computer Engineering), (except ECTE150 Engineering Design and Management 1, ECTE250 Engineering Design and Management 2 and the Computer Option) and having a value of 174 credit points; and
- (b) the requirements for the Bachelor of Commerce.

To qualify for the award of the degree of Bachelor of Commerce only, a candidate must satisfy requirements stipulated in Course Rule 106.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6
Plus	Choice of 100-level Commerce Subjects	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH283	Mathematics 2E for Engineers Part 1	6
Plus	Choice of 100/200-level Commerce Subjects	18

Year 3

ECTE313	Electronics	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
Plus	Choice of 200/300-level Commerce Subjects	30

Year 4

CSCI205	Development Methods and Tools	6
ECTE301	Digital Signal Processing 1	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Choice of 200/300-level Commerce Subjects	30

Year 5

CSCI311	Software Process Management	6
ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
ECTE457	Thesis	18

Plus	6 Final Year Specialisation Subjects	24
Plus	300-level Commerce Subject	6

Bachelor of Engineering (Electrical Engineering) - Bachelor of Commerce

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Electrical Engineering) and Bachelor of Commerce a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Electrical Engineering), (except ECTE150 Engineering Design and Management 1, ECTE250 Engineering Design and Management 2 and the Electrical Option) and having a value of 174 credit points; and
- (b) the requirements for the Bachelor of Commerce.

To qualify for the award of the degree of Bachelor of Commerce only, a candidate must satisfy requirements stipulated in Course Rule 106.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6
Plus	Choice of 100-level Commerce Subjects	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH283	Mathematics 2E for Engineers Part 1	6
Plus	Choice of 100/200-level Commerce Subjects	18

Year 3

ECTE313	Electronics	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
Plus	Choice of 200/300-level Commerce Subjects	30

Year 4

ECTE301	Digital Signal Processing 1	6
ECTE323	Power Engineering 2	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Choice of 200/300-level Commerce Subjects	30

Year 5

ECTE457	Thesis	18
Plus	10 Final Year Specialisation Subjects	30
Plus	300-level Commerce Subject	6

Bachelor of Engineering (Telecommunications Engineering) - Bachelor of Commerce

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Telecommunications Engineering) and Bachelor of Commerce a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Telecommunications Engineering), (except ECTE150 Engineering Design and Management 1, ECTE250 Engineering Design and Management 2 and one Telecommunications Option and replacing one Telecommunications Option with an Informatics Option) and having a value of 174 credit points; and
- (b) the requirements for the Bachelor of Commerce.

To qualify for the award of the degree of Bachelor of Commerce only, a candidate must satisfy requirements stipulated in Course Rule 106.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6
Plus	Choice of 100-level Commerce Subjects	6

Note:

MATH187 may be replaced by MATH141/161
MATH188 may be replaced by MATH142/162

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH283	Mathematics 2E for Engineers Part 1	6
Plus	Choice of 100/200-level Commerce Subjects	18

Year 3

ECTE313	Electronics	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
Plus	Choice of 200/300-level Commerce Subjects	30

Year 4

ECTE301	Digital Signal Processing 1	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
ECTE364	Telecommunication Networks 1	6
Plus	Choice of 200/300-level Commerce Subjects	30

Year 5

ECTE457	Thesis	18
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
Plus	Informatics Option	6
Plus	6 Final Year Specialisation Subjects	24
Plus	300-level Commerce Subject	6

Informatics Option

Year 5:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER:
 - (i) the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
 - (ii) the School of Mathematics and Applied Statistics (MATH or STAT).

OR

- (b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE 291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Bachelor of Engineering – Bachelor of Mathematics

The School of Electrical, Computer and Telecommunications Engineering, in conjunction with the School of Mathematics and Applied Statistics, offers a double degree course leading to the Bachelor of Engineering - Bachelor of Mathematics. The program, which may be completed in five years of full-time study, offers the opportunity for students to include additional mathematics or statistics with their studies in computer, electrical or telecommunications engineering. It is likely to be of particular interest to those students who wish to undertake a career in research. The BE degree with Honours is awarded for meritorious performance over the course and particularly in the final year thesis subject. The classes of honours awarded are defined in the Course Rules. With the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering and the Head of the School of Mathematics and Applied Statistics, students who have completed the recommended first year program of the Bachelor of Engineering (Computer Engineering or Electrical Engineering or Telecommunications Engineering) course and who have gained a weighted average mark of 67.5% or better may transfer to the BE,BMath.

It is a requirement of the BE,BMath that all students enrolled maintain this level of achievement throughout the course or they will be transferred to the BE Course.

All BE,BMath students must sit for and perform satisfactorily in an English Literacy Test organised by the School in association with the Student Learning Development Centre. The test will be held during the first session of a student's enrolment at the University. It is a requirement of the BE degree that the student perform satisfactorily in at least one such test prior to enrolment in ECTE457 Thesis. Students who are deemed to require tuition in literacy in order to complete this requirement will be advised accordingly and will be required to repeat the literacy test the following year. Enrolment in and attendance at literacy courses will be the individual responsibility of the students concerned.

As indicated in the individual subject pre-requisites, students are required to complete satisfactorily the recommended first year before beginning the recommended third year and to complete satisfactorily the recommended second year before beginning the recommended fifth year. With the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering, these requirements may be waived.

The choice of Mathematics or Statistics subjects will be constrained by the requirements for a BMath degree as set out in the Course Rules and is subject to the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering and the Head of the School of Mathematics and Applied Statistics.

Professional Experience

All BE,BMath students must accumulate at least 12 weeks of approved professional experience, documented in the form of employment reports and preferably in the period between fourth and fifth years.

Bachelor of Engineering (Computer Engineering) - Bachelor of Mathematics

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Computer Engineering) and Bachelor of Mathematics a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Computer Engineering), (except MATH283 Mathematics 2E for Engineers Part 1 and replacing the Computer Option with an Informatics Option) and having a value of 192 credit points;
- (b) Requirements 2, 3, 6, 8(c) and 9, for the Bachelor of Mathematics, including no more than 18 credit points at 100-level.

To qualify for the award of the degree of Bachelor of Mathematics only, a candidate must satisfy requirements stipulated in Course Rule 108.

Recommended Full-Time Program**Year 1**

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6

Year 3

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
STAT231	Probability and Random Variables	6
Plus	Choice of 200/300 level Mathematics or Statistics Subjects	24

Year 4

CSCI205	Development Methods and Tools	6
ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Choice of 300-level Mathematics or Statistics Subjects	24

Year 5

CSCI311	Software Process Management	6
ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
ECTE457	Thesis	18
Plus	6 Final Year Specialisation Subjects	24
Plus	Informatics Option	6

Informatics Option

Year 5:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER
- (i) the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
- (ii) the School of Mathematics and Applied Statistics Mathematics (MATH or STAT).

OR

(b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Bachelor of Engineering (Electrical Engineering) - Bachelor of Mathematics**Course Requirements**

To qualify for award of the degrees of Bachelor of Engineering (Electrical Engineering)-Bachelor of Mathematics a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Electrical Engineering) (except MATH283 Mathematics 2E for Engineers Part 1 and replacing the Electrical Option with an Informatics Option) and having a value of 192 credit points;
- (b) Requirements 2, 3, 6, 8(c) and 9, for the Bachelor of Mathematics, including no more than 18 credit points at 100-level.

To qualify for the award of the degree of Bachelor of Mathematics only, a candidate must satisfy requirements stipulated in Course Rule 108.

Recommended Full-Time Program**Year 1**

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6

Year 3

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
STAT231	Probability and Random Variables	6
Plus	Choice of 200/300 level Mathematics or Statistics Subjects	24

Year 4

ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE323	Power Engineering 2	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Choice of 300-level Mathematics or Statistics Subjects	24

Year 5

ECTE457	Thesis	18
Plus	10 Final Year Specialisation Subjects	30
Plus	Informatics Option	6

Informatics Option

Year 5:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER:
 - (i) the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
 - (ii) the School of Mathematics and Applied Statistics Mathematics (MATH or STAT).

OR

- (b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Bachelor of Engineering (Telecommunications Engineering) - Bachelor of Mathematics

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Telecommunications Engineering)-Bachelor of Mathematics a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed for the Bachelor of Engineering (Telecommunications Engineering), (except MATH283 Mathematics 2E for Engineers Part 1 and replacing the Telecommunications Options with Informatics Options) and having a value of 192 credit points;
- (b) Requirements 2, 3, 6, 8(c) and 9 for the Bachelor of Mathematics, including no more than 18 credit points at 100-level.

To qualify for the award of the degree of Bachelor of Mathematics only, a candidate must satisfy requirements stipulated in Course Rule 108.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6

MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Year 2

CSCI204	Programming: The C Family and Unix	6
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or

CSCI213	Java Programming and the Internet	6
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Plus

ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6

Year 3

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
STAT231	Probability and Random Variables	6
Plus	Choice of 200/300 level Mathematics or Statistics Subjects	24

Year 4

ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
ECTE364	Telecommunication Networks 1	6
Plus	Informatics Option	6
Plus	Choice of 300-level Mathematics or Statistics Subjects	24

Year 5

ECTE457	Thesis	18
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
Plus	6 Final Year Specialisation Subjects	24
Plus	Informatics Option	6

Informatics Option

Year 5:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER:
 - (i) the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
 - (ii) the School of Mathematics and Applied Statistics (MATH or STAT).

OR

- (b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE 291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Bachelor of Engineering – Bachelor of Science

The School of Electrical, Computer and Telecommunications Engineering in conjunction with the Discipline of Engineering Physics and the Faculty of Science offers a double degree course leading to the Bachelor of Engineering - Bachelor of Science. The program, which may be completed in five years of full-time study, offers the opportunity for students to include additional science with their studies in computer, electrical or telecommunications engineering. It is likely to be of particular interest to those students who wish to undertake a career in research. The BE degree with Honours is awarded for meritorious performance over the course and particularly in the final year. The classes of honours awarded are defined in the Course Rules.

With the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering and the Head of Engineering Physics, or the Sub-Dean, Faculty of Science, students who have completed the recommended first year program of the Bachelor of Engineering (Computer Engineering or Electrical Engineering or Telecommunications Engineering) course and who have gained a weighted average mark of 67.5% or better may transfer to the BE,BSc. It is a requirement of the BE,BSc that all students enrolled maintain this level of achievement throughout the course or they will be transferred to the BE Course.

All BE,BSc students must sit for and perform satisfactorily in an English Literacy Test organised by the School in association with the Student Learning Development Centre. The test will be held during the first session of a student's enrolment at the University. It is a requirement of the BE degree that the student perform satisfactorily in at least one such test prior to enrolment in ECTE457 Thesis. Students who are deemed to require tuition in literacy in order to complete this requirement will be advised accordingly and will be required to repeat the literacy test the following year. Enrolment in and attendance at literacy courses will be the individual responsibility of the students concerned.

As indicated in the individual subject pre-requisites, students are required to complete satisfactorily the recommended first year before beginning the recommended third year and to complete satisfactorily the recommended second year before beginning the recommended fifth year. With the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering, these requirements may be waived.

The choice of Science subjects will be constrained by the requirements for a BSc degree as set out in the Course Rules and is subject to the approval of the Head of the School of Electrical, Computer and Telecommunications Engineering and the Head of the Department of Engineering Physics or the Sub-Dean, Faculty of Science.

Professional Experience

All BE,BSc students must accumulate at least 12 weeks of approved professional experience, documented in the form of employment reports and preferably in the period between fourth and fifth years.

Bachelor of Engineering (Computer Engineering) - Bachelor of Science

Course requirements

To qualify for award of the degrees of Bachelor of Engineering (Computer Engineering) and Bachelor of Science a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- all subjects prescribed for the Bachelor of Engineering (Computer Engineering), (replacing MATH283 Mathematics 2E for Engineers Part 1 with MATH201 Multivariate and Vector Calculus and MATH202 Differential Equations 2 and replacing the Computer Option with an Informatics Option and having a value of 204 credit points;
- Requirements for the Bachelor of Science or the Bachelor of Science (Physics).

To qualify for the award of the degree of Bachelor of Science or Bachelor of Science (Physics) only, a candidate must satisfy requirements stipulated in Course Rule 110.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
Plus	Choice of 100/200-level Science Subjects	24

Year 3

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
STAT231	Probability and Random Variables	6
Plus	Choice of 200/300-level Science Subjects	24

Year 4

CSCI205	Development Methods and Tools	6
ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Choice of 300-level Science Subjects	24

Year 5

CSCI311	Software Process Management	6
ECTE431	Real-time Computing	3
ECTE432	Computer Systems	3
ECTE457	Thesis	18
Plus	6 Final Year Specialisation Subjects	24
Plus	Informatics Option	6

Informatics Option

Year 5:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER
 - (i) the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
 - (ii) the School of Mathematics and Applied Statistics Mathematics (MATH or STAT).

OR

- (b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Bachelor of Engineering (Electrical Engineering) - Bachelor of Science

Course requirements

To qualify for award of the degrees of Bachelor of Engineering - Electrical Engineering-Bachelor of Science a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- a) all subjects prescribed for the Bachelor of Engineering (Electrical Engineering), (replacing MATH283 Mathematics 2E for Engineers Part 1 with MATH201 Multivariate and Vector Calculus and MATH202 Differential Equations 2 and replacing the Electrical Option with an Informatics Option) and having a value of 204 credit points;
- b) Requirements for the Bachelor of Science or the Bachelor of Science (Physics).

To qualify for the award of the degree of Bachelor of Science and Bachelor of Science (Physics) only, a candidate must satisfy requirements stipulated in Course Rule 110.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		

ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
Plus	Choice of 100/200-level Science Subjects	24

Year 3

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6

STAT231	Probability and Random Variables	6
Plus	Choice of 200/300-level Science Subjects	24

Year 4

ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE323	Power Engineering 2	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
Plus	Choice of 300-level Science Subjects	24

Year 5

ECTE457	Thesis	18
Plus	10 Final Year Specialisation Subjects	30
Plus	Informatics Option	6

Informatics Option

Year 5:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER:
 - (i) the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
 - (ii) the School of Mathematics and Applied Statistics Mathematics (MATH or STAT).

OR

- (b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling

Bachelor of Engineering (Telecommunications Engineering) - Bachelor of Science

Course Requirements

To qualify for award of the degrees of Bachelor of Engineering (Telecommunications Engineering)-Bachelor of Science a candidate must complete satisfactorily and independently each of (a) and (b) as follows:

- (a) all subjects prescribed by the Bachelor of Engineering (Telecommunications Engineering), (replacing MATH283 Mathematics 2E for Engineers Part 1 with MATH201 Multivariate and Vector Calculus and MATH202 Differential Equations 2 and replacing the Telecommunications Options with Informatics Options) and having a value of 204 credit points;
- (b) Requirements for the Bachelor of Science or Bachelor of Science (Physics).

To qualify for the award of the degree of Bachelor of Science only, a candidate must satisfy requirements stipulated in Course Rule 110.

Recommended Full-Time Program

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
ECTE101	Electrical Engineering 1	6
ECTE150	Engineering Design and Management 1	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

Year 2

CSCI204	Programming: The C Family and Unix	6
or		
CSCI213	Java Programming and the Internet	6
Plus		
ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6

Plus		
Choice of 100/200-level Science Subjects		24

Year 3

ECTE250	Engineering Design and Management 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ENGG291	Engineering Fundamentals	6
STAT231	Probability and Random Variables	6
Plus	Choice of 200/300-level Science Subjects	24

Year 4

ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE350	Engineering Design and Management 3	6
ECTE363	Communication Theory	6
ECTE364	Telecommunication Networks 1	6
Plus	Informatics Option	6
Plus	Choice of 300-level Science Subjects	24

Year 5

ECTE457	Thesis	18
ECTE461	Telecommunications Queuing Theory	3
ECTE462	Telecommunications System Modelling	3
Plus	6 Final Year Specialisation Subjects	24
Plus	Informatics Option	6

Informatics Option

Year 5:

With the approval of the Head of School, students may select:

- (a) one six credit point, 200 or 300 or 400-level subject from those listed in the General Schedule and offered by EITHER:
- the School of Information Technology and Computer Science (CSCI, IACT or ITCS); or
 - the School of Mathematics and Applied Statistics (MATH or STAT)

OR

- (b) one of the following four subjects: ECTE281 Embedded Internet Systems, ECTE 291 Internet Systems, ECTE292 Internet Technology 2, ECTE392 Wireless Internet.

Note that this selection may be constrained by pre- and co-requisites and timetabling.

Bachelor of Engineering (Civil, Environmental, Materials, Mechanical, Mechatronics, Mining) - Bachelor of Computer Science

Refer to the Faculty of Engineering section for details of this double degree program.

Bachelor of Engineering (Civil, Environmental, Materials, Mechanical, Mechatronics, Mining)- Bachelor of Mathematics

Refer to the Faculty of Engineering section for details of this double degree program.

Bachelor of Mathematics - Bachelor of Laws

Refer to the Faculty of Law section for details of this double degree program.

Bachelor of Mathematics - Bachelor of Computer Science

Requirements

To qualify for the award of the degrees of Bachelor of Mathematics and Bachelor of Computer Science by joint registration a candidate shall satisfactorily complete the subjects and the credit points as prescribed, and, in so doing, satisfy the requirements of Course Rules 108 and 107 for the Bachelor of Mathematics and the Bachelor of Computer Science, respectively.

Minimum Performance Requirement

Candidates must maintain a weighted average mark (WAM) of at least 65 at the end of each year otherwise they must show cause as to why they should be permitted to remain registered for the two courses jointly.

Candidates who, at the end of any year of registration, have satisfied the requirements of Course Rule 011, but who do not have a WAM of at least 65 and who have not given adequate reason as to why they should be permitted to continue with registration for the double degree, will be required to transfer into either a Bachelor of Mathematics or a Bachelor Computer Science, the choice being that of each such candidate.

Program of Study

The following program of study is recommended to satisfy the requirements in minimum time.

Year 1

Year total: 48 credit points

CSCI101	Introduction to Information Technology A	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
MATH111	Applied Mathematical Modelling 1	6
MATH121	Discrete Mathematics	6
STAT131	Understanding Variation and Uncertainty	6

Year 2

Year total: 60 credit points

MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6

and any two of

MATH212	Applied Mathematical Modelling 2	6
MATH222	Continuous and Finite Mathematics	6
STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6

and

CSCI203	Data Structures, Algorithms, Systems	6
CSCI204	Programming: The C Family and Unix	6
CSCI205	Development Methods and Tools	6

and either

CSCI212	Operating Systems	6
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or

CSCI235	Data Bases	6
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and

IACT201#	Information Technology and Citizens' Rights	6
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and

CSCI102*	Introduction to Information Technology B	6
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May be taken in year 3, in lieu of 6 credit points of 200- or 300-level subjects, and replaced in year 2 by 6 credit points of 100- or 200-level subjects.

* CSCI102 not to count with IACT101.

Year 3

Year total: 60 credit points

MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6
CSCI213	Java Programming and the Internet	6

and any 12 credit points of 300-level Mathematics subjects,

and any 6 credit points 200-level Computer Science subjects,

and any 12 credit points 300-level Computer Science subjects,

and any 12 credit point of 200- or 300-level General Schedule subjects.

Year 4

Year total: 48 credit points

24 credit points of 300-level Mathematics subjects

and

CSCI321	Project	12
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and 12 credit points of 300-level Computer Science subjects.

Honours

Candidates may apply to register for either, or consecutively, both the Bachelor of Mathematics (Honours) or the Bachelor of Computer Science (Honours) after the satisfactory completion of the double degree program.

Bachelor of Creative Arts-Bachelor of Computer Science

To qualify for award of the DOUBLE degree of Bachelor of Creative Arts - Bachelor of Computer Science, a candidate must satisfactory complete at least 216 credit points from the Computer Science course structure, the Creative Arts Schedule and the General Schedule.

The 216 credit points must include:

- no more than 96 credit points at 100 level;
- no more than 36 credit points (ie 1/6) of subjects at PC grade.

The 108 credit points for Creative Arts must include:

- a major study for the Bachelor of Creative Arts comprising 108 credit points of compulsory subjects as listed in the Bachelor of Creative Arts course structure.

The 108 credit points for Computer Science must include the following subjects:

CSCI101*	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6

CSCI204	Programming: The C Family and UNIX	6
CSCI213	Java Programming and The Internet	6
MATH122	Probability and Logic	6

Plus:

- at least 36 credit points of 300-level subjects of which 24 credit points must be CSCI subjects, including CSCI321; 24 credit points at 300-level must be at pass grade or better;
- 90 credit points of Computer Science subjects;
- elective subjects from Computer Science course structure, the Creative Arts Schedule or the General Schedule to the value of at least 18 credit points

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with another 6cp 100 level subject from the Additional Subjects List.

The following program of study is recommended for students holding 2 units of NSW HSC Information Technology; Information Processes & Technology; or Software Design (with a mark of 50 or better). To satisfy the requirements in minimum time the following subjects should be taken:

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6

Plus up to 36 credit points of prescribed subjects for a Major Study selected from the Creative Arts course structure.

Year 2

CSCI204	Programming: The C Family and Unix	6
MATH122	Probability and Logic	6
CSCI102	Introduction to Information Technology B	6
CSCI213	Java Programming and the Internet	6

Plus 12 credit points selected from the Computer Science course structure*

Plus up to 24 credit points of prescribed subjects for a Major Study selected from the Creative Arts course structure.

Year 3

36 credit points selected from the Computer Science course structure* (Noting that CSCI336 Computer Graphics is required for the students enrolled in the Visual or Graphic Arts Studies programme in the Creative Arts degree.)

Plus up to 24 credit points of prescribed subjects for a Major Study selected from the Creative Arts course structure.

Year 4

CSCI321	Project	12
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Plus 12 credit points of 300 level Computer Science subjects

Plus 24 credit points of subjects from Creative Arts Schedule

* up to 18 credit points of these 54 credit points can be taken from the General Schedule

Honours

Subject to satisfactory performance, existing 48 credit point end-on honours courses will be available for either the Bachelor of Computer Science or the Bachelor of Creative Arts, or sequentially for both degrees. The following program of study is recommended for students who do NOT hold 2 units of NSW HSC Information Technology; Information Processes & Technology; or Software Design (with a mark of 50 or better).

To satisfy the requirements in minimum time the following subjects should be taken:

Year 1

CSCI101	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6

Plus up to 36 credit points of prescribed subjects for a Major Study selected from the Creative Arts course structure.

Year 2

CSCI111	Computer Science 1A	6
MATH122	Probability and Logic	6
CSCI121	Computer Science 1B	6

Plus 18 credit points of Computer Science subjects.

Plus up to 24 credit points of prescribed subjects for a Major Study selected from the Creative Arts course structure.

Year 3

CSCI204	Programming: The C Family and Unix	6
CSCI213	Java Programming and the Internet	6

Plus 24 credit points selected from the Computer Science course structure*

(Noting that CSCI336 Computer Graphics is required for the students enrolled in the Visual or Graphic Arts programme in the Creative Arts degree.)

Plus up to 24 credit points of prescribed subjects for a Major Study selected from the Creative Arts course structure.

Year 4

CSCI321	Project	12
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Plus 12 credit points of 300 level Computer Science subjects

Plus 24 credit points of subjects from Creative Arts Schedule

* up to 18 credit points of these 54 credit points can be taken from the General Schedule

Bachelor of Computer Science - Bachelor of Laws

Refer to the Faculty of Law section for details of this double degree program.

Bachelor of Computer Science - Bachelor of Science

To qualify for the award of the double degree of Bachelor of Computer Science and Bachelor of Science by joint registration, candidates must satisfactorily complete the subjects and credit points as prescribed in the following Program, and in so doing, satisfy the requirements of Course Rules 107 and 109 for the Bachelor of Computer Science and the Bachelor of Science, respectively.

Minimum Performance Requirement

Candidates must maintain a weighted average mark (WAM) of at least 65 at the end of each year, otherwise they must show cause as to why they should be permitted to remain registered for the two courses.

Candidates who, at the end of any year of registration, have satisfied the requirements of Course Rule 011, but who do not have a WAM of at least 65 and who have not given adequate reason as to why they should be permitted to continue with registration for the joint course, will be required to transfer into either a Bachelor of Computer Science or a Bachelor of Science.

Major Study Areas

It is strongly recommended that students who are enrolled in this degree and wish to major in Secure Distributed Systems complete the core subjects as well as CSCI212, CSCI214, CSCI322 and CSCI399.

Students wishing to major in Software Development should complete the core subjects as well as CSCI205, CSCI235, CSCI311 and CSCI325.

Honours

Candidates may apply, within normal procedures, to register for either, or consecutively, both, the Bachelor of Computer Science (Honours) or the Bachelor of Science (Honours) after the satisfactory completion of the joint program.

The following program of study is recommended to satisfy the requirements in minimum time.

Year 1

CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
MATH187	Mathematics IA Part 1	6
MATH188	Mathematics IA Part 2	6
CSCI101	Introduction to Information Technology A	6

Plus 18 credit points from 100-level BIOL and/or CHEM and/or GEOG and/or GEOL and/or PHYS subjects selected from the Science Schedule

* If you received a mark of at least 50/100 for at least one of the following IT HSC subjects:

- Information Technology,
- Information Processes & Technology, or
- Software Design

You may enrol directly in CSCI102, and **must** replace CSCI101 with another 6cp 100 level subject from the Additional Subjects List.

Year 2

CSCI204	Programming: The C Family and Unix	6
STS212	The Scientific Revolution: History, Philosophy and Politics of Science	8
MATH121	Discrete Mathematics	6
CSCI102	Introduction to Information Technology B	6

Plus one of the following subjects

ECTE196	Introduction to Internet Technology	6
MATH111	Applied Mathematical Modelling I	6

Plus at least 18 credit points from 100- and/or 200-level BIOL and/or CHEM and/or GEOG and/or GEOL and/or PHYS subjects selected from the Science Schedule. Plus at least 12 credit points at 200-level from the General Schedule.

Year 3

IACT201	Information Technology and Citizens' Rights	6
STAT131	Understanding Variation and Uncertainty	6

Plus at least 18 credit points from 200- and/or 300-level subjects selected from the Computer Science course structure.

Plus at least 24 credit points from 200- and/or 300-level BIOL and/or CHEM and/or GEOG and/or GEOL and/or PHYS subjects selected from the Science Schedule. Plus at least 6 credit points from the General Schedule

Year 4

CSCI321	Project	12
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Plus at least 12 credit points from 200- and/or 300-level subjects selected from the Computer Science course structure.

Plus at least 24 credit points from 200- and/or 300-level BIOL and/or CHEM and/or GEOG and/or GEOL and/or PHYS subjects selected from the Science Schedule

If the Science major study is Physics, please refer to your coordinator for details of MATHS subject selection.

Bachelor of Information and Communication Technology - Bachelor of Laws

Refer to the Faculty of Law section for details of this double degree program.

INFORMATICS SUBJECT DESCRIPTIONS

Note: Except where shown all subjects are offered on the Wollongong campus.

CSCI101 Introduction to Information Technology A 6cp

Autumn

Contact Hours: 4 hours per week

Pre-requisites: CSCI101 can not be taken by students who received at least a mark of 50/100, in at least one of the following IT HSC subjects: Information Technology, Information Processes & Technology or Software Design, (or before 2002 - holding NSW HSC 2 (with a mark of 60 or better, or 3 unit computing studies or equivalent.) To action this HSC qualifier, candidates **MUST** apply (see Sonia Jennings 3.227). This means the subject **MUST** be replaced with a 6cp, 100 lvl subject.

Exclusions: not to count with CSCI100 or BUSS110; not to be taken by students who have successfully completed CSCI121.

Assessment: Laboratory Assignments - 50%; Exam - 50%.

Subject Description: CSCI101 introduces the concepts of computer system organisation including the main hardware and software components. Covers the historical development of software and hardware technologies. Introduction to problem solving using a visual programming tool. Provides experience with integrated packages including use of simple databases. Students are also taught how to use the Internet and World Wide Web.

Subject Objectives: On successfully completing this subject students should be able to: (i) identify the main hardware and software components of a computer system; (ii) manipulate data in an integrated application; (iii) create a simple web page; and (iv) solve a problem in a procedural style, using a visual design and code generating tool.

CSCI102 Introduction to Information Technology B 6cp

Spring / Autumn

Contact Hours: 3 hours per week

Pre-requisites: CSCI101 or BUSS110 or NSW HSC 2 (60 or better) or 3 unit computing studies or equivalent. To action this HSC qualifier, candidates **MUST** apply on an appropriate form.

Assessment: Workshop Reports - 10%; Assignments - 40%; Exam - 50%.

Subject Description: CSCI102 examines a range of information and communications technology e.g., voice-mail, Fax, telephone, optical fibre, global networks and satellites to increase the understanding of how the technology is, or can be applied. Examination of the convergence of these technologies and the impact of the convergence e.g., data networks, EFTPOS, HDTV, personal communications networks. The impact of IT is discussed in relationship to ethical, privacy and legal issues for IT professionals.

Subject Objectives: On successfully completing this subject students should be able to: (i) identify the main hardware and software components of a computer system; (ii) manipulate data in an integrated application; (iii) create a simple web page; and (iv) solve a problem in a procedural style, using a visual design and code generating tool.

CSCI111 Computer Science 1A 6cp

Spring / Autumn

Contact Hours: 6 hours per week

Exclusions: BUSS111

Assessment: Exam - 70%, Assignments - 30%

Subject Description: CSCI111 introduces the procedural approach to program design and implementation. Covers basic language constructs for defining variables of built-in types, flow control constructs, simple I/O. Explores functional decomposition as a design technique, and the implementation of functions. Introduces simple user-defined data types and aggregates.

Subject Objectives: The aim of this subject is to provide a foundation for subsequent Computer Science studies particularly by developing students' programming skills. Students should be able to: (i) structure solutions to problems for execution by a computer; (ii) use a microcomputer efficiently and effectively in developing total solutions; (iii) develop and express their solutions using "good programming style"; and (iv) express their solution in well structured programs written in ANSI C++.

CSCI112 Fundamentals of Computer Science 6cp

Spring

Contact Hours: 4 hours per week

Pre-requisites: CSCI111

Assessment: 6 Assignments - 40%; Final Examination - 60%

Subject Description: The concepts of algorithms and computability together with techniques for analysis of the efficiency and complexity of algorithms are studied. Logical formalisms and their application in computing environments and the use of logical reasoning in establishing the correctness of implementations of algorithms are discussed. The abstract models such as finite state machines, pushdown automata and Turing machines are treated.

Subject Objectives: Objectives On successfully completing this subject, students should be able to: (i) use logical formalisms to describe problems; (ii) use logical reasoning to find and analyse solutions; (iii) assess algorithms with respect to their efficiency and complexity; (iv) use logical reasoning to establish the correctness of implementations of algorithms; and (v) describe a number of formal models of computational processes.

CSCI121 Computer Science 1B 6cp

Spring

Contact Hours: 6 hours per week

Pre-requisites: CSCI111

Restrictions: Note BUSS111 will NOT equip you for this subject's content

Assessment: Exam - 60%; Assignment - 40%

Subject Description: CSCI121 develops skills in object-based program design and implementation. Covers characterisation of abstract data types and their realisation as classes. Explores standard data types including lists, binary trees, queues.

Subject Descriptions

Investigates implementation and efficiency of standard searching and sorting algorithms. Provides experience in the use of dynamic data structures.

Subject Objectives: On completion of this subject you should be able to: (i) display an understanding of structured data types and their implementation in C++; (ii) create abstract data types which have general applicability to a range of generic problems and implement them efficiently using C++; (iii) use dynamic memory allocation to create and maintain dynamic data structures; (iv) analyse and compare the efficiency of competing algorithms using a range of sorting algorithms as the vehicle; (v) implement solutions to problems involving dynamic data structures and abstract data types in the programming language C++; and (vi) display an understanding of some object-based programming concepts by using appropriate C++ constructions.

CSCI131 Introduction to Computer Systems 6cp

Spring

Contact Hours: 5 hours per week

Pre-requisites: CSCI111

Assessment: Exam - 60%; Assignment - 40%

Subject Description: The subject focuses on the internal operation of the computer and provides an understanding of how the computer, at a low level, carries out the task of processing data. It deals with the machine language as determined by the architecture, addressing techniques, assembly languages, assembler construction, linkers, loaders and related operating system software and provides an introduction to the role of the operating system itself.

Subject Objectives: On successfully completing this subject students should be able to: (i) work with numbers in various and mixed bases; (ii) express arbitrarily complex logical statements in conjunctive or disjunctive normal form; (iii) express logical statements in the form of circuits using cascaded gates; (iv) decompose complex solutions in as fine grained detailed manner as possible, within the constraints of a machine's instruction set; and (v) extract the essence of what an arbitrary sequence of machine instructions appears to perform.

CSCI203 Data Structures, Algorithms, Systems 6cp

Autumn

Contact Hours: 3 hours Lecture, 2 hours Computer Lab per week.

Pre-requisites: CSCI121

Assessment: Assignment 40%; Exam 60%

Subject Description: Approaches to analysing algorithm complexity, introduced in first year subjects, will be reviewed. The complexity class of algorithms will be introduced as one of the major considerations in problem analysis and program design. The use of abstract data types as a design technique, and their implementation in solutions to problems, will form a part of the practical work. Code will be implemented in the form of reusable C++ classes and/or C modules.

Subject Objectives: For full list see subject outline.

CSCI204 Programming: The C Family and Unix 6cp

Autumn / Spring

Contact Hours: 6 hours per week

Pre-requisites: CSCI121

Assessment: Laboratory Assignments - 40%; Final Examination - 60%

Subject Description: The Computer Science component applies algorithms and data structures to text processing problems. In the Programming Tools component, solutions to these problems are designed using object based and object oriented design and implemented in C++ and Shell(sic) on Unix. The Software Engineering component emphasises achieving correct, robust and efficient programs. Note: This session, the subject will vary the emphasis on particular topics to more reflect the purpose of this subject i.e. the relationships between C and C++ and programming in a Unix environment. The official description will be modified to reflect this change in emphasis.

Subject Objectives: On completion of this subject you should be able to: (i) select and code the appropriate algorithms to solve text processing problems; (ii) understand the concepts of scanning, parsing and interpreting textual input; (iii) use object based techniques in the design of programs; (iv) write correct, robust and efficient programs in C++; (v) read C programs; and (vi) develop software in a Unix environment.

CSCI205 Development Methods & Tools 6cp

Spring

Contact Hours: 4 hours per week

Pre-requisites: CSCI121

Assessment: Examination - 50%; Assignment - 50%

Subject Description: To provide students with practical skills and knowledge of systems analysis and design techniques. Students will be given instruction in a particular, standard analysis and design method. The techniques and phases of the selected method will be treated thoroughly and in detail. The instruction will utilise case studies, and it will be supported by Computer Aided Software Engineering (CASE) technology. In addition to individual learning, students will be introduced to group analysis and design activities.

Subject Objectives: On completion of this subject the student should be able to: (i) explain the techniques and stages of the analysis and design method; (ii) describe the range of application domains to which the method can properly be applied; (iii) demonstrate proficiency in the correct use of the techniques learnt; (iv) properly apply the method to a particular analysis and design problem within the method's application domain. (v) demonstrate proficiency in the use of appropriate CASE tools.

CSCI212 Operating Systems 6cp

Autumn

Contact Hours: 5 hours per week

Pre-requisites: CSCI131 or CSCI121

Assessment: Assignments - 40%; Final Exam - 60%

Subject Description: The subject introduces main operating system concepts and explains the role of major operating system components. In particular, the subject overviews computer system structures, describes main process and storage management issues, and stresses the importance of protection and security.

Subject Objectives: A student who successfully completes this subject should be able to: (i) identify the major components of an operating system; (ii) define the terms used to describe operating system functions; (iii) explain the algorithms commonly used to implement these functions; (iv) compare the performance of commonly used algorithms, and (v) evaluate the suitability of an operating system for a task.

CSCI213 Java Programming & the Internet 6cp

Autumn / Spring

Contact Hours: 3 hours Lectures, 2 hours Labs per week.

Pre-requisites: CSCI121

Assessment: Assignments - 50%; Exams - 50%

Subject Description: This subject provides: 1. an introduction to the Java language and some of its standard class libraries; 2. experience with object oriented design and implementation techniques; 3. an understanding of the Internet and its importance to modern software systems. Topics will include: Java language, subset of Java class libraries (windowing, graphics, networking, threads), object oriented design and implementation, Internet issues, basics of TCP/IP protocols, Web technologies, HTML and Javascript, CGI programming, introduction to security issues.

Subject Objectives: A student who successfully completes this subject should be able to: (i) relate Java to other Web technologies including CGI, Javascript and other browser technologies; (ii) build Java applets and stand alone applications that exploit the abstract windows toolkit; (iii) design object oriented (OO) programs using a simplified version of a standard OO methodology; (iv) implement programs exploiting the threads and networking capabilities of Java; and (v) explain the security problems in a networked environment and detail Java's security mechanisms.

CSCI214 Distributed Systems 6cp

Spring

Contact Hours: 4 hours per week.

Pre-requisites: CSCI121

Assessment: Assignments - 40%; Exam - 60%

Subject Description: CSCI214 introduces basic concepts of internetworking and distributed systems. Physical communications media are introduced, then the focus shifts to network protocols (TCP/IP), then client-server model and the sockets interface. Other topics to be covered include network addressing and security (firewalls). Real-world programming examples from Unix and Windows-NT environments will be presented. Students will undertake laboratory exercises on Linux-based PCs.

Subject Objectives: A student who successfully completes this course should be able to: (i) identify the main component parts of a networked, distributed computer system; (ii) describe how these components interact; (iii) understand the workings of some of the more commonly encountered network protocols; (iv) be able to both understand and write TCP/IP applications software routines; (v) explain network addressing; (vi) demonstrate an understanding of the Client-Server model; and (vii) describe firewalls and other relevant security issues.

CSCI235 Databases 6cp

Spring

Contact Hours: 3 hours Lecture, 2 hours Computer Lab per week.

Pre-requisites: CSCI121

Assessment: Assignments - 25%; Class tests - 15%; Final Examination - 60%.

Subject Description: This subject investigates three major areas of modern database systems: 1. design of relational databases; 2. programming of relational databases; 3. concurrency control and data recovery in database systems. Topics will include: Introduction to conceptual database modelling; Principles of relational database model; Structured Query Language (SQL) and its procedural extensions (PL/SQL, Embedded SQL, JDBC); Database server programming; Normalization of relational databases; and Transaction management and recovery in database systems.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the principles of relational database model; (ii) design and implement a simple relational database; (iii) use a number of software tools to implement database applications; (iv) program a relational database server; (v) normalise a relational database; (vi) explain the principles of distributed databases and design a distributed database; and (v) explain the principles of transaction management and database recovery mechanisms.

CSCI236 3D Modelling and Animation 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 12 credit points of 200 level CSCI or IACT subjects

Exclusions: CSCI463

Assessment: 5 Laboratory Assignments - 40%; Final Examination - 60%

Subject Description: This subject provides students with a hands-on introduction to the use of computers for developing models of three-dimensional objects and viewing them in 3D as still images and animations. Topics covered include basic modelling primitives, from polygons to spline surfaces; tools to modify simple objects; surfacing concepts such as textures and bump maps; basic lighting of scenes; the animation process including key frames, articulated structures, camera movement and morphing; lighting effects such as volumetrics and radiosity. The subject uses the industry standard software package LightWave.

Subject Objectives: A student who successfully completes this subject should be able to: (i) understand the basic concepts of modelling and animating three-dimensional scenes; (ii) take an object, whether real or imagined, and build a geometric model of the object in the computer; (iii) choose suitable colours and textures to provide a realistic appearance of the model; (iv) set up lighting and camera to display a still image of the model; (v) set up the motion of objects, cameras and lights to generate an animation of a scene; and (vi) use lighting effects to enhance the scene.

CSCI311 Software Process Management 6cp

Autumn

Contact Hours: 3 hours per week.

Pre-requisites: CSCI205

Assessment: Assignments 50%; Examination 50%

Subject Descriptions

Subject Description: Software development is a difficult and challenging task. Apart from the most trivial of problems, the software development process is generally a collaborative rather than an individual effort. To manage the development of complex software artifacts, various principles and practices of software engineering have been formulated. Acquainting students with the principles and practices of managing the software development process is the primary aim of this subject.

Subject Objectives: On completion of this subject the student should be able to: (i) describe various models of software development process; (ii) explain the principles and practices of software process management; (iii) demonstrate proficiency in a selection of process management techniques; and (iv) apply process management skills and knowledge to a group software project.

CSCI313 Professional Programming Practices 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: CSCI204

Assessment: Assignments - 60%; Exam - 40%

Subject Description: The aims of this subject are to assist students in refining their programming skills and to develop awareness of issues important to professional programmers. The focus will be predominantly on programming in C++. Topics will include more advanced language features, tools, and libraries.

Subject Objectives: On successful completion of this subject, a student should be able to: (i) make effective use of professional development tools including performance analysis tools, testing tools, debuggers, project and version management tools; (ii) exploit template language constructs and generic algorithm libraries in the implementation of programs; (iii) demonstrate familiarity with the use of inheritance and the complexities of multiple inheritance constructs; (iv) address issues of code organization, quality, reliability, and performance; (v) construct programs based on a framework library such as the Microsoft Foundation Class library; and (vi) recognize the use of design patterns in code and exploit patterns in the development of their own code.

CSCI315 Database Design and Implementation 6cp

Autumn

Contact Hours: Autumn 3 hour lectures.

Pre-requisites: CSCI235

Assessment: 3 Assignments -10%; 2 Class tests - 10%; Final examination - 50%

Subject Description: This subject investigates the process of relational database design starting from conceptual database design, through logical database design up to and including physical database design, database tuning and administration. The topics will include conceptual database design based on Object Modelling Technique, methodologies for conceptual design, view integration, logical database design, database normalization and de-normalization, physical database design, generation of database applications, database tuning, design of distributed database systems.

Subject Objectives: A student who successfully completes this subject should be able to: (i) design a relational database using Object Modelling Technique in a systematic manner; (ii) prove the correctness of the final design using the formal techniques;

(iii) carry out cost/benefit analysis of the final design in the terms of physical database design techniques;

(iv) implement the design using commercially available database application generators; (v) carry out performance evaluation tests and evaluate his/her implementation against a range of criteria using the best test results; (vi) explain an internal organisation of a sample relational database system; (vii) carry out the basic functions of database administrator; and (viii) design a distributed database system.

CSCI321 Project 12cp

Annual / Spring 2003 - Autumn 2004

Contact Hours: 2 hours per week

Pre-requisites: CSCI204 or CSCI213 and 18cp of 200 level IACT or CSCI subjects

Restrictions: Spring start is ONLY available to candidates who have 96cp of advance standing. As Web Enrolment is NOT possible for Spring start, see co-ordinators for details

Subject Description: Working in groups, students design, implement, and document a software system. Involves: project planning and scheduling, seminars and individual presentations, group coordination, research of proposed application domain, use of design methodologies, design documentation, coding, module and system integration, testing, verification, and implementation. A small number of project topics have been proposed. Students will form teams, each of which will design, implement and document a solution to one of the proposed projects. Teams will meet weekly with supervisors to discuss progress and problems.

Subject Objectives: This subject should develop the student's ability to handle the definition, design, programming and documentation of a non-trivial software project.

CSCI322 Systems Administration 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: CSCI204 and 6 cp of 200-level CSCI subjects

Assessment: Assignments 40%; Final Examination 60%

Subject Description: This subject will cover the practical and theoretical aspects of system administration. The various resource areas which have to be managed will be discussed and examined, and the possible methods of monitoring and controlling them in various systems will be investigated. The features unique to both single processor and networked systems will be investigated.

Subject Objectives: On successful completion of this subject the student should be able to: i) identify the manageable components of a typical system; and ii) demonstrate an understanding of the steps to follow when the system being managed grows and changes with time.

CSCI323 Artificial Intelligence 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: CSCI202 or CSCI204 and 6cp of 200-level Computer Science subjects

Subject Description: CSCI323 reviews the main components of Artificial Intelligence research including knowledge representation, reasoning, natural language understanding, and perception. Focuses on Expert Systems and the computational models they embody. Introduces the programming languages Lisp and Prolog.

CSCI324 Human Computer Interface 6cp**Autumn****Contact Hours:** 3 hours per week**Pre-requisites:** CSCI204 and 6cp 200 level CSCI subjects**Exclusions:** not to count with IACT403**Assessment:** Final Exam - 40%; Assessment - 60%

Subject Description: This subject examines the design evaluation and implementation of interactive computing systems for human use (HCI) and the major phenomena surrounding them. Also considered are joint performance of tasks by humans and machines, structure of human machine communication, social and organizational interactions with machine design, human capabilities to use machines including their learnability as well as algorithms and programming of the interface itself, engineering concerns that arise in designing interfaces, the process of specification design and implementation of interfaces and design tradeoffs.

Subject Objectives: At the successful completion of this subject a student should be able to: i) describe & justify HCI principles; ii) apply the principles of designing HCI; and iii) design a HCI for a specific application and implement a prototype.

CSCI325 Software Engineering Formal Methods 6cp**Autumn****Contact Hours:** 4 hours per week**Pre-requisites:** CSCI204**Co-requisites:** CSCI311**Assessment:** Z Exercise-30%; Essay-20%; Final Examination-50%

Subject Description: This subject introduces students to formal methods for software specification. The role of formal methods in the software development process is explained, and it is illustrated with case studies of the industrial application of formal methods. The subject uses the Z notation as an example of a formal specification technique, and software tools for the manipulation of Z specifications are introduced. Case studies in the application of formal methods to safety-critical and real-time software systems are presented.

Subject Objectives: A student who successfully completes this subject should be able to: (i) understand and use propositional and predicate calculus; (ii) understand formal specifications written in the Z notation; (iii) translate informal descriptions into formal specifications in the Z notation; (iv) use software tools for the manipulation of formal specifications; (v) describe case studies of the applications of formal methods; and (vi) describe current industrial practice of formal methods in software development.

CSCI333 Compilers 6cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** CSCI337

Subject Description: CSCI333 introduces the theories and practices of compiler and interpreter construction. Covers: lexical analysis, parsing, code generation, optimisation, symbol tables, and error detection.

CSCI334 Interfacing and Real Time Programming 6cp**Spring****Contact Hours:** 3 hours Lectures ,1 hour Computer Lab per week.**Pre-requisites:** CSCI121**Assessment:** 5 Assignments @ 8% - 40%; Final Examination (3 hours) - 60%

Subject Description: The emphasis of this subject is on low-level interfacing of computer peripherals in high-level languages. Students will be required to complete a number of practical assignments. Topics to be covered will include: (a) IBM PC Programmer s model; (b) interrupt handling; (c) I/O registers; (d) data input, error detection and correction, filtering, storage and output; and (e) programmable chips for digital, serial, analog and disk I/O, graphics, memory management and real-time clocks. It should be noted that according to Course Rule 003 {Interpretation Point 2 (t)} each credit point for a single session subject has the value of about 2 hours per week including class attendance. Therefore, the amount of time spend on each 6 credit point subject should be at least is at least 12 hours per week, which includes lectures/tutorials/labs etc.

Subject Objectives: On satisfactory completion of this subject the student should be able to: (i) Describe the internal structure of the i80x86/pentium processor in terms of the programmer s view of the device; (ii) Critically discuss a range of techniques for interrupt handling in a microprocessor; (iii) Describe the essential features of registers in terms of their structure and function; (iv) Identify a range of tasks carried out within a microcomputer by a range of specialised programmable chips; (v) Describe the structure and function of programmable chips for each of a range of specialised tasks including input/output and real-time clocks and (vi) Discuss the role and function of a range of micro-electronic components; and (vii) Program a range of computer peripherals using a high-level language.

CSCI336 Computer Graphics 6cp**Spring****Contact Hours:** 3 hours per week**Pre-requisites:** CSCI204 and 6cp of 200-level CSCI subjects**Assessment:** Laboratory Assignments 5 @ 8%-40%; Final Examination - 60%

Subject Description: Introduction to computer representation of lines and points; mathematical models; transformations in 2 and 3 dimensions; homogenous coordinate systems; fill algorithms; solid modelling; hidden line and surface algorithms; lighting models; and current trends.

Subject Objectives: A student who successfully completes this subject should be able to: (i) outline the methods by which a computer can represent graphical images; (ii) specify mathematical models of two- and three-dimensional graphic entities; (iii) devise geometric transformations of two- and three-dimensional graphic entities; (iv) select appropriate algorithms used to produce realistic images of three-dimensional scenes; (v) implement the above methods and procedures on a computer; and (vi) discuss mathematical techniques and technological approaches which may affect the way in which graphical representations are produced in the future.

Subject Descriptions

CSCI337 Organisation of Programming Languages 6cp

Spring

Contact Hours: 3 hours Lectures, 1 hour Computer Lab per week.

Pre-requisites: CSCI121

Subject Description: CSCI337 develops an understanding of major programming paradigms including imperative, functional, logical, object-oriented, and procedural paradigms. Introduces formal language specification. Covers language definition and syntax; data types and data structures, control structures and data flow; run-time considerations; and interpreted languages.

CSCI361 Computer Security 6cp

Autumn

Contact Hours: 3 hours lectures, 2 hours labs per week.

Pre-requisites: CSCI204 and 6cp of 200-level CSCI subjects

Assessment: Final exam - 70%; Laboratory Work - 30%

Subject Description: CSCI361 develops the knowledge and skills necessary to identify the security problems that may occur in a distributed computer environment, and then to devise means for countering the threats. Covers: Identification: passwords, challenge-response protocols Private Key; Cryptography: classical ciphers, Feistel cryptosystems Public; Key Cryptography: RSA, Merkle-Hellman, El-Gamal, Elliptic-Curve cryptosystems; Hashing: Birthday paradox, serial and parallel hashing, MD family, keyed hashing; Digital Signatures: generic, RSA, El-Gamal, blind, undeniable, fail-stop; Key Establishment; Protocols: classical key transport, DH agreement, Kerberos, SPX, STS protocol, BAN logic Access; Control: MAC, DAC, RBAC, implementations of access control, security kernel, Multics, UNIX, capabilities, access control lists; Network Security: IPsec, viruses, web security, copyright protection .

Subject Objectives: A student who successfully completes this subject should be able to: (i) identify the threats to computing resources in a distributed computer environment; (ii) classify cryptographic algorithms in terms of their cryptographic characteristics and services provided; (iii) describe two generic key establishment protocols and explain how to assess their performance; (iv) categorise different access control models and their relation to access control policies; (v) explain how protection of information is implemented in a distributed computer environment; (vi) define what is the virus, worm and Trojan horse; (vii) identify which security services can be implemented using IPsec protocols; and (viii) describe security aspects of Web technology and their significance for Electronic Commerce.

CSCI365 CSCI Honours Preliminary Project 6cp

Contact Hours: Not on offer in 2003

Subject Description: A supervised reading course for prospective Honours students. Under direction of a member of academic staff, students undertake a reading or small research project in an area of Computer Science not available by coursework. Introduction to research methodology.

CSCI370 Special Topics in Computing Science A 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 12 credit points of CSCI or IACT @ 200 level

Subject Description: Topics selected from the areas of interest of staff members or visiting faculty. Consult the head of school for details.

CSCI371 Special Topics in Computing Science B 6cp

Contact Hours: Not on offer in 2003

Subject Description: Topics selected from the areas of interest of staff members or visiting faculty. Consult the head of school for details.

CSCI372 Special Topics in Computing Science C 6cp

Contact Hours: Not on offer in 2003

Subject Description: Topics selected from the areas of interest of staff members or visiting faculty. Consult the head of school for details.

CSCI373 Special Topics in Computing Science D 6cp

Contact Hours: Not on offer in 2003

Subject Description: Topics selected from the areas of interest of staff members or visiting faculty. Consult the Head of School for details.

CSCI399 Server Technology 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: CSCI204 + 6cp @200 level

Assessment: Assessment - 30%; Final Examination - 70%

Subject Description: Topics to include: * Web server technology including "servelets" and other server extensions * Mechanisms for handling "state" data in a web context * XML, VRML, and related technologies for the packaging and presentation of data (including style sheets and problems of maintaining consistency in style of site content) * Security problems of a server machine, web specific security issues * Proxy servers, firewalls, traffic filters * Secure network protocols * Java s security related APIs * Certification agents, digital signatures * Logging and tracing user access * Introduction to scripting languages for servers (Perl, etc) * Naming services (DNS & Bind, JNDI) for resource location.

Subject Objectives: A student who successfully completes this subject should be able to: (i) manage securely both the deployment of information resources and the handling of commercial transactions via the Internet.

CSCI401 Computing Science IV Honours 48cp

Annual

Pre-requisites: Candidates who achieve a credit average or better in the Bachelor of Computer Science or a major in computer science in another degree, are eligible to enrol in an additional years study towards a Bachelor of Computer Science (Honours) (BCompSc(Hons)).

Subject Description: The program of study for BCompSc(Hons), i.e., CSCI401 Computer Science IV Honours will include: 1. a 18 credit point project; 2. 30 credit points of 400/900 level subjects from the Computer Science Schedule; 3. With the permission of the Head of School, candidates may substitute up to 12 credit points of subjects with 300 level subjects from the the Computer Science Schedule or 400 level subjects from another discipline; 4. Attendance at a series of seminars on research methodology (including quantitative and qualitative analysis). Seminars will cover the purpose of research, formulating a research question, conducting a literature review and writing a research proposal. Students will learn how to design an appropriate research plan. Requirements for scholarly writing will also be discussed and the process of undertaking a research project will be analysed. Individual results for subjects attempted will not be released. Instead, the final result for CSCI401 will be calculated from the total results for the project and subjects.

CSCI405 Computer Science Joint Honours 24cp

Annual

Assessment: written examination, seminar and thesis.

Subject Description: The thesis is usually integrated with the other academic unit. The subject comprises one half of CSCI401. A topic for the thesis will be determined in consultation with the other academic unit. See the Computer Science co-ordinator for advice.

Subject Objectives: A student who successfully completes this subject should be able to: (i) present a seminar on the results of their investigation; (ii) explain and /or apply appropriate research skills; (iii) explain and /or use appropriate project management skills; and (iv) write a research report.

CSCI407 Corba and Enterprise Java 6cp

Autumn

Contact Hours: 2 hours Lectures plus independent work in the computer laboratories

Pre-requisites: 24 cp @ 300 level CSCI subjects

Exclusions: CSCI407

Assessment: A series of assignments totalling 100% with no one assignment exceeding 50% in value.

Subject Description: This subject introduces students to the "enterprise level" computing environments - Corba, and Enterprise Java Beans. It will also provide a more limited overview of general "web services" and related technologies. The emphasis is practical with students developing Corba applications with Java clients and C++ servers, and later creating and deploying complete EJB systems.

Subject Objectives: On successful completion of this subject, students should be able to: (i) Implement Corba systems that exploit the language independent characteristic of this technology; (ii) Utilize Corba services including at least one of Naming, Trading, Events (Notification), or Transaction services; (iii) Implement and deploy an EJB server and Java client application; (iv) Implement and deploy a complete EJB-based web-application with front-end servlet and JSP components.

CSCI408 Distributed Java 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 24cp@ 300level CSCI subjects

Exclusions: CSCI908

Assessment: A series of assignments totalling 100% with no one assignment exceeding 50% in value.

Subject Description: This subject provides students with a strong grounding in distributed object systems, using the inter-related Java based RMI, Jini, Javaspaces, and JXTA technologies as illustrations. The content will include an exploration of how to "objectify" a client-server distributed system, a reasonably detailed study of Java Remote Method Invocation, exploration of the Jini technology with emphasis on applications such as Javaspaces distributed computing, and an introduction to the latest Java based peer-to-peer systems.

Subject Objectives: On successful completion of this subject, students should be able to: (i) Implement Java RMI systems, including systems with activatable objects and systems that utilize a variety of naming services; (ii) Implement distributed computing environments based on the Javaspaces and Jini systems; (iii) Utilize the JXTA peer-to-peer computing framework.

CSCI425 Topics in Software Engineering 6cp

Autumn

Contact Hours: 2 hours per week

Pre-requisites: 24cp @300 level

Assessment: Project Planning & Requirement Specifications - 20%; Project Architecture & Design - 10%; Project Testing - 20%; Configuration Management - 10%; Final Exam - 40%.

Subject Description: This subject examines the current state of software engineering both as an academic discipline and as a profession. The subject focuses on issues of requirements engineering, system procurement, and professional practice, and through case studies, the subject considers reasons for the failure and success of various software engineering projects.

Subject Objectives: At the successful completion of this subject students should be able to: (i) describe contemporary software engineering issues, methods, and practices; (ii) report on pertinent case studies of software engineering project failures and successes; (iii) select appropriate tools and techniques for software engineering problems; and (iv) evaluate relevant software engineering constraints, such as risk, cost, time, safety, for a given software engineering project

CSCI444 Perception and Planning 6cp

Spring

Contact Hours: 2 hours Lectures per week.

Pre-requisites: 24cp @300 level

Assessment: Assignments 100%

Subject Description: This subject explores ways in which a robot can combine data from variety of sensors to create or update a model of its environment, and then use this model to infer the consequences of proposed actions. The subject will cover the use of internal sensors, such as those measuring odometry and location, and external sensors including those for touch, vision, and range finding.

Subject Objectives: At the completion of this subject students should be able to: i) describe the sensors used for navigation of a mobile robot; ii) understand the process of perception for robot sensing and navigation; iii) design a software architecture for perception using behavioural, fuzzy logic and learning technique; and iv) select appropriate data structure and algorithms for path planning.

CSCI445 Parallel Computing 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 24cp @300 level

Assessment: Assignments - 40%; Exam - 60%

Subject Description: This subject presents different approaches to the construction of parallel algorithms and computer architectures. Both theoretical and practical aspects are covered, emphasis is placed on identifying the suitability of the approaches for specific applications.

Subject Objectives: At the completion of this subject students should be able to: (i) characterize parallel computers in terms of granularity, coupling, Flynn's Models, topology and interconnection network; (ii) understand the difference between shared memory and distributed (message -passing) models; (iii) implement both simd and mind parallel algorithms in c/c++; (iv) implement parallel programs in both PVM and threads; (v) evaluate parallel algorithms in terms of both computational and communication efficiency; and (vi) apply divide-and-conquer and master-slave techniques to appropriate parallel applications.

CSCI446 Multimedia Studies 6cp

Autumn

Contact Hours: Autumn 3 hrs/wk - 2hrs lecture + 1hr lab per week

Pre-requisites: 24cp @300 level or INFO202

Assessment: Assignment 100%

Subject Description: This subject studies the creation and programming of digital media for multimedia applications. Multimedia systems combine images, graphics, sound and text to interactively communicate information. Each of these media has its own standards, algorithms and file formats. The foundations strand examines the principles of how media is created. The programming strand explores the programming of multimedia applications, using a multimedia applications such as QuickTime for Java. The practical strand explores the acquisition, encoding and editing of digital video and audio with professional tools, such as Final Cut Pro.

Subject Objectives: At the completion of this subject the student should be able to: (i) select the appropriate media for communication of information; (ii) explain their choice in terms of the communication requirements; (iii) select the appropriate standards for the media chosen; (iv) understand the processes involved in the acquisition; representation, compression, delivery, display and human perception of the information; (v) select suitable software tools for producing the information; (vi) understand the algorithms used to process the information; and (vii) write programs to manipulate the information.

CSCI450 Software Requirements and Specifications 6cp

Spring

Contact Hours: 2 Lectures hours per week

Pre-requisites: 24cp @ 300 level

Assessment: Assignments - 50%; Examination - 50%

Subject Description: Software development can be viewed as an activity in which useful things are built to serve recognisable purposes. For software developers, these "useful things" are a special kind of machine known as software systems, and the "purpose" of these machines is to help solve problems in some application domain. This subject emphasises the importance of understanding the application domains that software systems interact with and the problems we try to solve in these domains.

The subject focuses on writing explicit and precise descriptions known as: (1) Requirements - descriptions of application domains and the problems to be solved there; (2) Specifications - descriptions of the interface between the machine and the application domain. The subject addresses techniques used to record, elicit, and reason about these descriptions. The subject examines the approach to Requirements and Specification techniques taken by a range of systems engineering methodologies. The concepts of method engineering are introduced and the role of software tools to support this activity is discussed.

Subject Objectives: On completion of this subject the student should be able to: (i) describe state of the art techniques of software requirements capture and analysis; (ii) explain how software system requirements are translated to appropriate software specifications expressed in a range of different formalisms; (iii) demonstrate an ability to interpret a particular set of software requirements and translate into a specification; and (iv) apply the knowledge and skills presented in this subject to typical software development scenarios encountered in the software industry.

CSCI457 Advanced Topics in Database Management Systems 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: 24cp @300 level

Assessment: Implementation Project - 20%; Mini Research Project - 30%; Final Examination - 50%.

Subject Description: This subject covers two advanced topics from modern database management systems: object-oriented databases and transaction management in database systems. The topics include the details such as design and implementation of object-oriented database systems, hybrid transaction management, optimistic transaction management, nested transactions, management of long transactions, and management of transaction in distributed systems.

Subject Objectives: At the completion of this subject students should be able to: i) Design and implement object-oriented and object-relational database systems; and ii) Identify and describe the differences among the various concurrency control techniques in database systems and determine their impact on performance of database systems

CSCI463 Advanced Computer Graphics 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 24cp @ 300 level

Exclusions: Not to count with CSCI236

Assessment: Assignment - 60% Examination - 40% (form of assessment to be confirmed with class)

Subject Description: In this subject students will learn how to use graphics techniques such as ray tracing and radiosity to produce highly realistic images with features such as shadows, reflection, refraction, texturing, penumbras and motion blur. The rendering algorithms and their underlying mathematics are covered with a practical component being the implementation of a ray tracer. Applications including scientific visualisation are also covered.

Subject Objectives: At the completion of this subject, students should be able to: (i) describe and implement the algorithms used to produce ray-traced images; (ii) discuss the underlying mathematical models; and (iii) discuss the advantages and disadvantages of several visualisation techniques.

CSCI464 Neural Computing**6cp****Autumn****Contact Hours:** 2 hours per week**Pre-requisites:** 24 cp @ 300 level**Assessment:** Exam - 60%; Assignment - 40%

Subject Description: This subject introduces students to the basics of "soft" computing. Primary focus will be on artificial neural networks, with some attention also given to genetic algorithms, (evolutionary computing), fuzzy logic and neurofuzzy expert systems. These approaches will be compared and contrasted with heuristic, rules-based artificial intelligence methods, such as decision trees and case-based reasoning. Several application areas will be discussed, primarily pattern recognition and/or classification.

Subject Objectives: At the completion of this subject students should be able to: i) explain the architecture and learning algorithms of the more commonly encountered neural network models; ii) understand the strengths and limitations of artificial neural networks (ANNs); iii) be able to apply ANNs to typical pattern recognition and/or classification problems; and iv) understand the need for preprocessing the available neural data.

CSCI465 Design and Analysis of Algorithms**6cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** 24cp @ 300 level**Assessment:** Assessment - 50%; Exam - 50%.

Subject Description: The objective of this subject is to develop the knowledge, skills and techniques for designing and analysing algorithms. Topics to be studied include: review of standard algorithm designs including divide and conquer, the greedy method, etc; complexity analysis and comparison of algorithms, number theoretical algorithms.

Subject Objectives: At the completion of this subject students should: i) use some basic mathematics; ii) be able to compare algorithms for speed and storage requirements; iii) be able to give quantitative assessment of algorithms; iv) be able to choose the appropriate algorithm for a task; and v) be able to quantify that an algorithm cannot be used with given resources.

CSCI466 Coding for Secure Communication**6cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** 24cp @ 300 level**Assessment:** Assignment - 50%; Exam - 50%

Subject Description: This subject provides a fundamental understanding of information protection and efficient coding strategies that can be used to ensure correctness, security and authenticity of data. It uses entropy as the universal measure of information to analyse and explore fundamental bounds on the performance of secure and reliable storage and communication systems, and examine a range of coding schemes that form the main building blocks of such systems. It will include the following topics: i) redundancy in data and compression algorithm; ii) efficient error control strategies for secure and reliable communication and storage systems; and iii) coding methods for secrecy and authenticity.

Subject Objectives: At the completion of this subject students should be able to: i) understand the problems and models in information protection; ii) use a range of coding methods and strategies for providing protection; and

iii) evaluate various strategies for protection of data and suggest the best solution for a particular system.

CSCI467 Complexity Theory**6cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** CSCI361**Co-requisites:** CSCI471**Assessment:** Assignment - 50%; Exam - 50%

Subject Description: The subject introduces basic concepts of complexity theory. Topics include NP-completeness and NP-hardness, Cook's theorem and its implications concepts of indistinguishability and pseudorandomness, interactive proof systems and zero-knowledge protocols.

Subject Objectives: At the completion of this subject students will be able to: i) classify decision problems according to their computational difficulty; ii) understand different types of indistinguishability and their relation to pseudorandomness; and iii) use interactive proof systems for identification and knowledge proving.

CSCI468 Network Security**6cp****Spring****Contact Hours:** 2 hours Lecture per week**Pre-requisites:** 24 cp @ 300 level**Assessment:** Assignment - 50% Exam - 50%

Subject Description: This subject provides a survey of network security technologies and explores them in practice. This includes but not limited to, network-based threats, security failure in cryptographic and network protocols, authentication servers, certificates and public-key infrastructure, security provisions in communication protocols and standards, electronic mail security, firewalls and intrusion detection systems.

Subject Objectives: At the completion of this subject students will be able to: i) understand network vulnerabilities and network-based attacks; ii) apply a range network security technologies such as firewalls and intrusion detection systems for securing networks; iii) use appropriate security standards and network security tools to enhance security of a distributed system; and iv) evaluate, compare and recommend network security applications and systems.

CSCI471 Advanced Computer Security**6cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** 24cp @300 level**Assessment:** Assessment - 50%;Exam - 50%

Subject Description: This subject provides a review of computer security. Topics include: digital signatures, elliptic curve cryptography, El Gamal public key methods, the Advanced Encryption Standard (AES), Security Standards, Security Evaluation Standards, Linear Cryptanalysis, Differential Cryptanalysis.

Subject Objectives: At the completion of this subject students will be able to: i) understand and use modern cryptographic techniques; ii) access appropriate technique to be used in specific conditions; iii) undertake rudimentary cryptanalysis of a cryptalgorithm or hash algorithm; and iv) understand what is required to get a certified security evaluation.

ECTE101 Electrical Engineering 1 6cp**Spring****Contact Hours:** 78 hours**Co-requisites:** MATH142 or MATH161 or MATH188.**Exclusions:** ELEC101

Assessment: See Subject Information Sheet those presented here are only a guide. Assessment: Practical attendance and performance - 10%; Practical (Reports) - 15%; Tutorial Tests - 7.5%; Tutorial Assignments - 7.5%; Examination - 60%.

Subject Description: ECTE101 aims to provide students with an understanding of the behaviour of basic electrical devices and circuits and with an introduction to the mathematical models used in computer, electrical, internet and telecommunications engineering. It will provide an introduction to electrical quantities and measurements; circuit analysis; electronic devices and circuits; an introductory overview of the frequency spectrum used for communications; the use of modulation and broadcast mediums, e.g., television and radio; wireless technology; and fixed networks. The practical component will cover basic electrical measuring, recording and display instruments; characteristics and measurements of circuit elements, analogue and digital electronic circuits, simple communications circuits.

Subject Objectives: Students who successfully complete this subject will acquire the following competencies and abilities. In particular, students will be able to: (i) use circuit theorems to simplify circuit calculations; (ii) analyse and design simple circuits using devices covered in the contents; (iii) demonstrate an understanding of the frequency spectrums used in communications; (iv) demonstrate practical experience in making and recording measurements using electrical components and equipment; and (v) write reports on experimental work undertaken.

ECTE150 Engineering Design and Management 1 6cp**Autumn / Annual****Contact Hours:** 78 hours**Exclusions:** ELEC150

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 50%; Reports/Presentation(s) - 10%; Tutorial/Practical Assignments - 15%; Team Exercise - 25%.

Subject Description: The aim of ECTE150 is to provide students with an introduction to the communication, management and teamwork skills required of professional engineers. The subject will examine the role played by electrical engineers in society, their responsibility to the environment, and will show the importance of the professional code and ethics. Lectures will also examine and introduce management topics relevant to engineers. Laboratory activities will introduce basic measurement and computing skills.

Subject Objectives: A student who successfully completes this subject should be able to: (i) demonstrate an understanding of the social, environmental, and economic consequences of an engineer's professional activities; (ii) demonstrate ability to work in and contribute effectively to a team solving simple engineering design problems; (iii) use a systematic approach to the design, construction and testing of simple circuits; and (iv) write structured reports and give organised presentations on design activities and researched material.

ECTE191 WWW Engineering 6cp**Autumn**

Wollongong

On Campus

Contact Hours: 78 hours

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination - 60%, Assignment - 25% and Practical - 15%.

Subject Description: The aim of this subject is to provide students with a practical introduction to the World Wide Web and to a variety of tools useful in engineering the WWW. Topics covered will include: embedded servers; relevant standards; multimedia content and formats in use on the WWW, for example, MPEG, JPEG and ZIP compression formats; practical applications of compression; and modular level engineering of Java programs.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students will be able to: (i) engineer a simple WWW communication solution; (ii) demonstrate an understanding of the systems involved in Web development; (iii) demonstrate an understanding of the issues involved in composing multimedia WWW content; (iv) demonstrate an appropriate level of written and oral communication skills; and (v) demonstrate practical and problem solving skills.

ECTE195 Design and Management 6cp**Autumn****Contact Hours:** 71.5 hours**Exclusions:** ELEC150, ELEC195

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Tutorials - 30%; Seminars - 20%; Practical - 20%

Subject Description: This subject provides an introduction to the communication, management and team work skills necessary to implement typical IT projects for students in the BIST degree. It also seeks to provide students with communication and experimentation skills. Accompanying laboratory activities will introduce students to basic skills and concepts needed for internet performance measurements and monitoring.

Subject Objectives: A student who successively completes this subject should be able to: (i) demonstrate an understanding of some of the fundamentals of management theory and practice; (ii) demonstrate an ability to work in and contribute effectively to a team solving simple problems; (iii) demonstrate an ability to communicate with others; and (iv) write structured reports and give organised presentations.

ECTE196 Internet Technology 1 6cp**Spring**

Wollongong

On Campus

Spring

Dubai

On Campus

(Feb-May 03)**Autumn**

Dubai

On Campus

(Sept03-Jan 04)**Contact Hours:** 78 hours**Exclusions:** ELEC196

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination - 60%, assignment - 25% and practical - 15%.

Subject Description: This subject introduces students to the fundamentals of computer communications. These fundamentals are then used to outline the Internet Architecture, and describe its key components.

Following this, the operation of the World Wide Web (WWW) will be detailed. Topics covered include packet switching, switched networks, layered protocols, Local and Wide Area networks, WWW operation, network components (e.g., routers), access technologies (e.g., modems). Laboratory exercises will illustrate key computer communications concepts.

Subject Objectives: After successfully completing this subject, the student should be able to: (i) describe packet switching and switched network architectures; (ii) identify key Internet components; (iii) demonstrate an understanding of how internet component behaviours determine overall Internet performance; (iv) explain how access devices, e.g., modems, transfer information; (v) demonstrate an understanding of the protocols, eg., http, which underpin the operation of the WWW; and (vi) write reports on exercises undertaken.

ECTE202 Circuits and Systems 6cp

Annual

Contact Hours: 65 hours

Pre-requisites: ELEC101 or ECTE101 and (MATH141 or MATH161 or MATH187)

Exclusions: ELEC201, ELEC202

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial assignments - 20%; Tests - 10%; Final Examinations - 70%.

Subject Description: Topics covered will include: dependent sources; circuit analysis techniques; operational amplifiers; feedback; energy storage elements L, C; natural, forced and complete response of first and second order circuits; steady state sinusoidal circuits-phasors; frequency response, Bode diagrams and filters; Laplace and Fourier approaches to system and signal analysis; and block and signal flow diagrams.

Subject Objectives: A student who successfully completes this subject should be able to: (i) use circuit theorems in analysing networks with mixed sources; (ii) analyse the transient and steady state response of circuits; (iii) analyse ac circuits using phasor methods; (iv) calculate the frequency response of circuits; (v) analyse system and circuit dynamics using Laplace and Fourier Techniques; and (vi) represent systems by block diagram techniques.

ECTE212 Electronics and Communications 6cp

Spring

Contact Hours: 58.5 hours

Pre-requisites: ELEC101 or ECTE101

Co-requisites: ELEC202 or ECTE202

Exclusions: ELEC211, ELEC212

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial assignments 10%; Laboratory work and Test 30%; Final Examination 60%.

Subject Description: The aims of this subject are: to provide students with an opportunity to develop an understanding of electronic circuit design using operational amplifiers as the building blocks and with an ability to analyse circuits using conventional methods; to introduce analogue modulation techniques and the circuit implementations required for analogue communications. Topics covered will include: using ideal operational amplifiers to construct: inverting and non-inverting amplifiers; summing amplifiers; integrators; comparators with and without hysteresis; peak detectors; and scaling adders; Digital-to-Analogue and Analogue-to-Digital conversion; determine the effect of the frequency response of non-ideal operational amplifiers and the effects of positive and negative feedback;

signal representation in time and frequency domains; analogue modulation techniques (AM, FM); electronic circuit implementations of modulators and demodulators (AM, FM).

Subject Objectives: A student who successfully completes this subject should be able to: (i) analyse operational amplifier circuits; (ii) write technical descriptions of circuit operation; (iii) design electronic circuits using operational amplifiers; (iv) explain how the non-idealities of the operational amplifier change circuit behaviour; (v) analyse signals in the time and frequency domains; (vi) design simple modulators and demodulators; (vii) explain the characteristics of analogue modulation schemes; and (viii) demonstrate appropriate laboratory skills.

ECTE222 Power Engineering 1 6cp

Spring

Contact Hours: 58.5 hours

Pre-requisites: ELEC101 or ECTE101

Co-requisites: ELEC202 or ECTE202

Exclusions: ELEC221, ELEC222

Assessment: See Subject Information Sheet those presented here are only a guide. Mid session test - 10%; Laboratory work and Test - 30%; Final Examination - 60%.

Subject Description: Topics covered include: Typical power system loads; basic structure of a power system; electric power generation; single and three phase systems. Power system equipment: transformers, switch gear and protection. Installation practice: voltage drops, power factor correction, tariffs, safety, earthing, protection equipment rating. Power quality: system disturbances, equipment susceptibility, improvement and instrumentation.

Subject Objectives: A student who successfully completes this subject should be able to: (i) describe the major types of power system loads and their particular requirements; (ii) describe the structure and components of a power system; (iii) perform basic power system calculations involving power and energy requirements, voltage drops, power factor correction and fault currents; (iv) describe power quality problems for particular load types and their solution (v) appreciate the need for safety and equipment protection and the means for achieving it; (vi) be familiar with basic laboratory equipment and instrumentation; and (vii) demonstrate appropriate laboratory skills.

ECTE233 Digital Hardware 1 6cp

Autumn

Contact Hours: 58.5 hours

Pre-requisites: ECTE150 or ECTE195 or CSCI111

Exclusions: ELEC231, ELEC233

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial Tests - 10%; Laboratory work and test - 30%; Final examination - 60%.

Subject Description: Topics covered will include: combinational logic, simplification of logic expressions, Karnaugh maps; sequential logic, flip-flops, registers, clock, timing and synchronisation problems; sequential machines, Mealy and Moore machines, timing diagrams and state tables. Students will also be required to become proficient at writing simple programs for a microcontroller.

Subject Objectives: A student who successfully completes this subject should be able to: (i) design a combinational circuit with a minimum of hardware using standard SSI and MSI integrated circuits; and

Subject Descriptions

(ii) design a synchronous sequential circuit with a small number of states and inputs using standard SSI and MSI integrated circuits; (iii) write simple assembler language programs and be competent at using editors, assemblers, linkers and debuggers; and (v) demonstrate appropriate laboratory skills.

ECTE250 Engineering Design and Management 2 6cp

Annual

Contact Hours: 42 hours

Pre-requisites: ECTE150 or MGMT110

Co-requisites: ECTE202 or ELEC202

Exclusions: ELEC250

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Reports (one per team per session) - 30%; Presentations (two per session) - 20%; Project Deliverables (two per session) - 20%.

Subject Description: ECTE250 will consist of a structured team design activity covering the first four phases of a product design cycle; conceptualisation, functional/target specification, design specification and detailed design. Products will be selected from a central theme. The team activity will be supplemented by lectures covering such areas as project planning, contracts/law, budgeting, quality, industrial and community relations, engineering ethics and social consequences. Student teams will undertake the entire project using staff as 'costed' advisors.

Subject Objectives: A student who successfully completes this subject should be able to: (i) demonstrate an understanding of the Product Design Cycle, including the roles of those supporting engineering design; (ii) undertake problem identification, formulation and solution within the framework of a product Design Team; (iii) function effectively in a multi-cultural, multi-disciplinary team, with the capability to be a team leader/manager as well as a team member; (iv) write structured reports and give organised presentations on design activities, to both peers and 'customers'; and (v) perform structured, organised, and costed electronic design utilising skills from core ELEC200-level subjects.

ECTE281 Embedded Internet Systems 6cp

Spring

Contact Hours: 4.5 hours Lecture/Tutorial/Practical per week

Pre-requisites: ECTE101 or ECTE191 or ECTE196

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination - 60%; Individual and/or group assignments (involving theoretical and practical/laboratory projects) - 30%; Oral presentation - 10%

Subject Description: The aim of this subject is to provide students with an understanding of the concepts and typical applications of embedded internet real-time systems. In addition, the methodologies and tools used to design and develop embedded internet real-time systems will also be covered. The subject will cover Web servers in embedded systems, embedded system configuration, real-time embedded databases, design for embedded internet, wireless embedded internet systems including WAP and Bluetooth technologies.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, they should be able to: (i) demonstrate an understanding of the concept of embedded internet systems;

(ii) describe different elements and configuration of an embedded internet systems; (iii) demonstrate the ability to design an embedded internet system based on the available tools and technologies (iv) interact effectively with other people on a one to one basis and in groups to achieve a shared goal; (v) demonstrate an appropriate level of written and oral communication skills; and (vi) demonstrate practical and problem solving skills.

ECTE290 Fundamentals of Electrical Engineering 6cp

Spring

Contact Hours: 58.5 hours

Pre-requisites: MATH141 or MATH161 or MATH187

Co-requisites: PHYS142 or PHYS143

Exclusions: ELEC290

Assessment: See Subject Information Sheet those presented here are only a guide. Practical Attendance and Performance - 13%; Practical Reports - 7%; Tutorial Assignment and Mid-session Test - 20%; Examination - 60%.

Subject Description: ECTE290 is offered as a servicing subject to students undertaking Bachelor of Engineering Degrees within the Faculty of Engineering. The aim of this subject is to provide students in other Engineering disciplines with an introduction to some basic concepts of electrical circuits, electrical measurements, instrumentation, data logging, and heavy current devices.

Subject Objectives: On successfully completing this subject, the student should be able to: (i) apply the fundamental laws behind electric circuits and appreciate the importance of electric-electronic circuits in the modern world; (ii) develop simple circuits for the processing of electrical signals; (iii) interface transducers to data logging equipment; (iv) explain the operation and limitations of serial and parallel communications with computers; (v) demonstrate a working knowledge of a variety of motors/generators and transformers; and (vi) write reports on experimental work undertaken.

ECTE291 Internet Systems 6cp

Autumn Wollongong On Campus

Autumn Dubai On Campus

(Sept03-Jan 04)

Contact Hours: 4.5 hours per week

Pre-requisites: ECTE101 or ECTE196

Assessment: See Subject Information Sheet those presented here are only a guide. Final Exam - 60%; Assignments - 20%; Laboratory - 20%

Subject Description: This subject will examine Internet protocols, technologies and performance issues. In particular, the link layer technologies that underpin the Internet will be considered. Topics will include: TCP/IP, IP Addressing, Address Resolution Protocol (ARP), Asynchronous Transfer Mode (ATM), Ethernet, Gigabit Ethernet, Frame Relay, Congestion Control/Flow Control. The role of various standards bodies, e.g., Internet Engineering Task Force (IETF) and the International Telecommunications Union (ITU), will be examined. Laboratory exercises will illustrate the operation of key Internet protocols.

Subject Objectives: After successfully completing this subject, the student should be able to: (i) demonstrate an understanding of the operation of link layer protocols, e.g., Frame Relay, ATM, Ethernet; (ii) describe how network congestion arises; (iii) describe how protocols such as TCP, ATM and Frame Relay react to network congestion;

(iv) configure basic networking devices; (v) control the operation of experimental networks; and (vi) write reports on exercises undertaken.

ECTE292 Internet Technology 2 6cp

Spring

Contact Hours: 4.5 hours Lecture/Tutorial/Practical per week

Pre-requisites: ECTE101 or ECTE196

Assessment: See Subject Information Sheet those presented here are only a guide. Final Exam - 60%; Assignments - 20%; Laboratory - 20%

Subject Description: This subject examines recent Internet developments, particularly in access systems, quality of service deployment and scalable architectures. Emerging applications, such as Internet Telephony and Universal Multimedia Access (UMA) will be studied in depth, as well as the protocols that underpin them (e.g., routing, coding). Topics will include: OSPF, BGP4, Mobile IP, Integrated Services, Differentiated Services, Wireless Access Protocols, Simple Network Management Protocol (SNMP), Media Coding Schemes, RSVP, H.323 and SIP. Advanced laboratory exercises will illustrate the operation of various internet protocols.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: (i) demonstrate an understanding of routing principles, including those for quality of service provision; (ii) describe the architecture and components of integrated and differentiated services; (iii) identify the key components of wireless internet access; (iv) demonstrate an understanding of the signalling mechanisms that underpin internet telephony and other multimedia applications; (v) carry out practical experiments related to the theory; and (vi) appropriate practical and problem solving skills.

ECTE301 Digital Signal Processing 1 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 1 subjects or equivalent, ECTE212 and MATH283

Co-requisites: ECTE344

Exclusions: ELEC301

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial Assignments - 10%; Laboratory Work and Test - 30%; Final Examination - 60%.

Subject Description: Topics covered will include: sinusoids, spectrum representation, sampling and aliasing, FIR filters, frequency response, Z transform, bilinear transform, IIR filters, and spectral analysis.

Subject Objectives: A student who successfully completes this subject should be able to: (i) represent sinusoidal signals mathematically and spectrally; (ii) analyse sampling and reconstruction systems including those with aliasing; (iii) identify the time and frequency behaviour of FIR and IIR filters; (iv) use the Z transform to simplify time delay problems; (v) use MATLAB to synthesize and model sinusoidal AM and FM signals; (vi) use MATLAB to examine filtering edge detection and spectral analysis of images and musical tones; and (vii) demonstrate appropriate laboratory skills.

ECTE313 Electronics 6cp

Annual

Contact Hours: 57 hours

Pre-requisites: Year 1 subjects or equivalent, ECTE202 and ECTE212

Co-requisites: ECTE344

Exclusions: ELEC311, ELEC313

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial Assignments - 10%; Laboratory work and Test - 30%; Final Examination - 60%.

Subject Description: Topics covered will include: analysis and design of: multistage amplifiers, feedback amplifiers, sinusoidal oscillators, analogue filters, non-linear circuits and power amplifiers.

Subject Objectives: A student who successfully completes this subject should be able to: (i) analyse analogue electronic circuits; (ii) design analogue electronic circuits with discrete devices and integrated circuits; (iii) design and make measurements on electronic circuits using transistors and operational amplifiers; and (iv) demonstrate appropriate laboratory skills.

ECTE323 Power Engineering 2 6cp

Autumn

Contact Hours: 58.5 hours

Pre-requisites: Year 1 subjects or equivalent, ECTE222

Exclusions: ELEC322

Assessment: See Subject Information Sheet those presented here are only a guide. Mid session test - 10%; Laboratory work and Test - 30%; Final Examination - 60%.

Subject Description: Topics covered will include: induction and dc machines; elements of electric motor drives; power electronics.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the principles of operation of the main types of electrical machines used in industry; (ii) explain the principles of operation of the main types of solid-state power electronic controllers used in industry; (iii) explain the principles of operation of machines in industrial systems; (iv) predict the performance of machines in industrial systems; (v) wire up power circuits safely and correctly and make measurements; (vi) demonstrate team work skills while completing the experiments, and (vii) demonstrate appropriate laboratory skills.

ECTE333 Digital Hardware 2 6cp

Spring

Contact Hours: 58.5 hours

Pre-requisites: Year 1 subjects or equivalent, ECTE233

Exclusions: ELEC332, ELEC333

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorials - 10%; Laboratory Work and Test - 30%; Final Examination - 60%.

Subject Description: Topics covered will include: computer architecture, central processing unit, memory (ROM and RAM), input/output devices; basic computer organisation, binary data and instruction codes, machine and assembly languages - instruction set, direct and indirect addressing; building computer systems from commercially available parts such as micro-processors and micro-controllers, static and dynamic memory, A/D and D/A converters, digital I/O, and serial communication integrated circuits.

Subject Descriptions

Students will also be required to become proficient at interfacing a micro-controller with digital hardware and writing programs to control the hardware.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the architecture of digital computers; (ii) design a simple microprocessor system from readily available integrated circuits; (iii) write simple assembler language programs to interact with the outside world; and (iv) demonstrate appropriate laboratory skills.

ECTE344 Control Theory 6cp

Autumn

Contact Hours: 58.5 hours

Pre-requisites: Year 1 subjects or equivalent, ECTE202 and MATH283

Exclusions: ELEC343, ELEC344

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial Assignments - 10%; Laboratory Work and Test - 30%; Final Examination - 60%.

Subject Description: Topics covered will include: mathematical modelling of physical systems; signal flow and state space representation of systems; steady state and transient analysis; root locus; frequency response analysis using Nyquist and Bode; design of PID, lag, lead, controllers using Bode and root locus methods; multiloop control.

Subject Objectives: A student who successfully completes this subject should be able to: (i) analyse the behaviour and stability of a system using Laplace transform methods; (ii) design analogue compensators to improve the performance of a system; (iii) measure the frequency response of a system by magnitude and phase measurement; (iv) design, implement and simulate a number of different compensators; (v) compare the performance of the compensated systems; and (vi) demonstrate appropriate laboratory skills.

ECTE350 Engineering Design and Management 3 6cp

Annual

Contact Hours: 38 hours

Pre-requisites: Year 1 subjects or equivalent, ECTE250

Co-requisites: ECTE344 and 18 credit points at 300-level ECTE subjects

Exclusions: ELEC350

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Reports (one per team per session) 30%; Presentations (two per session) - 20%; Project Deliverables (two per session) - 20%.

Subject Description: ECTE350 will consist of a structured team design activity covering the final four phases of a product design cycle; continued detailed design, prototyping, testing/conformance, and sales/marketing. The team activity will be supplemented by lectures covering such areas as social and ethical considerations, psychology/ergonomics, accountancy, marketing, sales, and engineering test methodology. Student teams will undertake the entire project using staff as 'costed' advisers. In contrast with ELEC250, this subject emphasises the technical achievements of the group project.

Subject Objectives: On successfully completing this subject, the student should be able to: (a) demonstrate an understanding of the Product Design cycle, including the roles of those supporting engineering design; (b) demonstrate an understanding of the role of social and ethical considerations in product design;

(c) undertake problem identification, formulation and solution within the framework of a Product Design team; (d) function effectively in a multi-cultural, multi-disciplinary team, with the capacity to be a team leader/manager as well as a team member; (e) write structured reports and give organised presentations on design activities, to both peers and 'customers'; and (f) perform structured, organised, and costed electronic design utilising skills from core third year subjects.

ECTE363 Communication Theory 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: MATH142 or MATH162 or MATH188

Co-requisites: MATH283 or STAT131

Exclusions: ELEC361, ELEC363

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorials - 10%; Laboratory work and Test - 30%; Final Examination - 60%.

Subject Description: Topics covered will include: Gauss' and Stokes' theorems; Maxwell's equations, wave equation, plane wave propagation, Poynting vector; fundamentals of waveguide and antenna design; noise temperature, gain, figure of merit; microwave propagation; digital modulation schemes; error correction coding; TDMA and CDMA.

Subject Objectives: A student who successfully completes this subject should be able to: (a) explain the principles behind propagation, modulation and demodulation; (b) apply appropriate theory to solve practical problems in communication system design; (c) conduct experiments to measure communication system parameters; (d) analyse the experimental results; and (e) demonstrate appropriate laboratory skills.

ECTE364 Telecommunications Networks 1 6cp

Autumn

Contact Hours: 54 hours

Pre-requisites: MATH142 or MATH162 or MATH188

Co-requisites: MATH283 or STAT131

Exclusions: ELEC362, ELEC364

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorials - 10%; Laboratory work and Test - 30%; Final Examination - 60%.

Subject Description: The aim of ECTE364 is to provide students with an understanding of the techniques that are used to provide communication between computer systems. Topics covered will include: coding, error detection and correction, serial communications, packet switching, protocols, modems, and computer networks.

Subject Objectives: A student who successfully completes this subject should be able to: (a) analyse the performance of communication protocols; (b) design communication protocols; (c) describe the techniques used to implement real computer networks (including addressing, routing and interworking); and (d) demonstrate appropriate practical and problem solving skills.

ECTE371 Mechatronics Design 6cp

Annual

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: ENGG151, MECH215

Co-requisites: MECH311

Assessment: See Subject Information Sheet those presented here are only a guide.

Examination (Lecture Material) 30%; Reports (one per team per session) 30%; Presentations (two per session) 20%; Project Deliverables (two per session) 20%

Subject Description: ECTE371 will include a structured team design activity covering the phases of a mechatronics product design cycle; including detailed design, prototyping, testing/conformance, and sales/marketing. Student teams will undertake the entire project using staff as 'costed' advisers.

Subject Objectives: On successfully completing this subject, the student should be able to: (i) demonstrate an understanding of the Product Design cycle, including the roles of those supporting engineering design; (ii) identify problems within the framework of a Product Design Team; (iii) formulate solutions within the framework of a Product Design Team; (iv) demonstrate an ability to function effectively in a multi-cultural, multi-disciplinary team, with the capacity to be a team leader/manager as well as a team member; (v) write structured reports on design activities to both peers and 'customers'; (vi) make organised presentations on design activities to both peers and 'customers'; and (vii) demonstrate an ability to perform structured, organised, and costed mechatronic design utilising skills from core third year subjects.

ECTE381 Internet Engineering 1 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: ECTE292

Co-requisites: ECTE364

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 65%; Tutorials - 5%; Assignments - 15% and Practicals (including reports) - 15%.

Subject Description: The aim of this subject is to provide students with an understanding of the structure of the Internet and its basic engineering challenges. The subject covers the following topics: Internet architecture, Synchronous Digital Hierarchy and Gigabit Ethernet, Asynchronous Transfer Mode, the overlay and peer architectures, Multi-Protocol Label Switching, the principles of optical transmission, optical networking and photonic switching and introduction to traffic engineering and network planning.

Subject Objectives: On successful completion of this subject, students should be able to: (i) analyse network architectures with respect to scalability and reliability; (ii) design network infrastructures based on optical and electronic transmission for carriage of Internet traffic; (iii) develop an appreciation of the pros and cons of the overlay and peer models for the Internet; (iv) demonstrate good understanding about the future evolution of the Internet; and (v) demonstrate appropriate practical and problem solving skills.

ECTE391 Internet Technology Project 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: INFO202 and WAM of > 70 at the end of Year 2 full-time.

Assessment: See Subject Information Sheet those presented here are only a guide. Oral Presentation - 30%; Project and Report - 70%.

Subject Description: ECTE391 requires students to work on individual projects that may involve some background reading and analysis, the development of hardware and/or the development of software. It will involve weekly tutorial sessions; a seminar presentation and report writing.

The aim of this subject is to provide an opportunity for students who have achieved the required pre-requisite to undertake an individual project and develop their initiative.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: (i) demonstrate an understanding of the theoretical/practical aspects of the project; (ii) undertake a literature survey and/or undertake practical research on the project topic; (iii) show initiative and ability in solving problems; and (iv) demonstrate a high level of written and oral communication skills.

ECTE392 Wireless Internet 6cp

Autumn

Contact Hours: 4.5 hours per week

Pre-requisites: ECTE202 or ECTE291

Co-requisites: ECTE364

Assessment: See Subject Information Sheet those presented here are only a guide. Examination - 70%; Tutorials and Assignments - 30%.

Subject Description: The aim of this subject is to provide students with the knowledge to evaluate current and emerging trends in wireless networks in relation to the Internet. The following topics will be covered: wireless local area networks, personal area networking, mobility in the internet, wireless access protocols, internet in second and third generation mobile networks.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: (i) describe the principles of operation of wireless networks in relation to the Internet; (ii) demonstrate an understanding of the principles of wireless local area networks; (iii) describe the evolution towards third generation systems and their effect on the internet; and (iv) demonstrate appropriate practical and problem solving skills.

ECTE401 Fast Signal Processing Algorithms 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Exclusions: ELEC402, ELEC401

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. It forms a useful basis for subsequent DSP applications subjects. The contents will consist of: Discrete Transforms, including: FFT, DFT, DCT, etc.; Wavelet transforms; Filter Design and Structures and Multirate Signal Processing (Interpolation, Decimation, etc.).

Subject Objectives: A student who successfully completes this subject should be able to (a) analyse and understand digital signal processing algorithms; (b) design and utilise digital filters and filter banks; (c) use and implement discrete transforms such as the Fourier and the wavelet transforms; (d) apply digital signal processing solutions to problems in research or industrial environments; and (e) demonstrate appropriate practical and problem solving skills.

ECTE402 Stochastic Signal Processing 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Exclusions: ELEC402

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. It forms a useful basis for subsequent DSP applications subjects. The contents will consist of: stochastic signals; least squares analysis, including optimal linear filters; spectral analysis, including linear predictive analysis; and basic scalar quantisation schemes (e.g., PCM, DPCM, ADPCM).

Subject Objectives: A student who successfully completes this subject should be able to: (a) analyse and understand digital signal processing algorithms; (b) use and implement techniques for processing stochastic signals; (c) design and utilise optimal linear filters and basic scalar quantisation schemes; (d) apply digital signal processing solutions to problems in research or industrial environments; and (e) demonstrate appropriate practical and problem solving skills.

ECTE403 Image and Video Processing 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. The contents will consist of: applying digital signal processing in image and video processing applications.

Subject Objectives: A student who successfully completes this subject should be able to: (a) implement digital signal processing techniques in new applications; (b) demonstrate an understanding of both theoretical and applications-related problems of the image and video processing systems; (c) apply advanced digital signal processing solutions to problems in research or industrial environments; and (d) implement a real-time application or simulation using image and video processing systems.

ECTE404 Adaptive Signal Processing 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Exclusions: ELEC403

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. The contents will consist of: applying digital signal processing in adaptive signal processing (echo cancellation, channel equalisation, etc.) applications.

Subject Objectives: A student who successfully completes this subject should be able to: (a) implement digital signal processing techniques in new applications; (b) demonstrate an understanding of both theoretical and applications-related problems of the adaptive signal processing systems; (c) apply advanced digital signal processing solutions to problems in research or industrial environments; and (d) implement a real-time application or simulation using adaptive signal processing systems.

ECTE405 Speech and Audio Processing 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Exclusions: ELEC403

Assessment: See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. The contents will consist of: applying digital signal processing in speech and audio processing applications.

Subject Objectives: A student who successfully completes this subject should be able to: (a) implement digital signal processing techniques in new applications; (b) demonstrate an understanding of both theoretical and applications-related problems of the speech and audio processing systems; (c) apply advanced digital signal processing solutions to problems in research or industrial environments; and (d) implement a real-time application or simulation using speech and audio processing systems.

ECTE411 AC-Sourced Power Electronics 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC323 or 322 or 323 or ECTE323

Co-requisites: ELEC313 or 311 or ECTE313

Exclusions: ELEC411

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered in this subject include: ac-sourced power electronics devices and their main applications, ac to dc power conversion and its industrial applications, ac voltage controllers, high power conversion in electric power utilities, harmonics and current research developments.

Subject Objectives: A student who successfully completes this subject should be able to: (a) identify speed/power characteristics of power electronics devices and their major applications; (b) demonstrate adequate knowledge of electric power conversion processes at domestic, industrial and commercial loads; (c) develop analysis skills for basic power electronics circuits; (d) identify common problems associated with power electronic circuit operation and methods of solutions; (e) demonstrate an understanding of recent developments in power electronics, circuits and related technologies; and (f) demonstrate appropriate practical and problem solving skills.

ECTE412 DC-Sourced Power Electronics 3cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ELEC222 or ECTE222**Co-requisites:** ELEC313 or 311 or ECTE313**Exclusions:** ELEC412**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations 70%; Assignments 30%.**Subject Description:** This subject will study power conversion circuits with dc-supplies and using modern power switching devices. Topics covered include: power switching devices and their application (diode, MOSFET, IGBT, gto), dc-dc conversion (choppers), including switch-mode power supplies, dc-ac conversion using inverters, including methods of pulse width modulation.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) analyse dc-dc and dc-ac power conversion circuits; (b) select appropriate component values for these circuits; (c) select suitable devices for the above circuits and describe their characteristics; (d) analyse non-ideal effects in the above circuits; (e) describe industrial applications for the above circuits; and (f) demonstrate appropriate practical and problem solving skills.**ECTE413 Micro-Electronics 3cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ELEC313 or 311 or ECTE313**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments 30%.**Subject Description:** The aim of this subject is to extend the electronics knowledge gained in ELEC313 Electronics. Topics covered will include: theory of operation of BJT and FET devices; the use of FET devices in analogue and digital circuits; CMOS logic family; oscillators; high frequency amplifiers; VLSI design techniques; gate arrays; programmable logic devices; memory cells. The practical component will consist of using Electronics Simulation Packages to (a) model circuits and examine their behaviour; (b) perform a logical design, (c) program the design into a programmable device and test its performance.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) demonstrate an understanding of the operation of BJT and FET devices; (b) use FET devices in analogue and digital circuits; (c) demonstrate an understanding of VLSI design techniques; (d) model circuits and perform a logical design using Electronics Simulation Packages; and (e) demonstrate appropriate practical and problem solving skills.**ECTE421 Power Quality 3cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ECTE222**Co-requisites:** ECTE301**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.**Subject Description:** This subject will study the different types of systems which can propagate in the electric power supply, their origins and their effects on sensitive equipment such as computers, telecommunications systems, PLCs and variable speed drives.

The disturbances include harmonics, voltage sags, capacity switching transients, voltage unbalance, etc. Topics discussed will include: the ability of equipment to emit disturbances, its susceptibility, industry standards and design techniques to ensure standards are met.

Subject Objectives: A student who successfully completes this subject should be able to: (a) describe the main features of a power supply system of relevance to the supply of sensitive loads, (b) describe the main types of power supply disturbances and their origin; (c) discuss the main types of sensitive loads and their disturbance emission and susceptibility characteristics; (d) analyse example installations for the level of disturbances and compare with industrial standards; (e) suggest appropriate mitigation means where standard levels are exceeded; and (f) demonstrate appropriate practical and problem solving skills.**ECTE422 Power Quality Monitoring 3cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ELEC323 or 322 or ECTE323**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.**Subject Description:** This subject will treat measurement techniques and waveform interpretation relevant to the operation of sensitive equipment with a non-ideal power supply. The different types of waveform disturbances and their characterisation will be discussed, such as harmonics, inter-harmonics, flicker and voltage sag. Relevant standards for signal analysis will be examined and their approach justified. There will also be a treatment of transducers.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) describe the main types of power supply disturbances and their characterisation; (b) identify the waveform signatures of different types of disturbances; (c) discuss the main features of the relevant instrumentation standards; (d) discuss the non-ideal behaviour of real voltage and current transducers; (e) discuss the different types of power quality monitors and their main functional blocks; (f) develop programs to find the parameters of waveforms, and (g) demonstrate appropriate practical and problem solving skills.**ECTE423 Power Systems 3cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ELEC323 or 322 or ECTE323**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.**Subject Description:** Topics covered in this subject include: an introduction to power systems comprising thermal and hydro power stations, transmission lines and distribution systems, renewable energy, other energy sources such as solar energy, windmills, sea waves and geothermal, computer applications in power systems planning, design, control and operation, review of basic analysis tools, reactive power management, load flow and fault analysis and flexible ac transmission technology, and environmental considerations.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) identify traditional and modern sources of power; (b) demonstrate adequate knowledge of power systems operation in general and Australian and N.S.W. systems in particular;

(c) gain analysis skills using both calculator and computer simulations for basic system calculations; (d) demonstrate an understanding of recent developments in power systems technologies both at power industries and power utilities; (e) understand environmental considerations of power generation and usage; and (f) demonstrate appropriate practical and problem solving skills.

ECTE424 Power System Abnormalities 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC323 or 322

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered include: reliability concerns, insulation requirements and protection methods of energy systems. The design aspect of energy systems for reliable and economical energy supply, internal and external overvoltage protection of energy systems and terminal equipment, stability limits of energy systems and the application of electromagnetic transient programmes (EMTP) for insulation co-ordination will be discussed.

Subject Objectives: A student who successfully completes this subject should be able to: (a) demonstrate an understanding of the critical factors that influence the reliability of electrical energy systems; (b) recognise the need for proper protection methods; (c) identify insulation requirements; (d) use simulation programs to understand the behaviour of electrical energy systems under specific over-voltages; and (e) demonstrate appropriate practical and problem solving skills.

ECTE425 Industrial Drives and Actuators 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ECTE222

Co-requisites: ECTE344

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered in this subject include: selection of dc, ac motors (induction and/or permanent magnet) and actuators for industrial applications and the design of closed loop speed control systems for dc and ac motors. In ac motor control, field orientation will be given particular emphasis.

Subject Objectives: A student who successfully completes this subject should be able to: (a) select appropriate motors and actuators for industrial applications; (b) analyse dynamic models of dc and ac motors; (c) discuss field orientation in ac motor control; (d) analyse important blocks in closed loop motor control systems and the design of closed loop control systems; (e) simulate the behaviour of dc and ac motor drives using various simulation packages; and (f) demonstrate appropriate practical and problem solving skills.

ECTE426 Power Equipment Design 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC323 or 322 or ECTE323

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments 30%.

Subject Description: Topics covered in this subject include: design aspects of transformers, ac motors and generators and industrial actuators for motion control. The design and analysis of magnetic circuits to meet requirements such as: torque/weight ratio, losses, heating and cooling will be addressed. Essentials of electromagnetic analysis using simulation software (e.g., finite element methods) will be covered.

Subject Objectives: A student who successfully completes this subject should be able to: (a) demonstrate an understanding of the end requirements of the electrical equipment required for power systems and industrial processes; (b) discuss the electromagnetic principles that are required in the design of electrical equipment and motion control devices; (c) apply appropriate electromagnetic principles in the design to meet the requirements of the process; (d) use and realise the importance of simulation software in the design process to obtain optimum performance; and demonstrate appropriate practical and problem solving skills.

ECTE431 Real-Time Computing 3cp

Autumn

Contact Hours: 24 hours

Pre-requisites: Year 2 subjects or equivalent, ELEC333 or 332 or ECTE333

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital hardware knowledge gained in ECTE333 Digital Hardware 2. Topics covered will include: real-time operating systems; interrupts; interfacing to real world signals; use of A/D and D/A converters; multi-tasking, multi-threading; clocks and timers; and direct digital control. The practical component will consist of writing real-time programs on DSP and micro-controller computer systems.

Subject Objectives: A student who successfully completes this subject should be able to: (a) demonstrate an understanding of real-time operating systems; (b) implement a real-time system on a micro-controller or DSP processor; (c) design interfacing circuitry between microprocessors and real-world signals; (d) write real-time programs on DSP and micro-controller computer systems; and (e) demonstrate appropriate practical and problem solving skills.

ECTE432 Computer Systems 3cp

Autumn

Contact Hours: 24 hours

Pre-requisites: Year 2 subjects or equivalent, ELEC333 or 332 or ECTE333

Exclusions: ELEC432

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations 70%; Assignments 30%.

Subject Description: The aim of this subject is to extend the digital hardware knowledge gained in ECTE333 Digital Hardware 2. Topics covered will include: CPU organisation; complex instruction sets; reduced instruction sets; I/O structures; interrupts; direct memory access; intelligent peripherals; interfacing to real world signals; use of A/D and D/A converters; multi-processors; parallel DSP architectures. The practical component will consist of writing programs on micro-controller computer systems.

Subject Objectives: A student who successfully completes this subject should be able to: (a) explain the principles of the organisation, operation and design of Complex Instruction Set Computers and their control units; (b) explain the principles of system design, with particular emphasis on interconnection and I/O structures; (c) design interfacing circuitry between microprocessors and real-world signals; (d) write programs on micro-controller computer systems; and (e) demonstrate appropriate practical and problem solving skills.

ECTE441 Intelligent Control 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC443

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The subject provides the knowledge and skills required to model, analyse and design a system using intelligent methods. The contents will consist of: introduction to fuzzy systems, introduction to artificial neural network, crisp fuzzy control systems, adaptive fuzzy control systems, and neuro-fuzzy control systems.

Subject Objectives: A student who successfully completes this subject should be able to: (a) model a system using fuzzy and artificial neural networks methods; (b) design, simulate and implement crisp and adaptive fuzzy controllers to improve the performance of a system; (c) design, simulate and implement neuro-fuzzy systems to improve the performance of a system; and (d) demonstrate appropriate practical and problem solving skills.

ECTE442 Computer Controlled Systems 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC443

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject provides the knowledge and skills required to model, analyse and design computer controlled systems in the z-domain. The contents will consist of: Discrete time state space modelling of system, stability analysis in state space, controllability and observability, pole placement design and state feedback, state observer design.

Subject Objectives: A student who successfully completes this subject should be able to: (a) model a system using the discrete state space approach; (b) analyse the behaviour and stability of a discrete time system using state space approach; (c) design, simulate and implement state feedback controllers to improve the performance of a system; (d) design, simulate and implement observers to improve the performance of a system; and (e) demonstrate appropriate practical and problem solving skills.

ECTE443 Digital Control 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC443

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject provides the knowledge and skills required to model, analyse and design computer controlled systems in the z-domain.

The contents will consist of: Impulse sampling, stability analysis in the Z-domain, root locus analysis and design in the Z-domain, W-transformation, frequency response analysis and design in the Z-domain and current research developments.

Subject Objectives: A student who successfully completes this subject should be able to: (a) model a system using Z-transform and W-transform; (b) analyse the behaviour and stability of a discrete time system using root-locus; (c) analyse the behaviour and stability of a discrete time system using frequency response methods; (d) design, simulate and implement digital compensators in Z-domain to improve the performance of a system; and (e) demonstrate appropriate practical and problem solving skills.

ECTE444 Identification and Optimal Control 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC444

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The subject provides the knowledge and skills required to identify the model of a system and optimise its performance. The contents will consist of: system identification using the least square method and quadratic performance index; quadratic optimal control; Kalman filters; and applications of genetic algorithms in system identification and optimal control.

Subject Objectives: A student who successfully completes this subject should be able to: (a) identify the mathematical model of a system using least square, performance index and genetics algorithms methods; (b) design Kalman filters for optimal estimation and stochastic optimal control of a system; (c) design and simulate an optimal control based on a quadratic performance index; (d) design and simulate an optimal control based on genetics algorithms; and (e) demonstrate appropriate practical and problem solving skills.

ECTE457 Thesis 18cp

Annual

Contact Hours: 48 hours

Pre-requisites: All subjects to the end of Year 3 or equivalent

Co-requisites: 18 credit points at 400-level or CSCI311 and 12 credit points at 400-level

Exclusions: ELEC457

Assessment: The mark for each session will be calculated according to the following formula: Sessional mark = $0.6 * (\text{Supervisor's mark out of } 100\%) + 0.3 * (\text{Co-Supervisor's mark out of } 100\%) + 0.1 * (\text{Seminar Presentation out of } 100\%) - \text{Penalty points}$. Final mark = $0.35 * (\text{Autumn Session mark out of } 100\%) + 0.65 * (\text{Spring Session mark out of } 100\%)$.

Subject Description: ECTE457 requires students to work on individual projects which may involve some background reading and analysis, the development of hardware, the development of software, or an experimental program.

Subject Descriptions

It will involve weekly tutorial sessions; presentation of seminars; and writing of reports. The aim of this subject is to provide an opportunity for students to undertake a major engineering project and develop their initiative.

Subject Objectives: A student who successfully completes this subject should be able to: (a) demonstrate an understanding of the theoretical/practical aspects of the project; (b) undertake a literature survey and/or undertake practical research on the project topic; (c) show initiative and ability in solving engineering problems; and (d) demonstrate a high level of written and oral communication skills.

ECTE461 Telecommunications Queueing Theory 3cp

Autumn

Contact Hours: 24 hours

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Exclusions: ELEC460

Assessment: See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.

Subject Description: The aim of this subject is to provide students with telecommunication engineering skills including analysis of delay and loss queueing systems, undertake Markov modelling and analysis, and calculate blocking probabilities of telephone switching equipment. Topics covered will include: queueing theory, Markov chain analysis, throughput and congestion analysis, Erlang and Engset distributions, blocking probability and overflow traffic.

Subject Objectives: A student who successfully completes this subject should be able to: (a) undertake Markov modelling and analysis; (b) analyse delay and queueing loss systems, such as telephone exchanges and trunk lines; (c) calculate blocking probabilities of telephone switching equipment; and (d) demonstrate appropriate practical and problem solving skills.

ECTE462 Telecommunications System Modelling 3cp

Autumn

Contact Hours: 24 hours

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Exclusions: ELEC460

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments 30%.

Subject Description: The aim of this subject is to provide students with telecommunication engineering skills including skills to analyse and dimension telephone exchanges, trunk lines, Internet switches and circuit and packet switched networks. Topics covered will include: telephone and data networks and systems, mixed voice and data queueing systems, optimal capacity allocation, direct and alternate routing.

Subject Objectives: A student who successfully completes this subject should be able to: (a) analyse circuit and packet switched networks and systems; (b) analyse mixed voice and data queueing systems; (c) optimally allocate capacity in transmission links in telecommunication networks; and (d) demonstrate appropriate practical and problem solving skills.

ECTE463 Transmission Systems 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Exclusions: ELEC463

Assessment: See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.

Subject Description: Topics covered include: Maxwell's equations, wave propagation in transmission lines, the Smith chart, wave guides and optical fibres. The aim of this subject is to provide methods of characterising distributed passive transmission media such as transmission lines, wave guides, and fibre optics.

Subject Objectives: A student who successfully completes this subject should be able to: (a) demonstrate an understanding of electromagnetic wave propagation; (b) apply this knowledge to transmission lines, wave guides and fibre optics; (c) demonstrate an understanding of fibre optic geometries; and (d) demonstrate appropriate problem solving skills.

ECTE464 Antennas and Propagation 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Exclusions: ELEC463

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered include: wave propagation in the air and signal radiation and antennas. The aim of this subject is to provide methods of characterising antenna systems for use in communications.

Subject Objectives: A student who successfully completes this subject should be able to: (a) demonstrate an understanding of electromagnetic wave propagation; (b) demonstrate an understanding of signal radiation and antenna design; and (c) demonstrate appropriate practical and problem solving skills.

ECTE465 Wireless Communications 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to introduce wireless communication systems, including cellular telephony, personal communications, and wireless local area networks. The contents will consist of: mobile radio channel characterisation, channel access techniques used in wireless systems and error control coding. The taught concepts will be illustrated by examples of existing wireless communication systems and those being developed.

Subject Objectives: A student who successfully completes this subject should be able to: (a) analyse and understand transmission phenomena of mobile radio channel; (b) analyse parameters and understand operation principles of mobile telephony and PCs; (c) select and optimise channel access technique for wireless application; (d) design error control algorithms for wireless applications; and (e) demonstrate appropriate practical and problem solving skills.

ECTE466 Spread Spectrum Communications 3cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations 70%; Assignments - 30%.**Subject Description:** The aim of this subject is to teach students the theory and highlight the major problems involved in application of spread-spectrum communications. The contents will consist of: basic spread-spectrum techniques, principles of code division multiple access (CDMA), design of spreading sequences, and detection techniques for CDMA. The taught concepts will be illustrated by examples of existing spread-spectrum communication systems.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) analyse and understand principles of spread-spectrum; (b) design spreading sequences and evaluate their parameters; (c) select and optimise spreading sequences for a given application; (d) analyse and design receivers for direct sequence spread-spectrum systems; and (e) demonstrate appropriate practical and problem solving skills.**ECTE467 Mobile Networks 3cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469**Assessment:** See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.**Subject Description:** The aim of this subject is to provide students with the knowledge to evaluate current and emerging mobile networks. Topics covered will include: analogue and digital mobile networks, roaming in mobile networks, GSM standards and principles, GSM network structure, call hand-over analysis, mobility in the Internet, emerging third generation mobile networks.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) describe operation principles of mobile networks; (b) analyse and dimension mobile network radio cells; (c) analyse call hand-over process; and (d) demonstrate appropriate practical and problem solving skills.**ECTE468 Error Control Coding 3cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ELEC301 or 363 or ECTE301 or 363**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.**Subject Description:** The subject includes general concepts of information transmission and covers error-correction techniques applied to data transmission over error-prone (noisy) channels. Topics covered are forward error correction schemes like linear codes, cyclic codes, block codes (e.g. BCH and Reed-Solomon codes), and convolutional codes, as well as error control for channels with feedback, e.g. automatic repeat request (ARQ) coding.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) explain general concepts of information transmission; (b) design and implement block codes over finite fields;

(c) design and implement convolutional codes; and (d) demonstrate appropriate practical and problem solving skills.

ECTE471 Robotics Manipulators 3cp**Spring****Contact Hours:** 24 hours**Pre-requisites:** Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344**Exclusions:** ELEC473**Assessment:** See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.**Subject Description:** The subject provides the knowledge and skills required to model, analyse, design and employ a robotics manipulator. The contents will consist of: Industrial robots as a component of automation, mathematical modelling of a robotics arm, direct and inverse kinematics model, direct and inverse dynamics model, trajectory planning, robot control.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) design and simulate a robotics manipulator to perform a specific task; (b) plan the trajectory of the motion of a robotics manipulator; (c) control a robotics arm; (d) plan the integration of a robot arm in a production line; and (e) demonstrate appropriate practical and problem solving skills.**ECTE472 Robotics Sensory Control 3cp****Spring****Contact Hours:** 24 hours**Pre-requisites:** Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344**Co-requisites:** ELEC313 or ELEC311 or ECTE313**Exclusions:** ELEC473**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.**Subject Description:** This subject provides the knowledge and skills required to design appropriate sensors for the intelligent operation of robotics systems. Topics covered include: intelligent operation of robots, industrial vision, hand-eye control of a robot, tactile sensors, force sensors, ultrasound sensors, and other sensors.**Subject Objectives:** A student who successfully completes this subject should be able to: (a) design and employ a vision sensor for hand-eye control of a robot arm; (b) design and employ a tactile sensor for intelligent grasping; (c) design and employ a force sensor for compliant motion; (d) design and employ an ultrasound sensor for autonomous motion of a robot arm; and (e) demonstrate appropriate practical and problem solving skills.**ECTE481 Internet Protocols 3cp****Contact Hours:** Not on offer in 2003**Pre-requisites:** Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469**Assessment:** See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.**Subject Description:** This subject will provide students with an understanding of protocols used in the computer networks. Examples will be drawn from existing networks including the Internet.

Subject Descriptions

Students will learn what computer network protocols are and how they work today, and how they are likely to evolve in the future. Topics to be studied will include: LAN medium access control protocols, congestion/flow/error control, routing, addressing, and internetworking. There will be both written and programming assignments, including a project involving the design and implementation of an exemplar protocol.

Subject Objectives: A student who successfully completes this subject should be able to: (a) enumerate protocols and functions for a variety of networking scenarios; (b) analyse the performance of error and flow control mechanisms such as FEC, MAC, and ARQ; (c) explain the operation of routing and addressing functions associated with network protocols; (d) implement a simple protocol based on a functional specification; and (e) demonstrate appropriate practical and problem solving skills.

ECTE482 Internet Engineering 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject will provide students with an understanding of the design and operation of computer networks, with emphasis on the Internet. Students will learn what networks are and how they work today, and how they are likely to evolve in the future. Topics to be studied will include: design and operation of the Internet (including IPv4, OSPF, BGP, Mobile IP, CIDR, mobile IP, IPv6, TCP, and UDP), the role of ATM in the Internet (including the use of MPOA and MPLS), and mechanisms for engineering networks to provide QoS (such as RSVP, RTP, ATM service classes, and IETF DiffServ). There will be both written and programming assignments.

Subject Objectives: A student who successfully completes this subject should be able to: (a) explain the operation of Internet protocols such as IP, OSPF, BGP, CIDR, TCP and UDP; (b) analyse the performance of protocols such as TCP in the presence of congestion and errors; (c) analyse performance of technologies such as ATM and label switching, in the context of the Internet; (d) enumerate tradeoffs between efficiency and Quality of Service when using mechanisms such as RSVP and DiffServ; and (e) demonstrate appropriate practical and problem solving skills.

ECTE483 Computer Networking 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent

Exclusions: ELEC364

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to provide students with an understanding of the techniques that are used to provide communication between computer systems. Topics covered will include: modems, addressing, routing, interworking and congestion control in computer networks.

Subject Objectives: A student who successfully completes this subject should be able to: (a) describe the techniques used to implement real computer networks (including addressing, routing and interworking);

(b) demonstrate an understanding of the techniques used to provide communication between computer systems; and (c) demonstrate appropriate practical and problem solving skills.

ECTE484 Network Design and Analysis 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to provide students with the engineering skills to analyse multi-service packet switched networks and systems. Topics covered will include: simulation and numerical techniques in queueing, software tools for analysis of queueing systems and networks, queueing performance analysis of Internet, ATM and mobile multi-service networks.

Subject Objectives: A student who successfully completes this subject should be able to: (a) perform simulation and numerical analysis of packet switched networks and systems (b) dimension multi-service networks and systems; and (c) demonstrate appropriate practical and problem solving skills.

ECTE485 Internet Communications 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent

Exclusions: ELEC364, ECTE364

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to provide students with an understanding of the techniques that are used to provide communication between computer systems. Topics covered will include: layered protocol architectures, circuit and packet switching, asynchronous and synchronous transmission, coding, error detection and correction and flow control.

Subject Objectives: A student who successfully completes this subject should be able to: (a) explain the principles of layered protocol architectures (b) explain the principles of circuit and packet switching (c) analyse the performance of circuit and packet switching networks; (d) analyse the performance of error and flow control protocols; and (e) demonstrate appropriate practical and problem solving skills.

ECTE486 Telecommunications Network Management 3cp

Contact Hours: Not on offer in 2003

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Exclusions: ELEC468

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aims of this subject are to provide students with an understanding of the technical issues of telecommunications management and to provide practical hands-on experience of network configuration and management systems. Topics covered will include: private and public communications systems; LANs and SNMP; general management issues; and international standards.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: (a) demonstrate an understanding of the technical issues involved in telecommunications management; (b) recognise and understand the underlying functions of network management protocols, especially those aspects associated with managing internets; (c) undertake practical experimentation in network configuration; and (d) demonstrate appropriate practical and problem solving skills.

ECTE491 Computer Architectures 6cp

Autumn

Contact Hours: 48 hours

Pre-requisites: ELEC333 or 332 or ECTE333

Exclusions: ELEC431/432 ECTE431/432

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%

Subject Description: The aim of this subject is to extend the digital hardware knowledge gained in ECTE333 Digital Hardware 2. Topics covered will include: CPU organisation; complex instruction sets; reduced instruction sets; I/O structures; interrupts; direct memory access; intelligent peripherals; interfacing to real world signals; use of A/D and D/A converters; real-time operating systems; multi-tasking, multi-threading; multi-processors; parallel DSP architectures; clocks and timers; and direct digital control. The practical component will consist of writing real-time programs on DSP and micro-controller computer systems.

Subject Objectives: A student who successfully completes this subject should be able to: (a) explain the principles of the organisation, operation and design of Complex Instruction Set Computers and their control units; (b) explain the principles of system design, with particular emphasis on interconnection and I/O structures; (c) implement a real-time system on a micro-controller or DSP processor; (d) design interfacing circuitry between microprocessors and real-world signals; (e) write real-time programs on DSP and micro-controller computer systems; and (f) demonstrate appropriate practical and problem solving skills.

ECTE492 Intelligent and Optimal Control 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: ELEC343 or 344 or MECH365 or ECTE344

Exclusions: ELEC441/444, ECTE441/444

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%

Subject Description: The subject provides the knowledge and skills required to analyse and design a system using intelligent methods and optimise its performance. The contents will consist of: introduction to fuzzy systems and artificial neural networks, crisp fuzzy, adaptive fuzzy and neuro-fuzzy control systems; system identification using the least square method and quadratic performance index; quadratic optimal control; Kalman filters; and applications of genetic algorithms in system identification and optimal control.

Subject Objectives: A student who successfully completes this subject should be able to: (a) model a system using fuzzy and artificial neural networks methods; (b) design, simulate and implement crisp, adaptive and neuro-fuzzy controllers to improve the performance of a system;

(c) identify the mathematical model of a system using least square, performance index and genetics algorithms methods; (d) design Kalman filters for optimal estimation and stochastic optimal control of a system; (e) design and simulate an optimal control based on a quadratic performance index; (f) design and simulate an optimal control based on genetics algorithms; and (g) demonstrate appropriate practical and problem solving skills.

ECTE494 Robotics 6cp

Spring

Contact Hours: 48 hours

Pre-requisites: ELEC332, 343 or 333, 344 or MECH226 or ECTE333, 344

Exclusions: ELEC473, ECTE471/472

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examination - 70%; Assignments - 30%

Subject Description: The aim of ECTE494 is to provide students with an opportunity to study the basic principles and concepts of robotics and its application in modern manufacturing systems. Topics covered will include: survey of industrial robot types; strengths and weaknesses of actual robots; the robot as a component of automation; automation and labour relations; vision, tactile and other sensors; design criteria for robots; and the kinematics and dynamics of manipulator arms.

Subject Objectives: A student who successfully completes this subject should be able to: (a) design a robot manipulator to perform a specific task; (b) plan the trajectory of the motion of the robot; (c) design the internal and external sensors required for the robot; (d) plan the integration of the robot in a production line; and (e) demonstrate appropriate practical and problem solving skills.

IACT201 Information Technology and Citizens' Rights 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: 24cp @100 level

Assessment: Essay Preparation-10%; Essay (Maximum 2,000 words) -20%; Group Seminars - and paper or report-20%; Participation-10%; Forums, activities, etc. Examination- 40%.

Subject Description: IACT201 will examine the information technology industry which encompasses: telecommunications; computing; broadcasting and publishing. It will analyse the encroachment of industry activities that use electronic media on: citizens' rights in matters of data surveillance; freedom of access to information and ownership of intellectual property. The extent to which technical solutions to these problems can and cannot be provided will be discussed and alternative non-technical (eg administrative or regulatory) solutions will also be treated. An investigation of the current legal safeguards, their legislative histories and the need for new legislation will be covered.

Subject Objectives: A student who successfully completes this subject should be able to: (i) identify the privacy, legal and security issues related to the introduction of information and communication technologies; (ii) explain technical solutions to security and privacy problems arising from the introduction of technology; and (iii) evaluate existing laws and regulations relating to privacy legal and security issues.

IACT202 The Structure and Organisation of Telecommunications 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: IACT101 OR CSCI102 or CSCI111

Assessment: Class participation - 20%; Weekly Tutorial Report - 20%; Seminar Presentation - 10%; Examination - 50%.

Subject Description: The aim of the subject is to provide students with an introduction to the technologies and regulatory structures which constitute the modern telecommunications system. Under regulatory components, the variety of telecommunications services and related regulatory concepts and structures are discussed. Under technological components, the following issues are dealt with: telecommunications standards; new network services; and basic components of the telecommunications system such as the public switched network, the radio frequency spectrum, mobile telephony and satellites.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the basic components of the modern telecommunications system; (ii) describe the fundamental technological and regulatory aspects of the modern telecommunications system; and (iii) discuss some of the current social, economic and political issues surrounding telecommunications and its regulation.

IACT301 Information and Communication Security Issues 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: IACT201

Assessment: Assignment 1- 10%; Seminar presentation + seminar - 40% Exam - 50%

Subject Description: This subject will examine current controls, both legislative and technical, aimed at maintaining data integrity, ease of access to information, and protection of ownership, in the light of on going developments in computer security, multimedia communications, international electronic networks, and electronic publishing. The subject will cover communication security; issues relating to the monitoring of international agreements; OECD guidelines for security of information; maintaining privacy provisions; password security; and future IT developments and their implications for monitoring intellectual property rights and communication security.

Subject Objectives: A student who successfully completes this subject should be able to: (i) Identify current security controls aimed at protecting the availability, confidentiality, and integrity of electronic data; (ii) Explain the pitfalls (limitations) of existing controls in relation to intellectual property; (iii) Debate current problems regarding security for ownership of, and access to electronic data; (iv) Critically analyse current international policies relating to communication security. For example: OECD guidelines for security of information, and international developments relating to information and communication technologies and intellectual property.

IACT302 Corporate Network Planning 6cp

Autumn

Contact Hours: 3 hours Lecture / Tutorial, 2 hours labs per week.

Pre-requisites: IACT202 or ELEC211 or ELEC212 or ECTE211 or ECTE212

Assessment: made up of Strategic network plan; Seminar presentation; Tutorial Paper and Final Examination.

Subject Description: This subject explores telecommunications network planning from a strategic perspective. Topics covered will include: (1) Fundamental Networking Concepts: standards, protocols, architectures and technologies (2) Fundamental Data Networking Concepts: network topologies, network devices, wireless networking, security and applications (3) Fundamental Voice Networking Concepts: history, network classifications, the telephone system and voice communications, architectures, cellular networks (4) Convergence Of Voice And Data In Telecommunications: frame/cell relay, broadband networks, emerging technologies.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the principles of telecommunications network architecture and standards; (ii) debate the current status and future directions of telecommunications networks; (iii) evaluate the critical planning issues and the options created by new technology; (iv) develop a telecommunications network plan; and, (v) critically analyse the need for culture and social considerations in telecommunications planning.

IACT303 World Wide Networking 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: IACT101 or CSCI102 or CSCI213 or BUSS110 or CSCI111

Assessment: Examination - 40%; Participation - 20%; Proposal for Web - 5%; Group Seminar & Paper - 15%; Web Pages - 20%.

Subject Description: This subject investigates the issues listed in the schedule below within the context of world wide networking. Emphasis will be placed on group work with students required to participate in problem solving communications tasks. Web based activities will be an essential element in the conduct of this subject. Other activities may include: the setting up and conduct of a video-conference with students at another University, the running of a bulletin board or Internet mailing list or the maintenance of a World Wide Web site. Contributions to this subject have been made by several members of staff within the School.

Subject Objectives: A student who successfully completes this subject should be able to: (i) identify the technical, social and legal problems related to the developments in world wide networking; (ii) debate legal, business and social issues confronting the global networking community; (iii) critically analyse current standards and policies in relation to world wide networking; (iv) demonstrate a capacity to work as a team member; (v) discuss the key technical and security related issues confronting network managers; (vi) evaluate use of global networks as an educational medium; and (vii) Develop and create websites using basic technologies.

IACT304 eBusiness Fundamentals 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: 12 cp at 200 level in IACT or CSCI

Exclusions: IACT305 or CSCI370

Assessment: Essay - 15%; Seminar Presentation - 10%; Tutorial Participation - 10%; Essay - 25%; Examination - 40%.

Subject Description: This subject aims to provide students with an understanding of eBusiness fundamentals. Today most businesses compete in a global environment and a sound strategy for online business is essential to facilitate this. This subject covers key areas of eBusiness, including: business-to-consumer, business-to-business and business-to-government electronic commerce (EC); online business models and electronic payment systems (EPS) and EC technology basics. Standards, regulation and policy, security and social and economic issues will also be considered in the contexts of business Intranets, Extranets and the Internet. The subject also provides an introduction to the 'Patterns for eBusiness' approach to eBusiness analysis and design.

Subject Objectives: On successful completion of this subject, students should be able to: 1. demonstrate a thorough grounding in eBusiness principles; 2. identify stakeholders and their capabilities and limitations in the strategic convergence of technology and business; 3. critically assess new technologies of importance to doing business on-line; and 4. understand and be able to explain the critical issues related to eBusiness. (plus shared learning outcomes with IACT305 of 5 & 6)

IACT305 eBusiness Technologies 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: 12 cp at 200 level of IACT or CSCI

Exclusions: IACT304 or CSCI370 or ITCS938

Assessment: Mid Session Test - 10% Assignment - 30% Exam - 60%

Subject Description: The subject explores the technology being adopted by organisations and the various means of maximising business potential using Internet technology, including eBusiness (B2B, B2C, B2G etc.). The focus of the course is from the IT professional perspective, giving the student a feel for what is required in a commercial business environment. The technology aspects will cover both developing in house software, as well as selecting 'best practice' outsourced options. Comparisons are drawn between the two adoption methods, and the student is engaged by scenario role playing as part of the group assignments.

Subject Objectives: On successful completion of this subject, students should be able to: (1) explain the technical aspects and constraints of implementing online sites; (2) analyse specific eBusiness adoption models and advise on their technical requirements for implementation; (3) identify and demonstrate the most appropriate technology to deploy for specific eBusiness requirements; (4) explore and review the methodologies for developing specifications/requirements for the implementation of online sites.(plus shared learning outcomes with iact304); (5) describe at an overview level the pattern-oriented approach to specifying and analysing eBusiness problems; (6) describe at an overview level how to drill down through a pattern-oriented description of an eBusiness solution in order to specify and describe what is involved in designing and implementing eBusiness processes

IACT401 IT Strategic Planning 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Exclusions: IACT901

Assessment: Tutorial Readings - Report - 10%; Tutorial Participation - 10%; Essay (2000 words) - 20%; Critique IT Strategic Plan - 40%; Seminar - 20%.

Subject Description: The subject is essentially about the application of technology for competitive advantage. Throughout the subject, the spotlight will be trained on techniques and frameworks for "thinking strategically about a company's technological orientation". A wide spectrum of business and technology issues will be covered that address the problems and issues surrounding the analysis and development of an IT strategic plan.

Subject Objectives: Students who successfully complete this subject should be able to: (i) identify the key techniques and frameworks of strategy analysis; (ii) critically apply these techniques to case study material; and (iii) analyse the processes required to develop a sensible IT strategic plan.

IACT402 Applied Project Management 6cp

Autumn

Contact Hours: 3 hours Lectures per week

Pre-requisites: 24cp @ 300 level

Assessment: Assessment - 40% Examination - 60%

Subject Description: IACT402 deals with the efficient management of a medium size project to ensure that a project meets deadlines and is within its budget. It covers the process of planning, directing and controlling the development of an IT project. Topics covered will include project management tools, software and techniques; expectations management matrices; and use of people management (the subtle art of delegation and accountability). Students will test the principles on the plan, design and implementation of a medium size project.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the principles of project management (ii) apply the tools and techniques of project management to a medium size IT project; and (iii) communicate and present coherent arguments relating to the planning, controlling and development of an IT project both individually and in groups.

IACT403 Human Computer Interface 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Exclusions: CSCI324

Assessment: Final Exam - 40%; Assessment - 60%

Subject Description: IACT403 examines the design evaluation and implementation of interactive computing systems for human use (HCI) and the major phenomena surrounding them. Also considered are joint performance of tasks by humans and machines, structure of human machine communication, social and organizational interactions with machine design, human capabilities to use machines including their learnability as well as algorithms and programming of the interface itself, engineering concerns that arise in designing interfaces, the process of specification design and implementation of interfaces and design tradeoffs.

Subject Objectives: At the completion of this subject students should be able to: i) describe & justify HCI principles; ii) apply the principles of designing HCI; and iii) design a HCI for a specific application and implement a prototype.

**IACT404 International Telecommunications 6cp
Policy Issues****Contact Hours:** Not on offer in 2003**Pre-requisites:** 24cp @ 300 level

Subject Description: IACT 404 provides students with an understanding of the policy issues relating to the emergence of political, economic and technological change in international telecommunications. The interdisciplinary foundations of telecommunications policy are examined. Issues in the development of telecommunications policy in Australia and overseas are reviewed as well as the regulatory frameworks adopted by different countries (eg. Australia and the United States) and regions (eg. European Union and South East Asia).

IACT405 Information Technology and Innovation 6cp**Autumn****Pre-requisites:** 24cp @ 300 level**Assessment:** Examination - 40%; Tutorial/seminar assignments - 40%; Essay - 20%

Subject Description: The rapid development of information technology networks has prompted governments to develop national policies to promote the growth of services in these areas. Innovation in information technology and its effective use is now seen to underpin international competitiveness. Successful innovation policies are now central to the future viability of industry and nations alike. This subject addresses key themes such as: the importance of innovation to the economy and the firm; the links between information, information technology and innovation; and, the development of effective national policies to promote industrial innovation. Issues such as the role of multinationals, transborder data flows and research and development are discussed in this context.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the central conceptual ideas underpinning the complex relationships between information, information technology, telecommunications and innovation; (ii) analyse the key political and economic issues in the area of information technology policy; and (iii) communicate and present complex arguments relating to the formulation of information technology and innovation policies, both individually and in groups.

IACT406 Strategic eBusiness Solutions 6cp**Spring****Contact Hours:** 3 hours per week**Pre-requisites:** IACT304 or CSCI370**Exclusions:** ITCS436 or ITCS450**Assessment:** Project - Part A 20%; Project- Part B 30%; Seminar Presentation 10%; Tutorial Participation 10%; Examination 30%

Subject Description: This subject aims to provide students with an understanding of how to design integrated solutions for eBusiness using a pattern-oriented approach. Enterprises, both large and small, as well as government institutions, are increasingly becoming reliant upon eBusiness infrastructure. Knowing the strategic business and technology principles and practices related to the design process is becoming increasingly important for a given organisation.

This subject will cover business scenarios including electronic data interchange (EDI), supply chain management (SCM), enterprise application integration (EAI), customer relationship management (CRM), sales force automation (SFA); and knowledge management systems (KM).

Subject Objectives: After studying this subject students should be able to: (1) identify and be able to explain the critical applications being used by companies to do business online; (2) critically assess a variety of eBusiness options for an organisation; (3) understand the relevance of various technology components that are required to build an eBusiness system; (4) identify and specify an eBusiness application infrastructure plan in response to a real business requirement using a pattern-oriented approach.(plus shared learning outcomes with ITCS436) plus 5, 6 & 7.

IACT416 Organisational Issues in Information Technology 6cp**Spring****Contact Hours:** 3 hours per week**Pre-requisites:** 24cp @ 300 level**Assessment:** Seminar presentation - 15%; Seminar paper - 15%; Essays - 70%.

Subject Description: IACT416 aims to provide the student with an understanding of issues related to the combination of management, workers and information technology. Students will gain an appreciation of the complexity of the issues involved in decision making when people and technology are concerned. Students will also develop an understanding across commerce and industry of the parallels that exist in the development, implementation and application of information and communication technology. Effect on organisational information flows of growth in size and complexity: the management and technological response. Information technology as a catalyst in codifying work procedures and creating new organisational structures. Hierarchical versus horizontal approaches to information management. Management theory and IT. Industrial use of IT and parallels with office sector usage. Implications of broadband networks for traffic integration and subsequent application in commerce and industry.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the meaning of the major terms confronted in IACT416; (ii) discuss the major issues involved in the debate over technology versus people; (iii) explain what is meant by codification of information and knowledge; (iv) present a coherent discourse about the major topics in the subject; (v) argue persuasively about the advantages and disadvantages of the use of IAC technology in commerce and industry; (vi) report on broadband technologies and their possible implications commerce and industry; (vii) examine the relevance of change management and TQM in commerce and industry; and (viii) develop skills in academic writing.

IACT417 Information Management 6cp**Autumn****Contact Hours:** 3 hours per week**Pre-requisites:** 24 cp @ 300 level**Assessment:** Group Project Proposal - 10%; Group Seminar 15%; Participation - 10%; Examination - 40%; Group Report/Project - 25%

Subject Description: This subject focuses on the importance of information as a resource, on which the knowledge base of successful organisations is dependent. While the main focus of the subject is information management within the organisation, a broader context is important. National and international issues relating to information access will be addressed. These include: standards relating to electronic storage and retrieval of electronic documents (digital archiving); legal protection for information as an economic good (for example as patents, copyright and other forms of intellectual property); and social and ethical issues (eg privacy and security) relating to information management

Subject Objectives: A student who successfully completes this subject should be able to: (i) Understand the importance of information management to the firm; (ii) Identify organisational concerns regarding information management; (iii) Evaluate current mechanisms and/or procedures relating to information management within organisations; (iv) Appreciate the influence of external forces (governments and international bodies) in controlling or facilitating information flows; (iv) Investigate the importance of networks like the Internet in the global information context; and (v) Discuss the key issues relating to digital archiving.

IACT418 Corporate Network Management 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Assessment: Major Project - 40%; Seminar Presentation - 10%; Tutorial Paper - 10%; Final Examination - 40%

Subject Description: The subject investigates the documentation and management of telecommunications networks. Topics to be covered include 1. Documenting the Network: requirements capture and specification, functional specification, design specification, documenting the network configuration 2. Managing the Network: influences on the network, management architectures and standards, performance management, fault management, disaster management, managing changes in a network, cost minimisation management and 3. Corporate and Regulatory Requirements: management teams, operations and support, standards and protocols.

Subject Objectives: A student who successfully completes this subject should be able to: (1) Explore the uses of telecommunications by businesses; (2) Understand the current status and future directions of telecommunications regulatory environment; (3) Discuss the strategic management issues and the options created by emerging technologies; and (4) Develop documentation to support organisational requirements for a telecommunications network

IACT419 Online Information Services 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Assessment: Practical Work - 20%; Essays - 30%; Project or Report - 30%; Seminar and Seminar Paper - 20%.

Subject Description: This subject examines the emergence of electronic information supermarkets and the changes in ownership that have taken place within the online information industry as mass media conglomerates have entered the field.

Other aspects covered include: the role of government in the development of online databases and networks; the creation of "value-added" products through re-formatting, marketing and electronic delivery of information; the future of public information sources such as libraries and government data collection and publication agencies in a changing online environment; and the potential of network developments such as AARNet, the Internet, and NREN in the delivery of online information resources. Some practical experience in the use of electronic information services is provided including Australian and international databases and computer networks.

Subject Objectives: A student who successfully completes this subject should be able to: (i) Identify major online information vendors and producers (both private sector and government) within Australia and internationally; (ii) Describe the services provided by online vendors and the means by which access to them can be achieved; (iii) Analyse the potential of network developments in the delivery of information; (iv) Discuss comparative value of a variety of electronic information resources and assess their usefulness; (v) Debate the issues affecting traditional information providers like libraries as more electronic services become available and information brokerages become more common; and (vi) Complete practical exercises to a satisfactory level of achievement using a number of electronic information services including: online databases, CD-ROMs and a variety of resources through the Internet.

IACT422 Case Studies in Information Technology Applications 6cp

Spring

Pre-requisites: 24cp @ 300 level

Subject Description: IACT422 examines leading edge technological developments and the issues arising from the innovative uses of such technology. This subject covers innovative and new applications of information technology to create services and systems, eg electronic banking, video conferencing, multimedia, EDI and CD-ROM. In order to provide a thorough background and understanding of an application, normally only one case will be studied in the subject in any one semester. Cases that may be covered include, multimedia, EDI and EFTPOS.

IACT424 Corporate Network Design and Implementation 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Assessment: Major project - 40% Seminar presentation - 10% Tutorial Paper - 10%; - Final Examination - 40%

Subject Description: The subject investigates the design and implementation of a telecommunications network plan. Topics to be covered include (1) The Need for Planning and the Planning Process: planning teams, strategic planning, the network plan, security planning and implementation planning. (2) The Design Process: design teams, translating the plan into design criteria, requirements capture and specification, design requirements and criteria, choosing topographies and architectures, evaluating plans (3) The Implementation Process: implementation teams, validating implementation plans, managing people and technology, managing the implementation process.

Subject Objectives: A student who successfully completes this subject should be able to: (1) Explain the principles of telecommunications network traffic flow control, forecasting, dimensioning and security; (2) Debate the current status and future directions of telecommunications networks as a complex interrelated set of operations; (3) Evaluate the critical forecasting, long range planning issues and appropriate project management techniques; (4) Critically analyse the telecommunications network plan for a large organisation. (5) Identify design criteria and implementation choices for a large telecommunications network; (6) Critically analyse the implementation plan for a telecommunications network for a large organisation.

IAC2426 Information Society, Knowledge Work and Information Technology 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 24cp @ 300 level

Assessment: Examination - 30%; Seminar presentation - 10%; Seminar paper - 10%; Essay - 25%; Project - 25%

Subject Description: The subject examines the concept of 'information society' and its measurement. It also examines the changing structure of the workforce with an investigation of the place and role of knowledge workers in the labour force being a core element. An examination of the trends affecting knowledge workers in Australia, and internationally, with respect to increasing credentialism, life-long learning and issues relating to their education and training will be undertaken. The introduction and application of IT affects each of these areas is therefore another critical component of study.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the role of IT in the trends relating to the composition of the Australian workforce; (ii) isolate the major issues associated with the use (and impact) of IT and compile suggestions about how commerce and industry can respond to the need for knowledge and skill development; (iii) report on the major trends in education/training in Australia (and to a lesser extent overseas) as they relate to skill and knowledge development and use of IT; (iv) list and explain a range of techniques and technologies used in developing knowledge and skills including those applicable to distance education; (v) analyse national (and/or state) plans for the continuing development of skills and knowledge; (vi) report on national (and/or state) plans for the continuing development of skills and knowledge; and (vii) critically analyse the role of knowledge workers

IAC2430 Special Topics in Information and Communication Technology 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 24 @300 level

Subject Description: This is an elective subject usually undertaken in the Honours year of the BInfoTech degree, and is also available to students from other disciplines. IAC2430 aims to provide the student with an understanding of topics at the forefront of the discipline. Topics will be selected from areas of interest of staff members or visiting staff members to the School. These will include topics in the application of information and communication technology.

IAC2433 Special Topics in Telecommunications Issues 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: 24cp @ 300 level

Subject Description: Topics will be selected from areas of interest of staff members or visiting staff members to the School in the area of telecommunications. IT is a rapidly changing area. This subject will allow investigation into topics at the forefront of the discipline.

IAC2441 IT Research Methodology 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: WAM of 67.5 & approval from Head of School

Assessment: Annotated bibliography, Research proposal, Methodology - 40%; Exam - 40%; Workshop participation - 20%

Subject Description: IAC2441 will cover the following topics on IT research methodology: What is Research (Purpose of thesis components); Research Methods; Literature Review - Critical Reading, Annotated bibliography and note taking; Survey Methods; Quantitative Methodologies (Results etc); Literature Review - Structure, Writing Up and Presentation Skills Satisfactory attendance at workshops is a requirement for the successful completion of this subject as is attendance at the Postgraduate Forum, held usually during week 8 of Autumn Session

Subject Objectives: A student who successfully completes this subject should be able to: (i) communicate effectively (both orally and in writing) the results of their investigation; (ii) present a literature review on the research topic which includes in its content relevant books, journal articles, software reviews and bibliographics and which demonstrates skilful use of appropriate research tools; and (iii) demonstrate the skills necessary to undertake a project.

IAC2450 Research Report 18cp

Spring

Pre-requisites: a grade of 75% or better in IAC2441

Exclusions: IAC2440

Subject Description: This is an Honours year subject of the BInfoTech degree, only available to students enrolled for honours from year 2000 onwards. It is a research project conducted under the supervision of academic staff in the school.

INFO202 Project 6cp

Annual Wollongong On Campus

Spring Dubai On Campus

(Feb-May 03)

Contact Hours: 2 hours Lecture/Tutorial per week for half each session

Pre-requisites: CSCI111 and ECTE195

Exclusions: ECTE250

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Reports (one per team per session) - 30%; Presentations (two per session) - 20%; Project Deliverables (two per session) - 20%.

Subject Description: This subject is a multi-disciplinary group project in which students will form groups to design and implement a project which is related to internet science and technology. The project will be supervised by staff from the Faculty of Informatics.

Subject Objectives: A student who successfully completes this subject should be able to: a) demonstrate an understanding of the critical factors that influence the performance of internet; b) demonstrate an ability in communicating with others; c) acquire some of the fundamental management; and d) demonstrate an ability for teamwork

INFO303 Advanced Project 12cp

Autumn / Spring Dubai On Campus
(Sept 03-June 04)

Annual Wollongong On Campus

Pre-requisites: INFO202, and WAM > 70 in level 200 subjects

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Reports (one per team per session) - 30%; Presentations (two per session) - 20%; Project Deliverables (two per session) - 20%.

Subject Description: This subject provides an opportunity for more capable students to do a group multi-disciplinary project in an area related to internet science and technology. It will allow students to learn how to communicate with one another in teamwork, in collaboratively executive a large internet related project.

Subject Objectives: A student who successfully completes this subject should be able to: a) demonstrate an understanding of the critical factors that affect the performance of the internet; b) demonstrate an ability in communicating with others; c) acquire some of the fundamental management theory and put it into practice; and d) demonstrate an ability for teamwork.

INFO401 Mathematics and Finance 12cp Honours Project

Annual

Contact Hours: 3 hours per week

Pre-requisites: WAM greater than or equal to 67.5 after completing 144 cp of the course.

Assessment: Examination of written work, and a seminar.

Subject Description: This is a project conducted under the supervision of one or more relevant members of academic staff. The topic of the work is determined jointly by the student and supervisor.

INFO402 Mathematics and Economics 12cp Honours Project

Annual / Spring 2003 - Autumn 2004

Contact Hours: 2 hours week per week.

Pre-requisites: WAM greater than or equal to 67.5 after completing 144 cp of the course.

Assessment: Examination of written work, and a seminar.

Subject Description: This is a project conducted under the supervision of one or more relevant members of academic staff. The topic of the work is determined jointly by the student and supervisor.

INFO403 Computer Bioinformatics 24cp Honours Project

Annual

Contact Hours: 1 hour per week

Pre-requisites: WAM greater or equal to 67.5 after completing 144cp of the course

Restrictions: only available to Computer Bioinformatics candidates

Assessment: Examination of written work; Seminar presentation

Subject Description: This is a research project conducted under the supervision of one or more relevant members of academic staff. The topic of the work is determined jointly by the student and supervisor.

Subject Objectives: A student who successfully completes this subject should be able to: (i) communicate effectively (both orally and in writing) the results of their investigation ;(ii) present a literature review on the research topic which includes in its content relevant books, journal articles, software reviews and bibliographics and which demonstrates skilful use of appropriate research tools; and (iii) demonstrate the skills necessary to undertake a research project.

INFO411 Data Mining and Knowledge 6cp Discovery

Spring

Contact Hours: 2 hours per week

Pre-requisites: 36 cp (Knowledge of mathematical and statistical notation at an introductory level.)

Assessment: Projects and Assignments - 40%; Exam - 60%

Subject Description: Introduction to Data Mining and Knowledge Discovery, Data Bases and Warehouses, Data Structures, Exploratory Data Analysis Techniques, Association Rules, Artificial Neural Networks, Tree Based Methods, Clustering and Classification Methods, Regression Methods, Overfitting and Inferential Issues, Use of Data Mining packages.

Subject Objectives: To provide students with the knowledge and understanding to plan and carry out analyses of large and complex data sets to identify useful relationships and important subgroups.

INFO412 Mathematics for Cryptography 6cp

Autumn

Contact Hours: 4 hours per week

Assessment: Assignments - 15%; Class Tests - 15%, Final Examination - 70%.

Subject Description: Logic: informal propositional logic, circuit theory. Natural Deduction style proofs in propositional & predicate logic. Interpretations & Models. Nonclassical logics. Number Theory: elementary number theory, modular exponentiation, discrete logarithms, Galois arithmetic & polynomials, error correcting codes & cryptography. Elliptic curves, groups for cryptography. Combinatorics: combinatorial probability, Knapsack problem, network and graph theory, combinatorial designs, game theory & linear programming applied to cryptography.

Subject Objectives: After successful completion of this subject students should be able to: (i) apply a knowledge of elementary logic to the simplification and designing of electrical circuits; (ii) prove theorems various classical and nonclassical logics;

Subject Descriptions

(iii) apply knowledge of number theory and group theory to the implementation of some modern methods of cryptography; and
(iv) apply basic notions from combinatorics, game theory and linear programming to cryptography.

INFO413 Information Theory 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: MATH121 or MATH122 or (MATH187 and MATH188), or (MATH141 and MATH142).

Assessment: Assignments - 16%, Test - 20%, Final Examination - 64%

Subject Description: The following is a selection of topics which may vary. The idea of probability, entropy, inequalities involving entropy, data compression, Huffman and Fano codes, information sources, McMillan's theorem, communication and capacity, block codes, Shannon's theorems, applications to other areas which may include communication, linguistics, genetics and financial investment.

Subject Objectives: One aim is to develop a critical and analytical understanding of information theory, especially by means of precise formulation of central concepts such as information, entropy, and compression of information. Another aim is to develop an understanding and appreciation of how these concepts relate to other disciplinary areas.

ITCS429 Concepts and Issues in Healthcare Computing 6cp

Spring

Contact Hours: 1 hour lecture, 2 hour tutorial per week.

Pre-requisites: 24cp @ 300 level

Exclusions: IACT430 or IACT432 or IACT929

Assessment: Assignment 100%

Subject Description: This subject examines the essential concepts of health computing, limitations of technology, issues of privacy and security, economics of healthcare computing, managing healthcare computing projects, evaluation methods in medical informatics, knowledge engineering in health informatics, risk assessment in health informatics and the important issues involved in computer applications in healthcare.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Describe contemporary health computing issues; 2. discover the issues of privacy and confidentiality in healthcare; 3. manage healthcare computing projects; and 4. Evaluate relevant health computing techniques.

ITCS430 Introduction to Health Informatics 6cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Tutorial per week.

Pre-requisites: 24cp @ 300 level

Exclusions: IACT430 or IACT432 or ITCS930

Assessment: Assignment 100%

Subject Description: The subject covers clinical decision making and decision support systems and how health informatics and health information systems can assist. Topics include decision-making and decision-support systems in healthcare; the reasons for the necessity of systematically processing data, information and knowledge in medicine and healthcare; benefits and constraints of using information and communication technology; principles of practice evaluation and evidence-based care;

evaluation methods; processing and evaluating information including analysis of business processes, bio-statistics and epidemiology; the application of statistics; computer concepts; characteristics of health information systems; healthcare systems; patient management; primary care systems and knowledge management.

Subject Objectives: A student who successfully completes this subject should be able to: 1. identify the technical, social and legal problems related to the developments in Health Informatics; 2. debate legal, business and social issues confronting Health Informatics; 3. critically analyse current strategies, standards and policies in relation to Health Informatics; 4. discuss the key technical and security related issues confronting Health Informatics; and 5. evaluate the contribution of Health Informatics to quality of care.

ITCS431 Advance Web Application Development 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Assessment: Assignments Final exam

Subject Description: This subject is an advanced web applications development subject utilizing the visual basic integrated development environment. Requirements analysis and component solution architectures for e-commerce applications will be studied and solutions implemented utilizing advanced features of VB IDE. See Subject Outline for details

Subject Objectives: After successful completion of this subject students should be able to: 1. explain in-depth the importance of n-tier architectures for web-based application systems; 2. explain the range and type of n-tier solution architectures for web application systems; 3. explain the importance of analyzing the business requirements before proposing a solution architecture for e-commerce systems; 4. analyse the business requirements for web application solutions; 5. apply in-depth knowledge of the VB IDE tools and technologies available to implementing a services design model; and 6. understand components, component architectures, and how to design and implement component applications using VB IDE

ITCS432 Web Design 6cp

Spring

Contact Hours: 2 hours Lectures, 1 hour Lab

Pre-requisites: 24cp @300 level

Assessment: Assignments 100%

Subject Description: This subject introduces students to the design and programming of multi-tier web sites, where dynamic pages present data from databases. Programming will be done with frameworks, such as Apple Web Objects to create web applications that support dynamic web pages and object models of databases. Topics include the design and creation of user process, site architecture, elegant page layouts and simple site navigation. Pages will be designed and content created with professional web tools, such as Adobe web tools. Emphasis is placed on user process, good media design, clean architecture and efficient algorithms.

Subject Objectives: After successful completion of this subject students should be able to: 1) have an appreciation of the principles underlying good web design for information presentation; 2) understand the process of creating web pages; 3)work in a team comprising technical and creative people on web development projects;

4) develop dynamic web pages in Web Objects; 5) model relational databases in EO modeller; and 6) understand the multi-tier model for efficient delivery of dynamic data over the web

ITCS436 Detailed Design of Integrated Solutions for eBusiness 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: IACT305 or CSCI399 or CSCI370

Exclusions: ITCS450 or IACT406 or ITCS936

Assessment: Assignment 50%; Exam 50%

Subject Description: This subject develops the students' understanding of the system development process by taking the student through all the phases of analysis design and construction of an eBusiness solution. The methods adopted provide an in-depth understanding of the logistical problems associated with gathering user requirements, and analysis and design, using the 'Patterns for eBusiness' method.

Subject Objectives: On successful completion of this subject, students should be able to: 1. start with a pattern-oriented architectural specification for an eBusiness solution' complete an elaboration phase using the architectural specification as input 'produce a set of use cases' develop an object-oriented analysis and design model' perform a set of iterative construction phases to implement the architectural specification(Plus shared learning outcomes with IACT406 of 2, 3 & 4).

ITCS437 Security, Risk Management and Control in Electronic Commerce 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: IACT406

Assessment: Tutorial Participation/Exercises/Discussion; Essay; Risk Assessment Project (Major Group Assignment); Seminar Presentation.

Subject Description: This subject aims to provide students with a deep understanding of the security, risk management and regulatory aspects of e-commerce facing businesses in the on-line business environment. Today most businesses compete in a global business environment; a sound business strategy that addresses these issues is essential. This subject covers key issues in e-commerce, including: security options, trusted authorities, secure payment systems for the Internet, the regulatory environment and Government policy; risk management and control.

Subject Objectives: A student who successfully completes this subject will be able to: 1. demonstrate a thorough understanding of current security issues in e-commerce applications; 2. demonstrate an in depth understanding of the primary legal issues surrounding web-based e-commerce; 3. critically assess the relative benefits of self-regulatory practices versus government regulation; 4. understand the risk management paradigm; and 5. differentiate between control weakness and control risk

ITCS450 Patterns for eBusiness 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: 12 cp at 200 level of IACT or CSCI

Exclusions: IACT406 or ITCS436 or CSCI370

Assessment: Assignments - 60%; Exam - 40%.

Subject Description: This subject explores advanced 'pattern-oriented' approaches to the design and development of eBusiness solutions. The 'Patterns for eBusiness' initiative provides a conceptual framework that can be exploited at all stages in the eBusiness software lifecycle.

In particular, this conceptual framework and vocabulary bridges the communications gap between business analysts and systems developers seeking to devise integrated solutions for eBusiness.

Subject Objectives: On successful completion of this subject, students will be able to: 1. describe how a pattern-oriented approach (specifically 'Patterns for eBusiness') supports the design of integrated solutions for eBusiness. This pattern-oriented design approach spans the entire eBusiness solution space from eBusiness problems through to eBusiness technology choices; 2. analyse eBusiness problems in terms of patterns for eBusiness; 3. choose and adapt the appropriate application patterns and integration patterns to support the business patterns; 4. map the application patterns onto an adaptable software application framework; and 5. experiment with technologies and products that implement the software application framework.

ITCS451 Web Services for Dynamic eBusiness 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: IACT305 or CSCI399

Exclusions: ITCS951

Assessment: Assignments - 60%; Exam - 40%.

Subject Description: Web Services are at the core of what is being termed the next generation of eBusiness. The term 'Web Services' refers to the set of standard protocols and associated technologies that enable software applications to communicate with each other across the Internet. To effectively exploit the potential of Web Services requires appropriate effort in the proper design of business processes and service architectures.

Subject Objectives: On successful completion of this subject, students will be able to: 1. describe and discuss the perceived expectations and anticipated impact of Web Services on the next generation of eBusiness; 2. describe each of the basic standard components from which Web Services are constructed, i.e., XML, SOAP, UDDI, WSDL, and describe how these components combine to enable the publishing and exploitation of Web Services; 3. build simple examples of distributed applications constructed using Web Services; and 4. exploit a high-level Web Services Development Toolkit to implement and deploy Web Services.

MATH110 Advanced Mathematics 1 6cp

Autumn

Contact Hours: 4 hours per week

Assessment: Assignments - 10%; mid-session test - 20 %; Final Examination - 70%.

Subject Description: Several areas of maths: Algebra (involves solving systems of equation using matrix methods, determinants and applications); Vector geometry (involves the idea of vectors and applications to geometry) Polar coordinates; Calculus (involves solution techniques for first and second order differential equations).

Subject Objectives: After successful completion of this subject students should be able to: (i) demonstrate a basic knowledge of the principles and techniques of mathematics; (ii) Demonstrate problem solving skills and the ability to analyse the final results; and (iii) apply general mathematical principles, think logically and analytically.

MATH111 Applied Mathematical Modelling 1 6cp

Spring

Contact Hours: 6 hours per week

Pre-requisites: Either a mark of at least 80 in MATH151 OR (in the NSW HSC Examination) 2 unit Mathematics - at least 72 marks out of 100; 3 unit Mathematics - at least 33 marks out of 50; 4 unit Mathematics - no minimum mark restriction

Co-requisites: MATH188 or MATH142

Assessment: Laboratory Reports - 18%; Midsession Exam - 41%, Final examination - 41%.

Subject Description: Emphasises the physical, mathematical, numerical and computational aspects of the modern usage of Applied Mathematics in Science, Engineering and Industry. It is strongly recommended for the students who are majoring in Industrial and Applied Mathematics. Real-world problems are tackled as idealised mathematical systems, the mathematical problem is solved and the results interpreted

Subject Objectives: After successful completion of this subject, students should be able to: (i) translate assumptions to mathematical equations, given a conceptual quantitative model; (ii) solve any separable first order differential equation, any second order linear differential equation or difference equation with constant coefficients; and (iii) use spreadsheet software to display data generated by mathematical models.

MATH121 Discrete Mathematics 6cp

Autumn

Contact Hours: 6 hours per week

Pre-requisites: Either a mark of at least 80 in MATH151 OR (in the NSW HSC Examination) 2 unit Mathematics - at least 72 marks out of 100; 3 unit Mathematics - at least 33 marks out of 50; 4 unit Mathematics - no minimum mark restriction.

Assessment: Assignments - 20%; Mid-Session Tests - 20%, Final Examination - 60%.

Subject Description: Students will be introduced to the spirit of mathematical inquiry and critical analysis, and encouraged to develop the ability to apply mathematical principles to the formulation and solution of problems. This is done through the use of non-calculus techniques, especially those of logic and number theory. This subject is well suited to computer science students.

Subject Objectives: After successful completion of this subject students should be able to: (i) apply mathematical principles to the interpretation of data, the formulation and solution of problems and the critical analysis of answers for use in a range of problems in both mathematics and computer science; (ii) construct truth tables for logical expressions; test statements for logical equivalence and represent mathematical statements in the language of predicate logic; (iii) use appropriate methods of proof to derive results in set theory, number theory and the elementary theory of relations and functions; (iv) define the basic elements of graph theory, and apply these in analysing types of graphs; and (v) define binary trees and apply them in networking.

MATH122 Probability and Logic 6cp

Spring Dubai On Campus

(Feb-May 03)

Autumn Dubai On Campus

(Sept03-Jan 04)

Autumn Wollongong On Campus

Contact Hours: 4 hours Lectures, 1 hour Tutorial per week

Exclusions: not to count with MATH121 or STAT131.

Assessment: Exam - 70%; Assignments - 30%

Subject Description: MATH122 consists of two sections: 1) Probability and Statistics: counting, modelling variability tree diagrams, conditional probability, discrete and continuous random variables, central limit theorem, statistical literacy. 2) Logic and Set Theory: propositional logic, truth tables, tautology, negation, algebraic laws, deduction, proofs, basic set theory, equivalence relations, functions, partial order, linear order.

Subject Objectives: After successful completion of this subject students should be able to: i) apply mathematical principles to the interpretation of data, the formulation and solution of problems and the critical analysis of answers for use in a range of problems in both mathematics and computer science; ii) construct truth tables for logical equivalence and represent mathematical statements in the language of predicate logic; iii) use appropriate methods of proof to derive results in set theory and the elementary theory of relations and functions; iv) use the basic rules of probability; and v) use probability distributions to model the behaviour of some random systems.

MATH141 Mathematics 1C Part 1 6cp

Autumn

Contact Hours: 6 hours per week

Pre-requisites: Either a mark of at least 65 in MATH151 OR in NSW HSC Examination: 2 unit Mathematics - no minimum mark restriction

Exclusions: MATH101, MATH141 and MATH187 are not to count together.

Assessment: Assignments - 10%; Tests - 30%; Final Examination - 60%.

Subject Description: MATH141 is an alternative core subject for candidates whose HSC mathematics background is weaker than that required for MATH187. The aim of this subject is to develop ideas, concepts and skills in mathematics, especially applied skills, for application in later subjects. Main topics covered are matrix algebra, determinants, vectors, and differential and integral calculus. Computer Aided Learning modules on background material are available.

Subject Objectives: After successful completion of this subject the student should be able to: (i) demonstrate a basic knowledge of the principles and techniques in Mathematics; (ii) demonstrate problem solving skills and the ability to analyse the final results; and (iii) apply general mathematical principles, think logically and analytically.

MATH142 Mathematics 1C Part 2 6cp

Spring

Contact Hours: 6 hours per week

Pre-requisites: Either MATH141 or MATH161 OR a mark in the range 45 to 54 in MATH187

Exclusions: MATH101, MATH162 and MATH188 are not to count together.

Assessment: Assignments - 10%; Tutorial Quizzes - 10%; Mid-Session Test - 20%; Final Examination - 60%.

Subject Description: MATH142 is a core subject continuing on from MATH141. The aim of this subject is to develop ideas, concepts and skills, especially applied skills, in mathematics for application in later subjects. Main topics covered are further calculus, differential equations, numerical mathematics, sequences and series of numbers and complex numbers. Computer Aided Learning modules are available.

Students who do sufficiently well in MATH142 may proceed to relevant 200 level mathematics subjects.

Subject Objectives: After successful completion of this subject the student should be able to: (i) demonstrate a basic knowledge of the principles and techniques in Mathematics; (ii) demonstrate problem solving skills and the ability to analyse the final results; and (iii) apply general mathematical principles, think logically and analytically;

MATH151 General Mathematics 1A 6cp

Autumn

Contact Hours: 6 hours per week

Pre-requisites: NSW HSC Examination 2 unit Mathematics in Society- no mark restriction; 2 unit Mathematics - no minimum mark restriction.

Exclusions: Not to count with any one of MATH101, MATH141, MATH142, MATH187, or MATH188 unless satisfactorily completed prior to satisfactory completion of any of MATH101, MATH141, MATH142, MATH187, or MATH188 respectively.

Assessment: Tests - 30%; Final Examination - 70%.

Subject Description: MATH151 is intended for candidates registered for courses in the Faculty of Science who do not meet the pre-requisite for the subject MATH187. It introduces topics in algebra, trigonometry, co-ordinate geometry, vectors, functions, and calculus. The material is presented in a self-contained manner with a view to further applications in Science subjects.

Subject Objectives: After successful completion of this subject students should be able to: (i) apply mathematical principles to the interpretation of data, the formulation and solution of problems and the critical analysis of answers in work relevant to the scientific disciplines; (ii) graph 2 and 3 dimensional vectors, calculate vector sums, scalar products, dot products of vectors, and the angle between 2 vectors; (iii) define the basic trigonometric ratios, sketch the graphs of trigonometric functions and apply this knowledge to represent the periodic behaviour of natural events; (iv) define the logarithmic and exponential functions and apply these functions to natural growth and decay and to understand data represented by log log and semi-log graphs; (v) differentiate basic functions, calculate rates of change and apply anti-differentiation to the calculation of areas.

MATH161 Mathematics 1E Part 1 6cp

Spring

Pre-requisites: Either a mark of at least 65 in MATH151 OR in NSW HSC Examination: 2 unit Mathematics - no minimum mark restriction

Exclusions: Not to count with MATH101, MATH141, MATH143, MATH144, MATH187.

Assessment: Assignments 10%; In-Session Tests - 30%; Final Examination - 60%.

Subject Description: The content of MATH161 involves several areas of Mathematics. These areas are: Calculus which includes real functions, and an introduction to differentiation and integration; Polar co-ordinates; Algebra, which includes solving systems of equations using matrix methods, determinants and applications; and Vector Geometry, which involves vectors and their applications to geometry.

Subject Objectives: After successful completion of this subject the student should be able to: (i) demonstrate a basic knowledge of the principles and techniques in Mathematics;

(ii) demonstrate problem solving skills and the ability to analyse the final results; and (iii) apply general mathematical principles, think logically and analytically.

MATH162 Mathematics 1E Part 2 6cp

Summer

Wollongong

Flexible

2003/2004

Pre-requisites: Either MATH161 or MATH141 or MATH187

Exclusions: Not to count with MATH101, MATH142, MATH143, MATH144, MATH188.

Assessment: Assignments - 10%; Tests - 30%; Final Examination - 60%.

Subject Description: The content of MATH162 involves several areas of Mathematics. These areas are: Calculus, which includes further integration, applications of integration, and first and second order differential equations; Complex Numbers; Further Calculus, which includes an elementary introduction to sequences and series and their convergence.

Subject Objectives: After successful completion of this subject the student should be able to: (i) demonstrate a basic knowledge of the principles and techniques in Mathematics; (ii) demonstrate problem solving skills and the ability to analyse the final results; and (iii) apply general mathematical principles, think logically and analytically;

MATH187 Mathematics 1A Part 1 6cp

Autumn

Contact Hours: 6 hours per week

Pre-requisites: Either a mark of at least 80 in MATH151 OR (in the NSW HSC Examination) 2 unit Mathematics - at least 72 marks out of 100; 3 unit Mathematics - at least 33 marks out of 50; 4 unit Mathematics - no minimum mark restriction.

Exclusions: MATH101, MATH141 and MATH187 are not to count together.

Assessment: Assignments - 10%; Test - 20%; Final Examination - 70%.

Subject Description: The pair of subjects MATH187 and MATH188 make up the core for 100 level subjects. They are needed for most 200 level subjects in Mathematics and Applied Statistics. Students not wishing to proceed to 200 level mathematics may just study MATH187. MATH187 is available to students in all disciplines. This subject aims to develop ideas, concepts and skills in mathematics for application in subjects that require MATH187 as a co- or pre-requisite. Main topics are matrix algebra, determinants, vectors, and differential and integral calculus. Assistance is available for students with a weak background in mathematics.

Subject Objectives: After successful completion of this subject the student should be able to: (i) demonstrate a basic knowledge of the principles and techniques in Mathematics; (ii) demonstrate problem solving skills and the ability to analyse the final results; and (iii) apply general mathematical principles, think logically and analytically.

MATH188 Mathematics 1A Part 2 6cp**Spring****Contact Hours:** 6 hours per week**Pre-requisites:** Either MATH187 OR a mark of at least 65 in MATH141**Exclusions:** MATH101, MATH142 and MATH188 are not to count together.**Assessment:** Assignments - 10%; Test - 20%; Final Examination - 70%.

Subject Description: MATH188 is a core subject continuing on from MATH187. The aim of this subject is to develop ideas, concepts and skills in mathematics for application in later subjects. Main topics covered are further calculus, differential equations, sequences and series of numbers, numerical mathematics and complex numbers. This subject is required for most 200 level Mathematics and Applied Statistics subjects.

MATH201 Multivariate and Vector Calculus 6cp**Autumn****Contact Hours:** 4 hours per week**Pre-requisites:** One of MATH101 or MATH188 or MATH283 or a mark of at least 65 in MATH142.**Assessment:** Assignments - 6%; Mid-Session Test - 34%, Final Examination - 60%; Lab Assignments Compulsory.

Subject Description: MATH201 is one of four core 200 level Mathematics subjects and is a prerequisite for many 300 level subjects in Mathematics and Statistics. This subject extends the calculus of one variable to the calculus of more than one variable. Applications are given to maxima and minima, multiple integrals, vector calculus, line, surface and volume integrals, and to geometrical problems.

Subject Objectives: A student who successfully completes this subject should be able to: (i) distinguish space curves and surfaces; (ii) contrast scalar and vector functions in three-dimensions; (iii) differentiate functions of more than one independent variable; (iv) differentiate vectors; (v) determine rates of change of multivariable and scalar and vector functions; (vi) manipulate derivative and integral formulations in two or more dimensions where the variables undergo transformation; (vii) analyse surfaces for maxima and minima; (viii) differentiate and integrate over three-dimensional space curves; and (ix) differentiate and integrate over three-dimensional surfaces and throughout three-dimensional volumes.

MATH202 Differential Equations 2 6cp**Spring****Contact Hours:** 4 hours per week**Pre-requisites:** One of MATH101 or MATH188 or a mark of at least 65 in MATH142**Co-requisites:** MATH201**Assessment:** Assignments - 22%; Mid-Session Test - 13%; Final Examination - 65%.

Subject Description: MATH202 is one of four core 200 level Mathematics subjects. This subject introduces the student to various special functions and differential equations and to techniques (both analytic and numerical) for their solution. Topics covered include exact first order equations, Gamma, Beta and Error functions, Laplace transforms, Fourier series, separation of variables for pde s, basic numerical techniques, computer packages, and comparative accuracy of numerical techniques.

Subject Objectives: A student who successfully completes this subject should be able to: (i) evaluate and manipulate relevant integrals in terms of Gamma, Beta and Error functions; (ii) recognise and evaluate integro-differential equations able to be solved by Laplace transform methods, and then solve them; (iii) express relevant functions using their Fourier series or other representations; (iv) solve partial differential equations by separation of variables techniques; (v) compare methods of solving differential equations numerically and assess their accuracy; (vi) use a laboratory package for solving differential equations.

MATH203 Linear Algebra 6cp**Autumn****Contact Hours:** 4 hours per week**Pre-requisites:** One of MATH101 or MATH188 or MATH283 or a mark of at least 65 in MATH142.**Assessment:** Assignments - 27%; Final examination - 70%; Tutorial/Lab Participation - 3%.

Subject Description: MATH203 is one of four core 200 level Mathematics subjects. The study of systems of linear equations is important not only to mathematicians but also to scientists and engineers. Study of these systems is done both theoretically and numerically with geometrical interpretations given. It aims to build on students' knowledge of matrix algebra and vector analysis.

Subject Objectives: A student who successfully completes this subject should be able to: (i) identify vector spaces and subspaces of vector spaces and find bases for them; (ii) relate row and column spaces and null spaces to the solution of $Ax = b$ and be able to discern relationships between the solution x of a linear system and its coefficient matrix; (iii) determine whether transformations are linear and perform simple geometry of linear transformations in R^2 ; (iv) diagonalise square matrices; (v) solve linear systems numerically by a variety of direct and indirect methods; and (vi) use a matrix laboratory package for a variety of algebraic tasks.

MATH204 Complex Variables and Group Theory 6cp**Spring****Contact Hours:** 4 hours per week**Pre-requisites:** One of MATH101 or MATH188 or a mark of at least 65 in MATH142.**Co-requisites:** MATH201**Assessment:** Assignments - 10%; Mid-Session Test - 20%; Final Examination - 70%.

Subject Description: MATH204 is one of four core 200 level Mathematics subjects. It is of substantial value to science and other students. The study of Complex Variables extends the calculus of functions of a real variable to functions of a complex variable. Group Theory studies basic algebraic properties common to many mathematical systems and is currently applied in the areas of physics, geology and computer science.

Subject Objectives: A student who successfully completes this subject should be able to: (i) use the basic theory of complex valued functions; (ii) determine which functions are differentiable; (iii) recognise and manipulate the elementary complex functions; (iv) evaluate complex valued integrals by a variety of methods; (v) use complex integration to evaluate certain real integrals, and (vi) define and use the fundamental concepts from group theory;

(vii) apply the fundamental definitions to groups with special properties; (viii) prove elementary group identities and understand the proof of Lagrange's theorem and some applications; and (ix) use the fundamental concepts from group theory and Lagrange's theorem to characterise small finite groups.

MATH212 Applied Mathematical Modelling 2 6cp

Spring

Contact Hours: 4 hours per week

Pre-requisites: One of MATH101 or MATH188 or MATH283 or a mark of at least 65 in MATH142.

Assessment: Mid-session Test - 30%; Final examination - 70%.

Subject Description: MATH212 is a subject in the applied mathematics strand. The subject provides insight into the process of Applied Mathematical Modelling in two important areas, heat transfer and Newtonian mechanics, though the modelling skills will be transferable to other areas. The main mathematical technique used is that of solving ordinary differential equations.

Subject Objectives: A student who successfully completes this subject should be able to: (i) apply the process of Applied Mathematical Modelling to some physical systems; (ii) illustrate the process with reference to simple Newtonian statics and dynamics; (iii) solve problems involving Newton's Second Law and the use of non-Cartesian coordinates; and (iv) use the introductory concepts of continuum mechanics and heat transfer.

MATH222 Continuous and Finite Mathematics 6cp

Autumn

Pre-requisites: One of MATH101 or MATH188 or a mark of at least 65 in MATH142.

Co-requisites: MATH201

Assessment: Assignments - 24%; Class Participation - 6%; Final examination - 70%.

Subject Description: MATH222 is for students who wish to continue in the mathematical analysis strand. Continuous Mathematics is concerned with the continuation of concepts introduced in first year calculus, including those of convergent sequence, continuous function and the integral of a function. Finite Mathematics is strictly independent of earlier work, but is related to first year algebra.

Subject Objectives: A student who successfully completes this subject should be able to: (i) construct proofs relating to convergent sequences, continuous functions, sequences and series of functions, and number theory; (ii) identify situations where the interchange of integrals with limiting processes is valid; (iii) calculate the Fourier series of various functions and/or calculate the iterations of some functions, and demonstrate an understanding of some of the problems associated with these procedures; (iv) solve difference equations and present knowledge of some of their applications; (v) describe some topics in number theory and/or combinatorics and of some of their applications; and (vi) demonstrate an appreciation and understanding of the role of proof, problem-solving and clarity of argument in a mathematical context.

MATH235 Mathematics Project A 6cp

Autumn / Spring

Contact Hours: 2 hours per week

Pre-requisites: 24 credit points at 100 level including MATH110

Restrictions: This subject is only for students enrolled in the BMath(Advanced) degree

Assessment: Projects - 60%; Test - 10%, Final Exam - 30%

Subject Description: The subject is a project individually chosen for the student, at a level appropriate to the 200 classification. The content may consist of (1) a placement in business or industry where substantial use is made of mathematical techniques; or (2) a project directed towards independent investigation by the student, written and/or oral presentations, and substantial interaction of the student with the supervisors of the project and other members of staff; or (3) a project directed to mastery of a mathematical package or language, with specific use of the package or language in some application or area of mathematics; or (4) a project of research collaboration with a member or members of staff, of which written and spoken presentation would be a part. Other projects which are appropriate but not primarily in one of these single categories may occur, such as a project combining features of (1) and (2).

Subject Objectives: After successful completion of the subject, and depending upon the nature of the project undertaken, the student should be able to: (i) demonstrate an independent approach to problems and communication and interaction skills in a business/industrial context where use is made of mathematical ideas and procedures, (ii) demonstrate skills of independent thought and investigation, emphasising written and oral communication skills, (iii) demonstrate the development of skills of investigation in the context of computation or mathematical software packages, (iv) show the acquisition of research skills involving interaction with established researchers, and (v) write an independent report to a high level of presentation as appropriate to the 200 level classification. However, note that whatever the project is, there is to be an emphasis on written and spoken communication skills and upon the capacity of the student to interact and discuss problems with others.

MATH253 Linear Algebra 4cp

Autumn

Contact Hours: 4 hours per week

Pre-requisites: MATH188 a mark of at least 65 in MATH142.

Exclusions: MATH203

Assessment: Assignments - 27%; Final Examination - 70%; Tutorial/Lab Participation - 3%.

Subject Description: MATH253 is 2/3 of the subject MATH203. The aim of MATH253 is to build on students' knowledge of matrix algebra and vector analysis, and provide a strong foundation in the mathematics of linear algebra, with an appreciation of the applications that motivate it. The study of systems of linear equations is important not only to mathematicians but also to scientists and engineers. MATH253 will include study of these systems with geometrical interpretations being given. It includes vector spaces, subspaces, linear dependence, basis, dimension and inner product spaces. This will be followed by eigenvalues and eigenvectors and their central role to the diagonalization of matrices. Linear transformations and their basic properties will be discussed.

Subject Objectives: A student who successfully completes this subject should be able to: (i) identify vector spaces and subspaces of vector spaces and find bases for them; (ii) relate row and column spaces and null spaces to the solution of $Ax = b$ and be able to discern relationships between the solution x of a linear system and its coefficient matrix; (iii) determine whether transformations are linear and perform simple geometry of linear transformations in R^2 ; (iv) diagonalise square matrices, when possible; (v) construct orthonormal bases and use them to find the orthogonal projections of vectors onto subspaces; and (vi) be proficient in the use of a matrix laboratory package for a variety of algebraic tasks.

MATH283 Mathematics IIE for Engineers Part 1 6cp

Autumn

Contact Hours: 4 hours per week

Pre-requisites: One of MATH101 or MATH142 or MATH144 or MATH162 or MATH188

Exclusions: Not to count with MATH202 or MATH261 or MATH281.

Assessment: Assignments - 20%; Mid-Session Test - 10%, Final Examination - 70%.

Subject Description: MATH283 is a subject for Bachelor of Engineering students. The subject consists of two topics, Differential Equations and Statistics. Each topic is worth 50% of the final mark. Differential Equations deals with new techniques, including the Laplace transform, Fourier series, and special functions (the gamma, beta and error functions). Statistics gives an introduction to statistical computing, and to basic statistical techniques, including mathematical models for describing variation in experimental situations.

Subject Objectives: A student who successfully completes this topic (Differential Equations) should be able to: (i) evaluate and manipulate relevant integrals in terms of Gamma, Beta and Error functions; (ii) recognise and evaluate integro-differential equations able to be solved by Laplace transform methods, and then solve them; (iii) express relevant functions using their Fourier series representations, and extend the work on these series to the summing of other series; and (iv) solve elementary partial differential equations by separation of variables techniques. See also Additional information below.

MATH291 Differential Equations 3cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: MATH101 or MATH188 or a mark of at least 65 in MATH142.

Co-requisites: MATH201

Exclusions: Not to count with MATH202.

Assessment: As for MATH202. (Assignment 10%, test 20%, final exam 70%)

Subject Description: Linear second and higher order differential equations, solution of differential equations by Laplace transform methods. Fourier series, and some special functions (gamma, beta and error functions) will be introduced, together with an introductory solution method to boundary value problems (separation of variables).

MATH292 Numerical Analysis 3cp

Spring

Pre-requisites: MATH101 or MATH188 or a mark of at least 65 in MATH142.

Co-requisites: MATH201

Assessment: As for MATH202. (Assignments - 20%, Test - 10%, Final Exam - 70%).

Subject Description: Basic numerical techniques for the solutions of differential equations, with application of computer packages, will also be covered. Students will also be expected to assess the comparative accuracy of these techniques.

Subject Objectives: as for MATH202

MATH293 Complex Variables 4cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: One of MATH101 or MATH188 or a mark of at least 65 in MATH142.

Exclusions: Not to count MATH204.

Assessment: Assignment - 10%, Mid-Session Test - 20%, Final Examination - 70%

Subject Description: Complex functions, power series, analytic functions, Laurent series, singularities, residues, contour integration, Cauchy's theorem, Residue theorem and applications, conformal transformations.

Subject Objectives: As for MATH204.

MATH294 Group Theory 2cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: One of MATH101 or MATH188 or a mark of at least 65 in MATH142.

Exclusions: MATH204

Assessment: Assignments - 10%; Mid-Session Test - 20%; Final Examination 70%.

Subject Description: Group Theory consists of a careful study of the fundamental properties of groups using the following concepts: order, finite groups, subgroups, cosets, group homomorphisms and group isomorphisms. This study leads to an important result in Group Theory called Lagrange's theorem.

Subject Objectives: As for MATH204.

MATH302 Differential Equations 3 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: MATH283 or MATH202

Assessment: Assignments 10%, Mid-session test 20%, Final Examination 70%.

Subject Description: Many physical problems in the world are modelled with differential equations. This subject extends the knowledge of the student to various types of equations and to their solution. Techniques used widely in many areas of physical science are developed in this subject. Topics include Laplace and Fourier transforms, series solutions, and Hypergeometric and Bessel functions.

Subject Objectives: A student who successfully completes this subject should be able to: (i) evaluate and manipulate relevant harder integrals in terms of Gamma and Beta functions; (ii) recognise and evaluate harder integro-differential equations able to be solved by Laplace transform methods;

(iii) recognise and evaluate integro-differential equations able to be solved by Fourier transform methods; (iv) recognise and evaluate differential equations able to be solved by Taylor or Frobenius methods; and (v) recognise, and solve differential equations by the use of the Hypergeometric and Bessel functions.

MATH305 Partial Differential Equations 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: MATH201, 202 and 203

Assessment: Laboratory - 10%; Assignments -5%; Final Examination - 85%.

Subject Description: MATH305 is in a central area of mathematics, as many physical problems in the world are modelled with partial differential equations. Various types of equations and their solutions are discussed. As many equations cannot be solved in analytical form, numerical methods of solution also are considered. The aim is to develop high level mathematical ability and problem solving skills.

Subject Objectives: A student who successfully completes this subject should be able to: (i) recognise and solve first order partial differential equations; (ii) classify second order partial differential equations as hyperbolic, elliptic or parabolic; (iii) use appropriate methods of solution for each of the above types; (iv) distinguish between methods of solving partial differential equations according to their type; (v) assess the stability of the numerical methods used to solve partial differential equations; and (vi) demonstrate proficiency by using a laboratory package unassisted to successfully solve partial differential equations.

MATH312 Applied Mathematical Modelling 3 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: MATH202 or (MATH283 and ENGG252)

Assessment: Assignments - 10%; Mid-Session Test - 20%, Final Examination - 70%.

Subject Description: MATH312 builds on work and knowledge originating in MATH111 and MATH212 and shows how to undertake mathematical modelling of many scientific and engineering processes and problems arising in industry. Main foci are: continuum mechanics, including deformation of materials; linear elasticity, including basic concepts of the stress-strain relation; and fluid mechanics.

Subject Objectives: A student who successfully completes this subject should be able to use notions of stress and strain and universal conservation laws in the mathematical formulation of problems in solid and fluid mechanics.

MATH313 Industrial Mathematical Modelling 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: MATH202 or (MATH283 and MECH343)

Assessment: Case study project - 30%; Tutorial participation - 10%; Final examination - 60%.

Subject Description: MATH313 is designed to develop mathematical modelling skills by the examination of case studies relevant to industry. The basic equations are derived from first principles and used to study the transfer of mass and heat, diffusion, solidification and combustion.

In addition, the subject aims to improve oral presentation skills by making tutorial participation an assessable component of the subject.

Subject Objectives: A student who successfully completes this subject should be able to: (i) construct a mathematical model for an industrial process involving mass diffusion, heat conduction, change of phase, and combustion; (ii) express such a mathematical model in dimensionless form, identifying the important dimensionless parameters of a process; (iii) solve standard fixed and free boundary value problems of heat conduction; and (iv) present and explain mathematical models and their solutions to colleagues/employers.

MATH316 Applied Dynamics 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: MATH202 and MATH212

Assessment: Assignments - 20%; Final examination - 80%.

Subject Description: MATH316 is designed to broaden and deepen the understanding of mathematical techniques for analysing mathematical models of practical mechanical systems. These techniques include the calculus of variations, the systematic use of symmetries and conservation laws, the application of canonical transformations and the identification of bifurcations.

Subject Objectives: After successful completion of this subject students should be able to: (i) derive Euler-Lagrange equations from variational principles; (ii) construct appropriate Lagrangians for conservative mechanical systems; (iii) derive conservation laws from Noether Symmetries; (iv) construct Hamiltonians from Lagrangians; (v) identify canonical transformations and apply them to mechanical systems; and (vi) identify conserved dynamical quantities using Poisson Bracket criteria.

MATH317 Financial Calculus and Logistics 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: MATH202 and (STAT131 or STAT231)

Assessment: Assignments - 30%; Final examination - 70%.

Subject Description: MATH317 is an elective subject available to students enrolled in the degree courses primarily offered within this School. The subject consists of two sections: Financial Calculus: This is an introductory mathematical modelling course into the rapidly accelerating area of financial derivatives. It explores the properties of options and provides a theoretical framework within which these options can be valued and hedged. Logistics: This section introduces general principles of mathematical logistics, using inventory modelling as the main example.

Subject Objectives: A student who successfully completes this subject should be able to: 1. explain and apply the mathematical background necessary for pricing options; 2. price European and American options by finding analytical and accurate numerical solutions; 3. construct various risk management strategies and determine their limitations; 4. determine the optimal order quantity of a stock item, given the production costs, holding costs, unit costs and demand pattern; 5. account for the effects of uncertain demand, stockout losses, bulk discounts and continuous production, in inventory planning; 6. construct a Material Requirement Plan.

MATH321 Numerical Analysis 6cp

Spring

Contact Hours: 3 hours per week**Pre-requisites:** MATH202 and MATH203**Assessment:** Laboratory Reports - 20%; Assignments - 10%; Final Examination - 70%.

Subject Description: MATH321 is designed to extend the ideas developed in MATH202 and MATH203 as to how numerical and computational mathematics can be used to solve problems that have no analytic solution. The foci are problems in linear algebra and applications to real world problems. Specific techniques include algorithms for calculating eigenvalues and eigenvectors of a matrix.

Subject Objectives: A student who successfully completes this course should be able to: (i) perform matrix decomposition by various methods; (ii) determine the effectiveness of various numerical methods; (iii) maximise the efficiency of various algorithms; (iv) identify special matrices and implement appropriate methods; (v) apply singular value decomposition where necessary; (vi) be proficient in the use of a laboratory package for solving numerical linear algebra problems.

MATH322 Algebra 6cp

Spring

Contact Hours: 3 hours per week**Pre-requisites:** Either MATH204 or MATH222**Assessment:** Assignments - 14%; Mid-Session Test - 16%; Final Examination - 70%.

Subject Description: MATH322 has been designed to develop clear and critical understanding, problem-solving skills and a capacity for rigorous argument. It builds on the group theory section of MATH204, and to a lesser extent upon the finite mathematics section of MATH222. An aim is to develop an appreciation of some of the concepts of modern algebra, including the work leading to the classification of finite simple groups completed around 1980.

Subject Objectives: A student who successfully completes this subject should be able to: (i) distinguish the properties of Abelian and non-commutative groups; (ii) demonstrate, with proofs, an understanding of the basic properties of finite groups, (iii) demonstrate an ability to determine the structure of groups of small order; (iv) demonstrate basic knowledge of commutative rings, integral domains and fields; (v) demonstrate an ability to determine the structure of finite fields of prime power order; and (vi) have some appreciation of the problem of classification of finite simple groups.

MATH323 Topology and Chaos 6cp

Autumn

Contact Hours: 3 hours per week**Pre-requisites:** MATH222**Assessment:** Assignments - 30%; Final Examination - 70%.

Subject Description: MATH323 aims to develop critical understanding and problem-solving skills in the context of topology and chaos theory. It is intended to convey some of the impact of chaos theory in other areas and encourage interest of the student in phenomena such as the Koch curve. Some concepts discussed are notions of distance, dynamical systems, fractals and the Mandelbrot set.

Subject Objectives: Students who successfully complete this subject should be able to: (i) define some of the basic concepts of topology;

(ii) see connection between topological ideas and chaotic phenomena; (iii) deduce some elementary results for chaotic phenomena; (iv) apply some results of fixed point theory to derive some results in mathematical analysis; (v) use and appreciate the need for rigorous argument when proving results in topology and chaos; (vi) illustrate the way in which topological concepts can clarify and enhance the understanding of some topics in other areas.

MATH324 Analysis 6cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** MATH203 and MATH222**Assessment:** Assignments - 30%; Final Examination - 70%.

Subject Description: MATH324 builds upon the continuous mathematics part of MATH222. The subject is intended to develop critical understanding and problem-solving skills in an analysis context. It is intended to convey an understanding of some of the concepts of modern analysis which underlie applications in numerous areas. Specific topics may include Hilbert space, Henstock integration, and applications.

MATH345 Mathematics Project B 6cp

Autumn / Spring

Contact Hours: 3 hours per week**Pre-requisites:** 24 credit points at 200 level**Restrictions:** This subject is only for students enrolled in the BMath(Advanced) degree

Assessment: Assessment will depend upon the content and circumstances of the project, and will be specified in advance for each student. Assessment may include: (1) a written report; (2) a spoken presentation; (3) evaluation of performance in a business or industrial placement; (4) evaluation in part by examination; and (5) assignments

Subject Description: The subject is a project individually chosen for the student, at a level appropriate to the 300 classification. The content may consist of (1) a placement in business or industry where substantial use is made of mathematical techniques; or (2) a project directed towards independent investigation by the student, written and/or oral presentations, and substantial interaction of the student with the supervisors of the project and other members of staff; or (3) a project directed to mastery of a mathematical package or language, with specific use of the package or language in some application or area of mathematics; or (4) a project of research collaboration with a member or members of staff, of which written and spoken presentation would be a part. Other projects which are appropriate but not primarily in one of these single categories may occur, such as a project combining features of (1) and (2).

Subject Objectives: After successful completion of the subject, and depending upon the nature of the project undertaken, the student should be able to: (i) demonstrate an independent approach to problems and communication and interaction skills in a business/industrial context where use is made of mathematical ideas and procedures, (ii) demonstrate skills of independent thought and investigation, emphasising written and oral communication skills, (iii) demonstrate the development of skills of investigation in the context of computation or mathematical software packages, (iv) show the acquisition of research skills involving interaction with established researchers, and (v) write an independent report to a high level of presentation as appropriate to the 300 level classification.

However, note that whatever the project is, there is to be an emphasis on written and spoken communication skills and upon the capacity of the student to interact and discuss problems with others.

MATH371 Special Topics in Industrial and Applied Mathematics 3 6cp

Spring / Autumn

Contact Hours: 3 hours per week

Assessment: Assessment methods will be determined after specification of objectives.

Subject Description: Entry to this subject is at the discretion of the Head of the School of Mathematics and Applied Statistics. This subject may not be offered in any particular year. MATH371 is one of a number of elective subjects available to students enrolled in the degree courses offered by the School. The aim of this subject is to provide students with specialist applied mathematical skills. Topics will be selected from the areas of interest of staff members of the School or visiting staff members.

MATH372 Special Topics in Mathematical Analysis 3 6cp

Spring

Contact Hours: 3 hours per week

Pre-requisites: At discretion of Head of School

Assessment: Assessment methods will be determined after specification of objectives.

Subject Description: Entry to this subject is at the discretion of the Head of the School of Mathematics and Applied Statistics. This subject may not be offered in any particular year. MATH372 is one of a number of elective subjects available to students enrolled in the degree courses offered by the School. The aim of the subject is to provide students with advanced mathematical concepts and skills. Topics will be selected from the areas of interest of staff members of the School or visiting staff members.

MATH401 Mathematics 4 (Honours) 48cp

Annual / Spring 2003 - Autumn 2004

Contact Hours: 10 hours per week

Pre-requisites: At discretion of Head of School

Assessment: The coursework component is worth 70% of the total assessment in the subject MATH401. The Project is worth 30%.

Subject Description: A candidate must select 7 topics (a candidate may select 8 or more topics with approval from the Head of the School) from those on offer at the 400 level in Mathematics and Statistics. The topics are usually sessional, and a candidate will normally take 4 topics in one session, 3 in the other. With the approval of the Head of the School, up to 2 of these topics may be replaced by 300 level Mathematics and Statistics subjects that may be considered appropriate to complement a particular candidate's previous undergraduate studies. A candidate will complete a Project in an area of interest under the close supervision of one or more members of staff of the School.

Subject Objectives: A student who successfully completes this subject should be able to: (i) identify and demonstrate a range of mathematical techniques used extensively in current research;

(ii) explain the arguments presented in a range of research publications in at least one branch of mathematics, with the aid of a library; (iii) identify appropriate books, journals, software, reviews and bibliographies when faced with a new project; (iv) communicate effectively the results of their investigations to others.

MATH411 Mathematical Sciences Honours Project A 12cp

Annual

Contact Hours: 8 hours per week

Pre-requisites: Subject to approval of head of school

Assessment: Report - 80%; Seminar - 20%.

Subject Description: MATH411 is a final year honours subject for Mathematics-Statistics/Science strand students. It is a project conducted under the supervision of one or more relevant members of academic staff. The aim is to provide students with mathematical skills which can be used effectively in scientific work.

Subject Objectives: A student who successfully completes either subject should be able to: (i) identify and demonstrate a range of mathematical techniques used extensively in current scientific research; (ii) explain the arguments presented in a range of research publications in at least one branch of mathematics, with the aid of a library; (iii) identify appropriate books, journals, software, reviews and bibliographies when faced with a new project; and (iv) communicate effectively the results of their investigations to others.

MATH412 Mathematical Sciences Environmental Honours Project A 12cp

Annual

Contact Hours: 8 hours per week

Pre-requisites: Subject to approval of head of school

Assessment: Report - 80%; Seminar - 20%.

Subject Description: MATH412 is a final year honours subject for Mathematics/Geoscience and Mathematics/ Ecology strands students. It is a project conducted under the supervision of one or more relevant members of academic staff. The aim is to provide students with mathematical skills which can be used effectively in scientific work.

Subject Objectives: A student who successfully completes either subject should be able to: (i) identify and demonstrate a range of mathematical techniques used extensively in current scientific research; (ii) explain the arguments presented in a range of research publications in at least one branch of mathematics, with the aid of a library; (iii) identify appropriate books, journals, software, reviews and bibliographies when faced with a new project; and (iv) communicate effectively the results of their investigations to others.

MATH471 Honours Topics in Mathematics A 6cp

Spring / Autumn

Contact Hours: 2 hours per week

Pre-requisites: Subject to approval of Head of School

Assessment: Assignments - 20%; Final Examination - 80%.

Subject Description: MATH471, MATH472, MATH473 and MATH474 are offered to BMathEcon, BMathFin, and BMathSc candidates. The aim of each of these subjects is to provide students with mathematical skills which can be used effectively in the relevant discipline.

Subject Descriptions

Students may be required to present some part of the course to the rest of the class, in a working seminar. The content is a topic from those offered in a particular year at 400-level within the subject MATH401, and which may vary from year to year.

MATH472 Honours Topics in Mathematics B 6cp

Spring / Autumn

Contact Hours: 2 hours per week

Assessment: Assignments - 20%; Final Examination - 80%.

Subject Description: MATH471, MATH472, MATH473 and MATH474 are offered to BMathEcon, BMathFin, and BMathSc candidates. The aim of each of these subjects is to provide students with mathematical skills which can be used effectively in the relevant discipline. Students may be required to present some part of the course to the rest of the class, in a working seminar. The content is a topic from those offered in a particular year at 400-level within the subject MATH401, and which may vary from year to year.

STAT131 Understanding Variation and Uncertainty 6cp

Autumn

Contact Hours: 6 hours per week

Assessment: Assignments, Portfolio of In-Session work, Mid-Session Test - 50%; Examination - 50%

Subject Description: Variation and uncertainty occur in most aspects of life. Topics covered include Displaying variation and summarising data; Statistical computing and report writing; Probability Models: Markov Chains, binomial, Poisson; Modelling Uncertainty: Normal and other continuous distributions; Sampling Distributions - Central Limit Theorem; Inference - Point and Interval Estimation, Hypothesis Testing.

Subject Objectives: A student who successfully completes this subject should be able to: (i) produce numerical and graphical data summaries and use them as exploratory tools with univariate and bivariate data; (ii) correctly apply the principles of graphical integrity and excellence; (iii) apply probabilistic concepts to build stochastic models, especially Markov chains, and to build statistical models, especially the Normal, Binomial, Poisson and Exponential Distributions; (iv) explain the relationship between samples and populations and use statistical models to derive statistical properties of random samples; and (v) describe the principles of statistical inference, find point and interval estimates of population parameters, carry out tests of hypotheses, and explain the meaning and use of p-values.

STAT151 Introduction to the Concepts and Practice of Statistics 6cp

Spring

Contact Hours: 4 hours per week

Exclusions: Not to count with STAT131 or STAT252

Assessment: Assignments - 30%; Mid-Session Test and Summary - 10%; Final Examination - 60%

Subject Description: STAT151 enables students to understand the statistical content of articles in their own discipline. Includes exploratory data analysis; samples and populations; elementary probability; the Normal, binomial and Poisson distributions; estimation and confidence intervals; hypothesis testing for means, proportions and regression analysis; sensitivity and specificity.

Subject Objectives: A student who successfully completes this subject should be able to: (i) apply Exploratory Data Analysis, both with and without use of a statistical package, and present the conclusions of that analysis; (ii) explain concepts involved in designing experiments and collecting data; (iii) interpret and model practical problems, by application of sensitivity/specificity analysis, and by use of the Normal, Binomial and Poisson distributions; (iv) select and apply appropriate statistical techniques, including confidence intervals, one and two-sample t-tests, chi-squared contingency table tests, and linear regression; and (v) critically evaluate and draw conclusions from health research papers which use simple statistical tools.

STAT171 Understanding Variation and Risk 6cp

Contact Hours: Not on offer in 2003

Assessment: Assignments, Portfolio of In-Session work, Mid-Session Test - 50%; Examination - 50%

Subject Description: Variation and uncertainty occur in most aspects of life. Topics covered include Displaying variation and summarising data; Statistical computing and report writing; Probability Models: Markov Chains, binomial, Poisson; Modelling Uncertainty: Normal and other continuous distributions; Sampling Distributions - Central Limit Theorem; Inference - Point and Interval Estimation, Hypothesis Testing.

Subject Objectives: A student who successfully completes this subject should be able to: (i) produce numerical and graphical data summaries and use them as exploratory tools with univariate and bivariate data; (ii) correctly apply the principles of graphical integrity and excellence; (iii) apply probabilistic concepts to build stochastic models, especially Markov chains, and to build statistical models, especially the Normal, Binomial, Poisson and Exponential Distributions; (iv) explain the relationship between samples and populations and use statistical models to derive statistical properties of random samples; and (v) describe the principles of statistical inference, find point and interval estimates of population parameters, carry out tests of hypotheses, and explain the meaning and use of p-values.

STAT231 Probability and Random Variables 6cp

Autumn

Contact Hours: 4 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 20%; Examination - 80%

Subject Description: STAT231 applies statistical tools to the modelling and analysis of random experiments. Includes graphical and numerical data presentation; statistical computing; discrete random variables (binomial, geometric, hypergeometric and Poisson) and continuous random variables (uniform, Normal and gamma); expected values; transformations; moment generating functions; multivariate distributions; the Poisson process.

Subject Objectives: A student who successfully completes this subject should be able to: (i) apply Exploratory Data Analysis, both with and without use of a statistical package, and present the conclusions of that analysis; (ii) interpret and model practical problems; (iii) explain the basic concepts of probability and distribution theory; (iv) derive distributions from models and by transformations; (v) derive the moments of distributions directly and by using moment generating functions; and (vi) simulate various random variables.

STAT232 Estimation and Hypothesis Testing 6cp**Spring****Contact Hours:** 4 hours per week**Pre-requisites:** STAT231**Assessment:** Assignments - 30%; Examination - 70%

Subject Description: STAT232 develops techniques of statistical inference and statistical analysis. The inference techniques are sampling distributions (such as chi-squared, t and F distributions), methods and criteria of estimation, and hypothesis testing. The analysis techniques are nonparametric testing (such as the sign, median and Wilcoxon tests), simple linear regression and one and two-way analysis of variance.

Subject Objectives: A student who successfully completes this subject should be able to: (i) apply appropriate parametric and non-parametric tests and present the conclusions of that analysis; (ii) interpret and model practical problems; (iii) explain the basic concepts of sampling theory, point and interval estimation and hypothesis testing; (iv) derive the details (such as the distribution of the test statistics, their expected mean squares, and the power functions) of the tests studied and similar tests; (v) apply and interpret appropriate procedures from a statistical package such as JMP.

STAT235 Statistics Project A 6cp**Spring / Autumn****Contact Hours:** 2 hours per week**Pre-requisites:** 24 credit points at 100 level including MATH110**Restrictions:** The subject is only for students enrolled in the BMath(Advanced) degree

Assessment: Assessment will depend upon the content and circumstances of the project, and will be specified in advance for each student. Assessment may include: (1) a written report; (2) a spoken presentation; (3) evaluation of performance in a business or industrial placement; (4) evaluation in part by examination; and (5) assignments

Subject Description: The subject is a project individually chosen for the student, at a level appropriate to the 200 classification. The content may consist of: (1) a placement in business or industry where substantial use is made of statistical techniques; or (2) a project directed towards independent investigation by the student, written and/or oral presentations, and substantial interaction of the student with the supervisors of the project and other members of staff; or (3) a project directed to mastery of a statistical package or language, with specific use of the package or language in some application or area of statistics; or (4) a project of research collaboration with a member or members of staff, of which written and spoken presentation would be a part. Other projects which are appropriate but not primarily in one of these single categories may occur, such as a project combining features of (1) and (2) above.

Subject Objectives: After successful completion of the subject, and depending upon the nature of the project undertaken, the student should be able to: (i) demonstrate an independent approach to problems and communication and interaction skills in a business/industrial context where use is made of statistical ideas and procedures, (ii) demonstrate skills of independent thought and investigation, emphasising written and oral communication skills, (iii) demonstrate the development of skills of investigation in the context of computation or statistical software packages, (iv) show the acquisition of research skills involving interaction with established researchers, and

(v) write an independent report to a high level of presentation as appropriate to the 200 level classification. However, note that whatever the project is, there is to be an emphasis on written and spoken communication skills and upon the capacity of the student to interact and discuss problems with others.

STAT252 Statistics For the Natural Sciences 6cp**Spring****Contact Hours:** 4 hours per week**Pre-requisites:** 24 credit points**Exclusions:** Not to count with STAT131 or STAT151 or STAT231 or STAT232 or PSYC232**Assessment:** Assignments - 30%; Mid-session Test and Summary - 10%; Final examination - 60%

Subject Description: STAT252 provides an introduction to statistical techniques. Topics covered are: data presentation; probability, binomial and Poisson distributions; Normal distribution; inference for single samples; comparison of two samples; analysis of variance and multiple comparisons; linear regression and correlation; goodness-of-fit testing and contingency tables.

Subject Objectives: A student who successfully completes this subject should be able to: (i) select an appropriate simple experimental design; (ii) apply and interpret Exploratory Data Analysis; (iii) explain basic concepts of hypothesis testing and estimation, including null and alternative hypotheses, type I and II errors, significance level, P-values, power, confidence limits and standard errors; (iv) implement basic statistical procedures, both parametric and non-parametric, for single and multiple samples, using a statistical computer package, and interpret the output; (v) select appropriate models and procedures for practical problems; and (vi) present the conclusions of a statistical analysis in the context of the particular application.

STAT291 Engineering Statistics 3cp**Autumn****Contact Hours:** 3 hours per week**Pre-requisites:** MATH142 or MATH188**Exclusions:** Not to count with STAT231.

Subject Description: (Part of MATH283) In this topic, methods of collecting and summarising data are discussed. Statistical inference methods concerning population means, proportions and variances are given. Linear and multiple regression methods are used to develop mathematical relationships among variables and to predict variables of interest. Some basic advantages of using experimental planning are discussed. Latin square and randomised block experimental designs are discussed. Students will be introduced to a major statistical package.

Subject Objectives: A student who successfully completes this topic (Statistics) should be able to: (i) apply and interpret Exploratory Data Analysis, both using a calculator and using a statistical computer package; (ii) explain basic concepts of hypothesis testing and estimation; (iii) analyse categorical data and proportions; (iv) implement basic statistical procedures, both parametric and non-parametric, for single and multiple samples, using both calculator and tables and also a computer package; (v) select appropriate models and procedures for practical problems; and (vi) present the conclusions of a statistical analysis in the context of the particular application.

STAT304 Operations Research and Applied Probability 6cp**Spring****Contact Hours:** 3 hours per week**Pre-requisites:** Either (MATH188 and [STAT131 or STAT231]) or MATH283**Assessment:** Assignments - 30%; Examination - 70%.

Subject Description: The operations research component includes linear programming, simplex algorithm, duality, sensitivity analysis, transportation and assignment problems, integer programming, and use of computer software. The applied probability component includes Markov chains, birth and death processes and queuing theory.

Subject Objectives: A student who successfully completes this subject should be able to: (i) formulate practical optimisation problems as linear programming, transportation or assignment problems; (ii) apply the Simplex Algorithm, both manually and using a computer package, to solve linear programming problems; (iii) conduct sensitivity analysis on solved linear programming problems via duality theory; (iv) formulate models for random processes or systems as Markov chains or other stochastic processes; (v) simulate various stochastic processes; and (vi) analyse the probabilistic behaviour of simple stochastic processes.

STAT332 Multiple Regression and Time Series 6cp**Spring****Contact Hours:** 3 hours per week**Pre-requisites:** STAT232**Assessment:** Assignments 40%; Examination 60%

Subject Description: STAT332 is an advanced course covering relationships between variables and the analysis of observational studies and designed experiments. Topics covered include multiple linear regression, non-linear regression, generalised linear regression, ARIMA models, forecasting of time series and Box-Jenkin's approach.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the theory and techniques of model building; (ii) apply the theory and techniques to practical problems and to use these methods for prediction purposes; and (iii) undertake model building and forecasting for problems representative of those arising in industry and commerce.

STAT333 Statistical Inference and Multivariate Analysis 6cp**Autumn****Contact Hours:** 3 hours per week**Pre-requisites:** STAT232**Assessment:** Assignments 25%; Examination 75%.

Subject Description: STAT333 covers inference (estimation and hypothesis testing) in both one and many dimensions. Topics covered include transformations, maximum likelihood and minimum variance unbiased estimation, the likelihood ratio, score and Wald tests, vector random variables, the multivariate Normal distribution, principal components analysis, factor analysis and discriminant analysis.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the principles of statistical inference and the use of some standard procedures;

(ii) derive good parameter estimators and tests of hypotheses in a wide range of circumstances; (iii) perform various forms of inference when the type of distribution being considered is unknown; (iv) explain the general techniques of considering more than one dependent variable at a time; (v) apply appropriate statistical procedures to the analysis of multivariate data; and (vi) apply and interpret appropriate procedures from a statistical package such as SAS.

STAT335 Sample Surveys and Experimental Design 6cp**Autumn****Contact Hours:** 3 hours per week**Pre-requisites:** STAT232 or STAT252 at Credit level or better, or STAT151 at Credit level or better, or PSYC232 at Credit level or better, or ECON121 at Credit or better, or (STAT131 & STAT231 both at Credit or better)**Assessment:** Assignments - 25%; Examination - 75%.

Subject Description: STAT335 develops skills in designing and analysing statistical investigations. Statistical computing is an essential part of the course. Topics covered: Experimental designs: completely randomised, randomised complete block, Latin Square, factorial; the analysis of the data arising from these designs. Steps in conducting a sample survey; methods such as simple random sampling and stratified sampling, number raised and ratio estimation.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the importance of proper planning of experiments and sample surveys; (ii) identify the major pitfalls associated with the collection and analysis of data; (iii) evaluate different methods of collecting and analysing data; (iv) design simple experiments and sampling schemes; (v) determine the sample sizes required in experiments and sample surveys; (vi) analyse the results of a simple experiment; (vii) evaluate critically the methodology used in a survey and the validity of the results; and (viii) present conclusions in a clear and simple manner.

STAT345 Statistics Project B 6cp**Autumn / Spring****Contact Hours:** 3 hours per week**Pre-requisites:** 24 credit points at 200 level**Restrictions:** The subject is only for students enrolled in the BMath(Advanced) degree

Assessment: Assessment will depend upon the content and circumstances of the project, and will be specified in advance for each student. Assessment may include: (1) a written report; (2) a spoken presentation; (3) evaluation of performance in a business or industrial placement; (4) evaluation in part by examination; (5) assignments.

Subject Description: The subject is a project individually chosen for the student, at a level appropriate to the 300 classification. The content may consist of (1) a placement in business or industry where substantial use is made of statistical techniques; or (2) a project directed towards independent investigation by the student, written and/or oral presentations, and substantial interaction of the student with the supervisors of the project and other members of staff; or (3) a project directed to mastery of a statistical package or language, with specific use of the package or language in some application or area of statistics; or (4) a project of research collaboration with a member or members of staff, of which written and spoken presentation would be a part.

Other projects which are appropriate but not primarily in one of these single categories may occur, such as a project combining features of (1) and (2) above.

Subject Objectives: After successful completion of the subject, and depending upon the nature of the project undertaken, the student should be able to: (i) demonstrate an independent approach to problems and communication and interaction skills in a business/industrial context where use is made of statistical ideas and procedures; (ii) demonstrate skills of independent thought and investigation, emphasising written and oral communication skills; (iii) demonstrate the development of skills of investigation in the context of computation or statistical software packages; (iv) show the acquisition of research skills involving interaction with established researchers; and (v) write an independent report to a high level of presentation as appropriate to the 300 level classification. However, note that whatever the project is, there is to be an emphasis on written and spoken communication skills and upon the capacity of the student to interact and discuss problems with others.

STAT354 Design and Analysis 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: STAT231 or PSYC232

Exclusions: Not to count with STAT232 or STAT332 or ECON231

Assessment: Assignments - 30%; Examination - 70%.

Subject Description: STAT354 develops skills in the design and analysis of research investigations involving statistics. It is a pre-requisite for Psychology IV Honours. Statistical computing is an essential part of the course. Topics covered: statistical techniques in psychological research, experimental and observational research designs, analysis of survey data; analysis of variance and covariance; regression; factor analysis; multivariate analysis.

STAT355 Sample Surveys and Experimental Design (with Project) 8cp

Autumn

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week plus consultation with supervisor

Pre-requisites: STAT232 or STAT252 at Credit level or better, or STAT151 at Credit level or better, or PSYC232 at Credit level or better, or ECON121 at Credit or better, or (STAT131 & STAT231 both at Credit or better)

Exclusions: STAT335

Assessment: Assignments - 20%; Project - 25%; Examination - 55%.

Subject Description: STAT355 develops skills in designing and analysing statistical investigations. Statistical computing is an essential part of the course. Topics covered: Experimental designs: completely randomised, randomised complete block, Latin Square, factorial; the analysis of the data arising from these designs. Steps in conducting a sample survey; methods such as simple random sampling and stratified sampling, number raised and ratio estimation.

Subject Objectives: A student who successfully completes this subject should be able to: (i) explain the importance of proper planning of experiments and sample surveys; (ii) identify the major pitfalls associated with the collection and analysis of data; (iii) evaluate different methods of collecting and analysing data; (iv) design simple experiments and sampling schemes; (v) determine the sample sizes required in experiments and sample surveys;

(vi) analyse the results of a simple experiment; (vii) evaluate critically the methodology used in a survey and the validity of the results; and (viii) present conclusions in a clear and simple manner.

STAT373 Special Topics in Probability and Statistics 3 6cp

Spring / Autumn

Contact Hours: 3 hours per week

Pre-requisites: Entry to this subject is at the discretion of the Head of the School of Mathematics and Applied Statistics. This subject may not be offered in any particular year.

Assessment: A combination of assignments, projects, mid-session and examination.

Subject Description: STAT373 will be available at the discretion of the head of the School. Topics will be selected from areas of expertise of visiting staff members, or from other subjects offered by the School of Mathematics and Applied Statistics.

Subject Objectives: Where the content is in an area of expertise by a visiting staff member, and the objectives will be advised when the subject is offered.

STAT383 Statistics For Engineers 4cp

Contact Hours: Not on offer in 2003

Assessment: Assignments and In-Session work - 30%; Examination - 70%.

Subject Description: STAT383 develops the capability to understand and apply appropriate statistical tools. Topics covered include methods of collecting and summarising data; statistical inference concerning population means, proportions and variances; linear and multiple regression; basic advantages of using experimental planning; experimental designs: randomised block, Latin square designs, factorial experiments.

STAT401 Statistics 4 (Honours) 48cp

Annual / Spring 2003 - Autumn 2004

Contact Hours: 10 hours per week

Pre-requisites: At least 36 cp of maths 300 level subjects, and the approval of the Head of School.

Assessment: Coursework - 70%; Project - 30%.

Subject Description: The subject consists of two components, one being coursework, the other a project. Coursework Requirements: A candidate must select seven topics from those on offer at the 400 level in Statistics and Mathematics to satisfy the requirements of this part of the course. The topics are usually sessional, and a candidate will normally take four topics in one session and three in the other. With the approval of the Head of the School, up to two of these topics may be replaced by 300 level Statistics and Mathematics subjects that may be considered appropriate to complement a particular candidate's previous undergraduate studies.

Subject Objectives: A student who successfully completes this subject should be able to: (i) identify and demonstrate a range of statistical and mathematical skills; (ii) explain, with the possible aid of a library, the arguments presented in most research publications in Statistics in a range of topics related to the student's area of interest; (iii) make an appropriate selection of books, journals, software, reviews and bibliographies, when faced with a new project; (iv) successfully complete a research project in Statistics, and to make a major contribution to quantitative research projects in other disciplines; and (v) communicate and liaise effectively with other researchers.

STAT411 Mathematical Sciences Honours Project B 12cp

Annual

Contact Hours: 2 hours week

Pre-requisites: Subject to approval by Head of School

Assessment: Seminar - 70%; Project Report - 30%.

Subject Description: STAT411 and STAT412 are only offered to BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. These subjects are projects conducted under the supervision of one or more relevant members of academic staff.

STAT412 Mathematical Sciences Environmental Honours Project B 12cp

Annual

Contact Hours: 2 hours per week

Pre-requisites: Subject to approval of Head of School

Assessment: Seminar - 70%; Project Report - 30%.

Subject Description: STAT411 and STAT412 are only offered to BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. These subjects are projects conducted under the supervision of one or more relevant members of academic staff.

STAT471 Honours Topics in Statistics A 6cp

Spring / Autumn

Contact Hours: 2 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 25%; Examination - 75%.

Subject Description: STAT471, STAT472, STAT473 and STAT474 are only offered to BMathFin, BMathEcon and BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. A topic from those offered in a particular year at 400-level within the subject STAT401, and which may vary from year to year.

STAT472 Honours Topics in Statistics B 6cp

Spring / Autumn

Contact Hours: 2 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 25%; Examination - 75%.

Subject Description: STAT471, STAT472, STAT473 and STAT474 are only offered to BMathFin, BMathEcon and BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. A topic from those offered in a particular year at 400-level within the subject STAT401, and which may vary from year to year.

STAT473 Honours Topics in Statistics C 6cp

Spring / Autumn

Contact Hours: 2 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 25%; Examination - 75%

Subject Description: STAT471, STAT472, STAT473 and STAT474 are only offered to BMathFin, BMathEcon and BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work.

A topic from those offered in a particular year at 400-level within the subject STAT401, and which may vary from year to year.

STAT474 Honours Topics in Statistics D 6cp

Spring / Autumn

Contact Hours: 2 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 25%; Examination - 75%.

Subject Description: STAT471, STAT472, STAT473 and STAT474 are only offered to BMathFin, BMathEcon and BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. A topic from those offered in a particular year at 400-level within the subject STAT401, and which may vary from year to year.

Faculty of Law

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Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Laws

(3 year course)

Course requirements

A candidate who wishes to undertake the award of the degree of Bachelor of Laws (3 year course) must have qualified for admission to a degree of bachelor in this University or an approved equivalent qualification at the date of first enrolment and registration for the course.

To qualify for the award of the degree of Bachelor of Laws a candidate who is not enrolled in a double degree course must complete, satisfactorily and independently, each of (a) and (b) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 32 credit points from the LLB Schedule.

To be eligible for the award of Honours, candidates must complete either LLB313 or LLB314 from the list of electives.

Bachelor of Laws

(4 year course)

Course requirements

A candidate who wishes to undertake the award of the degree of Bachelor of Laws (4 year course) must be at least 25 years old at the date of first enrolment and registration for the course.

To qualify for the award of the degree of Bachelor of Laws a candidate who is not enrolled in a double degree course must complete, satisfactorily and independently, each of (a) and (b) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 64 credit points from the LLB Schedule.

To be eligible for the award of Honours, candidates must complete either LLB313 or LLB314 from the list of electives.

Bachelor of Arts - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Arts - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b) and (c) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 56 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;

c) subjects, not having the prefix LAW or LLB, selected from one or more of the Arts Schedule, the General Schedule or the Health and Behavioural Sciences Schedule and having a value of at least 90 credit points of which:

- i) at least 72 credit points, including a major study shall be for subjects selected from either the Arts Schedule or the Health and Behavioural Sciences Schedule;
- ii) no more than 48 credit points shall be for 100-level subjects;
- iii) at least 36 credit points shall be for subjects offered by member academic units of the Faculty of Arts.

Bachelor of Commerce - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Commerce - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b) and (c) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 56 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;
- c) subjects selected from the General Schedule, including the satisfactory completion of:
 - i) compulsory subjects;
 - ii) an approved Commerce major except for a Legal Studies major; and
 - iii) subjects with a value of at least 90 credit points, consisting of (i) and (ii) and excluding subjects listed in (a) and (b), except,
 - iv) where the subjects in (i) and (ii) have the prefix LAW, the equivalent LLB subjects must be substituted.

Bachelor of Computer Science - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Computer Science - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b) and (c) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 48 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;

- c) subjects selected from either or both of the Computer Science Schedule or the General Schedule having a value of at least 108 credit points of which:
- i) at least 84 credit points, including a major study shall be for subjects selected from the Computer Science Schedule;
 - ii) no more than 48 credit points shall be for 100-level subjects;
 - iii) at least 12 credit points, in addition to the 24 credit points in the major study shall be for 300-level subjects.

Bachelor of Creative Arts - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Creative Arts - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b) and (c) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 48 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;
- c) a major study (comprising 108 credit points) as approved by Creative Arts.

Bachelor of Engineering - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Engineering - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b) and (c) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 40 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;
- c) a major study (comprising 162 credit points) as prescribed by the Faculty of Engineering. All students should discuss their Engineering program with the relevant Course Coordinator.

Bachelor of Information & Communication Technology - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Information and Communication Technology - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b) and (c) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 40 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;
- c) all requirements as prescribed for the Bachelor of Information and Communication Technology.

Bachelor of Mathematics - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Mathematics - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b), (c) and (d) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 48 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;
- c) subjects selected from either or both of the Mathematics Schedule or the General Schedule having a value of at least 108 credit points, including a major study in Mathematics;
- d) satisfy the requirements prescribed for the Bachelor of Mathematics degree.

Bachelor of Medical Science - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Medical Science - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b) and (c) as follows:

- (a) all compulsory Law subjects;
- (b) elective subjects to the value of 56 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;

- (c) general elective subjects having a value of at least 90 credit points forming a Medical Science major study which must:
- (i) be selected from the Health and Behavioural Sciences Schedule of Subjects;
 - (ii) include no more than 48 credit points for 100-level subjects; and
 - (iii) include at least 24 credit points for 300-level subjects.

Bachelor of Science - Bachelor of Laws

Course requirements

To qualify for the award of the degrees of Bachelor of Science - Bachelor of Laws a candidate must complete, satisfactorily and independently, each of (a), (b) and (c) as follows:

- a) all compulsory Law subjects;
- b) elective subjects to the value of 56 credit points from the LLB Schedule; to be eligible for the award of Honours, candidates must complete either LLB313 or LLB314;
- c) general elective subjects having a value of at least 90 credit points including a major study which shall:
 - i) be selected from either the Science Schedule, or the Health and Behavioural Sciences Schedule; and
 - ii) include no more than 48 credit points for 100-level subjects
 or a prescribed Environmental Science program of study having a value of 92 credit points.

Compulsory Law Subjects

LLB100	Law in Society	6
LLB222	Perspectives on Law	6
LLB210	Law of Contracts	8
LLB300	Remedies and Procedure	8
LLB301	Evidence	8
LLB302	Law of Business Organisations	8
LLB304	Criminal Law and the Process of Justice	8
LLB305	Property & Trusts A	8
LLB306	Property & Trusts B	8
LLB307	Law of Torts	8
LLB308	Public Law A	8
LLB309	Public Law B	8
LLB311	Lawyers and Australian Society	8
LLB312	Legal Theory	8
LLB390	Computing and Statistical Skills	2
LLB391	Litigation Practice	2
LLB392	Communication Skills	2
LLB393	Drafting and Conveyancing Practice	2
LLB394	Advocacy and Negotiation	2
LLB395	Legal Research and Writing	2

Elective Law Subjects

LLB303	Family, Children and Welfare	8
LLB313	Legal Research Project A	8
LLB314	Legal Research Project B	16
LLB316	Occupational Health and Safety Law	8
LLB317	E-Commerce Law	8
LLB320	Commercial and Consumer Contracts	8
LLB321	Finance and Security	8
LLB330	Law of Employment	8
LLB331	Intellectual Property Law	8
LLB332	Labour Relations Law	8
LLB334	Environmental Law	8
LLB335	Anti-Discrimination Law	8
LLB337	Comparative Studies in Law	8
LLB339	Advanced Criminal Law and Procedure	8
LLB341	Revenue Law*	8
LLB343	International Law	8
LLB344	Indigenous Peoples and Legal Systems*	8
LLB348	Media Law*	8
LLB350	Special Study in Law A	8
LLB351	Special Study in Law B	8
LLB360	Foreign Investment Law in the People's Republic of China*	8
LLB362	Advanced Revenue Law*	8
LLB3911	Introduction to Natural Resources Law*	8
LLB3918	Law of Land and Nature Conservation*	8
LLB3919	Water Law*	8
LLB3920	Local Government Law and the Neighbourhood Environment*	8
LLB3922	International Maritime Environmental Law*	8
LLB3923	The Law of the Sea	8
LLB3924	International Environmental Law*	8
LLB3927	Natural Resources Law Review	8
LLB3928	Special Studies in Natural Resources Law I*	8
LLB3929	Special Studies in Natural Resources Law II*	8
SOC222	Sociology of Crime and Justice*	8
SOC244	Punishment: Purpose, Practice, Policy	8
SOC349	Social Regulation: Policies & Issues	8

*Not available in 2003

Note: To be eligible for the award of Honours, candidates MUST complete either LLB313 or LLB314 from the elective schedule.

Note: Elective subjects will be offered only if a sufficient number of students enrol during the Official Enrolment Period. The elective subject will be cancelled if less than 10 students are enrolled.

Legal Studies

Note: Legal Studies subjects will not normally count towards the LLB. Students enrolled in the LLB or a double degree course leading to the LLB should consult the Law Schedule.

Major Study in BA

Students wishing to major in Legal Studies in the BA degree must complete 54 credit points of Legal Studies subjects at Pass Grade or better with at least 24 credit points of the major study at the 300-level. LAW100 Law in Society is a compulsory subject in the BA major study.

Important: There may be some restrictions on class sizes in Legal Studies subjects. Accordingly, students are strongly advised to finalise their enrolment in Legal Studies subjects for BOTH Autumn and Spring sessions as early as possible, preferably before the commencement of the academic year. In certain instances, adding Legal Studies subjects after the enrolment or re-enrolment dates may not be possible.

Legal Studies Subjects

100-Level

LAW100	Law in Society	6
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200-Level

LAW210	Contract Law	6
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300-Level

LAW302	Law of Business Organisations	6
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LAW303	Children, Families and the Law	6
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LAW304	Criminal Law and the Process of Justice	6
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LAW308	Administrative Law	6
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LAW315	Taxation Law	6
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LAW316	Occupational Health and Safety Law	6
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LAW317	E-Commerce Law	6
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LAW330	Law of Employment	6
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LAW331	Intellectual Property Law	6
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LAW332	Labour Relations Law	6
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LAW334	Environmental Law	6
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LAW335	Anti-Discrimination Law	6
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LAW343	International Law	6
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LAW344	Indigenous Peoples and Legal Systems*	6
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LAW348	Media Law*	6
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LAW352	Advanced Taxation Law*	6
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LAW360	Foreign Investment Law in the People's	6
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	Republic of China*	
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LAW366	Selected Issues in Legal Studies*	6
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LAW370	An Introduction to Civil Law in the People's	6
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	Republic of China*	
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400-Level

LAW453	Studies in Taxation*	6
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LAW463	Jurisprudence*	6
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LAW464	Studies in Business Law*	6
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LAW465	Studies in Administrative Law*	6
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LAW466	Studies in Industrial Law*	6
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LAW467	Studies in Trade Practices and Consumer	6
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	Law*	
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LAW487	Special Topic in Law-A	6
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LAW488	Special Topic in Law-B	6
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LAW493	Research Essay*	12
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*Not available in 2003.

LAW SUBJECT DESCRIPTIONS

Note: Unless otherwise specified, all undergraduate Law subjects are offered on the Wollongong campus.

LAW 100 Law in Society 6cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Tutorial per week.

Exclusions: Not to count with LLB100 or LAW190.

Assessment: Class participation; assignments; examination.

Subject Description: A study of the constitutional law framework in Australia, the sources, classifications and terminology of law, the judicial process, legal reasoning, materials and methodology. Selected aspects of the substantive law will be used to illustrate the above.

Subject Objectives: By the end of this subject, students should be able to: explain the functions of law in society; describe Australia's constitutional and legal structure; identify key legal concepts, processes and personnel; situate issues within an international context; apply legal concepts to problems and issues; demonstrate sensitivity to different experiences of law; and evaluate the effectiveness of the legal system in carrying out specific tasks.

LAW 130 The Business of Law 6cp

Autumn Moss Vale On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega On Campus

Contact Hours: 1.5 hours Tutorial per week.

Assessment: Assignments.

Subject Description: The subject provides a foundation for the legal knowledge and skills required to participate in the business world.

Subject Objectives: By the end of the subject you should be able to: 1) Demonstrate a knowledge and understanding of: a) the regulatory framework within which small business operates in the community, b) the range of business structures that are available to small business, and c) the legal system as it applies to small business. 2) Identify legal issues arising in a small business context. 3) Identify situations in which specialist advice may be required. 4) Demonstrate an understanding of legal rights and responsibilities within a small business context. 5) Identify and evaluate legal and non-legal ways of resolving disputes. 6) Appreciate the limitations of the law in practical business contexts.

LAW 210 Contract Law 6cp

Spring

Contact Hours: 2 hours Lecture per week.

Pre-requisites: LAW100 or LAW190.

Exclusions: Not to count with LLB210 or LAW290.

Assessment: Multiple choice tests; problem question; examination.

Subject Description: A study of the common law governing contractual relationships together with an outline of relevant statutory modifications, including an introduction to the sale of goods and consumer law. The subject allows the student to have an understanding that contract law is the basis of commercial law and is thus essential for persons wishing to engage in business.

Indeed the formation of contracts is an integral part of the conduct of any business enterprise and an ability to interpret and understand such contracts will enable the person involved in the business to make informed decisions and be aware of alternatives.

Subject Objectives: By the completion of this subject, a student should be able to: 1. Identify the principles under which a person may become bound by contractual statements and actions, including: i) the requirements for a valid contract; ii) the terms of a contract and their interpretation; iii) the parties who may rely on or be bound by contractual promises; iv) the circumstances in which contractual obligations may be departed from or become void; v) the application of related obligations arising from promises or conduct; vi) the remedies available for breach or avoidance of contract. 2. Explain the policy, context and limits of these principles, by discussion of leading cases and statutory provisions. 3. Apply these principles to the analysis of complex hypothetical problems.

LAW 302 Law of Business Organisations 6cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Tutorial per week.

Pre-requisites: LAW210 OR LAW290.

Exclusions: Not to count with LLB302.

Assessment: Assignment; class tests; seminar presentation and final examination.

Subject Description: The subject outlines the key features of the different legal structures which people might adopt for their business and voluntary activities. The legal regulation of two of these, partnership and a company incorporated under the Corporations Act, are then considered in depth. Practical applications of the law, and public policy dimensions, are addressed throughout the subject.

Subject Objectives: By the conclusion of the subject a student should be able to: apply the law of business organisations to identify and solve problems; recognise social values reflected in the law of business organisations; recognise social issues raised by the law of business organisations; articulate their views on the law of business organisations and its operation in society.

LAW 303 Children, Families and the Law 6cp

Autumn

Contact Hours: One week intensive.

Pre-requisites: LAW100 or LAW190.

Exclusions: Not to count with LLB303.

Assessment: Essay; class participation; final examination.

Subject Description: To develop in students a satisfactory level of understanding of all aspects of the Family Law Act and related legislation.

Subject Objectives: At the end of this course a student should be able to:- identify and apply the basic concepts of family law; assess whether the legislation is necessary and suggest improvements to the law; evaluate the effects family law has on children; have obtained basic skills in the practice of family law.

LAW 304 Criminal Law and the Process of Justice 6cp

Autumn

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LAW100 or LAW190.

Exclusions: Not to count with LLB304.

Assessment: Essay; examination.

Subject Description: This subject is an introduction to: the general principles of criminal liability; major categories of offences and selected defences; and aspects of criminal procedure.

Subject Objectives: A student who has completed this subject successfully should: i. understand the elements of a selection of criminal offences, including public order offences, drug offences, homicide, and theft, and be able to apply them to hypothetical fact situations; ii. appreciate how different criminal laws have changed over time; iii. be able to identify the particular attributes of criminal law as a form of social regulation and compare it with other forms of regulation; iv. be able to examine the extent to which the versions of criminal law practised by you, as citizens, as well as by law enforcement agencies, juries and trial judges conform with that propagated by the appeal courts; v. appreciate the significance of statistical information on offences and how they are processed; vi. develop ideas relating to reform of the criminal law in an attempt to adapt it to the contours of specific problems.

LAW 308 Administrative Law 6cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Tutorial per week.

Pre-requisites: LAW100 OR LAW190.

Assessment: Problem assignment 40%; take-home exam 60%.

Subject Description: The notion of the state and state power; limitations on state power; the constitutional structure of the Australian nation-state; the notion of division and separation of powers; mechanisms of accountability and control of government officials, including access to government information, the Ombudsman, merits review tribunals and judicial review; the Commonwealth statutory framework of the New Administrative law.

Subject Objectives: At the conclusion of the subject students should be able to: describe the powers and functions of the three arms of government in Australia - the legislature, the executive and the judiciary; describe the relationships between the three arms of government with reference to the concepts of responsible government, the separation of powers, representative government, judicial review and federalism; describe the procedures available for obtaining reasons for decisions and access to information about government, and seeking review of administrative decisions internally, by Ombudsmen, by tribunals and the courts; assess the applicability of these procedures in given fact situations and evaluate the suitability of different procedures for performing these functions; describe and evaluate existing legal constraints on the operations of executive government at all levels in Australia.

LAW 315 Taxation Law 6cp

Spring

Contact Hours: 1 hour Lecture, 2 hours Seminar per week

Pre-requisites: LAW210 or LAW290.

Exclusions: Not to count with LAW251.

Assessment: 2 assignments; tutorial participation; and a final examination.

Subject Description: The focus of this course is the law relating to income tax and its practical application. The basic concepts of assessable income and allowable deductions are explored together with capital gains tax, tax accounting, taxation of business entities and dividend imputation, fringe benefits tax, an overview of international tax, retirement and termination payments, tax avoidance and tax administration.

Subject Objectives: At the end of the course a student should be able to: 1. demonstrate a sound knowledge of the fundamental principles of the law relating to income tax; 2. demonstrate a good working knowledge of the major provisions of the Commonwealth Income Tax Assessment Act 1936. and the Income Tax Assessment Act 1997; 3. identify and evaluate taxation policy in Australia; 4. apply income tax and fringe benefits tax laws to simulated real life situations for the purpose of giving advice; and 5. develop strategies to solve practical problems involving taxation law principles and resolve disputes with the Australian Tax Office.

LAW 316 Occupational Health & Safety Law 6cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LAW100 and 12 credit points in LAW subjects.

Assessment: Class participation; research essay; and examination.

Subject Description: The unit considers the following themes: the early English Factory Acts; factors motivating the use of law to regulate the workplace; prescriptive laws regulating the workplace; factors leading to the reform of the prescriptive approach; The Roben's Report – a new era in workplace safety; the influence of Robens in Australia; self-regulation in the post-Roben's era; occupational health and safety laws in New South Wales and at national level; review of reports into selected major accidents, and worker's compensation schemes. Within the context of the above broad themes particular attention will be given to the following specific issues: risk management and the law; how to determine a safe system of work according to law; how does law identify a 'hazard'; what are the legal obligations to undertake a risk assessment? in law what determines 'reasonable practicable steps'. Contemporary debate relating to the development of legal and policy measures to promote a safe workplace will be reviewed.

Subject Objectives: At the end of the subject a student should be able to:- appreciate the historical development of the Factory Acts to promote a safer workplace; understand limitation of the legislative approach underpinning the prescriptive approach of the Factory Act movement; recognise the demand for reform leading to the Roben's Report 1972; evaluate the main principles of self-regulation as proposed in the Roben's Report; trace the impact of the Roben's Report on Australian jurisdictions; demonstrate an understanding of the key legal obligations imposed under occupational health and safety laws; identify the State and national framework for promoting a safe workplace; summarise the main legal obligations for a safe workplace under New South Wales law; interpret the major cases which have shaped the case-law, and be aware of the workers compensation schemes. Particular attention will be given to incorporating the statutory obligation under law to the practical applications at the workplace.

LAW 317 E-Commerce Law**6cp****Spring****Contact Hours:** 2 hours Seminar per week**Pre-requisites:** LAW 210 or LAW290 and a minimum 48 credit points.**Assessment:** Hypothetical problems; client interview and presentation; learning diary and essay.**Subject Description:** E-Commerce is a different way of doing business and offers new business opportunities. The subject focuses on the law of e-commerce, particularly as it affects establishing and maintaining a cybermarket presence, protection of business reputation, on-line transactions and payments including consumer protection privacy and security matters, new business activities, and taxation issues. It adopts a compliance and risk management approach as well as addressing regulatory challenges such as jurisdictional problems and assessing regulatory models for their resolution.**Subject Objectives:** At the end of the course a student should be able to: identify, and make a positive contribution to preventing and solving, problems in relation to the establishment and operation of an on-line business; critically evaluate the law and regulation of e-commerce having regard to economic and social objectives; identify and explain e-commerce regulatory issues and critically evaluate present, proposed and potential legal responses to them.**LAW 330 Law of Employment****6cp****Autumn****Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Pre-requisites:** (LAW100 or LAW190) and (LAW210 or LAW290 or ECON140/ECON240).**Exclusions:** Not to count with LLB330.**Assessment:** Class participation, essay/project and examination.**Subject Description:** The rights and duties of individual employers and employees under common law and selected legislation, including: formation, content and termination of the contract of employment; implied duties of employers and employees; remedies at common law; unfair dismissal legislation; unfair work contracts; occupational health and safety.**Subject Objectives:** At the end of the subject a student will be expected to be able to:- explain the general legal principles governing individual relations between employers and employees under both common law and selected statutory modifications; evaluate the law of employment in terms of its context, interests, assumptions and limitations; apply the principles of the law of employment to factual problems; analyse current issues in the law of employment and assess their significance.**LAW 331 Intellectual Property Law****6cp****Autumn****Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Pre-requisites:** LAW210 or LAW290.**Exclusions:** Not to count with LLB331.**Assessment:** Class participation, tutorial presentation, research essay and take-home examination.**Subject Description:** An introduction to intellectual property law covering the six main protection regimes - copyright, design, breach of confidence, patents, passing off and trademarks - and their economic and social significance.**Subject Objectives:** By the end of a subject, a student should be able to: 1. describe the nature and scope of intellectual property legislation in Australia including international obligations and proposed reforms; 2. identify the requirements for protection of intellectual property rights under statute and common law; 3. outline and evaluate the policies underlying intellectual property protection; 4. develop strategies to problem solve and resolve legal disputes involving intellectual property rights; 5. identify the application of intellectual property rights in commercial planning and management.**LAW 332 Labour Relations Law****6cp****Spring****Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** LAW330 and (either LAW210 or ECON140/240).**Exclusions:** Not to count with LLB332.**Assessment:** Essay, class participation and examination.**Subject Description:** The legal regulation of collective relations between employers and employees under the Workplace Relations Act 1996 (Cth). Topics include: constitutional requirements; parties to an industrial dispute; powers of industrial tribunals (including natural justice); processes of award making and variation; collective bargaining and certified agreements; Australian Workplace Agreements; legal regulation of trade unions; law of industrial action.**Subject Objectives:** By the successful completion of this subject, students should be able to: explain the major current principles governing the legal regulation of collective relations between employers and employees; evaluate the structure, functions, interests, operation and limitations of legal aspects of the industrial relations system and processes; demonstrate familiarity with the main provisions of the Workplace Relations Act 1996 (Cth) as amended, and other relevant major legislation; analyse and interpret industrial decisions, awards and agreements from a legal perspective; analyse current issues in labour relations law and assess their significance.**LAW 334 Environmental Law****6cp****Spring****Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** LAW100 or LAW190.**Exclusions:** Not to count with LLB334 or LLB3911.**Assessment:** Take-home exercise and a final examination.**Subject Description:** Examination of both legal and public policy issues in the area of environmental protection, resource utility and management, emphasising the available machinery for preventative and remedial action, e.g. pollution control legislation. Appraisal of local, regional, state and national distribution of power and resources.**Subject Objectives:** A critical appreciation of the general anthropocentric and fragmented nature of environmental law, and the role of the ideology of private property in shaping environmental policy instruments; an understanding of the division of environmental responsibilities between the various levels of government in Australia, together with an appreciation of opportunities and constraints for closer integration of environmental decision making within the Federal system; an understanding of basic principles of international environmental law and their implications for environmental law in Australia; an understanding of legal principles relating to Australian statutory systems for environmental planning and development control;

Subject Descriptions

a sound working knowledge of the Environmental Planning and Assessment Act 1979 (NSW); an ability to interpret environmental planning instruments; an understanding of fundamental legal principles relating to statutory systems of pollution control.

LAW 335 Anti-Discrimination Law 6cp

Spring

Contact Hours: 1 hour Lecture, 2 hours Seminar per week

Pre-requisites: LAW100 or LAW190

Exclusions: Not to count with LLB335

Assessment: Essay/research Project, class participation and examination.

Subject Description: An analysis and appraisal of laws prohibiting discrimination in Australia on various grounds, including: sex, marital status, carer responsibilities, race, disability, age, sexual preference and transgender. Laws prohibiting harassment and vilification will also be examined. The subject includes exploration of the aims and social context of anti-discrimination legislation, as well as related concepts such as equal opportunity, social justice and affirmative action. Examination of processes for complaints, dispute resolution and enforcement, and powers of investigative and adjudicatory bodies.

Subject Objectives: On successful completion of the subject students should be able to:- appreciate the background, aims and limitations of anti-discrimination law in Australia; analyse the grounds of unlawful discrimination under Commonwealth and New South Wales legislation; demonstrate familiarity with the contents of Commonwealth and New South Wales anti-discrimination statutes, as well as key or illustrative interpretations by courts or tribunals; apply the contents of Commonwealth and New South Wales anti-discrimination legislation to factual problems; explain and apply the statutory exceptions to grounds and areas of unlawful discrimination; critically assess the barriers to effective operation of anti-discrimination laws; describe the methods and processes of complaint, dispute resolution and enforcement, including the general principles of assessment of damages, costs, and implementation of judgments.

LAW 343 International Law 6cp

Autumn

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LAW100 or LAW190.

Exclusions: Not to count with LLB343 or INTR900.

Assessment: Research essay and a final examination.

Subject Description: Sources of international law; the relationship between domestic law and international law; the law of treaties; the structure of the international legal system; statehood, state jurisdiction, state responsibility, nationality and refugees.

Subject Objectives: The objectives of this course are to equip you: 1. To understand the nature of the international legal system, to understand the nature of international law, and to understand how international law is made and enforced; 2. To understand the impact of international law on Australian municipal law and the relevance of international law for the practice of law in Australia.

LAW 344 Indigenous Peoples and Legal Systems 6cp

Contact Hours: Not on offer in 2003.

Pre-requisites: LAW100 or LAW190 or ABST100.

Exclusions: Not to count with LLB344.

Assessment: Essay, research paper.

Subject Description: This subject introduces the relationship between Indigenous and non-Indigenous laws and legal systems in Australia. It considers the nature and status of Aboriginal and Torres Strait Islander laws, exploring some of the specific legal issues of current relevance to Indigenous peoples in Australia. Topics include the impact of European colonisation, over-representation in the criminal justice system, land rights and native title, recognition of Aboriginal law, and self-determination.

Subject Objectives: Please refer to subject outline for objectives.

LAW 348 Media Law 6cp

Contact Hours: Not on offer in 2003.

Pre-requisites: 72 cp including among completed subjects one of: (LAW100 and LAW210) or (COMS100 and COMS101 and LAW100) or other as may from time to time be approved

Exclusions: Not to count with LLB348.

Assessment: Research Project; class tests, final examination.

Subject Description: An introduction to the law affecting information (in the broadest sense of the term) gathering and dissemination, and to the policies and philosophies informing the legal protection of and restrictions on freedom of speech.

Subject Objectives: At the end of this subject a student will be expected to: explain and critically evaluate the arguments for a right of freedom of expression; describe and explain the main areas of Australian law that restrict freedom of expression; critically evaluate the law having regard to the arguments for and critique of the right of freedom of expression; apply the law to hypothetical situations likely to arise in the course of a journalist or editor's professional activities, in a manner that demonstrates both: i) the ability to select the legal principles likely to be relevant in a particular fact situation, and elaborate on how the principle/s might apply in that situation; and ii) problem solving skills that give maximum effect to "the public's right to know"; and discuss the impact on media law and policy.

LAW 352 Advanced Taxation Law 6cp

Contact Hours: Not on offer in 2003.

Pre-requisites: LAW315.

Exclusions: Not to count with LLB341.

Assessment: Research project; client interview; and class participation.

Subject Description: In this subject students will be exploring selected aspects of income tax, capital gains tax, fringe benefits tax, the new goods and services tax and state taxes. The course is run on an intensive basis and features presentations from tax professionals and representatives from KPMG, the Australian Tax Office and the NSW Office of State Revenue.

Subject Objectives: At the end of the course a student should be able to: describe and apply the taxation laws of the selected topics covered in the course; outline and evaluate current government taxation policies;

identify and apply tax planning strategies used by business in commerce and management; use taxation literature and source materials to: (a) solve practical problems, and to identify and creatively analyse and evaluate a current issue in taxation reform; and to develop strategies to problem solve and resolve legal disputes between the Australian Tax Office and taxpayers.

LAW 360 Foreign Investment Law in the People's Republic of China 6cp

Contact Hours: Not on offer in 2003.

Pre-requisites: LAW100 or LAW190.

Co-requisites: LAW210.

Assessment: Class participation; negotiation group work; and inal assignment.

Subject Description: An analysis of the laws and procedures regulating foreign investment in, and trade with, the PRC. This subject will examine those laws relating to: joint ventures and other forms of foreign investment; revenue and finance law including taxation, customs duties and exchange control; foreign trade including compensation trade, technology transfer and intellectual property; and dispute resolution.

Subject Objectives: At the end of the course a student should be able to: Demonstrate an understanding of the overall legal system in the People's Republic of China as would affect business transactions with foreign investors; Assess the legal issues relevant to a foreign investor doing business in the People's Republic of China; Identify the Chinese legislation relevant to the business transactions being negotiated; Negotiate the terms of a contract relevant to a business transaction between a Chinese national and a foreign investor; Draft a contract in accordance with the terms negotiated and in accordance with the laws of the People's Republic of China

LAW 364 Consumer Protection and Business Regulation 6cp

Contact Hours: Not on offer in 2003.

Pre-requisites: LAW210 or LAW290.

Subject Description: This course is concerned with the law controlling the sale and distribution of products and services, credit, restrictive trade practices and other aspects of the commercial environment. It examines the relation of production and consumption in the economy and the law, the policies and legal rules intended to protect consumers, and legal remedies and institutions which are designed to offer assistance to consumers. Consumer protection is related to business regulation and restrictive trade practices (competition law) since both these areas seek to supplement and support market and other mechanisms which ensure that consumers get the goods and services that they want, at a fair price, and without risk of injury and deception. There is also an examination of consumerism as a world-wide phenomenon with specific emphasis on the international consumer movement and consumer rights as well as anti-competitive concerns about intellectual property in the context of the multilateral trading system of the WTO.

**LAW 380 Law For Environmental Managers 8cp
Spring**

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: 72 credit points in a discipline other than Law.

Exclusions: Not to count with LAW334.

Assessment: Take-home examination, take-home exercise and a final examination.

Subject Description: Examination of both legal and public policy issues in the area of environmental protection, resource utility and management, emphasising the available machinery for preventative and remedial action, e.g. pollution control legislation. Appraisal of local, regional, state and national distribution of power and resources.

Subject Objectives: A critical appreciation of the general anthropocentric and fragmented nature of environmental law, and the role of the ideology of private property in shaping environmental policy instruments; an understanding of the division of environmental responsibilities between the various levels of government in Australia, together with an appreciation of opportunities and constraints for closer integration of environmental decision making within the Federal system; an understanding of basic principles of international environmental law and their implications for environmental law in Australia; an understanding of legal principles relating to Australian statutory systems for environmental planning and development control; a sound working knowledge of the Environmental Planning and Assessment Act 1979 (NSW); an ability to interpret environmental planning instruments; an understanding of fundamental legal principles relating to statutory systems of pollution control.

LLB 100 Law in Society 6cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Exclusions: Not to count with LAW100.

Assessment: 2 written assignments; final examination.

Subject Description: This subject explores the nature of law and its relationship to society. It provides an introduction to the sources and authority of legal rules, the nature of legal institutions and practices, legal materials, reasoning and terminology. It also illustrates how the theory and practice of law may differ and the way in which the skills of lawyers can help to mediate this difference. Aspects of substantive law will be used to illustrate general principles.

Subject Objectives: To recognise and describe the interdependence between law and society in Australia; to identify and describe the relations between law and significant features of Australian society; to appreciate the relationship between law and values and the roles of lawyers in relation thereto; to explain the processes of law-making by Australian parliaments; to describe and apply the different approaches to statutory interpretation; to describe and apply the processes of analysis and justification used by judges; and to explain the constitutional framework within which the above processes occur.

LLB 210 Law of Contracts 8cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB100.

Exclusions: Not to count with LAW210.

Assessment: Class participation; 1 assignment; final examination.

Subject Description: The study of the modern law of contract as it has developed in Australia. Particular areas of focus include formation of contract; vitiating factors; privity; identification and construction of terms; breach of contract; and remedies.

Subject Descriptions

Emphasis is placed upon students developing skills in the application of legal principles to factual situations through the analysis of cases and hypotheticals.

Subject Objectives: At the end of the course a student should be able to: 1. have acquired a good knowledge of the principles pursuant to which a person may be contractually bound and the consequences of being so bound; 2. be able to identify the sources of contract law, and the relevant legal principles to apply to a given problem; 3. be able to apply those legal principles to the analysis of complex hypothetical problems; 4. be able to critically evaluate those principles and any need for reform and be able to discuss the shape any desirable reforms should take.

LLB 222 Perspectives on Law 6cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB100.

Assessment: Assignments.

Subject Description: As its title suggests, this is a subject about law rather than a subject on the law itself. A basic theme of the subject is the underlying tension between law as an abstract medium of scholarship and the way it operates in real life. A wide variety of theoretical tools will be presented to help students make sense of the differences between law in books and law in action.

Subject Objectives: On completion of the course, students should be able to: understand the prevailing ideological foundations of law in Australian society; describe aspects of the relationship between customary law and common law; identify and explain the different modes of inquiry of law and disciplines examining law; appreciate issues in the application of law, both civil and criminal, including the exercise of police discretion and the transformation of disputes; appreciate the impact of laws on aspects of everyday life; analyse the emergence and reform of laws; explain aspects of the legal uses of linguistic devices including narrative.

LLB 300 Remedies and Procedure 8cp

Autumn

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB210 and LLB307.

Assessment: Class participation, assignment and examination.

Subject Description: The Remedies component of this subject explores the major legal and equitable remedies available in a civil action. These judicial remedies are considered according to the particular purpose or goal that they are intended to achieve, including compensation, punishment, restitution and coercion. In addition, some attention is given to non-judicial (or "self help") remedies. The Civil Procedure component of the subject examines pre-trial procedure in civil actions in the Supreme Court of New South Wales. Topics covered include determining who may be a party to the proceedings; choosing originating process; serving court process; pleading; bringing proceedings to an early end; obtaining discovery and administering interrogatories.

Subject Objectives: At the conclusion of this subject students should: 1. be familiar with the origin of each of the major curial remedies, and should understand the principles governing the availability of those remedies; 2. be familiar with the major non curial remedies available to an injured or wronged party;

3. be able to analyse different factual situations to identify curial and non curial remedies which may be available to an injured or wronged party and be able to prepare and present arguments to support or oppose the grant of those remedies in a given case; 4. understand and be able to utilise the procedures available in civil proceedings in a superior court including being able to prepare and present arguments to support or oppose the application of those procedures in a given case; and 5. be able to evaluate the need for reform in each of the main content areas covered, and be able to discuss critically the shape any desirable reforms should take.

LLB 301 Evidence 8cp

Spring

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB304.

Assessment: Research essay, class participation and final examination.

Subject Description: The legal rules relating to the admissibility of evidence to prove facts in civil and criminal trials; comparison and analysis of the adversarial system of justice and the inquisitorial system.

Subject Objectives: Refer to Subject Outline

LLB 302 Law of Business Organisations 8cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB306.

Exclusions: Not to count with LAW302.

Assessment: Groupwork constitution and related documents; class participation; and take-home examination.

Subject Description: The subject comprises an introduction to:- the main forms of organisation adopted by voluntary (non-profit) associations and commercial enterprises and their legal incidents; the law of partnerships and companies; public policy in the above areas.

Subject Objectives: It is not intended that a student will conclude this subject having knowledge of the myriad technical requirements for each or all of the forms of association referred to during the course of the session. It is intended that a student should: (a) examine and discuss the purposes and policy considerations underlying the choice that must necessarily be made between alternative forms of association; (b) further develop legal writing skills, and in particular, the skill of legal drafting; (c) be able to isolate, examine and discuss the policies underlying, and the purposes for regulation in specific areas of partnership law and corporations law; (d) develop an appreciation of corporate regulation as an evolving mechanism, not to be isolated from its economic, political and social context; and (e) develop a familiarity and expertise in the usage of the Corporations Act 1989.

LLB 303 Family, Children and Welfare 8cp

Autumn

Contact Hours: One week intensive.

Pre-requisites: 48 credit points of LLB subjects.

Exclusions: Not to count with LAW303.

Assessment: Essay; class participation; final examination.

Subject Description: To develop in students a satisfactory level of understanding of all aspects of the Family Law Act and related legislation.

Subject Objectives: At the end of this course a student should be able to:- identify and apply the basic concepts of family law; assess whether the legislation is necessary and suggest improvements to the law; evaluate the effects family law has on children; have obtained basic skills in the practice of family law.

LLB 304 Criminal Law and the Process of Justice 8cp

Autumn

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB100.

Exclusions: Pre-requisites apply only to candidates in double degree courses; not to count with LAW304.

Assessment: Essay and examination.

Subject Description: This subject is an introduction to: general principles of criminal liability; major categories of offences and selected defences; and aspects of criminal procedure.

Subject Objectives: A student who has completed this subject successfully should: i. understand the elements of a selection of criminal offences, including public order offences, drugs offences, homicide, and theft, and be able to apply them to hypothetical fact situations; ii. appreciate how different criminal laws have changed over time; iii. be able to identify the particular attributes of criminal law as a form of social regulation and compare it with other forms of regulation; iv. be able to examine the extent to which the versions of criminal law practised by you, as citizens, as well as by law enforcement agencies, juries and trial judges conform with that propagated by the appeal courts; v. appreciate the significance of statistical information on offences and how they are processed; vi. develop ideas relating to reform of the criminal law in an attempt to adapt it to the contours of specific problems.

LLB 305 Property and Trusts A 8cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB210.

Assessment: Class participation, assignment and final examination.

Subject Description: Consideration of the notion of property and interests in property; the distinctions between real, personal and intangible property; the notions of ownership, title and possession; legal and equitable interests in property (including the resulting and constructive trust); legal protection of property interests. The law of landlord and tenant, easements and covenants.

Subject Objectives: At the end of the subject a student should be able to: demonstrate knowledge of the legal doctrine applicable to legal and equitable interests in real and personal property; apply these doctrinal elements to solve problems concerning the acquisition of property rights (including rights under resulting and constructive trusts); critically evaluate the legal doctrine applicable to Australian property law and identify potential areas for legal reform; discuss the role of property in Australian society and critically evaluate that role; demonstrate awareness of the responsibilities of the lawyer involved with matters concerning property law.

LLB 306 Property and Trusts B 8cp

Spring

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB305.

Assessment: Class participation; assignment and final examination.

Subject Description: The modern law of real property, including Torrens title, mortgages and co-ownership. The law of express trusts, including the powers and obligations of trustees, and remedies of the beneficiary for breach of trust.

Subject Objectives: At the conclusion of this subject, students should be able to: demonstrate knowledge of the legal doctrine applicable to legal and equitable interests in real and personal property; apply these doctrinal elements to solve problems concerning conflicting property claims and the acquisition of property rights (including rights under express trusts); critically evaluate the legal doctrine applicable to Australian property law and identify potential areas for legal reform; demonstrate awareness of the responsibilities of the lawyer involved with matters concerning property and trusts law.

LLB 307 Law of Torts 8cp

Autumn

Contact Hours: 2 x 1 hour Lectures, 1 hour Seminar per week.

Pre-requisites: LLB210.

Assessment: Assignments; class participation; examination.

Subject Description: Introduction to the law of civil wrongs, its aims, operation and relationship to other societal mechanisms of compensation. Topics include negligence; intentional torts; nuisance. The focus will be the development of the common law and the operation of public policy granting relief in a variety of tort actions. Students will work individually and in groups.

Subject Objectives: Refer to Subject Outline

LLB 308 Public Law A 8cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Tutorial per week.

Pre-requisites: LLB100.

Assessment: Problem assignment 40%; take-home exam 60%.

Subject Description: The notion of the state and state power; limitations on state power; the constitutional structure of the Australian nation-state; the notion of division and separation of powers; mechanisms of accountability and control of government officials, including access to government information, the Ombudsman, merits review tribunals and judicial review; the Commonwealth statutory framework of the New Administrative law.

Subject Objectives: At the conclusion of the subject students should be able to: describe the powers and functions of the three arms of government in Australia - the legislature, the executive and the judiciary; describe the relationships between the three arms of government with reference to the concepts of responsible government, the separation of powers, representative government, judicial review and federalism; describe the procedures available for obtaining reasons for decisions and access to information about government, and seeking review of administrative decisions internally, by Ombudsmen, by tribunals and the courts; assess the applicability of these procedures in given fact situations and evaluate the suitability of different procedures for performing these functions; describe and evaluate existing legal constraints on the operations of executive government at all levels in Australia.

LLB 309 Public Law B 8cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB308.

Assessment: Research essay 40%; exam 60%.

Subject Description: Division of power between Commonwealth and State legislatures; the structure and powers of State and Commonwealth governments, with special emphasis on the limitation of the power of the Commonwealth; the place of the judiciary and judicial review of legislative and executive power; Commonwealth and State fiscal powers; express and implied constitutional rights; constitutional change.

Subject Objectives: The aims of this subject are to enable students to develop an understanding of the concept of federation and its operation in Australia, including: a) the theory of the division of powers between the Commonwealth and the States; b) the federal legal framework and the scope of Commonwealth powers under the Australian Constitution; c) the system of judicial review of legislative action and the political and legal position of the High Court of Australia; d) the practical operation of the federal system; e) the process of constitutional change and contemporary constitutional issues.

LLB 311 Lawyers and Australian Society 8cp

Autumn / Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB304.

Co-requisites: LLB210.

Assessment: Research essay or project 35%, Problems in Professional Responsibility assignment 25%, class participation and placement program 40%.

Subject Description: This subject falls into two parts. 1) the nature of professionalism and ethics; the 'legal profession', its regulation, and its rules of conduct; and how the law in practice relates to access to justice. 2) a practical or clinical element, in which students can observe and participate in the practice and operation of the law, through the Professional Experience Placement Program. Each student must undertake 2 placements each of 20 working days of professional experience, in two different legal environments approved by the Faculty. The Placement Program is undertaken after the Course work in the subject has been completed.

Subject Objectives: After completing this subject you should be able to: discuss and explain i) the nature of the legal profession, ii) the nature of the relations between lawyers and their clients, iii) the practical operation of the law in at least two different legal environments; explain, discuss and apply, in simple cases i) the rules of conduct of the legal profession, ii) the law relating to legal practice; make informed, practical and critical judgements about i) the ethics and conduct of the legal profession, ii) the operation of the Australian legal system and the role of lawyers in that system i) the influence of lawyers in society; determine how you would act in situations arising in particular professional contexts which create value-choices for professionals.

LLB 312 Legal Theory 8cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects including LLB222.

Assessment: Assignment; research essay; class participation.

Subject Description: This subject addresses a selection of issues in jurisprudence, including the nature of law, the basis for legal authority, the scope and limits of law, and the relationship between law, morality and values such as justice, liberty and autonomy.

Subject Objectives: Refer to Subject Outline

LLB 313 Legal Research Project A 8cp

Spring / Autumn

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Performance is assessed by progress on a number of tasks, with the greatest weight given to the final research paper. The research paper will be assessed by two persons appointed by the Dean on the recommendation of the subject co-ordinator. Each examiner must provide a written report which will be made available to the students and the supervisor.

Subject Description: A supervised research paper of no more than 10,000 words on a subject selected by the student and agreed with a supervisor by week 3 of the session of enrolment.

Subject Objectives: The aim of the subject is to provide practical experience in research on a legal topic. At the end of the subject a student should be able to conduct independent research in an area of law, and report in writing the results of that research.

LLB 314 Legal Research Project B 16cp

Annual

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Performance is assessed by progress on a number of tasks, with the greatest weight given to the final research paper. The research paper will be assessed by two persons appointed by the Dean on the recommendation of the subject co-ordinator. Each examiner must provide a written report which will be made available to the students and the supervisor.

Subject Description: A supervised research paper of no more than 25,000 words on a subject selected by the student and approved by the Dean by week 6 of the first session of enrolment in this subject.

Subject Objectives: The aim of the subject is to provide practical experience in research on a legal topic. At the end of the subject a student should be able to conduct independent research in an area of law, and report in writing the results of that research.

LLB 316 Occupational Health & Safety Law 8cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class participation; research essay; and examination.

Subject Description: The unit considers the following themes: the early English Factory Acts; factors motivating the use of law to regulate the workplace; prescriptive laws regulating the workplace;

factors leading to the reform of the prescriptive approach; The Roben's Report – a new era in workplace safety; the influence of Robens in Australia; self-regulation in the post-Roben's era; occupational health and safety laws in New South Wales and at national level; review of reports into selected major accidents, and worker's compensation schemes. Within the context of the above broad themes particular attention will be given to the following specific issues: risk management and the law; how to determine a safe system of work according to law; how does law identify a 'hazard'; what are the legal obligations to undertake a risk assessment? in law what determines 'reasonable practicable steps'. Contemporary debate relating to the development of legal and policy measures to promote a safe workplace will be reviewed.

Subject Objectives: On successful completion of this subject a student should be able to:- appreciate the historical development of the Factory Acts to promote a safer workplace; understand limitation of the legislative approach underpinning the prescriptive approach of the Factory Act movement; recognise the demand for reform leading to the Roben's Report 1972; evaluate the main principles of self-regulation as proposed in the Roben's Report; trace the impact of the Roben's Report on Australian jurisdictions; demonstrate an understanding of the key legal obligations imposed under occupational health and safety laws; identify the State and national framework for promoting a safe workplace; summarise the main legal obligations for a safe workplace under New South Wales law; interpret the major cases which have shaped the case-law, and be aware of the workers compensation schemes. Particular attention will be given to incorporating the statutory obligation under law to the practical applications at the workplace.

LLB 317 E-Commerce Law 8cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB Subjects.

Assessment: Hypothetical problems, client interview and presentation, learning diary and essay.

Subject Description: E-Commerce is a different way of doing business and offers new business opportunities. The subject focuses on the law of e-commerce, particularly as it affects establishing and maintaining a cybermarket presence, protection of business reputation, on-line transactions and payments including consumer protection privacy and security matters, new business activities, and taxation issues. It adopts a compliance and risk management approach as well as addressing regulatory challenges such as jurisdictional problems and assessing regulatory models for their resolution.

Subject Objectives: On successful completion of this subject a student should be able to: identify, and make a positive contribution to preventing and solving, problems in relation to the establishment and operation of an on-line business; critically evaluate the law and regulation of e-commerce having regard to economic and social objectives; identify and explain e-commerce regulatory issues and critically evaluate present, proposed and potential legal responses to them.

LLB 320 Commercial and Consumer Contracts 8cp

Autumn

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class participation; assignment and examination.

Subject Description: The special rules relating to common commercial contracts, such as contracts of agency, contracts for the sale of goods, insurance contracts, and contracts of carriage; statutory restrictions on contracts.

Subject Objectives: On successful completion of this subject a student should be able to (among others): explain and describe commercial and consumer transactions as they occur in the real world of business; evaluate the basic concepts in the law relating to commercial and consumer transactions; recognise that commercial law is more than just a body of legal rules and that the real test of commercial law is to be found in what actually happens in commercial practice; explain the relevant commercial and legal principles as they relate to real situations through an understanding and application of relevant commercial transactions.

LLB 321 Finance and Security 8cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects, including LLB306 and LLB302.

Assessment: Class Participation, assignment, examination.

Subject Description: LLB321 Finance & Security is designed to develop in students a sound understanding of the law governing financial institutions in Australia, and the manner in which these institutions are regulated. The relationship between financial institutions and their customers will be examined, along with the impact of recent technological developments on this relationship and on the business of banking. The law dealing with cheques and other negotiable instruments will be discussed in detail. The issue of security for transactions with financial institutions will be analysed, along with the position of banks as creditors when a customer becomes bankrupt.

Subject Objectives: On successful completion of this subject a student should be able to: discuss and evaluate the importance of financial institutions, and the manner in which these institutions are regulated; identify and analyse the legal issues arising in the dealings between financial institutions and their customers; identify and explain the legal nature of cheques and negotiable instruments and evaluate the legal issues arising in this context; analyse the legal issues commonly arising in the law of security; analyse and apply the law relating to bankruptcy as it impacts on creditors and debtors; relate and apply legal principles in respect of financial transactions to fact situations; discuss and evaluate relevant policy issues; appreciate the reasons for and nature of change in the law relating to financial and banking transactions.

LLB 330 Law of Employment 8cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Exclusions: Not to count with LAW330.

Assessment: Class participation; essay/project and examination.

Subject Description: The rights and duties of individual employers and employees under common law and selected legislation, including: formation, content and termination of the contract of employment; implied duties of employers and employees; remedies at common law; unfair dismissal legislation; unfair work contracts; occupational health and safety.

Subject Objectives: On successful completion of this subject a student should be able to:- explain the general legal principles governing individual relations between employers and employees under both common law and selected statutory modifications; evaluate the law of employment in terms of its context, interests, assumptions and limitations; apply the principles of the law of employment to factual problems; analyse current issues in the law of employment and assess their significance.

LLB 331 Intellectual Property Law 8cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Exclusions: Not to count with LAW331.

Assessment: Class participation, Tutorial Presentation, Research Essay, Take-home Examination.

Subject Description: An introduction to intellectual property law exploring the legislative regimes of copyright, designs, patents and trademarks, the protection of confidential information and business reputation.

Subject Objectives: On successful completion of this subject a student should be able to: 1. describe the nature and scope of intellectual property law in Australia including international obligations and proposed reforms; 2. identify the requirements for protection of intellectual property rights under statute and common law; 3. outline and evaluate the policies underlying intellectual property protection; 4. develop strategies to problem solve and resolve legal disputes involving intellectual property rights; 5. identify the application of intellectual property rights in commercial planning and management.

LLB 332 Labour Relations Law 8cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects including LLB330.

Exclusions: Not to count with LAW332.

Assessment: Essay, class participation, examination.

Subject Description: The legal regulation of collective relations between employers and employees under the Workplace Relations Act 1996 (Cth). Topics include: constitutional requirements; parties to an industrial dispute; powers of industrial tribunals (including natural justice); processes of award making and variation; collective bargaining and certified agreements; Australian Workplace Agreements; legal regulation of trade unions; law of industrial action.

Subject Objectives: On successful completion of this subject a student should be able to: explain the major current principles governing the legal regulation of collective relations between employers and employees; evaluate the structure, functions, interests, operation and limitations of legal aspects of the industrial relations system and processes; demonstrate familiarity with the main provisions of the Workplace Relations Act 1996 (Cth) as amended, and other relevant major legislation; analyse and interpret industrial decisions, awards and agreements from a legal perspective; analyse current issues in labour relations law and assess their significance.

LLB 334 Environmental Law 8cp

Autumn

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Exclusions: Not to count with LAW334 or LLB3911.

Assessment: Assignments; research essay; class participation; examination.

Subject Description: Legal and policy issues of environmental protection, resource utility and management.

Subject Objectives: On successful completion of this subject, a student should have, among other: a critical appreciation of the general anthropocentric and fragmented nature of environmental law; an understanding of basic principles of international environmental law and their implications for environmental law in Australia; an understanding of the division of environmental responsibilities between the various levels of government in Australia, together with an appreciation of opportunities and constraints for closer integration of environmental decision making within the Federal system; a critical appreciation of current directions in Commonwealth environmental law.

LLB 335 Anti-Discrimination Law 8cp

Spring

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB Subjects.

Exclusions: Not to count with LAW335.

Assessment: Essay/research project; class participation and examination.

Subject Description: An analysis and appraisal of laws prohibiting discrimination in Australia on various grounds, including: sex, marital status, carer responsibilities, race, disability, age, sexual preference and transgender. Laws prohibiting harassment and vilification will also be examined. The subject includes exploration of the aims and social context of anti-discrimination legislation, as well as related concepts such as equal opportunity, social justice and affirmative action. Examination of processes for complaints, dispute resolution and enforcement, and powers of investigative and adjudicatory bodies.

Subject Objectives: On successful completion of the subject students should be able to:- appreciate the background, aims and limitations of anti-discrimination law in Australia; analyse the grounds of unlawful discrimination under Commonwealth and New South Wales legislation; demonstrate familiarity with the contents of Commonwealth and New South Wales anti-discrimination statutes, as well as key or illustrative interpretations by courts or tribunals; apply the contents of Commonwealth and New South Wales anti-discrimination legislation to factual problems; explain and apply the statutory exceptions to grounds and areas of unlawful discrimination ; critically assess the barriers to effective operation of anti-discrimination laws; describe the methods and processes of complaint, dispute resolution and enforcement, including the general principles of assessment of damages, costs, and implementation of judgments.

LLB 336 Regulation of Business 8cp

Contact Hours: Not on offer in 2003.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class participation; assignment and research paper.

Subject Description: This course is concerned with the law controlling the sale and distribution of products and services, credit, restrictive trade practices and other aspects of the commercial environment. It examines the relation of production and consumption in the economy and the law, the policies and legal rules intended to protect consumers, and legal remedies and institutions which are designed to offer assistance to consumers. Consumer protection is related to business regulation and restrictive trade practices (competition law) since both these areas seek to supplement and support market and other mechanisms which ensure that consumers get the goods and services that they want, at a fair price, and without risk of injury or deception. There is also an examination of consumerism as a world-wide phenomenon with specific emphasis on the international consumer movement and consumer rights as well as anti-competitive concerns about intellectual property in the context of the multilateral trading system of the WTO.

Subject Objectives: On successful completion of this subject a student should be able to determine and explain who is a 'consumer' in law, appreciate how the law is able to provide protection to consumers of goods and services and to regulate business - both at the municipal and international levels; explain how the common law has been altered by legislation enacted specifically to regulate restrictive trade practices; discuss the ability of the business community to influence or control market factors including supply, price and demand; explain the concepts of 'competition' and 'market'; appreciate and apply the concept of 'merger' and the conflict inherent in its application to the law of restrictive trade practices; explain the constitutional basis for and limitations of the jurisdiction of the Commonwealth Parliament to deal effectively with laws regulating anti-competitive conduct and those regulating access to essential services.

LLB 337 Comparative Studies in Law 8cp

Spring

Contact Hours: 4 day intensive.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Research essay and final examination.

Subject Description: A comparison of the French civil law with the common law of England and Australia, with the objective of developing an appreciation of different legal systems and approaches.

Subject Objectives: The objectives of this course are to enable you: to understand the basic structure and principles of the Civil Law; to learn something of the basic substantive law of the Civil Law in several key subject areas; to understand better the general structure and functioning of the Common Law by contrasting it to a Civil Law legal system.

LLB 338 International Trade Law 8cp

Contact Hours: Not on offer in 2003.

Pre-requisites: 48 credit points of LLB subjects.

Subject Description: Public and private law aspects of international trade and investment, including sales and investment contracts, transport, insurance and the settlement of international commercial disputes.

LLB 339 Advanced Criminal Law and Procedure 8cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects including LLB304.

Assessment: Essay, research paper, presentation.

Subject Description: This subject critically examines the role of the criminal justice system in the regulation of individual and organisational behaviour. Selected alternatives to conventional 'command and control' regulation are explored.

Subject Objectives: A student who has completed this subject successfully should be able to: demonstrate an understanding of selected theoretical perspectives on crime prevention and legal regulation; recognise the limitations of formal mechanisms of legal regulation as a means of preventing crime and influencing the behaviour of individuals and corporations; explain the differences between the conventional processes of criminal justice administration and other regulatory mechanisms; identify and critically analyse the factors which influence the choice of regulatory models in a variety of contexts; assess the effectiveness of different regulatory mechanisms in light of the stated regulatory objectives; and evaluate the relative merits of diffused (or non-state) forms of regulation and conventional criminal law enforcement approaches.

LLB 341 Revenue Law 8cp

Contact Hours: Not on offer in 2003.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class presentation; written advice to clients involving 2 scenarios; class participation and assignment.

Subject Description: Revenue Law, or taxation law, is one of the highly technical fields of law bringing together economic, accounting and financial concepts into a legal construct for the determination of how the costs of good government are to be shared among the members of society. Taxation pervades everyone's life in some way, whether in the form of income tax, for instance, or some form of consumption or other tax like the GST. LLB341 is confined to the Income Tax Assessment Act (1936/97), the Fringe Benefits Tax Assessment Act and associated legislation. These fields alone provide more than enough content for a one semester subject, but are essential for those students seeking registration as CPAs or Chartered Accountants after completing a combined Commerce/Law degree.

Subject Objectives: On successful completion of this subject a student will be expected to be able to:- Describe, explain and evaluate the policies behind the past present and future development of revenue law in Australia. Analyse revenue law critically. Explain and apply the fundamental principles of the law relating to income taxation, and the major provisions of the Commonwealth Income Tax Assessment Act 1936, and 1997. Evaluate critically existing taxation laws and government policy and consider future developments in the function and application of taxation in Australian society. Use taxation literature and source materials. Communicate with others and work in teams.

LLB 343 International Law 8cp**Autumn****Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects.**Exclusions:** Not to count with LAW343 or INTR900.**Assessment:** Research essay and final examination.

Subject Description: Sources of international law; the relationship between domestic law and international law; the law of treaties; the structure of the international legal system; statehood, state jurisdiction, state responsibility, nationality and refugees.

Subject Objectives: The objectives of this course are to equip you: To understand the nature of the international legal system, to understand the nature of international law, and to understand how international law is made and enforced. To understand the impact of international law on Australian municipal law and the relevance of international law for the practice of law in Australia.

LLB 344 Indigenous Peoples and Legal Systems 8cp**Contact Hours:** Not on offer in 2003.**Pre-requisites:** 48 Credit points of LLB subjects.**Exclusions:** Not to count with LAW344.**Assessment:** Essay, research paper.

Subject Description: This subject is an introduction to the relationship between Indigenous and non-Indigenous laws and legal systems in Australia. It considers the nature and status of Aboriginal and Torres Strait Islander laws, and explores some of the specific legal issues of current relevance to Indigenous peoples in Australia. Topics include the impact of European colonisation, over-representation in the criminal justice system, land rights and native title, recognition of Aboriginal law, and self-determination.

Subject Objectives: Please refer to subject outline for objectives.

LLB 348 Media Law 8cp**Contact Hours:** Not on offer in 2003.**Pre-requisites:** 48 credit points of LLB subjects.**Exclusions:** Not to count with LAW348.**Assessment:** Research project; class tests; examination.

Subject Description: An introduction to the law affecting information (in the broadest sense of the term) gathering and dissemination, and to the policies and philosophies informing the legal protection of and restrictions on freedom of speech.

Subject Objectives: On successful completion of this subject a student will be expected to be able to: explain and critically evaluate the arguments for a right of freedom of expression; describe and explain the main areas of Australian law that restrict freedom of expression; critically evaluate the law having regard to the arguments for and critique of the right of freedom of expression; apply the law to hypothetical situations likely to arise in the course of a journalist or editor's professional activities, in a manner that demonstrates both: i) the ability to select the legal principles likely to be relevant in a particular fact situation, and elaborate on how the principle/s might apply in that situation; ii) problem solving skills that give maximum effect to "the public's right to know"; discuss the impact of the internet on media law and policy.

LLB 350 Special Study in Law A 8cp**Spring / Autumn****Pre-requisites:** 48 credit points of LLB subjects and permission of Dean or Sub-Dean.**Subject Description:** A study in depth of a selected area of law.**LLB 351 Special Study in Law B 8cp****Spring / Autumn****Pre-requisites:** 48 credit points of LLB subjects and permission of Dean or Sub-Dean.**Subject Description:** A study in depth of a selected area of law.**LLB 360 Foreign Investment in the People's Republic of China 8cp****Contact Hours:** Not on offer in 2003.**Pre-requisites:** 48 credit points of LLB subjects.**Assessment:** Class participation; negotiation group work, final assignment.

Subject Description: An analysis of the laws and procedures regulating foreign investment in, and trade with, the PRC. This subject will examine those laws relating to: joint ventures and other forms of foreign investment; revenue and finance law including taxation, customs duties and exchange control; foreign trade including compensation trade, technology transfer and intellectual property; and dispute resolution.

Subject Objectives: On successful completion of this subject a student will be expected to be able to: demonstrate an understanding of the overall legal system in the People's Republic of China as would affect business transactions with foreign investors; assess the legal issues relevant to a foreign investor doing business in the People's Republic of China; identify the Chinese legislation relevant to the business transactions being negotiated; negotiate the terms of a contract relevant to a business transaction between a Chinese national and a foreign investor; draft a contract in accordance with the terms negotiated and in accordance with the laws of the People's Republic of China.

LLB 362 Advanced Revenue Law 8cp**Contact Hours:** Not on offer in 2003.**Pre-requisites:** 48 credit points of LLB subjects including LLB341.**Assessment:** Research project; client interview and class participation.

Subject Description: In this subject, students will be exploring selected aspects of income tax, capital gains tax, fringe benefits tax, the new goods and services tax and state taxes. The course is run on an intensive basis and features presentations from tax professionals, the Australian Tax Office, and the NSW Office of State Revenue.

Subject Objectives: On successful completion of this subject a student will be expected to be able to: describe and apply the taxation laws of the selected topics covered in the course; outline and evaluate current government taxation policies; identify and apply tax planning strategies used by business in commerce and management; use taxation literature and source materials to: (a) solve practical problems, and

(b) to identify and creatively analyse and evaluate a current issue in taxation reform; and to develop strategies to problem solve and resolve legal disputes between the Australian Taxation Office and taxpayers.

LLB 390 Computing and Statistical Skills 2cp

Autumn / Spring

Contact Hours: 2 hours Lab per week.

Co-requisites: LLB395.

Course Restrictions: Students enrolled in the first year of the LLB program MUST enrol in **Autumn session**. Students enrolled in the 2nd year of the LLB program or later, MUST enrol in **Spring session**.

Assessment: Students are required to demonstrate competence in a number of computing related and statistical exercises.

Subject Description: Refer to Subject Outline.

Subject Objectives: Refer to Subject Outline

LLB 391 Litigation Practice 2cp

Autumn / Spring

Contact Hours: Refer to Subject Outline.

Co-requisites: LLB304.

Assessment: Assignments.

Subject Description: This subject deals with the rules, practices and skills relevant to the conduct of civil and criminal litigation in the Federal Court and State Courts.

Subject Objectives: On successful completion of this subject a student will be expected to be able to:- select appropriate strategies for the resolution of civil disputes; evaluate material relevant to the conduct of a particular area of litigation; find sources of law governing litigation practices in both State and Federal jurisdictions; understand how summary and indictable matters proceed in the criminal justice system; explain pre-trial and interlocutory procedures; understand the procedure involved in conducting civil hearings; draft documents used in civil proceedings; know the legal principles applied in sentencing and bail applications

LLB 392 Communication Skills 2cp

Autumn

Co-requisites: LLB100.

Assessment: Simulated interview with a client; written memorandum; oral presentation. Students must achieve a satisfactory standard.

Subject Description: The skills of listening, observing, presenting ideas clearly in non-threatening and adversary contexts, and the differences between them; eliciting information; difficulties in the use of interpreters and in eliciting information from children.

Subject Objectives: At the conclusion of the subject, a student should be able to : 1. (a) recognise the significance of good communication skills, especially in the context of the lawyer/client interview, (b) employ listening, questioning and advising skills in a simulated lawyer/client interview, (c) evaluate their own proficiency and that of others in employing such skills, and (d) structure a lawyer/client interview to ensure an efficient and effective communication process.

2. (a) identify the elements of an effective oral presentation, (b) undertake a short oral presentation, and (c) evaluate their own performance and that of others.

LLB 393 Drafting and Conveyancing Practice 2cp

Spring / Autumn

Contact Hours: 4 x 2 hours Seminar per week.

Co-requisites: LLB306.

Subject Description: The skills of modern legal drafting in plain English, including those skills employed in professional legal practice in planning, writing and reviewing letters, memoranda and other legal documents. An introduction to will drafting. Conveyancing practice including analysis of relevant property law, practice and procedure, the standard contract for sale and consideration of time in performance of the contract.

LLB 394 Advocacy and Negotiation 2cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB304.

Assessment: 1. Written brief to counsel 2. Participation in negotiation/mediation exercise 3. Participation in an advocacy exercise 4. Class participation, including participation in simulations and role plays

Subject Description: Advanced skills of oral and written presentation of arguments in a range of different forums, and in the skills of negotiation and resolution of disputes. Exercises may include moots, practice court appearances, and the preparation of written submissions.

Subject Objectives: After completing this subject students should: understand the purpose, nature and contents of, and be able to prepare, a brief to counsel; develop skills acquired in Legal Writing and Research and Communication Skills; understand the function of a written submission to court and be able to prepare one; be able to present a plea in mitigation, bail application and/or interlocutory application; be able to prepare and present a simple case in court; be able to prepare and take part in a simple negotiation and mediation.

LLB 395 Legal Research and Writing 2cp

Autumn

Co-requisites: LLB100 or LAW810.

Assessment: Exercises, small-group presentation, class participation.

Subject Description: An introduction to the location and use of primary legal materials, including the use of computers in retrieving legal material; observation of legal practice in courts and elsewhere; analysis of legal documents; development of clear, concise and simple styles of presenting ideas and arguments in writing; citation of legal materials.

Subject Objectives: At the conclusion of this subject, students should be able to:- understand the nature of both statutory law and case law; undertake research involving primary sources, including: case law, statutes, regulations, and other government publications; undertake research involving secondary sources, including: journals, texts, digests and encyclopaedias, and non-legal materials; provide accurate citations and references; continue to develop skills in reading and interpreting both statutory law and case law after having developed a firm foundation in this subject;

continue to develop skills in legal writing and editing after having developed a firm foundation in this subject.

LLB 396 Advanced Legal Skills 8cp

Contact Hours: Not on offer in 2003.

Pre-requisites: 48 credit points of LLB subjects.

Subject Description: With the prior approval of the co-ordinator, students choose and develop a program of four activities from, e.g. organising or representing the faculty in skills competitions, editing law journals or publications or participation in community based projects.

LLB3922 International Maritime Environmental Law 8cp

Contact Hours: Not on offer in 2003.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class participation; assignment and take-home examination.

Subject Description: The rules of international law dealing with the regulation of the marine environment. The obligations of States under the United Nations Convention on the Law of the Sea 1982, and other Conventions, to protect and preserve the marine environment. Port State's and flag State's responsibilities and powers of enforcement over vessels. Pollution control in zones of sovereignty and sovereign rights; pollution control on the high seas and in the Area. Marine biodiversity protection.

Subject Objectives: At the conclusion of the subject students should be able to critically assess the framework of international laws of marine environmental management; apply the rules applicable in specific marine environment sectors and analyse their influence on development of the law; appreciate the political and management challenges facing marine environmental Australia and the Asia Pacific region.

LLB3923 Law of the Sea 8cp

Spring

Contact Hours: One week intensive.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class participation; assignment and take-home examination.

Subject Description: The evolving law of the sea from an historical perspective. The 1982 United Nations Convention on the Law of the Sea (LOSC) and its associated instruments. Maritime zones of jurisdiction and the navigational regime under LOSC. The major factors influencing the development of the law of the sea; the various interests involved in the law of the sea and how LOSC attempts to balance these interests.

Subject Objectives: On successfully completing the subject students should be familiar with the law of the sea regime; be aware of its rules in various sectors and of the institutional processes for their development; and understand the political and management issues in law of the sea now facing the Asia-Pacific region.

LLB3927 Natural Resources Law Review 8cp

Autumn

Pre-requisites: 48 credit points of LLB subjects and approval the subject co-ordinator.

Assessment: Revision of student research paper for publication Preparation of case/legislation note Editorial work.

Subject Description: Writing and editing of academic papers for the Australasian Journal of Natural Resources Law and Policy, a biannual publication by the Faculty of Law and distributed worldwide. Preparation of a case or legislation note for publication in the journal. Student will work in consultation with the Managing Editor and the subject co-ordinator.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Develop skills in legal writing and editing; in analysis of legal arguments; 2. Broaden students' familiarity with a broad range of topical issues in natural resources law and policy; 3. Facilitate publication of student research papers.

Faculty of Science

Member Units

Biological Sciences

Chemistry

Environmental Science

Geosciences

Degrees Offered

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Bachelor of Science	398
Bachelor of Science (Honours) – Advanced	398
Specialist Degrees:	404
Bachelor of Biotechnology	Bachelor of Marine Science
Bachelor of Biotechnology - Advanced	Bachelor of Marine Science - Advanced
Bachelor of Environmental Science	Bachelor of Medicinal Chemistry
Bachelor of Environmental Science – Advanced	Bachelor of Medicinal Chemistry - Advanced
Bachelor of Mathematical Sciences	

Students entering one of the four specialist degrees with a UAI of at least 90 are eligible to enrol in the Advanced for these degrees. For details refer to the Bachelor of Science (Honours) - Advanced.

The specialist degrees are structured differently to the Bachelor of Science. They are comprised of prescribed subjects with very few elective subjects. In the four-year degrees there is special coursework in the 4th year which is not available in other degrees as well as an Honours research project. Honours is awarded on completion of the 4th year on academic performance assessed by calculating a weighted average mark for specified 300-level and 400-level subjects. For the three-year Bachelor of Science and Bachelor of Marine Science, a separate Honours research year is available after completion of the three years of coursework.

The Faculty of Science is also involved in the following degrees: See Relevant Faculty

Bachelor of Computer Bioinformatics	Bachelor of Science Education
Bachelor of Computer Geoinformatics	

Double Degrees: 409

Bachelor of Science - Bachelor of Arts	Bachelor of Creative Arts - Bachelor of Science
Bachelor of Science - Bachelor of Commerce	Bachelor of Engineering - Bachelor of Science (Faculty of Engineering)
Bachelor of Science - Bachelor of Laws	Bachelor of Engineering - Bachelor of Science (Faculty of Informatics)
Bachelor of Computer Science - Bachelor of Science (Faculty of Informatics)	

All students enrolled in Faculty of Science degrees should note that:

1. they must satisfy the minimum mathematics requirement for all degrees offered by the Faculty of Science as set out in the Course Rules;
2. a Pass or Pass Conceded grade (not a Pass Restricted grade) is required in a pre-requisite subject to progress to a higher level subject in disciplines within the Faculty of Science unless that pre-requisite is waived by a Head of the Academic Unit for a particular student in special circumstances;
3. a Pass Conceded grade in a 300-level subject forming part of a Science major may not be counted towards the completion of the major. Students may obtain a copy of the Science Students' Guide from the Faculty Office, Room No. 41.258.

Please note that course and subject availability and requirements are often changed after the publication of the Calendar. For up-to-date information please refer to the on-line Course Structures and Subject Database, available from <http://www.uow.edu.au/student/calendar/>, or contact the relevant Faculty.

Bachelor of Science

Bachelor of Science degrees require 3 years of full-time study or equivalent part-time, and the completion of subjects to the value of 144 credit points. In the Faculty of Science, Bachelor of Science degrees fall into one of three categories, as follows:

1. a) At least one major chosen from disciplines located in the Faculty of Science. A major study consists of at least 90 credit points from the Science Schedule of which at least 60 credit points are from one of the Faculty of Science disciplines:

Biological Sciences

Chemistry

Human Geography

Physical Geography

Geology

Geosciences

The balance of 54 credit points (to a degree total of 144) may be chosen from either the Science Schedule or General Schedule and may include a second Science major or a selection of complementary or contrasting subjects.

- b) One major from within the Faculty of Science and a co-major from outside the Faculty. Approved co-majors are: Biomedical Sciences, Computer Science, Human Resource Management, Management, Marketing, Mathematics/Applied Statistics, Nutrition, Physics, Psychology. In this category, where an approved major is combined with a Science major, the requirement of at least 90 credit points from the Science Schedule is waived.
2. An approved major from outside of the Faculty combined with a minor from within the Faculty. A minor is defined as comprising at least 12 credit points of 100-level and 32 credit points of 200-level and/or 300-level subjects from one of the Science Academic Units: Biological Sciences, Chemistry or Geosciences. The allowed external majors are Computer Science, Mathematics/Applied Statistics, Physics, Psychology.

Note: Students wishing to undertake a major program involving a discipline outside of the Faculty of Science as in 1(b) and 2 above, must first obtain the approval of the Head of the relevant Department or School and verify their planned study program. Recommended major programs can be obtained from the Faculty of Science Office in room 41.258.

3. One of the four interdisciplinary, prescribed majors, as set out below:

Biotechnology

Ecology

Environment

Land and Heritage Management

Refer to the Faculty of Engineering for the following course:

Bachelor of Science (Physics)

A recommended elective subject listed in the Science Schedule:

SCIE201 Modern Perspectives in Science will be offered in Summer Session 2003/2004.

Bachelor of Science (Honours) Advanced

The Advanced Program, designed specifically for high achieving students, offers direct entry into Honours, unlike the normal BSc which delays selection for Honours until the completion of the third year. It offers a greater degree of flexibility in program design through: the possibility of exemptions from some first year subjects; direct entry into some 200-level subjects; the opportunity to undertake individual research subjects at second, third and fourth year level; the opportunity to progress at a faster rate through the use of "fast tracking" mechanisms; the chance to participate in various enrichment activities and to develop a close association with an appropriate member of one of the Department's research teams. In the final year, all students undertake a substantial piece of supervised research in their major discipline together with other required seminar and/or course work.

Study programs are structured on an individual basis in consultation with the Head of Department. Students are required to fulfil all the normal BSc and Honours requirements and may select their major study program from any of those available within the Faculty (refer to Bachelor of Science majors and special programs).

Similar Advanced programs are also available to students wishing to undertake one of the specialist degrees: Bachelor of Biotechnology, Bachelor of Environmental Science, Bachelor of Marine Science and Bachelor of Medicinal Chemistry.

In order to maintain a place in an Advanced Science degree, students are normally required to achieve at least a Distinction average (75%) in the 200 and 300 level subjects completed. The performance of each student will be reviewed by the Associate Dean after the completion of 72 credit points. Students will be interviewed by the Associate Dean at the end of their first year to assess their progress.

BSc students with an exceptionally high level of performance in first year may enter the program on the recommendation of the Coordinator or Head of the Academic Unit or the invitation of the Dean. Transfer will not be considered before completion of the first year of the course and is based on at least a Distinction average (75%) taken over all subjects completed, and the approval of the Dean or Associate Dean.

Bachelor of Science (Biological Sciences)

First year (BIOL103, 104) offers a general, self-contained introduction to the Biological Sciences, as well as essential background for future years. There is no requirement for any prior study in biology but participation in the bridging course in February is advised for students without HSC Biology. First year Chemistry (CHEM101, 102) is compulsory for students wishing to complete a Biological Sciences major. Participation in the Chemistry bridging course is also recommended for students without HSC Chemistry. MATH151 is a requirement for any student who has not obtained a pass of at least HSC Mathematics Band 4 or Mathematics Ext 1. This is a basic introduction to the skills in Mathematics that are relevant to future studies.

Students proceeding to a Biological Sciences major are strongly encouraged to take more than the minimum array of Biological Sciences subjects, especially at second year.

Third Year Biological Sciences subjects are available to any student with the relevant pre-requisites. All students majoring in Biological Sciences must take at least three 300-level subjects that form a coherent course of study. Approved subject combinations are (i) BIOL320, 321, and one of BIOL303, 332, CHEM320 (ii) BIOL351, 355 and BIOL332. Other subject combinations are possible and should be discussed with the Head of Department.

Advanced Biology Project (BIOL392) is an 8-credit point project-based subject and Advanced Biology (BIOL391) is a 16 credit point project-based subject. These two subjects are available for high-quality students wishing to complement their coursework with research projects. Entry into these subjects is by permission of the Coordinator and requires good performance (usually Distinction average) in four 200-level Biological Sciences subjects.

An elective subject, MARE357 - Advances in Molluscan Biology, is offered in Summer Session for students wishing to gain additional field experience.

Students with a good academic record, particularly in third year (eg. At least a credit average in relevant subjects) are encouraged to proceed to the Honours year, a fourth year of study which provides a training in independent research.

Biological Sciences Major Study

100-Level

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6

Either

CHEM101	Chemistry 1A	6
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or

CHEM104	Chemistry 1D	6
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Either

CHEM102	Chemistry 1B	6
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or

CHEM105	Chemistry 1E	6
MATH151	General Mathematics 1A (if required)	6

200-Level

Four of the following subjects (24 credit points) plus Statistics (STAT252)

BIOL213	Principles of Biochemistry	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BIOL215	Introductory Genetics	6
BIOL240	Functional Biology of Plants and Animals	6
BIOL241	Biodiversity: Classification and Sampling	6
BIOL251	Principles of Ecology and Evolution	6
MARE200	Introduction to Oceanography	6
STAT252	Statistics for Natural Sciences (or other Statistics subject approved by the Department of Biological Sciences)	6

Note: A fourth Biological Sciences 200 – level subject may be waived for students taking both a Biological Sciences major and a major from the School of Geosciences. STAT252 may be waived for programs combining 300-level Biological Sciences and some other disciplines.

300-Level

An approved combination of three of the following subjects (at least 24 credit points):

BIOL303	Biotechnology: Applied Molecular and Cell Biology	8
CHEM320	Bioinformatics: From Genome to Structure	8
BIOL320	Molecular Cell Biology	8
BIOL321	Cellular and Molecular Immunology	8
BIOL332	Ecological and Evolutionary Physiology	8
BIOL351	Conservation Biology: Marine and Terrestrial Populations	8
BIOL355	Marine and Terrestrial Ecology	8
MARE300	Fisheries and Aquaculture	8

Plus additional elective subjects at any level (subject to prerequisite requirements) chosen from the Science Schedule to total 90 credit points.

Plus additional elective subjects chosen from the Science Schedule or General Schedule to total 144 credit points.

Elective Subjects:

MARE357	Advances in Molluscan Biology	8
BIOL391	Advanced Biology*	16
BIOL392	Advanced Biology project*	8

* Distinction average is required for entry.

400-Level

Honours Program

BIOL401	Biology Honours	48
BIOL402	Biology Joint Honours	24

Bachelor of Science (Chemistry)

Chemistry is the study of the molecular nature of all matter and its interactions. The relationship between its structure and a molecule's properties and reactivity give chemistry an essential, central position in science and technology. An understanding of chemistry is needed for the full gamut of technology based disciplines from solid-state physics and astro-physics to molecular biology and the life sciences; from geochemistry and environmental science to engineering and health sciences. Chemistry 1A and 1B, or Chemistry 1D and 1E for students with an inadequate background in chemistry, provide the basic framework and concepts to students progressing onto 200 and higher level chemistry subjects as well as being suitable for those majoring in other areas.

A major in chemistry (set out below) consists of the four core 200 level subjects, together with an approved combination of 300 level subjects offered by the Department of Chemistry, with a value of at least 24 credit points. Completion of this major qualifies graduates for membership of the Royal Australian Chemical Institute.

The Department offers a third year research subject CHEM340 to students with a good academic record (usually a credit average or better) who wish to gain experience in research. Entry into this subject is by permission of the Head of Department.

Students with a good record, particularly in 3rd year (eg. credit average or above) are encouraged to proceed to Honours year, a fourth year of study providing training in independent research.

Major Study in Chemistry

100-Level

Either

CHEM101 Chemistry 1A 6

or

CHEM104 Chemistry 1D 6

Either

CHEM102 Chemistry 1B 6

or

CHEM105 Chemistry 1E 6

200-Level

CHEM211 Inorganic Chemistry II 6

CHEM212 Organic Chemistry II 6

CHEM213 Molecular Structure, Reactivity and Change 6

CHEM214 Analytical and Environmental Chemistry II 6

300-Level

Any three subjects taken from the following list:

CHEM311 Inorganic Chemistry III 8

CHEM314 Instrumental Analysis 8

CHEM320 Bioinformatics: From Genome to Structure 8

CHEM321 Organic Synthesis and Reactivity 8

CHEM327 Environmental Chemistry 8

CHEM340 Chemistry Laboratory Project 8

CHEM 364 Molecular Structure and Spectroscopy 8

Plus additional subjects at any level (subject to prerequisite requirements) chosen from the Science Schedule to total 90 credit points.

Plus additional elective subjects chosen from the Science Schedule or General Schedule to total 144 credit points.

400-level

Honours Program

CHEM401 Chemistry Honours 48

CHEM402 Chemistry Honours Part 1 for Part Time Students 24

CHEM403 Chemistry Honours Part 2 for Part Time Students 24

CHEM405 Chemistry Joint Honours 24

Entry to the Chemistry IV single Honours course normally requires the completion of at least four 300-level Chemistry subjects (32 credit points at 300-level). For entry to a joint Honours program at least three 300-level Chemistry subjects (24 credit points) should have been completed.

Bachelor of Science (Human Geography, Physical Geography, Geology, Geosciences)

The School of Geosciences comprises the disciplines of Geography and Geology, and offers the following major studies. Students must undertake one major study and may undertake two. Normally beyond first year, a subject cannot count towards two majors.

i) Human Geography

ii) Physical Geography

iii) Geology

iv) Geosciences

i) Major Study in Human Geography

100-Level

GEOS112 Physical Environments 6

GEOS142 The Human Environment: Problems and Changes 6

200 -Level

GEOS242 Living in Cities 6

GEOS243 The Bush and Beyond: Rural Society in Australia 6

GEOS246 A Hungry World: Food Resources and the World Economy 6

Plus one subject chosen from the following:

GEOS231 Environmental Impact of Societies 6

GEOS233 Discovering Downunder: A Geography of Australia 6

GEOS239 Remote Sensing of the Environment 6

300-Level

At least three subjects selected from

GEOS331 Environmental Management and Decision-making 8

GEOS333 Cultural Heritage Management 8

GEOS339 Geographic Information Systems 8

GEOS347 Northern Neighbours: Economic and Social Change in the Asia-Pacific Rim 8

GEOS349 Population, Health and Environment 8

Plus additional elective subjects at any level (subject to prerequisite requirements) chosen from the Science Schedule to total 90 credit points. Plus additional elective subjects chosen from the Science Schedule or General Schedule to total 144 credit points.

ii) Major Study in Physical Geography

100-Level

GEOS111 Planet Earth 6

GEOS102 Earth Environments and Resources 6

GEOS112 Physical Environments 6

GEOS142 The Human Environment: Problems and Change 6

200-Level

Any four subjects from the following

GEOS214 Soils, Landscape and Hydrology 6

GEOS217 Field and Spatial Techniques 6

GEOS220 Climate and Natural Hazards 6

GEOS222 Biogeography 6

GEOS231 Environmental Impact of Societies 6

GEOS239 Remote Sensing of the Environment 6

MARE200 Introduction to Oceanography 6

300-Level

Any three subjects from the following

GEOS315 Field Studies in Physical Geography 8

GEOS339 Geographic Information Systems 8

GEOS321 Fluvial Geomorphology, Sedimentology and River Management 8

MARE322 Global Environmental Change 8

MARE323 Coastal Environments: Process and Management 8

Recommended as an elective subject

GEOS331 Environmental Management and Decision-Making 8

Plus additional subjects at any level (subject to prerequisite requirements) chosen from the Science Schedule to total 90.

iii) Major Study in Geology

100-Level

GEOS111 Planet Earth 6

GEOS102 Earth Environments and Resources 6

GEOS112 Physical Environments 6

Recommended as an elective subject

GEOS142 The Human Environment: Problems and Change 6

200-Level

At least four subjects chosen from the following

GEOS205 Field Geology I 6

GEOS214 Soils, Landscape and Hydrology 6

GEOS217 Field and Spatial Techniques 6

GEOS219 The Earth in Crisis 6

GEOS239 Remote Sensing of the Environment 6

Recommended as elective subjects

GEOS220 Climate and Natural Hazards 6

GEOS231 Environmental Impacts of Society 6

MARE218 Marine Sediments and Fossils 6

300-Level

At least three subjects chosen from the following list

GEOS305 Field Geology II 8

GEOS302 Basin Resources 8

GEOS304 Dynamic Earth 8

GEOS307 Mineral Resources 8

Recommended as elective subjects

GEOS315 Field Studies in Physical Geography 8

GEOS321 Fluvial Geomorphology, Sedimentology and River Management 8

GEOS339 Geographic Information Systems 8

MARE322 Global Environmental Change 8

MARE323 Coastal Environments: Process and Management 8

Plus additional subjects at any level (subject to prerequisite requirements) chosen from the Science Schedule to total 90.

iv) Major Study in Geosciences

100-Level

GEOS111 Planet Earth 6

GEOS102 Earth Environments and Resources 6

GEOS112 Physical Environments 6

GEOS142 The Human Environment: Problems and Change 6

200-Level

At least 4, and up to 8, subjects from the School of Geosciences, at 200-level

300-Level

At least 3, and up to 6, subjects from the School of Geosciences, at 300-level, subject to appropriate prerequisites. Plus additional subjects at any level (subject to prerequisite requirements) chosen from the Science Schedule to total 90 credit points. Plus additional elective subjects chosen from the Science Schedule or General Schedule.

400-Level

Honours Program in Human Geography, Physical Geography, Geology or Geosciences

GEOS401 Geosciences Honours 48

GEOS402 Geosciences Joint Honours 24

Students with a good academic record, particularly in third year are encouraged to proceed to the Honours year, a fourth year of study which provides a training in independent research.

Bachelor of Science (Biotechnology)

Biotechnology is the application of exciting advances in molecular and cell biology to medicine, agriculture, and the environment. Through modern technologies, such as genetic engineering, biotechnology is shaping diverse aspects of medicine (cancer, vaccines, therapy and diagnosis of genetic diseases), food production (transgenic plants) and industry (bioremediation).

The Coordinator of the program is Associate Professor Mark Wilson (Department of Biological Sciences).

Course Structures

100 Level

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6
Either		
CHEM101	Chemistry 1A	6
or		
CHEM104	Chemistry 1D	6
Either		
CHEM102	Chemistry 1B	6
or		
CHEM105	Chemistry 1E	6
MATH151	General Mathematics A (if required)	6

Plus other elective subjects to give a total credit point value of 48, at least 6 of which should be one of the following:

PHYS132	Physics for the Environmental and Life Sciences	6
STS100	Science and Technology Studies: Introduction to Science and Technology Studies in their social context	6
BMS101	Systemic Anatomy	6
BMS112	Human Physiology I: Principles and Systems	6

Note: PHYS132 is strongly recommended

STS100 is compulsory for those students taking an approved course of study which does not include STS250

200 Level

BIOL213	Principles of Biochemistry	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BIOL215	Introductory Genetics	6
BIOL240	Functional Biology of Plants and Animals	6
STAT252	Statistics for the Natural Sciences	6
CHEM212	Organic Chemistry II	6
CHEM214	Analytical and Environmental Chemistry II	6

Plus one of the following subjects

STS250	From Molecular Genetics to Biotechnology	6
BMS202	Human Physiology II: Control Mechanisms	6

300 Level

BIOL303	Biotechnology: Applied Cell and Molecular Biology	8
BIOL320	Molecular Cell Biology	8
BIOL321	Cellular and Molecular Immunology	8
CHEM320	Bioinformatics: From Genome to Structure	8

Plus one Session 1 subject chosen from the following

CHEM350	Principles of Pharmacology	8
BIOL332	Ecological and Evolutionary Physiology	8
MGMT310	Introduction to Management for Professionals B	8
BMS344	Cardiorespiratory Physiology	8
BIOL392*	Advanced Biology Project	8

Plus one Session 2 subject chosen from the following

CHEM321	Organic Synthesis and Reactivity	8
BIOL392*	Advanced Biology Project	8
PHIL380	Bioethics	8

*Distinction average is required for entry.

If the required academic standard is attained the BSc(Biotechnology) student may transfer to the BBiotechnology fourth Honours year.

Bachelor of Science (Ecology)

This is a 3 year degree program. Appropriate subjects in Biological Sciences and Geosciences are combined with mathematics and statistics to form the following program. Approval is required for entry to this program. Coordinator: Associate Professor David Ayre.

100 Level

BIOL104	Evolution, Biodiversity and the Environment	6
BIOL103	Molecules, Cells and Organisms	6
GEOS102	Earth Environments and Resources	6
GEOS112	Physical Environments	6
MATH111	Applied Mathematical Modelling	6
MATH187	Mathematics 1A Part 1 (or MATH141/161)	6
MATH188	Mathematics 1B Part 2 (or MATH142/162)	6

Plus an elective subject chosen from the Science or General Schedule

200 Level

BIOL240	Functional Biology of Plants and Animals	6
BIOL241	Biodiversity: Classification and Sampling	6
BIOL251	Principles of Ecology and Evolution	6
GEOS220	Climate and Natural Hazards	6
GEOS239	Remote Sensing of the Environment	6
GEOS222	Biogeography	6
STAT252	Statistics for the Natural Sciences	6

Plus 6 credit points from

Either

CHEM101	Chemistry 1A	6
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or

CHEM104	Chemistry 1D	6
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Either

CHEM102	Chemistry 1B	6
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or

CHEM105	Chemistry 1E	6
STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6
GEOS231	Environmental Impact of Societies	6

or other subjects as approved by the course coordinator.

Note: STAT252 is NOT included if STAT232 is taken. MATH187 and MATH188 are prerequisite for STAT231 and 232

300 Level

BIOL351	Conservation Biology	8
BIOL355	Marine and Terrestrial Ecology	8
STAT355	Sample Surveys and Experimental Design (with project)	8
MARE322	Global Environmental Change	8

Plus 16 credit points from

BIOL332	Ecological and Evolutionary Physiology	8
MARE357	Advances in Molluscan Biology	8
BIOL392	Advanced Biology Project	8
GEOS339	Geographic Information Systems	8
MARE323	Coastal Environments	8
GEOS315	Field Studies in Physical Geography	8
GEOS381	Directed Studies in Geosciences A	8

Bachelor of Science (Environment)

This is a broad, flexible degree program offered jointly by the Departments of Biological Sciences and Chemistry and the School of Geosciences as an alternative to the more comprehensive four-year Bachelor of Environmental Science. The program has separate entry requirements from the general BSc. The approval of the Dean or Associate Dean is required for entry to the program.

There are two strands available within the program:

a) Biological Sciences/Chemistry/Geosciences Strand.

Students may elect to specialise in one of these disciplines.

Coordinator: Associate Professor Adrian Hutton

b) Physical Sciences Strand.

This strand combines Chemistry and Physics and is aimed at the physical sciences end of the broad environmental spectrum.

Coordinator: Associate Professor David Griffith

a) Biological Sciences/Chemistry/Geosciences Strand.

First Year

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6

Either

CHEM101	Chemistry 1A	6
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or

CHEM104	Chemistry 1D	6
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Either

CHEM102	Chemistry 1B	6
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or

CHEM105	Chemistry 1E	6
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GEOS142	The Human Environment Problems and Change	6
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GEOS112	Physical Environments	6
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GEOS111	Planet Earth	6
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GEOS102	Earth Environments and Resources	6
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Note: Students entering without a minimum of HSC Mathematics Band 4(or equivalent) are required to satisfactorily complete MATH151 General Mathematics. This subject may be taken in the preceding Summer Session, the Summer Session between Year 1 and 2 or in Autumn Session of Year 2.

Second Year

BIOL251	Principles of Ecology and Evolution	6
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CHEM214	Analytical and Environmental Chemistry II	6
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GEOS222	Biogeography	6
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GEOS239	Remote Sensing of the Environment	6
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STAT252	Statistics for the Natural Sciences	6
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PHYS233	Environmental Physics	6
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Options: Plus two of the following subjects (one of which should be MATH151 if minimum mathematics require work not already met), as approved, to total 48 credit points:

MATH151	General Mathematics (if required)	6
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BIOL240	Functional Biology of Plants and Animals	6
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BIOL241	Biodiversity: Classification and Sampling	6
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CHEM211	Inorganic Chemistry	6
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CHEM212	Organic Chemistry	6
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CHEM213	Molecular Structure, Reactivity and Change	6
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GEOS205	Field Geology I	6
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GEOS214	Soils, Landscape and Hydrology	6
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GEOS217	Field and Spatial Techniques	6
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GEOS219	The Earth in Crisis	6
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GEOS220	Climate and Natural Hazards	6
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GEOS231	Environmental Impact of Societies	6
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MARE200	Introduction to Oceanography	6
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Third Year

ENVI391	Environmental Science	8
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GEOS339	Geographic Information Systems	8
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Options: Plus four of the following subjects, as approved

BIOL351	Ecological and Evolutionary Physiology	8
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BIOL356	Marine and Terrestrial Ecology	8
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	(Environmental Science)	
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MARE357	Advances in Molluscan Biology	8
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CHEM314	Instrumental Analysis	8
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CHEM327	Environmental Chemistry	8
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GEOS305	Field Geology II	8
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GEOS302	Basin Resources	8
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GEOS307	Mineral Resources	8
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GEOS321	Fluvial Geomorphology, Sedimentology and	8
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	River Management	
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GEOS331	Environmental Management and Decision-	8
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	Making	
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GEOS333	Cultural Heritage Management	8
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MARE300	Fisheries and Aquaculture	8
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MARE322	Global Environmental Change	8
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MARE323	Coastal Environments: Process and	8
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	Management	
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Honours

Students would be eligible to enrol in Honours in their chosen discipline, Biological Sciences, Geosciences or Chemistry.

b) Physical Sciences Strand

First Year

Either

CHEM101	Chemistry 1A	6
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or

CHEM104	Chemistry 1D	6
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Either

CHEM102	Chemistry 1B	6
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or

CHEM105	Chemistry 1E	6
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PHYS141	Fundamentals of Physics A	6
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PHYS142	Fundamentals of Physics B	6
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MATH187	Mathematics 1A Part 1 (or MATH141/161)	6
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MATH188	Mathematics 1A Part 2 (or MATH142/162)	6
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GEOS112	Physical Environments	6
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CSCI111	Computer Science 1A	6
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Second Year

CHEM213	Molecular Structure, Reactivity and Change	6
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CHEM214	Analytical and Environmental Chemistry II	6
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PHYS230	Intermediate Physics	6
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PHYS235	Mechanics and Thermodynamics	6
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PHYS233	Environmental Physics	6
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MATH283	Mathematics 2E for Engineers Part 1	6
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BIOL352	Biology for Environmental Engineers	6
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Third Year

Core subjects

PHYS375	Nuclear and Solid State Physics	8
CHEM314	Instrumental Analysis	8
CHEM327	Environmental Chemistry	8
ENVE221	Air and Noise Pollution	6
GEOS239	Remote Sensing of the Environment	6

Options: plus 2-3 of the following as approved to total a minimum of 48 cp

ENVE321	Solid and Hazardous Waste Management	8
ENVI385	Environmental Engineering	8
ENVI411	Aqueous and Atmospheric Chemistry	8
PHYS305	Quantum Mechanics	8
PHYS335	Classical Mechanics	8
PHYS325	Electromagnetism	8
CHEM364	Molecular Structure and Spectroscopy	8

plus electives as approved by Course Coordinator.

Fourth Year - Honours

Students would be eligible to apply for enrolment in Honours or Joint Honours in the discipline(s) of their choice. The Honours year will normally involve both coursework and research thesis components.

Bachelor of Science (Land & Heritage Management)

This is a 3-year special degree program structured to provide a core grounding in both the human and physical geography strands and to provide the skills to work on both cultural and natural heritage issues or in land management. Approval is required for entry to this degree program. Co-ordinator: Dr Gordon Waitt.

100-Level

GEOS102	Earth Environments and Resources	6
GEOS112	Physical Environments	6
GEOS142	The Human Environment: Problems and Change	6
MATH151	General Mathematics (required if entering the program without at least HSC Mathematics Band 4 or equivalent)	6

Recommended as elective subjects

GEOS111	Planet Earth	6
BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6

Students are also encouraged to select from the General Schedule offerings in History, Aboriginal Studies, STS and Legal Studies.

200-Level

GEOS242	Living in Cities	6
GEOS243	The Bush and Beyond: Rural Society in Australia	6
GEOS222	Biogeography	6
GEOS231	Environmental Impact of Societies	6

Plus at least two subjects chosen from the following list

GEOS246	A Hungry World: Food Resources and the World Economy	6
GEOS239	Remote Sensing of the Environment	6
GEOS220	Climate and Natural Hazards	6

GEOS214	Soils, Landscape and Hydrology	6
BIOL251	Principles of Ecology and Evolution	6

Plus elective subjects to a total of 12 credit points.

300-Level

GEOS339	Geographic Information Systems	8
GEOS331	Environmental Management and Decision-Making	8
GEOS333	Cultural Heritage Management	8

Plus three subjects chosen from the following list

GEOS315	Field Studies in Physical Geography	8
GEOS347	Northern Neighbours: Economic and Social Change in the Asia-Pacific Rim	8
GEOS349	Population, Health and Environment	8
GEOS381	Directed Studies	8
MARE322	Global Environmental Change	8
MARE323	Coastal Environments	8

Bachelor of Biotechnology

This degree is a four year professional qualification awarded either with or without Honours. Successful completion of prescribed subjects (set out in the following course structure) with a total of at least 192 credit points is necessary for the award of either the pass or honours degree.

Students achieving the required entry HSC UAI ranking will be allowed to enrol in the degree program for which only 25 places are available. Other students may be permitted to enter the program at the end of subsequent years of study if they have obtained a suitably high standard in designated subjects at this University or similar subjects at other Institutions.

100 Level

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6

Either

CHEM101	Chemistry 1A	6
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or

CHEM104	Chemistry 1D	6
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Either

CHEM102	Chemistry 1B	6
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or

CHEM105	Chemistry 1E	6
MATH151	General Mathematics A (if required)	6

Plus other elective subjects to give a total credit point value of 48, at least 6 of which should be one of the following:

PHYS132	Physics for the Environmental and Life Sciences	6
STS100	Science and Technology Studies: Introduction to Science and Technology Studies in their social context	6
BMS101	Systemic Anatomy	6
BMS112	Human Physiology I: Principles and Systems	6

Note: PHYS132 is strongly recommended

STS100 is compulsory for those students taking an approved course of study which does not include STS250

200 Level

BIOL213	Principles of Biochemistry	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BIOL215	Introductory Genetics	6
BIOL240	Functional Biology of Plants and Animals	6
STAT252	Statistics for the Natural Sciences	6
CHEM212	Organic Chemistry II	6
CHEM214	Analytical and Environmental Chemistry II	6

Plus one of the following subjects

STS250	From Molecular Genetics to Biotechnology	6
BMS202	Human Physiology II: Control Mechanisms	6

300 Level

BIOL303	Biotechnology: Applied Cell and Molecular Biology	8
BIOL320	Molecular Cell Biology	8
BIOL321	Cellular and Molecular Immunology	8
CHEM320	Bioinformatics: From Genome to Structure	8

Plus one Session 1 subject chosen from the following

CHEM350	Principles of Pharmacology	8
BIOL332	Ecological and Evolutionary Physiology	8
MGMT310	Introduction to Management for Professionals B	8
BMS344	Cardiorespiratory Physiology	8
BIOL392*	Advanced Biology Project	8

Plus one Session 2 subject chosen from the following

CHEM321	Organic Synthesis and Reactivity	8
BIOL392*	Advanced Biology Project	8
PHIL380	Bioethics	8

*Distinction average is required for entry.

Please note: Students must satisfactorily complete at least 144 credit points before proceeding to enrol in fourth year subjects. In addition, satisfactory performance must be achieved (an average of 65% or greater in 300-level Biological Sciences, Chemistry and Biomedical Science subjects) for entry into the 4th year of the Bachelor of Biotechnology degree. Students with an average below 65% in 300-level Biological Sciences, Chemistry and Biomedical Science subjects may only progress into the 4th year of the Bachelor of Biotechnology with the approval of the Head of the Department of Biological Sciences. Students who do not gain entry into the 4th year of the Bachelor of Biotechnology degree will normally be required to transfer into the Bachelor of Science (Biotechnology) degree.

400 Level

BIOL420	Cell, Protein and Antibody Technology	12
BIOL421	Nucleic Acid Technology	12
BIOL422	Biotechnology Project	24

Bachelor of Biotechnology - Advanced

Students with a UAI of at least 90 who wish to undertake the Bachelor of Biotechnology are eligible for the Bachelor of Biotechnology - Advanced. For information on this degree refer to the Bachelor of Science - Advanced and consult the Biotechnology Co-ordinator, Associate Professor Mark Wilson.

Bachelor of Environmental Science

This course consists of a four-year full-time, or equivalent part-time, program leading to a pass or honours degree of Bachelor of Environmental Science. All students complete common first and second year programs. In third and fourth years students specialise in one of the four strands:

Earth Sciences
Land Resources
Life Sciences
Pollution Control

The awarding of an honours degree is based on the student's performance in selected subjects offered in third and fourth years of the course. Students will be informed of the subjects on which the Honours assessment is based.

Common 1st Year Program**Autumn Session**

BIOL104	Evolution, Biodiversity and Environment	6
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Either

CHEM101	Chemistry 1A	6
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or

CHEM104	Chemistry 1D	6
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GEOS111	Planet Earth	6
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GEOS112	Physical Environments	6
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Spring Session

BIOL103	Molecules, Cells and Organisms	6
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Either

CHEM102	Chemistry 1B	6
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or

CHEM105	Chemistry 1E	6
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GEOS102	Earth Environments and Resources	6
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GEOS142	The Human Environment: Problems and Change	6
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Summer Session if required (ie if entering the degree without at least HSC Mathematics Band 4 or equivalent)

MATH151	General Mathematics 1A	6
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Common 2 nd Year Program				Alternative Program if Life Sciences Strand is selected in second year			
Autumn Session				Autumn Session			
BIOL251	Principles of Ecology and Evolution	6		BIOL251	Principles of Ecology and Evolution	6	
PHYS233	Environmental Physics	6		PHYS233	Environmental Physics	6	
PHIL256	Ethics and the Environment	6		PHIL256	Ethics and the Environment	6	
GEOS222	Biogeography	6		GEOS222	Biogeography	6	
Spring Session				Spring Session			
STAT252	Statistics for the Natural Sciences	6		STAT252	Statistics for the Natural Sciences	6	
CHEM214	Analytical and Environmental Chemistry II	6		CHEM214	Analytical and Environmental Chemistry II	6	
GEOS214	Soils, Landscape and Hydrology	6		GEOS214	Soils, Landscape and Hydrology	6	
GEOS239	Remote Sensing of the Environment	6		BIOL241	Biodiversity: Classification and Sampling	6	

3rd Year Program - Strand Selection

Pollution Control		Earth Sciences*		Land Resources		Life Sciences				
Core Subjects		Core Subjects		Core Subjects		Core Subjects				
CHEM211	Inorganic Chemistry II	6		GEOS217	Field and Spatial Techniques	6				
CHEM212	Organic Chemistry II	6		GEOS219	The Earth in Crisis	6				
CHEM327	Environmental Chemistry	8		STS300	The Environmental Context	8				
STS300	The Environmental Context	8		ENVI491	Environmental Science and Systems	8				
ENVI491	Environmental Science and Systems	8		ENVI491	Environmental Science and Systems	8				
CHEM213	Molecular Structure, Reactivity and Change	8		GEOS231	Environmental Impact of Societies	6				
				MARE323	Coastal Environments	8				
							BIOL240	Functional Biology of Plants and Animals	6	
							STS300	The Environmental Context	8	
							BIOL351	Conservation Biology	8	
							ENVI491	Environmental Science and Systems	8	
							BIOL356	Marine and Terrestrial Ecology	8	
							BIOL241	Biodiversity: Classification and Sampling	6	
Elective Subjects		Elective Subjects		Elective Subjects		Elective Subjects				
Plus one of the following		Plus one of the following		Plus one of the following		Plus one of the following				
CHEM320	Biological Chemistry	8			Fluvial Geomorphology, Sedimentology and River Management	8				
				GEOS321			BIOL213	Principles of Biochemistry	6	
CHEM321	Organic Synthesis and Reactivity	8		GEOS307	Mineral Resources	8		GEOS339	Geographic Information Systems	8
Note: Students wishing to take CHEM314 should contact the program Coordinator		Plus one of the following		Plus one of the following		Plus one of the following		BIOL332	Ecological and Evolutionary Physiology	8
				GEOS205	Field Geology I (summer session between years 2 and 3)	8				
				MARE218	Marine Sediments and fossils	8				
				GEOS231	Environmental Impact of Societies	8				
				Summer session between years 3 and 4						
				GEOS305	Field Geology II	8				

*Subject to confirmation

Common 4th Year Program - for all Strands**Annual**

ENVI403	Research Report	24
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Autumn Session

ENVE385	Environmental Engineering	8
MGMT308	Introduction of Management for Professionals A	8

Spring Session

LAW380	Environmental Law	8
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Honours Assessment

The subjects included in the Weighted Average Mark for the calculation of the Honours grade are:

ENVI403	Research Project
ENVI491	Environmental Science and Systems

Plus the two subjects with the highest marks, selected from:

LAW380	Environmental Law
ENVE385	Environmental Engineering
STS300	The Environmental Context

Plus the two subjects at 300-level with the highest marks, selected from the core of the science strand specialisation:

Earth Sciences Strand:

GEOS305 and GEOS302 or GEOS307

Land Resources Strand:

GEOS323 and GEOS321 or GEOS322

Life Sciences Strand:

BIOL356 and BIOL351

Pollution Control Strand:

CHEM327 and CHEM314 or CHEM320 or CHEM321

Bachelor of Environmental Science - Advanced

Students with a UAI of at least 90 who wish to undertake the Bachelor of Environmental Science are eligible for the Bachelor of Environmental Science - Advanced. For information on this degree refer to the Bachelor of Science - Advanced and consult the Environmental Science Coordinator, Professor John Morrison.

Bachelor of Marine Science

The Bachelor of Marine Science is a 3-year program with a broad emphasis on the marine sciences taught jointly by the Department of Biological Sciences, the School of Geosciences and the Environmental Science Unit. The program consists of core subjects in each of the three years plus a flexible range of optional subjects. In third year there is a choice of three strands: Marine Biology, Marine Geosciences or the joint Marine Biology and Marine Geosciences. Subjects from across the range of relevant disciplines have been included together with two specially-designed marine studies subjects. The Coordinator is Associate Professor Chris Fergusson.

The approval of the Dean or Associate Dean is required for entry to the program.

100 - Level

GEOS102	Earth Environments and Resources	6
GEOS112	Physical Environments	6
BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6
Either		
CHEM101	Chemistry 1A	6
or		
CHEM104	Chemistry 1D	6
Either		
CHEM102	Chemistry 1B	6
or		
CHEM105	Chemistry 1E	6
MATH151	General Mathematics 1A (if required)	6

Options: Plus one or two of the following subjects

CSCI101	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
CSCI121	Computer Science 1B	6
GEOS111	Planet Earth	6
GEOS142	The Human Environment: Problems and Change	6
PHYS233	Introduction to Environmental Physics	6
STS112	The Scientific Revolution: History, Philosophy and Politics of Science	6
STS116	Environment in Crisis	6
MATH111	Applied Mathematical Modelling	6
MGMT110	Introduction to Management	6

200-Level

BIOL241	Biodiversity: Classification and Sampling	6
BIOL251	Principles of Ecology and Evolution	6
GEOS239	Remote Sensing of the Environment	6
STAT252	Statistics for the Natural Sciences	6
MARE200	Introduction to Oceanography	6
MARE218	Marine Sediments and Fossils*	6

*Students wishing to pursue cell and molecular biology subjects at 300-level (BIOL303 and BIOL320) should choose BIOL213 in Session 1 and BIOL215 in place of MARE218.

Options: Plus four of the following subjects to form a program approved by the Co-ordinator

GEOS205	Field Geology I	6
GEOS220	Climate and Natural Hazards	6
GEOS222	Biogeography	6
BIOL240	Functional Biology of Plants and Animals	6
BIOL213	Principles of Biochemistry	6
BIOL215	Introductory Genetics	6
PHYS233	Introduction to Environmental Physics	6

300-level**Marine Biology and Marine Geosciences Strand**

MARE300	Fisheries and Aquaculture	8
BIOL351	Conservation Biology: Marine and Terrestrial Populations	8
BIOL355	Marine and Terrestrial Ecology	8
Plus three of the following subjects		
GEOS331	Environmental Management and Decision-Making	8
GEOS339	Geographical Information Systems	8

Course Structures

MARE322	Global Environmental Change	8
MARE323	Coastal Environments: Process and Management	8
MARE393	Advanced Marine Science Project	8

Marine Biology Strand

MARE300	Fisheries and Aquaculture	8
BIOL351	Conservation Biology: Marine and Terrestrial Populations	8
BIOL355	Marine and Terrestrial Ecology	8

Plus an approved combination of 24 credit points from the following subjects

BIOL303	Biotechnology: Applied Cell and Molecular Biology	8
BIOL320	Cell and Molecular Biology	8
BIOL332	Ecological and Evolutionary Physiology	8
MARE357	Advances in Molluscan Biology	8

MARE393	Advanced Marine Science Project	8
STAT355	Sample Surveys and Experimental Design (with project)	8

or other subjects which include up to 18 credit points approved by the Coordinator

Marine Geosciences Strand

GEOS331	Environmental Management and Decision-Making	8
GEOS339	Geographical Information Systems	8
MARE322	Global Environmental Change	8
MARE323	Coastal Environments: Process and Management	8

Plus an approved combination of at least 16 credit points from the following subjects

GEOS302	Basin Resources	8
GEOS305	Field Geology II	8
GEOS315	Field Studies in Physical Geography	8
GEOS321	Fluvial Geomorphology, Sedimentology and River Management	8
GEOS381	Directed Studies in Geosciences A	8
MARE300	Fisheries and Aquaculture	8
MARE393	Advanced Marine Science Project	8

or other subjects which may include up to 18 credit points approved by the Coordinator.

Honours: After the completion of the three-year program, Marine Studies students may proceed to an Honours year within either the Department of Biological Sciences or the School of Geosciences or jointly in both disciplines.

Bachelor of Marine Science - Advanced

Students with a UAI of at least 90 who wish to undertake the Bachelor of Marine Science are eligible for the Bachelor of Marine Science - Advanced. For information on this degree refer to the Bachelor of Science - Advanced and consult the Marine Science Coordinator, Associate Professor Chris Fergusson.

Bachelor of Mathematical Sciences

The Bachelor of Mathematical Sciences is an interdisciplinary degree involving subjects offered by the Faculties of Informatics and Science. It emphasises the relationship between mathematics and science and is designed to produce a well-informed graduate with a broad knowledge base. Students may choose from four strands: Mathematics/Statistics/Science, Mathematics/Geosciences, Mathematics/Ecology, Statistics/Ecology. For course details refer to the Faculty of Informatics.

Bachelor of Medicinal Chemistry

Medicinal Chemistry is a specialist four-year degree which provides students with an excellent training in modern techniques of chemical science applied to medicine. This includes specialised courses in drug discovery and design, using both rational, computer-aided and bioprospecting approaches. It also gives students the training physiology, pharmacology and other areas needed to understand the effects of disease states on the human body and the role of drugs and other ways of chemical intervention. Recent graduates of the degree have readily found excellent employment opportunities in the pharmaceutical and biomedical sectors.

The BMedChem program is four years full-time with a workload of 48 credit points per year, but it is possible to undertake the course part-time. Honours is awarded on performance at the end of fourth year. Advanced entry into the degree may also be considered.

Students not admitted directly into the program may gain admission via the BSc program subject to satisfactory performance in first year, prerequisite considerations, and approval of the Dean. The Coordinator is Dr Paul Keller.

First Year

Either		
CHEM101	Chemistry 1A	6
or		
CHEM104	Chemistry 1D	6
Either		
CHEM102	Chemistry 1B	6
or		
CHEM105	Chemistry 1E	6
BIOL103	Molecules, Cells and Organisms	6
Either		
BIOL104	Evolution, Biodiversity and Environment	6
or		
BMS103	Human Growth, Nutrition and Exercise	6
BMS101	Systemic Anatomy	6
STAT252	Statistics for the Natural Sciences	6
BMS112	Human Physiology 1: Principles and Systems	6
Either		
MATH151	General Mathematics 1A (if required)	6
or		

PHYS131	Physics for the Environmental and Life Sciences A	6
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Second Year

BIOL213	Principles of Biochemistry	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BIOL215	Introductory Genetics	6
CHEM211	Inorganic Chemistry II	6
CHEM212	Organic Chemistry II	6
CHEM213	Molecular Structure, Reactivity and Change	6
CHEM214	Analytical and Environmental Chemistry II	6
BMS202	Human Physiology II: Control Mechanisms	6

Third Year

BIOL320	Molecular Cell Biology	8
CHEM320	Bioinformatics: From genome to structure	8
CHEM321	Organic Synthesis and Reactivity	8
CHEM330	Medicinal Chemistry	8
CHEM350	Principles of Pharmacology	8
CHEM364	Molecular Structure and Spectroscopy	8

Fourth Year

CHEM430	Selected Topics in Medicinal Chemistry	12
BIOL321	Cellular and Molecular Immunology	8
CHEM450	Medicinal Chemistry Project	28

Bachelor of Medicinal Chemistry - Advanced

Students with a UAI of at least 90 who wish to undertake the Bachelor of Medicinal Chemistry are eligible for the Bachelor of Medicinal Chemistry - Advanced. For information on this degree refer to the Bachelor of Science - Advanced and consult the Medicinal Chemistry Coordinator, Dr Paul Keller.

Bachelor of Science - Bachelor of Arts

Students must consult both the Faculty of Science and the Faculty of Arts academic advisers about selecting a major from each Faculty.

The double degree consists of a minimum of 216 credit points taken over at least 4 years and shall include:

1. 90 credit points of subjects from the Science Schedule (including a minimum of 60 credit points for a Science major);
2. at least 72 credit points, including a major, for subjects listed in the Arts Course Structures and including at least 36 credit points for subjects offered by member units of the Faculty of Arts;
3. not more than 96 credit points for 100-level subjects;
4. majors from two different disciplines are to be chosen for the Arts and Science degrees.

Note: Students may be given exemptions where similar subjects exist in both majors selected, eg Statistics subjects.

The available Science majors are:

Biological Sciences
Chemistry
Human Geography

Physical Geography
Geology
Geosciences
Physics (see Faculty of Engineering)
The available Arts majors are:
Aboriginal Studies
Asia Pacific Studies
Australian Studies
Communication Studies
Community and Environment
English Language Studies
English Studies
European Studies
French
Gender Studies
History
Italian
Japanese
Philosophy
Politics
Resource and Environmental Studies
Science, Technology and Society
Sociology

Bachelor of Science - Bachelor of Commerce

Students must consult both the Faculty of Science and the Faculty of Commerce academic advisers about selecting a major study from each Faculty. The double degree consists of a minimum of 216 credit points taken over at least 4 years and shall include:

1. 90 credit points of subjects from the Science Schedule (including a minimum of 60 credit points for a Science major);
2. subjects from the Commerce Schedule, including core subjects to satisfy the requirements of one of the Commerce majors. Candidates need to be aware that the number of credit points required by each major varies;
3. subjects from the Science, Commerce or General Schedules to ensure that a minimum of 216 credit points have been completed.

Note: Students may be given exemption from a subject when similar subjects exist in both majors selected, eg Statistics.

The available Science majors are:

Biological Sciences
Chemistry
Human Geography
Physical Geography
Geology
Geosciences
Physics (see Faculty of Engineering)
The available Commerce majors are:
Accountancy

Economics
 Business Information Systems
 Human Resource Management
 Industrial Relations
 Management
 Marketing
 Finance
 Employment Relations
 International Business

Bachelor of Science - Bachelor of Laws

Refer to the Faculty of Law section for details of this double degree program.

The available Science majors are:

Biological Sciences
 Chemistry
 Human Geography
 Physical Geography
 Geology
 Geosciences
 Physics (see Faculty of Engineering)

Bachelor of Computer Science – Bachelor of Science

Refer to the Faculty of Informatics section for details of this double degree program.

Bachelor of Creative Arts - Bachelor of Science

Refer to the Faculty of Creative Arts section for details of this double degree program.

The available Science majors are:

Biological Sciences
 Chemistry
 Human Geography
 Physical Geography
 Geology
 Geosciences

Physics (See Faculty of Engineering)

Bachelor of Engineering (Engineering) - Bachelor of Science

Refer to the Faculty of Engineering section for details of this double degree program.

Bachelor of Engineering (Informatics) - Bachelor of Science

Refer to the Faculty of Informatics section for details of this double degree program.

Science Schedule of Subjects

The following are subjects offered by the Academic Units in the Faculty of Science, as well as subjects from outside of the Faculty, that can be counted towards the 90 credit points of Science subjects required for a Bachelor of Science degree. The required 90 credit points must include a major or minor study in a discipline located in the Faculty of Science. Only 60 credit points of 100-level subjects may be counted towards a degree.

Biological Sciences

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6
BIOL213	Principles of Biochemistry	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BIOL215	Introductory Genetics	6
BIOL240	Functional Biology of Plants and Animals	6
BIOL241	Biodiversity: Classification and Sampling	6
BIOL251	Principles of Ecology and Evolution	6
MARE200	Introduction to Oceanography	6
BIOL292	Special Biology Studies	6
BIOL303	Biotechnology: Applied Cell and Molecular Biology	8
BIOL320	Molecular Cell Biology	8
CHEM320	Bioinformatics: from genome to structure	8
BIOL321	Cellular and Molecular Immunology	8
BIOL332	Ecological and Evolutionary Physiology	8
BIOL351	Conservation Biology: Marine and Terrestrial Populations	8
BIOL355	Marine and Terrestrial Ecology	8
MARE300	Fisheries and Aquacultures	8
MARE300	Advances in Molluscan Biology	8
BIOL391	Advanced Biology	16
BIOL392	Advanced Biology Project	8
MARE393	Advanced Marine Science Project	8

Chemistry

CHEM101	Chemistry 1A: Intro. Physical and General Chemistry	6
CHEM102	Chemistry 1B: Intro. Organic and Physical Chemistry	6
CHEM104	Chemistry 1D (Introductory Chemistry)	6
CHEM105	Chemistry 1E (Introductory Chemistry)	6
CHEM211	Inorganic Chemistry II	6
CHEM212	Organic Chemistry II	6
CHEM213	Molecular Structure, Reactivity and Change	6
CHEM214	Analytical and Environmental Chemistry II	6
CHEM218	Special Chemistry Studies	6
CHEM311	Inorganic Chemistry III	8
CHEM314	Instrumental Analysis	8
CHEM320	Bioinformatics: From Genome to Structure	8
CHEM321	Organic Synthesis and Reactivity	8
CHEM327	Environmental Chemistry	8
CHEM330	Medicinal Chemistry	8
CHEM340	Chemistry Laboratory Project	8
CHEM350	Principles of Pharmacology	8
CHEM364	Molecular Structure and Spectroscopy	8

Environmental Science

ENVI391 Environmental Science 8

Geosciences

GEOS102 Earth Environments and Resources 6

GEOS111 Planet Earth 6

GEOS112 Physical Environments 6

GEOS142 The Human Environment: Problems and Change 6

GEOS205 Field Geology 6

GEOS214 Soils, Landscape and Hydrology 6

GEOS217 Field and Spatial Techniques 6

MARE218 Marine Sediments and Fossils 6

GEOS219 The Earth in Crisis 6

GEOS220 Climate and Natural Hazards 6

GEOS222 Biogeography 6

MARE200 Introduction to Oceanography 6

GEOS231 Environmental Impact of Societies 6

GEOS233 Discovering Downunder: A Geography of Australia 6

GEOS239 Remote Sensing of the Environment 6

GEOS242 Living in Cities 6

GEOS243 The Bush and Beyond: A Geography of Australia 6

GEOS246 A Hungry World: Food Resources and the World Economy 6

GEOS292 Special Geosciences Studies 6

GEOS305 Field Geology II 8

GEOS302 Basin Resources 8

GEOS304 Dynamic Earth 8

GEOS307 Mineral Resources 8

GEOS315 Field Studies in Physical Geography 8

GEOS321 Fluvial Geomorphology, Sedimentology and River Management 8

MARE322 Global Environmental Change 8

MARE323 Coastal Environments: Process and Management 8

GEOS331 Environmental Management and Decision-making 8

GEOS333 Cultural Heritage Management 8

GEOS339 Geographic Information Systems 8

GEOS347 Northern Neighbours: Economic and Social Change in the Asia-Pacific Rim 8

GEOS349 Population, Health and Environment 8

GEOS381 Directed Studies in Geosciences A 8

GEOS382 Directed Studies in Geosciences B 8

MARE393 Advanced Marine Science Project 8

General Science

SCIE201 Modern Perspectives in Science 6

Marine Studies

MARE200 Introduction to Oceanography 6

MARE218 Marine Sediments and Fossils 6

MARE300 Fisheries and Aquaculture 8

MARE322 Global Environmental Change 8

MARE323 Coastal Environments: Process and Management 8

MARE357 Advances in Molluscan Biology 8

MARE393 Advanced Marine Science Project 8

Subjects offered by Academic Units external to the Faculty of Science:**Biomedical Science**

BMS101 Systemic Anatomy 6

BMS112 Human Physiology 1 6

BMS202 Human Physiology II: Control Mechanisms 6

BMS311 Nutrients and Metabolism 8

BMS312 Research in Human Nutrition 8

Information Technology and Computer Science

CSCI111 Computer Science 1A 6

CSCI121 Computer Science 1B 6

Mathematics and Applied Statistics

MATH141 Mathematics 1C Part 1 6

MATH142 Mathematics 1C Part 2 6

MATH161 Mathematics 1E Part 1 6

MATH162 Mathematics 1E Part 2 6

MATH187 Mathematics 1A Part 1 6

MATH188 Mathematics 1A Part 2 6

MATH151 General Mathematics IA 6

MATH201 Multivariate and Vector Calculus 6

MATH202 Differential Equations 2 6

MATH283 Mathematics 2E for Engineers Part 1 6

STAT252 Statistics for the Natural Sciences 6

Engineering Physics

PHYS131 Physics for the Environmental and Life Sciences A 6

PHYS132 Physics for the Environmental and Life Sciences B 6

PHYS141 Fundamentals of Physics A 6

PHYS142 Fundamentals of Physics B 6

PHYS205 Modern Physics 6

PHYS206 Project in Physics 6

PHYS215 Vibrations, Waves and Optics 6

PHYS225 Electromagnetism and Optoelectronics 6

PHYS233 Introduction to Environmental Physics 6

PHYS235 Mechanics and Thermodynamics 6

PHYS255 Radiation Physics 6

PHYS295 Astronomy: Concepts of the Universe 6

PHYS305 Quantum Mechanics 8

PHYS306 Project in Physics 8

PHYS325 Electromagnetism 8

PHYS335 Classical Mechanics 8

PHYS365 Detection of Radiation: Neutrons, Electrons and X Rays 8

PHYS375 Nuclear Physics 8

PHYS385 Statistical Mechanics 8

PHYS390 Astrophysics 8

PHYS396 Electronic Materials 8

SCIENCE SUBJECT DESCRIPTIONS

Note: Except where shown, all subjects are offered on the Wollongong Campus.

BIOL103 Molecules, Cells and Organisms 6cp

Spring

Contact Hours: 2 hour lecture, 1 hour tutorial, 3 hour practical per week.

Assessment: Continuous Practical assessment; Practical quizzes; Assignment; Mid session Quiz; final practical examination; final theory examination.

Subject Description: Properties and characteristics of living systems. Cell structure and function. Micro-organisms and viruses. Cell division. Introductory biochemistry. Structure and function of the respiratory, digestive, excretory and muscular systems. Physiology of nervous and hormonal control systems and the immune system. Plant structure and function.

Subject Objectives: Students should be able to describe the processes of science that uncover the mechanisms and principles of living systems; define the different levels of organization of living systems; identify the unity and diversity that exist at each level of organization; describe some of the basic interactions between, as well as aspects of, the regulation and integration of living systems; describe the characteristics of the most important classes of biological molecules and the major features of the structure and function of cells and sub-cellular organelles; and to be able to analyse results and present data clearly and concisely in a written report.

BIOL104 Evolution, Biodiversity and Environment 6cp

Autumn

Contact Hours: 2 hours lecture, 3 hours practical, 1 hour tutorial per week.

Assessment: Practical mini-quizzes; Insect collection; Project report - predation; Project report - seeds; Post-lecture mini-quizzes; Practical examination; Theory examination.

Subject Description: Types of organisms, their classification and life styles. Genetics. Animal behaviour. Ecology of populations and communities. Evolutionary biology and the origin of species.

Subject Objectives: To have a clear perception of the diversity of organisms present in nature; to recognise the anatomical and life-history characteristics of the major groups of organisms; to understand the operation of the evolutionary processes which have combined to produce the diversity; to understand the principles of intrinsic population growth and how it provides the potential for natural selection; to understand the way in which populations of different organisms combine to form communities, and be aware of the nature of the interactions which occur among organisms in a community; to understand the interactions between the physical and biotic components of ecosystems, and understand the importance of nutrient cycling and energy flow in ecosystem function; to be able to design an experiment, take replicate samples, analyse results and present a concise, accurate report; and to be aware of some of the social and ethical implications of research in biology.

BIOL213 Principles of Biochemistry 6cp

Autumn

Contact Hours: 2 hours lecture, 4 hours tutorial/practical per week.

Pre-requisites: BIOL 103 and (CHEM 101) or (CHEM 104) and (CHEM 102) or (CHEM 105)

Assessment: Practical reports; Dry practicals; Formal scientific reports; Theory Quiz; Practical exam; Theory exam.

Subject Description: Structure and biological functions of proteins, nucleic acids, carbohydrates and lipids and their subunits. Protein and nucleic acid synthesis in prokaryotes and eukaryotes. Membrane structure. Enzymes and their regulation. Intermediary metabolism.

Subject Objectives: To describe the major classes of macromolecules and their subunits; to describe the basic principles of enzyme function, energy metabolism, and gene structure and function; to perform the calculations necessary to relate to physical amounts and concentrations of biochemicals; to interpret biochemical data and reach valid scientific conclusions; and to attain satisfactory experimental laboratory skills.

BIOL214 The Biochemistry of Energy and Metabolism 6cp

Spring

Contact Hours: 2 hours lecture, 3 hours practical, 1 hour tutorial per week.

Pre-requisites: BIOL213

Assessment: Practical assessment; Scientific report; Quiz; Practical exam; Theory exam.

Subject Description: The generation and storage of metabolic energy. The major catabolic pathways. The biosynthesis of carbohydrates, lipids, proteins and nucleotides. The regulation of enzymes and of metabolic pathways and their role in cellular function. The integration of metabolism. Metabolic disorders.

Subject Objectives: To identify the major biochemical processes; to compare anabolic and catabolic metabolic pathways; to understand the principles involved in the control of metabolism; to relate knowledge of the structure and function of molecules; to perform basic laboratory procedures used in the study of metabolism; to use knowledge of metabolism and of biochemical methods to design experimental approaches to simple problems in metabolic biochemistry; to appreciate the historical process which led to this body of knowledge; and to relate metabolic processes to the functioning of whole organisms.

BIOL215 Introductory Genetics 6cp

Spring

Contact Hours: 3 hours lecture, 3 hours practical per week.

Pre-requisites: BIOL213

Assessment: 4 Practical reports; Practical assessment; Seminar; Theory exam.

Subject Description: Genetic variation in eukaryotic populations. Source of variation and techniques of measurement. Regulation of gene activity. Microbial genetics including transformation, conjugation and phage replication.

Subject Descriptions

Mechanisms for the rearrangement and exchange of genetic material including plasmids, recombination, transposons and genetic engineering.

Subject Objectives: To have an understanding of basic skills involved in microbial culturing, selection of mutations, plasmid transfer and chromosome mapping of bacteria; simple applications of molecular biology; the role of DNA, RNA and protein; the molecular basis of genetic variation; the mechanisms of genetic regulation; mechanisms of inheritance in a range of organisms and the design of simple breeding experiments and selection trials; simple models of the processes which determine the genetic composition of populations; and the basic algebraic and statistical skills needed to analyse genetic data.

BIOL240 Functional Biology of Plants & Animals 6cp

Autumn

Contact Hours: 3 hours lecture &/or tutorial, 3 hours practical per week.

Pre-requisites: BIOL103 and BIOL104

Assessment: Quiz; 2 Practical exams; 2 Written Assignments; Theory exam.

Subject Description: Functional morphology of plants and animals. Plant/environmental interactions. Physiological and behavioural responses of animals to various environments. Reproductive biology and life history patterns of plants and animals.

Subject Objectives: The objectives of this course are to study the form and function of living things with a comparative approach that recognises their evolutionary origins and how this affects the way they overcome challenges to their day-to-day existence.

BIOL241 Biodiversity: Classification and Sampling 6cp

Spring

Contact Hours: 3 hours lecture, 3 hours practical per week.

Pre-requisites: BIOL103 and BIOL104

Assessment: McClade report; Herbarium collection; Biodiversity paper; Theory exam; Practical exam.

Subject Description: Introduction to biological diversity. Identifying biodiversity. The species concept. Principles of classification (numerical and biochemical tools). Pitfalls in classification (coevolution, physical and evolutionary constraints). Use of keys. Making and curating a collection of selected groups of organisms. Environmental surveys: quantification and importance of biological diversity. Loss of biodiversity.

Subject Objectives: To provide students with an understanding of biological diversity, taxonomic principles and a working knowledge of taxonomic methods. The latter include the collection and identification of biological materials for study as well as data collection, analysis and interpretation.

BIOL251 Principles of Ecology and Evolution 6cp

Autumn

Contact Hours: 3 hours lecture, 3 hours practical per week.

Pre-requisites: BIOL103 and BIOL104

Assessment: Scientific writing; Competition experiment; Project progress; Seminar; Report; Practical examination; Theory examination.

Subject Description: Definitions of a population. Sampling and estimating density. Population growth and regulation. Interactions between organisms and community structure and function. Variation among organisms P genetic and environmental. Inheritance. Genetic structure of populations. Population size, breeding systems and selection, social evolution and evolution of life histories. Implications for human populations. Human ecology and ecological surveys.

Subject Objectives: To develop an understanding of the basic principles of general ecology, including evolutionary theory, and to develop specific skills relevant to progression to advanced ecology and evolutionary biology.

BIOL292 Special Biology Studies 6cp

Spring / Autumn

Contact Hours: 5 hours lab/field work, 1 hour tutorial per week.

Pre-requisites: 48 cp; enrolment in BSc(Hons) - Adv Program

Assessment: Literature review presentation (oral or poster) 10%; project reports 50%; project seminars 10%; final examination 30%.

Subject Description: Students will undertake research projects, under the supervision of academic staff members, on design and execution of field and/or laboratory experiments and the analysis and interpretation of these data. Intending students must consult with the Head of Department prior to enrolment.

Subject Objectives: To design and execute appropriate field and/or laboratory experiments and analyse and interpret these data. Students will also develop skills in the acquisition of information and its presentation in verbal and written reports.

BIOL320 Molecular Cell Biology 8cp

Autumn

Contact Hours: 2 hours lecture, 4 hours tutorial/practical per week.

Pre-requisites: BIOL 214 and BIOL 215

Assessment: Poster; 2 Practical Reports; Theory exam; Practical exam.

Subject Description: Biochemistry of major macromolecular components in eukaryotic cells including synthesis and regulation; assembly of molecular components into functional units in the cell; major cell functions - homeostasis, movement, energetics and recognition. Specific topics covered include proteins and nucleic acids, membranes, cytoskeleton, extracellular matrix, energetics. Practical work covers plant and animal cell culture and separation techniques - amino acid analysis, electrophoresis, flow cytometry, centrifugation and chromatography.

Subject Objectives: To achieve a sound knowledge and understanding of the key aspects of cell structure and function and mechanisms used by cells to regulate their activities.

BIOL321 Cellular and Molecular Immunology 8cp**Spring****Contact Hours:** 2 hours lecture, 4 hours tutorial/practical per week.**Pre-requisites:** BIOL320**Assessment:** Antibody Purification/Conjugation Project; Antibody Production/ELISA Project; Written assignments; Oral presentation of tutorial topic; Practical exam; Theory exam.**Subject Description:** The immune system as a model for cellular division and differentiation. Role of factors and the cellular interactions required to generate antibodies and cell-mediated responses. Molecular basis of immunity. Molecular biology of viruses. Immuno-technology: Monoclonal antibodies, phage display antibodies, immuno-affinity chromatography, immuno-diagnostics, immunotherapies, flow cytometry.**Subject Objectives:** Students should be able to understand and discuss many of the theoretical principles underlying modern cellular and molecular immunology; perform a variety of immunological techniques, including immunization of animals and purification and conjugation of antibodies; and demonstrate a respect for animals, and an understanding of the importance of appropriate controls when designing experiments using immunological techniques.**BIOL332 Ecological and Evolutionary Physiology 8cp****Autumn****Pre-requisites:** BIOL240**Assessment:** Project reports; Quiz; Theory exam.**Subject Description:** Physiology and biochemistry of whole organisms with emphasis on response to environmental parameters and the development of physiological systems. Effect of body size on physiology. Water and salt regulation in aquatic, marine and terrestrial environments. Physiological responses of plants and animals to temperature, gas composition, light intensity, and pressure. Evolution of endothermy. Effects of hormones on physiology and behaviour.**Subject Objectives:** To understand the physiological and biochemical responses of animals and plants to environmental variation; to identify how marine, aquatic, and terrestrial environments select for different biochemical and physiological adaptations in animals and plants; to explain aspects of the evolution of biochemical and physiological processes in organisms; to understand the influence of size and phylogeny in animal energetics; to design and complete an experiment to answer a specific physiological question; to analyse physiological data in an appropriate manner and present these effectively in both written and lecture formats; to appreciate the use of computers as analog to digital interfaces and understand fundamental procedures in writing data-gathering routines; and to show concern for accuracy, precision, honesty, and for the organisms under study.**BIOL351 Conservation Biology: Marine and Terrestrial Populations 8cp****Autumn****Contact Hours:** 2 hs lecture, 4 hours tutorial/practical per week.**Pre-requisites:** BIOL 241, BIOL 251, STAT 252**Assessment:** Spotlighting arboreal mammals; practical workbook write-ups; teamwork contribution; theory examination.**Subject Description:** Field camps are an integral part of this subject. Describing populations - demography, life tables, genetic structure.

Factors regulating population growth - competition herbivory, predation, environmental disturbance. Natural selection. Frequency-dependence and density-dependence. Phenotypic plasticity. Sex, recombination and breeding systems. Localised adaptation. Sexual selection. Genetic basis of behaviour. Hybrids and hybrid zones. Mechanisms of evolution and speciation. Population biology in relation to conservation - minimum population sizes, inbreeding depression, genetic tolerance of extreme conditions.

Subject Objectives: To develop an understanding of the concepts and techniques of population ecology and genetics which underpin the discipline of conservation biology.**BIOL352 Biology For Environmental Engineers 6cp****Autumn****Contact Hours:** 2 hours lecture, 3 hours practical, 1 hour tutorial per week.**Assessment:** Same as BIOL 104.**Subject Description:** See BIOL 104. This subject includes a set of tutorials specifically designed for Environmental Engineers.**Subject Objectives:** See BIOL 104.**BIOL355 Marine and Terrestrial Ecology 8cp****Spring****Contact Hours:** 2 hours lecture, 4 hours tutorial/practical per week.**Pre-requisites:** BIOL 241, BIOL 251, STAT 252,**Assessment:** Project report, field camp report and seminar 60%; final examination 40%.**Subject Description:** Introduction to ecology - levels of organisation (individual, population, community, eco-system). Experiments in ecology - their design, analysis and interpretation. Biotic interactions: competition, herbivory, predation, mutualisms. Disturbance, catastrophe and community structure and function. Behavioural ecology: innate vs learned behaviours and their effects on individual fitness, demography and community structure. Applied ecology: rehabilitation and management.**Subject Objectives:** Students should achieve familiarity with a range of ecosystems, marine and terrestrial; the ability to use a range of techniques to describe communities; knowledge of the range of biotic and abiotic factors that determine community structure; understanding of the nature of biotic interactions occurring within ecological communities; knowledge of the impacts of biotic interactions and disturbance on community structure and function; understanding of behavioural ecology, the effects of innate and learned behaviours on the fitness of individuals; expertise in the design, analysis interpretation of ecological experiments, especially in the field; competence in the preparation of scientific reports, including literature review and presentation of data; and the ability to communicate results and ideas in verbal presentations.

BIOL356 Marine and Terrestrial Ecology (Environmental Science) 8cp

Spring

Contact Hours: 2 hours lecture, 4 hours tutorial/practical per week.

Pre-requisites: BIOL 251, STAT 252

Assessment: Major project report and seminar, environmental report 60%; final examination 40%.

Subject Description: Lecture content as for BIOL355. Tutorial and practical components of this subject provide professional experience for Bachelor of Environmental Science students. A substantial amount of the practical work will be environmental science projects conducted in the Illawarra region.

Subject Objectives: As for BIOL 355, but including achieving competence in the preparation of consultancy reports and the framing of management recommendations.

BIOL357 Field Methods in Ecology 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: BIOL251 or equivalent

Restrictions: Do NOT enrol in this subject without first completing an application (obtainable from Dept. office), attaching a transcript of studies completed, and returning to Dept. office.

Assessment: Seminar, Project Report, Final examination

Subject Description: Techniques for estimating abundances of organisms - census, capture/recapture, indirect estimates. Shortcomings of various techniques. Radio telemetry of large vertebrates. Calculation of home range. Techniques for ecological survey and experiment in the field.

Subject Objectives: Students should achieve an understanding of the need to sample organisms, and the limits to accurate estimation of population parameters from a sample; understand various sampling designs to avoid bias and to maximise representatives of the sample; have the ability to apply these principles of sampling to field surveys for several types of organisms; have the ability to apply these principles of sampling to field surveys for several types of organisms; have the ability to estimate population sizes using capture-recapture techniques; familiarity with the basics of capturing and handling a range of animals; have the ability to design and carry out ecological survey and/or experiment, focussing on a particular organism or group of organisms; have the ability to communicate clearly and concisely both in a written report and in verbal presentations; and have the ability to solve the difficulties of working as part of a small team in the field and to prepare high-quality, team reports.

BIOL391 Advanced Biology 16cp

Spring / Autumn / Annual

Contact Hours: 12 hours practical, seminars per week.

Pre-requisites: Four 200-level (distinction and above)

Co-requisites: Two 300-level

Assessment: Students will conduct 2 research projects; write 2 project reports; give 2 project seminars; write 1 general essay; and sit a written examination.

Subject Description: Two research projects are to be undertaken with different supervisors, designed and chosen in consultation with these academic staff members.

Emphasis may be placed on developing competence in a range of laboratory and field techniques not already familiar to the student. Selection for Advanced Biology is based on merit, and intending students should consult the Coordinator before enrolment.

Subject Objectives: The aim of this subject is to provide students with an introduction to scientific research in two disciplines in Biological Sciences.

BIOL392 Advanced Biology 8cp

Spring / Autumn

Contact Hours: 6 hours practical per week.; seminars

Pre-requisites: Four 200-level (distinction and above)

Co-requisites: Two 300-level

Assessment: Students will conduct 1 research project; write 1 project report; give 1 project seminar; write 1 general essay; and sit a written examination.

Subject Description: One research project is to be undertaken, designed and chosen in consultation with an academic staff member. Emphasis may be placed on developing competence in a range of laboratory and field techniques not already familiar to the student. Selection for Advanced Biology is based on merit, and intending students should consult the Coordinator before enrolment.

Subject Objectives: The aim of this subject is to provide students with an introduction to scientific research in a discipline in Biological Sciences.

BIOL401 Biology Honours 48cp

Annual

Pre-requisites: Passing a major sequence in Biology at 300-level at a standard approved by the Head of the Department

Assessment: Essay, literature review, scientific paper, poster, seminar, thesis.

Subject Description: Students wishing to proceed to honours should consult the Honours Co-ordinator as soon as possible during their third year.

BIOL402 Biology Joint Honours 24cp

Annual

Pre-requisites: Passing a major sequence in Biology at 300-level at a standard approved by the Head of the Department

Co-requisites: Enrolment in a 24 credit point Honours subject offered by another Academic Unit.

Subject Description: Students wishing to proceed to joint honours should consult the Honours Co-ordinator as soon as possible during their third year.

BIOL420 Cell, Protein and Antibody Technology 12cp

Autumn

Contact Hours: 5 hours lecture, Research Project

Pre-requisites: Completion of the third year of the Bachelor of Biotechnology

Assessment: Mini-project 65%; theory exam 25%; tutorial seminar 10%.

Subject Description: The role of natural and recombinant proteins in biotechnology. Aspects of protein 3-dimensional structure and folding, ligand binding and catalysis important in biotechnology.

Extraction and recovery of proteins in the biotechnology industry. Purification and characterisation of proteins. Animal cell and tissue culture: advanced culture techniques, tissue engineering and therapeutic cloning, flow cytometry and genetic engineering. Antibody technology: radio-immunoassay and enzyme-immunoassay techniques, signal amplification strategies.

Subject Objectives: Student should be able to understand the contribution by the technologies of cell culture, protein and monoclonal antibodies to present and impending developments in fundamental research, agriculture, medicine and industry; to comprehend (at an advanced level) the structure-function relationships of proteins and the principles for their isolation, purification and characterisation; to appreciate antibody structure and function (at an advanced level) and understand the current application of these molecules in the field of biotechnology; to foster and promote the development of critical scientific and socially responsible attitudes to ethical issues arising from the implementation of biotechnology.

BIOL421 Nucleic Acid Technology 12cp

Autumn

Contact Hours: 5 hours lectures, Research Project.

Pre-requisites: Completion of the third year of the Bachelor of Biotechnology

Assessment: Mini-project 65%; theory exam 25%; tutorial seminar 10%.

Subject Description: Strategies for cloning of prokaryote and eukaryote genes using plasmid, cosmid, bacteriophage and transposon vector systems. Production and purification of recombinant proteins in bacterial, yeast, plant and animal systems. Plant genetic engineering. Bio-remediation and gene technology. Gene therapy. Transgenic animals. Diagnosis of human genetic disease. Ethical and social implications.

Subject Objectives: Students should possess an understanding of the roles which nucleic acid technology plays (or will play) in biology, biochemistry and biotechnology as research, diagnostic, clinical and therapeutic tools; appreciate, comprehend and perform (BIOL 421 only) the principles and methods involved in recombinant DNA technology; and have critical scientific and ethical attitudes to technological developments which use/have used biotechnology.

BIOL422 Biotechnology Project 24cp

Spring

Contact Hours: Varied-Research Project.

Pre-requisites: BIOL420 and BIOL421

Assessment: Research poster 10%; final thesis 80%; final research seminar 10%.

Subject Description: Under the supervision of staff from the Department of Biological Sciences, the student will undertake a research project in the field of biotechnology and present a written report, poster and seminar on the chosen topic.

Subject Objectives: To complete the final components of the Bachelor of Biotechnology (Honours) degree.

BIOL423 Protein, nucleic acid and cell biotechnology 6cp

Autumn

Pre-requisites: BIOL 303 Biotechnology, 148 c.p. from BCompBioinf.

Restrictions: Assumed knowledge: Computing science, mathematics and statistics; Genetics, molecular biology

Assessment: Presentation of one seminar; written examination.

Subject Description: The subject will provide a comprehensive education in the application of the disciplines of cell biology, molecular biology and biochemistry to biotechnology. Students will investigate recent and emerging technologies used in the generation of products by the biotechnology industry. Topics will include cell culture, protein properties and purification, antibody technology, nucleic acid and recombinant DNA technology. They will consider the social and ethical implications of developments which utilise biotechnology.

Subject Objectives: 1. Understand the contribution by the following technologies to present any impending developments in fundamental research, agriculture, medicine and industry: cell culture, protein and antibodies. 2. Comprehend the structure-function relationships of proteins and the principles for their isolation purification and characterisation. 3. Appreciate antibody structure and function and understand the current application of these molecules in the field of biotechnology. 4. Possess an understanding of the roles which nucleic acid technology plays as a tool in the research, diagnostic, clinical and therapeutic regimes. Appreciate and comprehend the principles and methods involved in recombinant DNA technology. 5. Foster and promote the development of scientifically critical and socially responsible attitudes to ethical issues arising from the implementation of biotechnology.

CHEM101 Chemistry IA: Introductory Physical & General Chemistry 6cp

Autumn

Contact Hours: 26 hours lecture, 13 hours tutorial, 39 hours practical per session.

Pre-requisites: NSW HSC Examination 2U Chemistry (at least 50 marks out of 100) 3U Science (at least 75 marks out of 150) 4U Science (at least 100 marks out of 200)

Assessment: Practical assignments, test, computer assignment, plus written examination.

Subject Description: Atomic theory and structure. Periodic Table and Chemical periodicity. Chemical bonding and shapes of molecules. Stoichiometry. Oxidation-reduction reactions. Acids and bases. Properties of gases and liquids. Thermodynamics and thermochemistry. Chemistry of the environment and radioactivity. Completion of at least a 2 Unit Science course at NSW HSC recommended. Not to count with CHEM103, CHEM104.

CHEM102 Chemistry IB: Introductory Organic & Physical Chemistry 6cp

Spring

Contact Hours: 26 hours lectures, 13 hours tutorial, 39 hours practical per session.

Pre-requisites: NSW HSC Examination, 2U Chemistry (at least 50 marks out of 100), 3U Science (at least 75 marks out of 150), 4U Science (at least 100 marks out of 200)

Subject Descriptions

Exclusions: Not to count for credit with CHEM105

Assessment: Practical assignments, test, computer assignment, plus written examination

Subject Description: Chemical equilibria and equilibrium constants. Acid-base equilibria. Electrochemistry, galvanic cells, Nernst equation and Faraday's laws. Kinetics of chemical reactions. Introductory organic chemistry. Nomenclature, preparation and reactions of alkanes, alkenes, alkynes, and arenes.

Chemistry of alcohols, amines, carbonyl, and other compounds. Reaction mechanisms. Synthetic polymers. Not to count for credit with CHEM105.

CHEM103 Introductory Chemistry For Engineers 6cp

Autumn / Summer 2003/2004

Contact Hours: 39 hours lecture, 18 hours Tutorial/Demonstration, 21 hour practical per session.

Exclusions: Not to count for credit with CHEM101 or CHEM104

Assessment: Practical assignments, test, computer assignment, plus written examination.

Subject Description: Atomic theory, chemical bonding, structure. Simple organic molecules and reactivity. Thermodynamics and thermochemistry. Gases, liquids and solutions. Chemical basis of engineering materials such as cement, adhesives, polymers, fuels, metals and semiconductors. Environmental chemistry-pollution and pollution control. Kinetics and radiation chemistry. Not to count for credit with CHEM101 or CHEM104

CHEM104 Chemistry 1D (Introductory Chemistry) 6cp

Autumn

Contact Hours: 39 hours lectures, 13 hour tutorials, 39 hours practical per session

Pre-requisites: Nil. Students who satisfy the HSC pre-requisites for CHEM101 and CHEM102 are not permitted to enrol.

Exclusions: Not to count for credit with CHEM101 or CHEM103

Assessment: Practical assignments, test, computer assignment, plus written examination.

Subject Description: Atomic theory and structure. Periodic Table and Chemical periodicity. Chemical bonding and shapes of molecules. Stoichiometry. Oxidation-reduction reactions. Acids and bases. Properties of gases and liquids. Thermodynamics and thermochemistry. Chemistry of the environment and radioactivity. Not to count for credit with CHEM101 or CHEM103

CHEM105 Chemistry 1E (Introductory Chemistry) 6cp

Spring

Contact Hours: 39 hours lectures, 13 hours tutorial, 39 hours practical per session.

Pre-requisites: Nil. Students who satisfy the HSC pre-requisite for CHEM101 and CHEM102 are not permitted to enrol

Exclusions: Not to count with CHEM102

Assessment: Practical assignments, test, computer assignment, plus written examination.

Subject Description: Chemical equilibria and equilibrium constants. Acid-base equilibria. Electrochemistry P galvanic cells, Nernst equation and Faraday's laws. Kinetics of chemical reactions. Introductory organic chemistry P nomenclature, preparation and reactions of alkanes, alkenes, alkynes and arenes. Chemistry of alcohols, amines, carbonyl, and other compounds. Reaction mechanisms. Synthetic polymers. Not to count with CHEM102.

CHEM211 Inorganic Chemistry II 6cp

Autumn

Contact Hours: 39 hours lecture & tutorial, 39 hours practical per session.

Pre-requisites: CHEM101/104 and CHEM102/105

Assessment: Practical assignments 20% and quizzes 20%, plus written examination 60%.

Subject Description: Introduction to modern coordination chemistry. The coordinate bond; types of ligands; hard and soft acid-base theory; inorganic kinetics; reaction mechanisms; coordination numbers and geometries; isomerism. Factors controlling the thermodynamic stability of transition metal complexes. Crystal Field theory; magnetochemistry and u.v.-visible spectra of transition metal complexes. Symmetry and symmetry point groups in molecules. Molecular orbital theory of bonding. The chemistry of the noble gases and the transition metals iron, cobalt, nickel, copper, silver and gold.

CHEM212 Organic Chemistry II 6cp

Autumn

Contact Hours: 26 hours lectures, 13 hours tutorials, 39 hours practical per session.

Pre-requisites: CHEM101 and CHEM104 OR CHEM 102 and CHEM105.

Assessment: Practical assignments 20%, quizzes 10%, assignments 15% and written examination 55%.

Subject Description: Modern organic synthetic methods, theory and practice. This includes: an introduction to organic chemical stereochemistry; fundamentals of molecular mechanism; synthetic transformations of organic molecular moieties; applications of spectroscopy.

CHEM213 Molecular Structure, Reactivity and Change 6cp

Spring

Contact Hours: 39 hours lectures & tutorials, 39 hours practical per session

Pre-requisites: CHEM101/ CHEM104 and CHEM102/ CHEM105 & Faculty of Science minimum mathematics requirement

Assessment: Practical, mid-session quiz plus written examination.

Subject Description: When looking at chemical systems, three fundamental questions arise: to what extent will they react, how quickly will they react and what is their structure? This subject explores these topics through the key topics of thermodynamics and kinetics and provides an understanding of experimental studies and their relationship to theory.

These macroscopically observed properties are then discussed in relation to fundamental molecular properties, including an introduction to simple quantum concepts and the rotational/vibrational spectroscopy of diatomic molecules. In addition, colloidal systems, including micellar phases, are used as examples of molecular self-assembly, where intrinsically unstable phases are maintained by kinetic factors.

Subject Objectives: After completion of this subject students will be able to: demonstrate a good understanding of the laws of thermodynamics and thermodynamic functions (DH, DG, DS, m and K) and their application to chemical systems; discuss the importance of activity to chemical systems and do simple calculations involving activity coefficients;

describe the rotational and vibrational energy levels of simple molecules; predict the kinetic behaviour of chemical reactions based on a reaction mechanism; discuss the formation of colloidal systems, including micellar phases, their properties and how there are stabilised.

CHEM214 Analytical and Environmental Chemistry 6cp

Spring

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Prerequisites: CHEM101/CHEM104 and CHEM102/CHEM105 or CHEM103 & Faculty of Science minimum mathematics requirement

Assessment: Practical assignments 30%, Tutorial assignments 15%, and written examination 55%.

Subject Description: This subject is an introduction to analytical chemistry and its application to environmental and biological systems. It will provide an understanding of: variations in sample composition and collection methods, sample preparation and analysis using current instrumentation, and data interpretation using statistics and chemometrics. The material will be presented in lectures, laboratory exercises, a workshop discussion and an on-campus sampling demonstration.

CHEM215 Food Chemistry 6cp

Autumn

Contact Hours: 39 hours lecture & tutorial , 18 hours practicals per session.

Prerequisites: CHEM101/CHEM104 and CHEM102/CHEM105

Assessment: Practical assignments 20% and quiz 20%, plus written examination 60%.

Subject Description: Only listed in the Health & Behavioural Sciences Schedule. This subject is designed as a core subject in the BSc (Nutrition) program. Description: Types of nutrients, energy value of food. Fats, carbohydrates, and proteins in foods. Colloidal systems. Essential trace elements, vitamins. Cooking, preservation and processing of food. Chemical additives and toxins in food.

CHEM218 Special Chemistry Studies 6cp

Spring / Autumn

Contact Hours: 6 hours Lab session etc per week.

Prerequisites: Entry restricted to BSc(Hons) Adv. Candidates.

Assessment: Written report on student's project.

Subject Description: This subject will involve the study of specific research areas of chemistry under the guidance of a member of staff. This study may include research assistance, directed reading, computer-based studies, and library assignments.

CHEM311 Inorganic Chemistry III 8cp

Spring

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Pre-requisites: CHEM211

Assessment: Practical 20%, quizzes 20% and written examination 60%.

Subject Description: UV-visible spectra of transition metal complexes-Magnetochemistry of transition metal complexes. Bioinorganic Chemistry: Interactions of metals, ligands and metal complexes in biological systems. Metalloproteins. Toxic action of metal ions and detoxification. Metallotherapy. Organometallic Chemistry: Metal carbonyls. \

Hydride and hydrocarbon metal complexes. Reactivity of coordinated carbon monoxide and hydrocarbon ligands. Oxidative addition. Fluxional behaviour. Industrial processes employing organometallic reactions. Macrocyclic ligands, metal complexes and their biological significance; supramolecular chemistry and molecular recognition.

CHEM314 Instrumental Analysis 8cp

Autumn

Contact Hours: 39 hours lecture & tutorial , 39 hours practical.

Pre-requisites: CHEM214

Assessment: Coursework (including practical work), quiz and final written exam.

Subject Description: Modern chemical analysis techniques will be presented. These will include the use of spectroscopy, chromatography and electrochemical methods. The subject emphasises the practical aspects of such measurements, and may include off-campus site visits.

CHEM320 Bioinformatics: From Genome to Structure 8cp

Spring

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Pre-requisites: BIOL213

Exclusions: Not to count with BIOL318

Assessment: Practical work 30%, quiz 10%, and final written examination 60%.

Subject Description: The course will be divided into three strands of approximately equal length: bioinformatics; biological macromolecules (proteins and nucleic acids) - structure and function; proteomics. In the practical course, bioinformatics will be explored in computer-based tutorials and practicals. Databases for nucleic acid and protein sequences, structures and other parameters of biological molecules, plus linkages to the scientific literature, will be used to extract information and to compare and analyse these data. Proteomics and protein and nucleic acid structure will also be investigated via computer-based practicals. In the laboratory, the sequence of a dipeptide will be determined and structure/function aspects of the protein, lysozyme, will be analysed.

Subject Descriptions

Subject Objectives: After successful completion of this subject, students should be able to: appreciate the significance and scope of bioinformatics in biology and biotechnology; access and utilise a range of databases with computer-based applications to discover information about genes, their products and biological effects; contrast how biological macromolecules interact and regulate chemical reactions in biology; understand the significance and scope of bioinformatics in biotechnology, pharmaceuticals and medicine; be competent in accessing and utilising biological databases with a range of computer-based applications; understand the methods used to isolate and identify proteins (proteomics).

CHEM321 Organic Synthesis and Reactivity 8cp

Spring

Contact Hours: 39 hours lecture & tutorial, 39 hours practical per session.

Pre-requisites: CHEM212

Assessment: Practical 20%, 3 assignments (spectroscopy/spectroscopy-stereochemistry/molecular modelling) 15%, quizzes 15%, and written examination 50%.

Subject Description: Reactive intermediates: free radicals, carbenes, arenes: generation, determination, reactions. Stereochemistry: physical detection of stereochemistry by n.m.r., C.D. etc; enantioselective synthesis and computer modelling. Synthesis: carbocyclic synthesis and theory and applications to natural product synthesis. Heterocycles: synthesis, reactions and applications of common heterocycles.

CHEM327 Environmental Chemistry 8cp

Autumn

Contact Hours: 39 hours lecture & tutorial, 39 hours practical per session.

Pre-requisites: CHEM214

Assessment: Literature review/laboratory report 40%, written examination 50%, quiz 10%

Subject Description: The environment depends on complex interactions in chemical, physical and biological processes both natural and anthropogenic in origin. This course considers three major strands: atmospheric chemistry, aquatic chemistry, and soil chemistry. These cover the role of chemistry in the atmosphere, in soils and in water, and includes pollution measurement, pollution control and the effects of major organic and inorganic pollutants.

CHEM330 Medicinal Chemistry 8cp

Spring

Contact Hours: 39 hours lecture & tutorial, 39 hours practical.

Pre-requisites: CHEM212 and BIOL214 and BMS202. Entry restricted to BMedChem candidates.

Assessment: Final examination 55%, practical work 20%, laboratory mini project 5%, literature assignment 5% and seminar based on assignment 5%, quiz 10%.

Subject Description: The concepts, principles and applications of medicinal chemistry are examined and include: drug lead discovery, investigation into the key molecular features necessary for medicinal action, drug metabolism, stereochemistry/chirality and drug action, modern methods in drug design including computer-aided molecular modelling.

This course also has guest lecturers who are experts in the varying fields of medicinal chemistry. This could include speakers from pharmaceutical companies or from research institutes.

CHEM340 Chemistry Laboratory Project 8cp

Summer 2003/2004 / Spring / Autumn

Contact Hours: 6 hour per week plus seminars etc.

Pre-requisites: Four 200-level Chemistry subjects. Restricted entry. Admission by application to Head of Department of Chemistry

Co-requisites: Two 300-level Chemistry subjects

Assessment: Report on project and literature review 80%. Seminar on project 20%.

Subject Description: Research projects are undertaken under the direct guidance of an academic supervisor, chosen after consultation with academic staff and the Head of Department. The projects will introduce students to a range of advanced experimental techniques, and familiarise them with the scientific approach to research.

Students must attend Departmental seminars. Selection for this laboratory project is based on merit, and intending students should consult with the Head before enrolment.

CHEM350 Principles of Pharmacology 8cp

Autumn

Contact Hours: 39 hours lecture & tutorial, 39 hours practical per session.

Pre-requisites: CHEM212 or BIOL214 and BMS202. CHEM350 is normally restricted to BMedChem candidates. Other students should contact the co-ordinator.

Assessment: Practical 20%, library assignment and seminar 20%, written examination and test 60%.

Subject Description: This course is designed to introduce students to the basic concepts of pharmacology. Topics covered will include, receptors and molecular basis of drug action, drug disposition and bioavailability, kinetics of drug action, factors affecting drug activity, in vitro and in vivo screening procedures, pharmacology of prototype drugs, and drug interactions.

Subject Objectives: At the end of this course you should have an understanding of the general nature of pharmacology, basic qualitative and quantitative concepts in molecular pharmacology including receptors, agonists, antagonists, dose-response curves, efficacy and affinity, and desensitisation. You should also have an appreciation of the importance of pharmacokinetics in drug action, together with knowledge of drug effects, including clinical aspects, on the autonomic and sympathetic and parasympathetic nervous systems, and on the cardiovascular system, plus drugs and the kidney, histamine and serotonin, local and general anaesthetics, respiratory drugs, alcohol and drug abuse, and sex hormones.

CHEM364 Molecular Structure and Spectroscopy 8cp

Autumn

Contact Hours: 39 hours lecture & tutorial, 39 hours practical per session.

Pre-requisites: CHEM213

Assessment: Written final examination 60%, practical & tutorial assignments 30%, mid-session quiz 10%.

Subject Description: Spectroscopy in its many forms is one of the most important tools we have for both molecular structure determinations and in quantitative chemical analysis. This multi-faceted course covers the fundamentals and many uses of spectroscopy for molecular structure determination and analysis. It includes optical (infrared, visible and ultraviolet), mass and nuclear magnetic resonance (NMR) spectroscopy and a formal treatment of molecular symmetry. Applications to organic, inorganic, biological and gas-phase systems are covered.

CHEM401 Chemistry Honours 48cp

Autumn / Annual / Spring 2003/Autumn 2004

Pre-requisites: Normally at least 32 credit points of 300-level Chemistry subjects at an appropriate standard (credit average). Not to count with CHEM402 or 403, 422.

Assessment: Coursework (15%); Research project, thesis and seminars (85%)

Subject Description: Coursework: advanced topics and skills for chemistry research including oral and written communication, project management, library techniques and OH&S. Research Project: each year, available projects are provided by the Department of Chemistry. See Co-ordinator or Head of Department

CHEM402 Chemistry Honours Part I For Part-Time Students 24cp

Annual / Spring 2003/Autumn 2004

Pre-requisites: Normally 32 credit points of 300-level Chemistry subjects at an appropriate standard. Not to count with CHEM401.

Assessment: Coursework (15%); research project, thesis and seminars (85%).

Subject Description: Coursework: advanced topics and skills for chemistry research including oral and written communication, project management, library techniques and OH&S. Research Project: each year, available projects are provided by the Department of Chemistry. See Co-ordinator or Head of Department

CHEM403 Chemistry Honours Part 2 for Part-Time Students 24cp

Annual / Spring 2003/Autumn 2004

Pre-requisites: Normally 32 credit points of 300-level Chemistry subjects at an appropriate standard. Not to count with CHEM401

Assessment: Coursework (15%); Research project, thesis and seminars (85%)

Subject Description: Coursework: advanced topics and skills for chemistry research including oral and written communication, project management, library techniques and OH&S. Research Project: each year, available projects are provided by the Department of Chemistry. See Co-ordinator or Head of Department

CHEM405 Chemistry Joint Honours 24cp

Annual

Pre-requisites: Normally 24 credit points of 300-level Chemistry subjects at an appropriate standard. Entry is subject to the approval of the Head of Department of Chemistry. This subject is taken with 24 credit points at 400-level from another Department.

Assessment: Coursework (15%); Research project, thesis and seminars (85%)

Subject Description: A list of topics available will be provided by the Department. See Co-ordinator or Head of Department.

CHEM430 Selected Topics in Medicinal Chemistry 12cp

Annual

Contact Hours: 84 hours lectures & tutorials per session.

Pre-requisites: CHEM330. Entry restricted to BMedChem candidates.

Assessment: Written examinations 60%, literature assignments 10%, project essay 20%, seminar 10%.

Subject Description: Specialist courses in aspects of medicinal chemistry and related areas. Topics will include: structure-based ligand design (including computer-aided drug design); structure-pharmacological property relationships; synthesis and applications of radiopharmaceuticals; drug stability and formulation; toxicology and metabolism; advanced synthetic chemistry (including asymmetric synthesis and chiral drugs); bioactive natural products and drug development (including medicinal plant studies).

CHEM431 Selected Topics in Medicinal Chemistry Part 1 6cp

Spring

Contact Hours: 42 hours lectures & tutorials per session.

Pre-requisites: CHEM330. Entry restricted to BMedChem candidates who commence BMedChem(Hons) mid-year.

Assessment: Written examinations 60%, literature assignments 10%, project essay 20%, seminar 10%.

Subject Description: Specialist courses in aspects of medicinal chemistry and related areas. Topics will include: structure-based ligand design (including computer-aided drug design); structure-pharmacological property relationships; synthesis and applications of radiopharmaceuticals; drug stability and formulation; toxicology and metabolism; advanced synthetic chemistry (including asymmetric synthesis and chiral drugs); bioactive natural products and drug development (including medicinal plant studies).

CHEM432 Selected Topics in Medicinal Chemistry Part 2 6cp

Autumn Wollongong On Campus

Contact Hours: 42 hours lectures & tutorials.

Pre-requisites: CHEM330. Entry restricted to BMedChem candidates.

Assessment: Written examinations 60%, literature assignments 10%, project essay 20%

Subject Descriptions

Subject Description: Specialist courses in aspects of medicinal chemistry and related areas. Topics will include: structure-based ligand design (including computer-aided drug design); structure-pharmacological property relationships; synthesis and applications of radiopharmaceuticals; drug stability and formulation; toxicology and metabolism; advanced synthetic chemistry (including asymmetric synthesis and chiral drugs); bioactive natural products and drug development (including medicinal plant studies).

CHEM450 Medicinal Chemistry Project 28cp

Annual / Spring 2003/Summer 2004

Pre-requisites: CHEM330 and CHEM350. Entry restricted to BMedChem candidates.

Assessment: Based on a research project thesis 90% and research seminar 10%

Subject Description: A list of research projects in medicinal chemistry available for study in any one year will be provided by the Department of Chemistry. The development of appropriate joint projects within or outside the University is actively encouraged.

CHEM451 Medicinal Chemistry Project Part 114cp

Spring

Pre-requisites: CHEM330 and CHEM350. Entry restricted to BMedChem candidates.

Assessment: Based on research project thesis 90% and research seminar 10%

Subject Description: Research project in medicinal chemistry. For students commencing BMedChem research project in Session 2.

CHEM452 Medicinal Chemistry Project Part 214cp

Autumn

Pre-requisites: CHEM330, CHEM350 and CHEM451. Entry restricted to BMedChem candidates.

Assessment: Based on a research project thesis 90% and research seminar 10%

Subject Description: Research project in medicinal chemistry.

ENVI391 Environmental Science 8cp

Spring

Contact Hours: 2 hours lecture, 1 hour tutorial, 3 hours practical per week.

Pre-requisites: Enrolment in BSc (Environment) and completion of BIOL251, CHEM214 and GEOS222

Exclusions: Not to be counted with ENVI491

Assessment: Assignments 25%; major project report 35%; final examination 40%.

Subject Description: This subject builds on the interdisciplinary knowledge gained through the first and second year BSc(Environment) program. Focus is on interactions between biological, chemical, geological and geographical factors and processes in major ecosystems including coral reefs, coasts, estuaries, rivers, lakes, alpine, forests, and grasslands. Existing and potential impacts that influence environmental management will also be investigated such as water and waste management, climate change, population growth, and social and political factors.

Subject Objectives: The principal objective of this subject is that students should understand the components of their physical environment, and how these interact to create the complex world in which we live. By the end of the subject they should be able: describe the physical, biological and chemical features of major ecosystems; evaluate and quantify common environmental impacts on ecosystems; understand and evaluate important environmental science concepts such as total catchment management; coastal zone management; analyze, interpret and effectively report field and laboratory data.

ENVI403 Research Report 24cp

Autumn / Annual / Spring 2003/Autumn 2004

Pre-requisites: Enrolled in final year of BEnvSc.

Assessment: Major report 100%.

Subject Description: A research project for an organisation involved with solving environmental problems will be allocated to candidates in consultation with the Professor of Environmental Science.

ENVI491 Environmental Science and Systems 8cp

Spring

Contact Hours: 2 hours lecture, 1 hour tutorial 3 hours practical per week.

Pre-requisites: Enrolment in BEnvSc and completion of BIOL251, CHEM214, GEOS222 and GEOS214

Exclusions: Not to be counted with ENVI391

Assessment: Assignments 25%; major project report 35%; final examination 40%.

Subject Description: This subject builds on the interdisciplinary knowledge gained through the first and second year BEnvSc program. Focus is on interactions between biological, chemical, geological and geographical factors and processes in major ecosystems including coral reefs, coasts, estuaries, rivers, lakes, alpine, forests, and grasslands. Existing and potential impacts that influence environmental management will also be investigated such as water and waste management, climate change, population growth, and social and political factors.

Subject Objectives: The principal objective of this subject is that students should understand the components of their physical environment, and how these interact to create the complex world in which we live. By the end of the subject they should be able to: describe the physical, biological and chemical features of major ecosystems; evaluate and quantify common environmental impacts on ecosystems; understand and evaluate important environmental science concepts such as total catchment management; coastal zone management; analyze, interpret and effectively report field and laboratory data.

GEOS102 Earth Environments and Resources 6cp

Spring

Contact Hours: 5 hours per week, 1 day field work per week.

Pre-requisites: Prior completion of GEOS111 is recommended

Exclusions: Not to count with GEOS251 or GEOS252

Assessment: 40% written examination, 10% multiple choice tests, 5% field tests, 10% practical tests, 35% practical examination.

Subject Description: The frequent conflicts between resource utilisation and its environmental consequences are of major concern in modern societies. This subject considers the implications and environmental and geological aspects of resource utilisation on Earth. Topics include economic geology: gold, metals, water, coal, oil and gas; industrial minerals; geophysical exploration; mining and resources; sedimentary processes, products and environments of deposition; fossils and palaeoecology.

GEOS111 Planet Earth 6cp

Autumn

Contact Hours: 5 hours per week, 1 day field work.

Exclusions: Not to count with GEOS251 or GEOS252

Assessment: 40% written examination, 10% multiple choice tests, 5% field tests, 10% practical tests, 35% practical examination.

Subject Description: How does the solid planet Earth function and of what does it consist? This subject provides an introduction to earth sciences by considering topics such as geological time, the solar system; the interior of Earth; tectonics and structural geology; crystals; minerals; volcanoes and volcanic processes; and characteristics of igneous, sedimentary and metamorphic rocks.

GEOS112 Physical Environments 6cp

Autumn

Contact Hours: 5 hours per week, 1 day field work.

Assessment: 1 examination, 2 essays, practical work

Subject Description: This subject examines the physical geography of our planet including the character of the oceans and their interaction with the land masses, the behaviour of the atmosphere, world-wide weather and climatic patterns, climatic change, major distributions of soil and biota, and the Earth's landforms. The latter includes information on weathering, theories of landform evolution, hillslope processes, glaciation, hydrology, river and coastal processes, and deserts. Laboratory classes concentrate on map and air photograph interpretation.

GEOS142 The Human Environment: Problems and Change 6cp

Spring Shoalhaven On Campus

Spring Wollongong On Campus

Spring Bega Education Access Centre On Campus

Spring Batemans Bay On Campus

Spring Moss Vale Flexible

Assessment: 2 examinations, practical work

Subject Description: This subject introduces students to the central themes of human geography. It aims to increase awareness and understanding of the impact of societies upon the environment. In particular it deals with questions relating to urban and political change, economic development and patterns of resource distribution. Practical classes introduce basic graphical, mapping and statistical skills and apply them to the analysis of course-relevant problems.

GEOS205 Field Geology I 6cp

Summer Wollongong Flexible
2003/2004

Contact Hours: 12 days field tutorial

Pre-requisites: GEOS111 or satisfactory progress in GEOS102

Exclusions: Not to count with GEOS301

Assessment: Field exercises (55%), field attitude and competence (10%), field report (35%)

Subject Description: The subject is taught and assessed on the basis of work completed during a 12 day field tutorial to view, describe and interpret well-exposed, coastal, rock sequences on the south coast of New South Wales. A variety of techniques will be used for measurement of stratigraphic sections, description and interpretation of geological structures, detailed sedimentary and volcanic facies assessment, and the organisation and production of geological maps, field mapping exercises and reports.

Subject Objectives: On successful completion of this subject, students will be able to: 1. Measure and describe field observations from a variety of geological environments; 2. Record via written notes and graphic logs field observations from a variety of geological environments; 3. Discuss and critically evaluate field-based geological data in both verbal and written formats; 4. Appreciate the relevance of localised field observations to large scale geological structures; 5. Interpret geological events and environments from field observations; 6. Work as part of a small team to measure field data; and 7. Appreciate the safety aspects relating to field work, including the safety and welfare of others.

GEOS214 Soils, Landscape and Hydrology 6cp

Spring

Contact Hours: 4 hours lecture/ practical per week 2 days field work

Pre-requisites: 30 credit points of 100-level subjects, normally including both GEOS111 and GEOS112

Assessment: Essays/field/practical assignments; final examination

Subject Description: The interdependence of landform, hydrology and soil, together with time and place, are the major factors influencing landscape evolution. This subject examines denudation of highlands; survival of ancient landscapes; climatic and geomorphic controls on landforms; erosion; weathering processes and the formation of soils, laterites, silcretes and calcretes; soil surveying: environmental records of lakes; groundwater and surface-water processes and chemistry; dating of land-surfaces and groundwater; the hydrological cycle.

GEOS217 Field and Spatial Techniques 6cp

Autumn

Pre-requisites: 12 credit points of 100-level GEOS subjects

Assessment: practical exercises, field reports, short tests and seminar/essay 70%; theory examination 30%

Subject Description: This field-based subject introduces the basic techniques used to collect and interpret field data. Concepts include determination of location (using maps, global positioning systems, basic surveying), methods of drilling and augering, section measuring, and drill-hole logging.

Subject Descriptions

Field interpretations will consider flow regime concepts; styles and mechanisms of sedimentary deposits; sedimentary structures; analysis of palaeocurrents; and sedimentary environments. Laboratory classes provide skills for construction and interpretation of graphic logs, fence diagrams and cross-sections.

GEOS219 The Earth in Crisis 6cp

Autumn

Contact Hours: 2 hours lectures, 2 hours practical per week; 1 day field tutorial

Pre-requisites: 12 credit points of 100-level GEOS subjects

Exclusions: GEOS201 AND GEOS303 (SUBJECTS DELETED)

Assessment: Practical tests, field report, essay, final examination

Subject Description: The subject will investigate the effects and the likely causes of the critical events that have shaped the Earth and its life forms throughout its 4.55 billion year history. Topics include: impacts of extraterrestrial objects; the 'snowball' Earth; the Cambrian explosion of life forms; major extinction events, particularly at the end of the Permian and end of the Cretaceous; the 'Mediterranean desert'; styles and mechanisms of volcanic eruptions; distribution and characteristic features of erupted volcanic products; major earthquakes.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. discuss and critically evaluate data on the causes and effects of global events 2. critically evaluate information sources 3. describe and interpret catastrophic events 4. measure, describe, record and interpret field observations on volcanic sequences

5. understand critical events in Earth's evolution in terms of the deposits formed; and 6. appreciate the relevance of global events to the evolution of Earth and its life forms.

GEOS220 Climate and Natural Hazards 6cp

Autumn

Contact Hours: 4 hours lecture /practical per week, field tutorial.

Pre-requisites: Normally 12 credit points of 1st year GEOS subjects

Assessment: practical test; research report/essay; final examination

Subject Description: Basic processes leading to climatic and geophysical hazards are described. Responses to such hazards are set within the historical context of past climates and disasters. The human impact on climate, including enhanced 'greenhouse' warming, sulphate aerosol pollution, expanding cities and increased atmospheric dust, is assessed with respect to past climatic change. Practicals complement lectures, while providing the basic techniques for collecting, analysing and presenting climate and hazard information.

GEOS222 Biogeography 6cp

Autumn

Contact Hours: 5 hours lecture / practical per week, 2 days field work.

Pre-requisites: GEOS112 or BIOL104

Assessment: essay, laboratory reports, research report, final examination

Subject Description: Biogeography is the study of the distribution of plants and animals and their interaction with the physical environment. This subject examines the present distribution of vegetation in relation to climate, topography and soils at global and local scales. Field methods of vegetation sampling and mapping are emphasised, as well as quantitative data analysis. The evidence for the evolution of Gondwanan flora and fauna is examined and related to climatic and geological changes.

GEOS231 Environmental Impact of Societies 6cp

Spring

Contact Hours: 5 hours lecture practical /tutorial per week, 2 days field work.

Pre-requisites: At least 30 cp of 100-level subjects normally including GEOS112

Assessment: essays/field/practical assignments; final examination

Subject Description: The rise of environmental lobby groups and the continuing debate over wilderness preservation, sustainable development and pollution testify to the present global and Australian concern about the impacts of human communities on the environment. These concerns are considered in terms of processes causing adverse impacts, means of minimising these impacts, and resolution of conflicts between competing land uses. Topics include water management, land degradation, mining, and urban and industrial pollution.

GEOS233 Discovering Downunder: a Geography of Australia 6cp

Spring

Contact Hours: 2 hours lectures, 2 hr seminar/workshop per week, 1-2 days fieldwork

Pre-requisites: Normally 12 credit points of 100-level subjects

Assessment: Essay 30%, Field report 15%, Seminar 15%, Research report 40%

Subject Description: This is a broad yet coherent overview of the physical and human environments of contemporary Australia. How did Uluru and the Great Barrier Reef form? Why is Sydney particularly vulnerable to bushfires? Which is the most multicultural Australian city? Where is the Back of Bourke? Within individual topics we emphasise the importance of spatial and temporal scale, interactions between people and the environment, and key research questions. Topics include landforms; climate; vegetation; coasts; rivers and deserts; indigenous Australia; population; industry and agriculture; cities, suburbs and rural settlement; and interactions with Australia's near neighbours.

Subject Objectives: On successful completion of this subject, students will be able to: 1. Outline fundamental features of Australia's physical and human environments 2. Explain key interactions of physical and social processes that have shaped contemporary Australia 3. Demonstrate detailed knowledge in a selected area of Australian geography, based on independent and/or team research 4. Demonstrate skills in oral and written communication.

GEOS239 Remote Sensing of the Environment 6cp**Spring****Contact Hours:** 5 hours lecture/ practical per week, field tutorial**Pre-requisites:** At least 30 cp of 100-level subjects normally including GEOS112**Assessment:** essay, practical exercises, project, final examination**Subject Description:** This subject introduces the principles and techniques for identifying and mapping environmental features using images obtained from satellites and aircraft. Satellite imagery from Landsat, SPOT, NOAA and ERS will be examined. Case studies will be used to illustrate the multidisciplinary scope of remote sensing. Topics include environmental monitoring, vegetation analysis, geological exploration and urban planning. Practical work involves the development of interpretation skills as well as computer-based digital analysis.**GEOS242 Living in Cities 6cp****Autumn****Pre-requisites:** Normally GEOS142**Assessment:** tutorial/practical assignments; field report; essay; final examination**Subject Description:** This subject examines the experience of living in cities, their social construction and the interpretation of urban landscapes. Explicit attention is focused on the mosaic of social worlds which exist within the city, including the sense of community and residential segregation. Problems such as inequitable access to resources and locational conflict are also examined. The subject explicitly considers a variety of perspectives, data sources and basic techniques of urban analysis.**GEOS243 The Bush and Beyond: Rural Society in Australia 6cp****Autumn** Wollongong On Campus**Autumn** Shoalhaven Flexible**Autumn** Bega Education Access Centre Flexible**Autumn** Batemans Bay Flexible**Pre-requisites:** Normally GEOS142**Assessment:** essay, tutorial paper, practical/field assignments, final examination**Subject Description:** Changing global markets and technologies have created increasing economic difficulties for the Australian rural sector. Adverse economic conditions have contributed to rural depopulation, declining services and widespread land degradation and at the same time reduced the capacity of rural communities to respond to these problems. This subject examines the linkages between global development, trade agreements and agricultural markets, and Australian rural restructuring and social and environmental conditions.**GEOS246 A Hungry World: Food Resources 6cp and the World Economy****Spring****Contact Hours:** 2 hours lecture/2hour practical.**Pre-requisites:** Normally GEOS142**Assessment:** essay, tutorial papers, practical assignments, final examination**Subject Description:** Inequalities in the distribution of food resources are evident at local to international scales. This subject examines the structural causes of hunger on a world political-economy scale, and the physical, demographic, social and technological forces involved in the production and distribution of food resources. The causes and consequences of global economic restructuring on food production and resources are examined for old, new and least industrialised countries.**GEOS251 Geology for Engineers I 6cp****Spring** Wollongong On Campus**Spring** Shoalhaven On Campus**Contact Hours:** 5 hours lecture/ practical.**Restrictions:** This subject is restricted to students enrolled in a Bachelor of Engineering degree**Exclusions:** Not to count for credit with: GEOS111 and GEOS102**Assessment:** multiple choice and practical tests in the field and laboratory 30%; 1 practical examination 40%, theory examination 30%**Subject Description:** This subject provides an introduction to geology applied to engineering. Topics include rock-forming minerals; petrology and physical properties of igneous, sedimentary and metamorphic rocks; weathering and erosion; basic geological structures and identification of unstable rock masses; geological mapping and three-point problems; geological controls on groundwater flow and chemistry; geophysics; site investigations; relationship between geology and various engineering works such as excavations, tunnels, dams and foundations.**GEOS252 Geology for Engineers II 6cp****Spring****Contact Hours:** 5 hours per week**Restrictions:** This subject is restricted to students enrolled in a Bachelor of Engineering degree**Exclusions:** Not to count for credit with: GEOS111 and GEOS102**Assessment:** class assessment including one or more of class tests, assignments, field reports, practical examination 50% and theory examination 50%**Subject Description:** GEOS252 builds on the concepts given in GEOS251 as well as reviewing mining geology. Topics include geological problems related to resource calculations; ore minerals; ore deposit genesis and implications for mining resulting from the geology of the deposits; geological basis for environmental problems; geology and mine site rehabilitation; coal formation and coal geology; geology of coal seam gas; geophysical techniques applied to mining; relevant case studies.**GEOS292 Special Geosciences Studies 6cp****Spring / Autumn****Contact Hours:** 6 hours per week.**Pre-requisites:** 12 credit points of 100-Level Geoscience subjects. Enrolment in BSc(Advanced) degree**Assessment:** project report 70%, literature review presentations/seminars/examinations 30%

Subject Descriptions

Subject Description: This subject involves the study of specific research topics in Geosciences under the guidance of a member of staff. The study may include research assistance, directed reading, computer-based studies, library assignments. Emphasis will be placed on the appropriate design and execution of field or laboratory experiments and/or studies involving the analysis and interpretation of data. Students will develop skills in the acquisition and presentation of data in verbal and written form.

Subject Objectives: At the conclusion of this subject students should: Develop an understanding of the principles of Geosciences research methodologies. Be able to understand the designing, implementation and recording of a Geosciences field study, and/or laboratory project. Be competent in the analysis and interpretation of scientific results. Be able to evaluate and synthesise scientific literature. Have developed skills necessary for the acquisition of information, for example computer searches of library data bases. Be able to effectively present both oral and written scientific reports.

Be able to efficiently compile a major research report modelled on scientific publications. Have increased their knowledge of Geosciences relevant to the research topic studied.

GEOS302 Basin Resources 8cp

Autumn

Contact Hours: 6 hours lecture/practical, up to 5 days field work

Pre-requisites: GEOS217

Assessment: practical examinations, exercises and tests, seminars 60%; theory examination 40%

Subject Description: This subject covers major concepts in fossil fuel resources. Topics include environments of formation and properties of coal, petroleum and oil shale; coalification and petroleum maturation; assessment of coal type and rank; petroleum source rocks;

applications of geophysics to petroleum and coal exploration; geophysical well logging; seismic stratigraphy; and burial and thermal history of sedimentary basins.

GEOS304 Dynamic Earth 8cp

Autumn

Contact Hours: 2 hours lecture /2 hours practical per week.

Pre-requisites: GEOS217

Assessment: theory and practical assignments, seminar, theory and practical tests, and field reports 60%; theory examination 40%

Subject Description: The subject provides an overview of the dynamic Earth with analysis of lithospheric processes of deformation. Topics covered in the subject include: plate tectonics, deformation of the crust and modern techniques in structural geology and tectonics. The principles of stress, strain and deformation are taught and applied to the understanding of rock structures. Aspects of the tectonic evolution of orogenic belts, including eastern Australian examples, are also dealt with.

GEOS305 Field Geology II 8cp

Spring Wollongong Flexible

Contact Hours: 12 days field tutorial

Pre-requisites: GEOS205 or GEOS217

Exclusions: Not to count with GEOS301

Assessment: Field exercises (40%), field attitude and competence (10%), field report (50%)

Subject Description: The subject is taught as a 12-day field tutorial usually conducted in the Lachlan Fold Belt of New South Wales. A number of field exercises are undertaken including mapping and structural analysis of selected areas in small groups of students. Exercises include mapping sedimentary, volcanic and granitic rocks. Field data are collected on each of the exercises, and maps, cross-sections, and stratigraphic sections are compiled along with written reports. Assessment is based on submission of reports on the different exercises during and at the end of the field tutorial.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Undertake geological mapping and structural analysis of selected areas; 2. Take field notes and record information from available outcrops; 3. Compile collected field data into geological maps and cross-sections; 4. Critically analyse field data both verbally and in writing; 5. Interpret depositional environments and modes of formation of rocks from collected field data; 6. Work as part of a team in the collection of field data; and 7. Comprehend safety aspects relating to field work including the welfare and safety of others.

GEOS307 Mineral Resources 8cp

Spring

Contact Hours: 4 hours lecture/ practical per week, 4 days field work.

Pre-requisites: Normally 12 cp of 200-level Geosciences; prior completion of GEOS201 is recommended

Assessment: practical assignments, tests, projects and seminar 50%; theory examination 50%

Subject Description: This subject covers the major concepts of metalliferous deposits. Topics include types, occurrences and genesis of ores in igneous, metamorphic and sedimentary rocks; geochemical exploration; applications of geophysics to mineral exploration, especially gravity and magnetic methods, radiometric surveys, and electrical and electromagnetic techniques; airborne geophysical and image analysis techniques; and resource assessment. Professional ethics in the mineral industry and the classification of ore reserves and resources are discussed.

GEOS315 Field Studies in Physical Geography 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: 12 credit points from GEOS214, GEOS220, GEOS222, GEOS231, GEOS234 and GEOS239

Co-requisites: 8 cp of 300-level Physical Geography

Assessment: field reports, major project, seminars

Subject Description: Fieldwork will be carried out in the June/July intersession break plus one weekend during session. This will include a detailed program of field observation, description, mapping, surveying, sediment sampling, augering, stratigraphic interpretation, soil description and mapping, vegetation description and mapping, field sampling techniques, air photograph interpretation and satellite image interpretation.

GEOS321 Fluvial Geomorphology, Sedimentology and River Management 8cp**Autumn****Contact Hours:** 5 hours per week, 5 days fieldwork**Pre-requisites:** 12 credit points from GEOS201, GEOS214, GEOS217, GEOS220, GEOS222, GEOS231, GEOS234 and GEOS239**Assessment:** 10% practical exam, 20% 2 essays, 20% field reports, 10% test, 40% written exam

Subject Description: Rivers play a dynamic role in shaping the Earth's landforms (geomorphology), constructing sedimentary sequences of economic importance (sedimentology), and presenting flood and erosion hazards, all of which greatly influence human use of the Earth's surface. This subject examines processes forming and modifying contemporary drainage basins, interprets fluvial sedimentary records and relates changes in these records to variations in climate and depositional environment. Particular attention is given to human modification and the management of river systems.

GEOS331 Environmental Management and Decision Making 8cp**Spring****Contact Hours:** Not on offer in 2003**Pre-requisites:** At least 12 credit points of 200-Level Geoscience subjects**Assessment:** research essay, tutorials, tutorial paper, final examination

Subject Description: Political, institutional, economic and geographic factors which influence environmental management are analysed in this subject. Particular attention is given to examining current approaches to environmental decision-making, assessment and evaluation. Emphasis is placed on the influence of political philosophies and social value systems, including those of indigenous peoples. Illustrations are drawn from a wide range of environmental issues, mainly from Australia, and commonly from the interface of human and physical geography.

GEOS333 Cultural Heritage Management 8cp**Autumn****Contact Hours:** 2 hours lectures, 3 hr practical per week, 1-2 days fieldwork**Pre-requisites:** Normally 12 credit points of 200-level GEOS subjects**Co-requisites:** Not to count with GEOS348**Assessment:** essay, practical reports, research report, final examination

Subject Description: Australia's outstanding heritage places include a range of sites and landscapes that have special value for current and future generations. Some, such as Kakadu, are world famous. Others are buildings important to local communities.

This subject is an introduction to the concepts and practice of cultural heritage management. Topics include the distinction between natural and cultural heritage; assessing significance; cultural landscapes; archaeological heritage; Aboriginal heritage; and restoration/preservation. The practical program focuses on legislative and policy issues at a range of scales, from the World Heritage process down to local council development applications. It provides vocationally relevant research skills.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Critically evaluate key concepts in cultural heritage management. 2. Explain Australia's contribution to recent international heritage debates. 3. Synthesise relevant inter-disciplinary evidence. 4. Demonstrate an understanding of heritage legislation relevant to NSW. 5. Demonstrate an understanding of heritage assessment processes and procedures, including appropriate community consultation.

GEOS339 Geographic Information Systems 8cp**Autumn****Contact Hours:** 5 hours per week**Pre-requisites:** 12 credit points from 200-Level or 300-Level Geosciences; prior completion of GEOS239 is recommended. Science Faculty Computer Literacy**Assessment:** essay, practical report, final examination

Subject Description: Geographic Information Systems (GIS) are computerised systems enabling storage, manipulation and display of spatial data. GIS can be used to model past and future scenarios, such as the effects of climate change, population growth or bushfire distribution. This course examines the principles of GIS, with an emphasis on natural resource management. It covers data acquisition, spatial databases, vector and raster systems, georeferencing, digital terrain modelling, analysis of errors and accuracy standards, and applications of GIS.

GEOS347 Northern Neighbours: Economic & Social Change in Asia Pacific Rim 8cp**Autumn****Contact Hours:** 5 hours per week**Pre-requisites:** 12cp of 2nd year geoscience subjects or 6 credit points of 200-Level Economics or Sociology**Assessment:** research project/essay/seminar papers, field and practical assignments, final examination

Subject Description: Employers often seek graduates with demonstrated skills in team work, critical thinking, oral communication and report writing. This subject is designed to enable students to develop these skills. The lecture content is designed to enable students to critically study contemporary social and economic problems in the territory known as Pacific Asia employing ideas developed in Human Geography. Underpinning the design of practicals is the objective that students will learn skills to transfer into their chosen career paths. Proficiency in three areas is concentrated upon in this subject: qualitative research, team work and presentation skills.

GEOS349 Population, Health and Environment 8cp**Spring****Pre-requisites:** 12 credit points from 2nd year geoscience subjects or 6 credit points of 200-Level Public Health or Sociology**Assessment:** research project/essay/seminar papers, field and practical assignments, final examination

Subject Description: Questions relating to population and health are important in all societies. This subject considers the processes and outcomes of demographic change (fertility, mortality, migration), compositional variation (population size, structure and growth), epidemiological transition (health status) and distribution.

Subject Descriptions

Examples are drawn from both 'developed' and 'less developed' countries. Attention will also be given to population and health regulating policies and programs, particularly the implications for the provision of health care.

GEOS381 Directed Studies in Geosciences A8cp

Spring / Autumn / Annual

Contact Hours: 2 hours tutorial/seminar/lecture per week, field work.

Pre-requisites: 8 credit points of 300-Level Geosciences

Assessment: seminar presentation, essays, research report

Subject Description: This subject consists of directed reading, field and laboratory work (as required) and writing leading to the production of a major research essay/project report or reports in a field selected by the student and approved by the Supervisor.

GEOS382 Directed Studies in Geosciences B8cp

Spring / Autumn / Annual

Contact Hours: 2 hours tutorial/seminar/lecture per week, field work

Pre-requisites: 8 credit points of 300-Level Geosciences

Assessment: seminar presentation, essays, research report

Subject Description: This subject consists of directed reading, field and laboratory work (as required) and writing leading to the production of a major research essay/project report or reports in a field selected by the student and approved by the Supervisor.

GEOS401 Geosciences Honours 48cp

Spring 2003/Autumn 2004 / Annual

Restrictions: Entry restricted to students who have completed a Geoscience major with a credit average in the area of specialisation

Assessment: based upon thesis examination

Subject Description: Final-year Honours students are required to write a thesis of approximately 20-25,000 words on an approved topic embodying the results of a piece of supervised research and to participate in a seminar program.

GEOS402 Geosciences Joint Honours 24cp

Annual

Restrictions: Joint Honours candidates must have satisfied the requirements for admission to Honours in both disciplines

Assessment: seminar papers, examinations, thesis

Subject Description: Students enrolling in this subject must: (1) have completed a program meeting the requirements for admission to Honours in Geosciences and a cognate discipline; (2) write a thesis on a topic acceptable to and supervised by each academic unit; (3) complete such course work as shall be determined by the Chairperson of each academic unit.

GEOS403 Geoinformatics Honours 36cp

Annual

Contact Hours: Supervised research: 3 hours per week
Seminars: averaging 1 hour per week over two sessions.

Pre-requisites: Completion of 144cp of BComp Geoinformatic degree, with WAM greater than or equal to 67.5.

Assessment: Research Project thesis (100%)

Subject Description: The subject consists of a research project supervised by an academic in the School of Geosciences or School of Information Technology and Computer Science, in the area of Geographic Information Systems analysis, spatial information technology or computer programming related to spatial analysis. The research project is presented as a thesis that is both internally and externally assessed. As much as possible projects will be linked to topics of interest to government, independent agencies or industry.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Carry out independent research 2. Write proficiently at a level required for publication of monographs or peer-reviewed research 3. Understand and be able to convey the interconnection between computer/information technology and spatial data analysis 4. Have a broad knowledge of computer applications for spatial analysis 5. Use computers for spatial data analysis and presentation. 6. Solve complex problems related to the analysis of spatial data 7. Interact with end users of spatially analysed data

MARE200 Introduction to Oceanography 6cp

Autumn

Contact Hours: 5-7 hours per week

Pre-requisites: GEOS102, GEOS112, BIOL103, BIOL104, CHEM101/104, CHEM102/105

Assessment: essay/literature reviews 20%, practical tests/reports 20%, tutorial reports/seminars 10%, written examination 50%

Subject Description: This subject forms a basic introduction to oceanography. Topics covered include physical attributes of oceans; circulation and currents; tides and waves; marine organisms and biodiversity; environmental controls on organisms; processes of transport and behaviour of organisms in their life cycles; food webs and nutrient cycling; chemistry of seawater; sources and sinks of chemicals; carbon and carbonate cycles, chemical reactions in seawater, chemical exchange with sediments, stable isotopes and climate change.

MARE218 Marine Sediments and Fossils 6cp

Spring

Contact Hours: 4 hours lecture/practical per week, 2 days field work.

Pre-requisites: GEOS102 and GEOS112

Assessment: essay/literature reviews/seminar, practical tests/reports, field reports 50%, 1 theory examination 50%

Subject Description: This subject provides an introduction to marine sediments, sedimentary environments and fossils. Topics covered include clastic high- and low-energy shelf sediments; evaporites; reefs and cool-water carbonates; abyssal turbidite, contourite and pelagic deposits. Physical attributes, transport processes and the contributions and controls provided by marine organisms will be described for each environment. Stable isotopes, the deep-sea drilling program and climate and sea-level change will be discussed.

MARE300 Fisheries & Aquaculture 8cp**Spring****Contact Hours:** 6 hours per week.**Pre-requisites:** MARE200, STAT252 and (BIOL351) or (BIOL355)**Assessment:** Examination (60%); Literature review (20%); Project Report & Lab reports (20%)**Subject Description:** This subject will provide an overview of fisheries biology and aquaculture (vertebrate and invertebrate) including: the diversity of Australian and international fisheries and their key challenges; relevant ecological issues (population dynamics, transport processes, stock identification); predictive modelling, fisheries management; secondary impacts of fisheries; the diversity of aquaculture; case studies in aquaculture; ecological impacts, potential for enhancement of fisheries.**MARE322 Global Environmental Change 8cp****Autumn****Contact Hours:** 2 hours lecture/ 3 hour practical per week, & field trip**Pre-requisites:** 12 credit points from GEOS214, GEOS220, GEOS222, GEOS231, GEOS234 and GEOS239 including GEOS222 or GEOS234**Restrictions:** not to be counted with GEOS322**Assessment:** essay, reports, final examination**Subject Description:** The present environment of Australia is the legacy of interactions between geological, biological and hydrological processes and human impacts. Understanding Quaternary changes is now recognised as crucial to the interpretation of our biotic and geomorphic landscapes. Topics include the nature of the Quaternary record; dating methods; pollen and charcoal analysis; biotic change; the role of fire; and geomorphic change. A global context to Quaternary change is provided.**MARE323 Coastal Environments: Process and Management 8cp****Spring****Contact Hours:** 2 hours lectures/ 3hours practical per week, & field trip**Pre-requisites:** 12 credit points from GEOS214, GEOS217, GEOS220, GEOS222, GEOS231, GEOS234 and GEOS239**Restrictions:** not be counted with GEOS323**Assessment:** essays, practical/field reports, final examination**Subject Description:** This subject examines sedimentary and ecological processes on the coast and explores coastal management issues in the context of these processes.

Topics include the morphology, evolution and morphodynamics of coastal landforms, particularly beaches, estuaries, deltas, coastal barriers, dunes and coral reefs. The role of different wave regimes, tectonic processes, sea-level change and extreme events in shaping the coast is examined.

Subject Objectives: Knowledge of the diversity of fisheries and aquaculture in Australia and overseas. Have understanding of the factors (physical and biotic) regulating fisheries populations and fisheries and aquaculture. Knowledge of the basis of fisheries management and ability to construct simple predictive models. Have understanding of the potential roles of biological research in aquaculture (diseases, nutrition, parasitology, etc).

Knowledge of the diversity and research needs of local fisheries and aquaculture. Knowledge of fish harvesting techniques and selected research methods. Students are expected to be able to conduct ecological surveys of fisheries habitat, identify fish species, maintain cultures of larvae and conduct effective library research.

MARE357 Advances in Molluscan Biology 8cp**Summer****2003/2004****Contact Hours:** 10 hours lecture/tutorial per week for 2 weeks; 20 hours practical & field excursions per week for 2 weeks**Pre-requisites:** BIOL241 (or equivalent)**Assessment:** Theory examinations; research project reports and presentation; literature review/critique**Subject Description:** One research project will be undertaken after consultation with academic staff. Students will attend and participate in a seminar/tutorial program in either the Department of Biological Sciences or the School of Geosciences. Research may be a discrete component of a larger project in which the emphasis will be on solving a larger problem as part of a research team. Projects will focus on developing competence in a laboratory and/or field techniques. Intending students should consult the Coordinator before enrolment.**Subject Objectives:** appreciate diversity of Mollusca in Australia and worldwide; understand morphological/biological differences between the major groups of Mollusca & charact import for identifiic; understd basis of the phylogenetic relationships, use computers for data analyse and graphically present; critically evaluate information sources and demonstrated ability to synthesise literature**MARE393 Advanced Marine Science Project 8cp****Spring / Summer 2003/2004 / Autumn****Pre-requisites:** Distinction average in relevant 2nd year Marine Science subjects**Restrictions:** Students are assumed to be adequately prepared to undertake a research project in Marine Science. Evidence of 'fitness' is required if work involves snorkelling, SCUBA, use of boats or inter-tidal work. Available only to students enrolled in BSc (marine S)**Exclusions:****Assessment:** Literature review 25%; project report 55%; tutorial report/presentation 10%; seminar 10%.**Subject Description:** One research project will be undertaken after consultation with academic staff. Students will attend and participate in a seminar/tutorial program in either the Department of Biological Sciences or the School of Geosciences.

Research may be a discrete component of a larger project in which the emphasis will be on solving a larger problem as part of a research team. Projects will focus on developing competence in a laboratory and/or field techniques. Intending students should consult the Coordinator before enrolment.

Subject Objectives: Students will develop research skills (including teamwork, experimental design, data analysis and interpretation and presentation of results) in at least one aspect of marine science; they will also increase their breadth of knowledge of marine science through their research, reading and seminars/tutorials.

SCIE201 Modern Perspectives in Science

Summer Wollongong Flexible
2003/2004

Spring Loftus Flexible

Contact Hours: 2 hour tutorial per week, block practical classes for the session.

Pre-requisites: 12 credit points of 100 – level Science subjects.

Assessment: Written assignments or reports on practicals (50%) ; final examination (50%).

Subject Description: This subject aims to address some of the major topical issues in modern science and their impact on our society as well as demonstrating the value of a cross disciplinary approach to problem solving. The content is presented in four modules from Physics, Chemistry, Biology and Geosciences. The topics are Planetology; Smart Chemistry; Genetic Engineering; How Long? How Hot? Each of the four modules provides examples of areas of science that are currently of widespread interest or importance. The way in which science has been used to solve technological and human problems will be illustrated in each module. The fourth module also includes a section on global warming. To demonstrate the need for collaborative approach when solving major issues, the same problem will be studied from the viewpoint of different disciplines.

Subject Objectives: 1. Physics Module: understand how the laws of physics can be applied to understand extraterrestrial bodies; evaluate the role of palentology in modern society; use computer simulated models of planetary processes and interatiions. 2. Chemistry Module: understand modern techniques in chemistry and how they can be applied to improve our standard of living and our health. Understand how chemistry has underpinned advances in technology and medicine; promote the role of chmistry in problem solving. 3. Biology Module: understand modern methods in biotechnology and their application to genetic engineering; understand how biology has contributed to improvements in agriculture and medecine; promote the role of biology in problem solving. 4. Geosciences module: understand modern techniques in geo- and earth sciences and the application to studies of global issues and problems that impact on the human environment; understand the importance of geological methods (especially dating) to other areas such as forensic science, archaeology and anthropology; promote the role of earth sciences in problem solving. 5. Understand the need for a collaborative, interdisciplinary approach to problem solving in science.

General Schedule

Aboriginal Studies

100-Level

ABST100	Introduction to Aboriginal Cultures	6
ABST150	Introduction to Aboriginal Australia	6

200-Level

ABST200	Aboriginal History Since Invasion	8
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300-Level

ABST300	Indigenous Theories of Decolonisation	8
ABST301	Research Methods and Issues in Aboriginal Studies	8
ABST350	Special Topic in Aboriginal Studies	8
ABST361	Issues in Aboriginal Education	8
ABST362	Aboriginal Pedagogy	8

Accounting

100-Level

ACCY100	Accounting IA	6
ACCY102	Accounting IB	6

200-Level

ACCY201	Financial Accounting IIB	6
ACCY202	Financial Accounting IIA	6
ACCY211	Management Accounting II	6
ACCY212	Accounting for Marketing Decisions	6
ACCY228	Tax Planning	6
ACCY231	Information Systems in Accounting	6
ACCY281	Government Accounting & Financial Management	6

300-Level

ACCY302	Financial Accounting III	12
ACCY303	Selected Issues in Accounting A*	6
ACCY312	Management Accounting III	6
ACCY313	Selected Issues in Accounting B*	6
ACCY332	Advanced Information Systems in Accounting	6
ACCY335	Advanced Information Systems in Accounting II	6
ACCY336	Decision Support Systems*	6
ACCY342	Advanced Auditing	6
ACCY368	Insolvencies	6
ACCY372	Topics in Accounting History	6
ACCY380	Accounting for Information Technology	6

* not on offer in 2003

400-Level

Compulsory Subjects for Honours Degree (Accountancy)

ACCY403	Theoretical Foundations of Research	6
ACCY404	Financial Accounting	6
ACCY413	Management Accounting	6
ACCY493	Research Essay	12

Combined Honours Degree in Accountancy and Management

Subjects aggregating not less than 24 credit points are to be selected from the 400-level subjects offered by the Schools of Accounting and Finance, and of Management, Marketing and Employment Relations with subjects aggregating not less than 12 credit points being in respect of Accountancy subjects and not less than 12 credit points being in respect of Management subjects; the overall program to be approved by the two School Heads.

Entry to the combined Honours course requires approval of the Academic Senate on the recommendation of the Heads of the Schools of Accounting and Finance, and of Management, Marketing and Employment Relations.

Optional Subjects for Honours Degree in Accountancy or Finance

ACCY405	International Accounting	6
ACCY406	Issues in Financial Accounting*	6
ACCY407	Empirical Research Methods	6
ACCY408	Applied Financial Accounting	6
ACCY409	Comparative Accounting Systems*	6
ACCY414	Management Planning and Control Systems	6
ACCY416	Studies in Controllership*	6
ACCY418	Applied Management Accounting	6
ACCY433	Studies in Information Systems in Accounting*	6
ACCY436	Management and Information Systems	6
ACCY443	Auditing and Accounting Information Systems*	6
ACCY444	Issues in Auditing	6
ACCY461	Professional Practice – Accounting*	6
ACCY462	Professional Practice – Auditing, Risk Assurance & IS*	6
ACCY463	Professional Practice –Taxation*	6
ACCY468	Insolvencies	6
ACCY473	History of Accounting Thought*	6
ACCY474	Accounting Regulation	6
ACCY483	Studies in Government Accounting*	6
ACCY485	Special Topic in Accounting - A	6
ACCY486	Special Topic in Accounting - B	6
ACCY493	Research Essay	12
ACCY495	Research Essay	6

* not on offer in 2003

Applied Statistics - Refer to Mathematics & Applied Statistics**Australian Studies****100-Level**

AUST101	Australian Studies: Cultures and Identities	6
AUST102	Australian Studies: Narrating the Nation	6

200-Level

AUST246	A Sociology of Australia's Indigenous People: Contemporary Issues & Debates	8
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300-Level

AUST300	Twentieth Century Australian Literary Culture	8
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Biological Sciences**100-Level**

BIOL103	Molecules, Cells and Organisms	6
BIOL104	Evolution, Biodiversity and Environment	6

200-Level

BIOL213	Principles of Biochemistry	6
BIOL214	The Biochemistry of Energy and Metabolism	6
BIOL215	Introductory Genetics	6
BIOL240	Organisms and their Life Cycles	6
BIOL241	Biodiversity: Classification and Sampling	6
BIOL251	Principles of Ecology and Evolution	6
MARE200	Introduction to Oceanography	6

300-Level

BIOL303	Biotechnology: Applied Cell and Molecular Biology	8
BIOL320	Molecular Cell Biology	8
BIOL321	Cellular and Molecular Immunology	8
BIOL332	Comparative Physiology: Adaptation and Environment	8
BIOL351	Conservation Biology: Marine and Terrestrial Populations	8

BIOL355	Marine and Terrestrial Ecology	8
BIOL391	Advanced Biology	16
BIOL392	Advanced Biology Project	8
BIOL393	Advanced Marine Science Project	8

Biomedical Science

Priority to enrol in subjects offered by Biomedical Science will be given to students enrolled in approved schedules in the Faculty of Health and Behavioural Sciences or in specialisations which require Biomedical Science subjects.

100-Level

BMS101	Systemic Anatomy	6
BMS103	Human Growth, Nutrition and Exercise	6
BMS112	Human Physiology 1: Principles and Systems	6

200-Level

BMS200	Histology	6
BMS202	Human Physiology II: Control Mechanisms	6
BMS203	Musculoskeletal Functional Anatomy	6
BMS204	Introduction to Pathophysiology	6
BMS211	Foundations of Biomechanics	6
BMS242	Exercise Physiology	6

300-Level

BMS300	Regional Anatomy	8
BMS302*	Research Topics	8

* Pre-requisite also includes a minimum overall credit average and permission from the subject co-ordinator.

BMS303**	Research Topics in Exercise Science	8
BMS304	Research Topics in Nutrition and Dietetics	8
BMS310	Community and Public Health Nutrition	8
BMS311	Nutrients and Metabolism	8
BMS312	Research in Human Nutrition	8
BMS341	Clinical Biomechanics	8
BMS342	Advanced Exercise Physiology	8
BMS344	Cardiorespiratory Physiology	8
BMS345	Advanced Topics in Pathophysiology	8
BMS346	Motor Control and Dysfunction	8
BMS352	Fundamentals of Neuroscience	8

** Pre-requisite 30 credit points of 200-level BMS subjects and permission of the subject co-ordinator.

400-Level

BND433	Communication in Health Care Practice	8
BMS401	Honours	48
BMS402	Joint Honours in Biomedical Science and another Discipline	48

Chemistry

100-Level

CHEM101	Chemistry 1A: Introduction to Physical and General Chemistry	6
CHEM102	Chemistry 1B: Introduction to Organic and Physical Chemistry	6
CHEM104	Chemistry 1D (Introductory Chemistry)	6
CHEM105	Chemistry 1E (Introductory Chemistry)	6

200-Level

CHEM211	Inorganic Chemistry II	6
CHEM212	Organic Chemistry II	6
CHEM213	Molecular Structure, Reactivity and Change	6
CHEM214	Analytical and Environmental Chemistry	6

300-Level

CHEM311	Inorganic Chemistry III	8
CHEM314	Instrumental Analysis	8
CHEM320	Bioinformatics: From Genome to Structure	8

General Schedule

CHEM321	Organic Synthesis and Reactivity	8
CHEM327	Environmental Chemistry	8
CHEM330	Medicinal Chemistry	8
CHEM340	Chemistry Laboratory Project	8
CHEM350	Principles of Pharmacology	8
CHEM364	Molecular Structure and Spectroscopy	8

Communication Studies

100-Level

CCS 105	Introduction to Communication and Cultural Studies	6
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200-Level

CCS207	Signs of Power: Culture and Representation	8
CCS215	Race, Gender, Colonialism: Studies in Australian Culture	8
CCS217	Film Form and Style	8
CCS219	Australian Screen	8
CCS221	Critical Cultural Practice	8
CCS223	Introduction to Publishing Studies: Print	8
CCS225	Introduction to Electronic Publishing	8

300-Level

CCS330	The Practices of Everyday Life	8
CCS333	Popular Genres	8
CCS334	Technologies of the Body	8
CCS335	Electronic Cultures	8
CCS337	Hollywood and American Culture	8
CCS339	Hollywood and the Globalisation of Culture	8
CCS341	Screen Studies Advanced Seminar	8
CCS348	Television, Globalisation and Cultural Identity	8
CCS351	Semiotics and Communication	8
CCS352	Flashpoints: Contestations in Contemporary Australian Culture	8
CCS357	Television Cultures	8

Community and Environment

The following two subjects are only available to students enrolled at the Shoalhaven and Moss Vale Campuses, Bega and Batemans Bay Education Access Centres

100-Level

ARTS112	People and Place	6
ARTS113	Society and Representation	6

Computer Science

100-Level

CSCI101	Introduction to Information Technology A	6
CSCI102	Introduction to Information Technology B	6
CSCI111	Computer Science 1A	6
CSCI112	Fundamentals of Computer Science	6
CSCI121	Computer Science 1B	6
CSCI131	Introduction to Computer Systems	6

200-Level

CSCI203	Data Structures, Algorithms, Systems	6
CSCI204	Programming: The C Family and Unix	6
CSCI205	Development Methods & Tools	6
CSCI212	Operating Systems	6
CSCI213	Java Programming and the Internet	6
CSCI214	Distributed Systems	6
CSCI235	Databases	6
CSCI236	3D Modelling & Animation	6

300-Level

CSCI311	Software Process Management	6
CSCI313	Professional Programming Practices	6
CSCI315	Database Design and Implementation	6
CSCI321	Project	12
CSCI322	Systems Administration	6
CSCI323	Artificial Intelligence	6
CSCI324	Human Computer Interface	6
CSCI325	Software Engineering Formal Methods	6
CSCI333	Compilers	6
CSCI334	Interfacing and Real Time Programming	6
CSCI336	Computer Graphics	6
CSCI337	Organisation of Programming Languages	6
CSCI361	Computer Security	6
CSCI399	Server Technology	6

Creative Arts

Some subjects listed in the Creative Arts Schedule are available under the General Schedule to students enrolled in degrees other than the BCA degree. However, quotas apply to all Creative Arts subjects and students enrolled in the BCA will be given first preference. Places for students enrolled in other degree programs will therefore be extremely limited. Enrolment is also subject to audition and other pre-requisite criteria as stated in the Creative Arts Schedule, and requires the specific approval of the Sub-Dean of the Faculty of Creative Arts.

Economics

Check subject availability at time of enrolment

100-Level

ECON101	Macroeconomic Essentials for Business	6
ECON111	Introductory Microeconomics	6
ECON121	Quantitative Methods I	6
ECON122	Quantitative Methods II	6

200-Level

ECON205	Macroeconomic Theory and Policy	8
ECON207	Economic Policy	8
ECON208	Gender, Work and the Family	8
ECON215	Microeconomic Theory and Policy	8
ECON216	International Trade Theory and Policy	8
ECON221	Econometrics	8
ECON227	The Creative Economy: Technology Innovation and Policy A	6
ECON228	Quantitative Analysis for Decision Making	8
ECON229	The Creative Economy: Technology Innovation and Policy B	8
ECON230	Quantitative Analysis for Decision Making	6
ECON231	Business Statistics and Forecasting	8
ECON251	Industry and Trade in East Asia	8

300-Level

ECON301	Monetary Economics	8
ECON302	Transition Economics	8
ECON303	Economic Development Issues	8
ECON307	International Monetary Economics	8
ECON308	Labour Economics	8
ECON309	Environmental Economics*	8
ECON310	Cost-Benefit Analysis	8
ECON311	Natural Resource Economics	8
ECON312	Industrial Economics*	8
ECON315	Applied Microeconomics*	8
ECON316	History of Economic Thought*	8
ECON317	Economics of Health Care	8

General Schedule

ECON318	Economics of Health Care - A	6
ECON319	Electronic Commerce and The Economics of Information	6
ECON320	Economics of Small and Medium Enterprises	8
ECON322	Mathematical Economics*	8
ECON327	Advanced Econometrics*	8
ECON331	Financial Economics	8
ECON332	Managerial Economics and Operations Research	8
ECON333	Conflict and Co-operation*	8
ECON334	Global Economics	8

* not on offer in 2003

400-Level

ECON421	Honours Economics	48
ECON423	Honours Econometrics	48
ECON451	Joint Honours Economics	24

Education

Faculty of Education subjects are affected by quota restrictions. Students enrolled in Faculty of Education courses, or those Bachelor of Arts students majoring in Education, will be given enrolment priority. Other students wishing to enrol in Faculty of Education subjects MUST seek advice from the relevant subject co-ordinator to avoid potential withdrawal in the event of quotas being exceeded.

Core Education Subjects

EDUF111	Education I	6
EDUF212	Education II	6

Language in Education Stream

EDUC291	Culture, Immigration & Education	8
EDUE303	Teaching Language and Literacy Through Literature in Early Childhood Years	6
EDUE304	Teaching Language Through Literature in the Primary and Middle Years	6
EDUL314	Language and Ideology	8
EDUL331	English Language: Examining Learners Problems	8
EDUL340	Materials and Technology in Second Language Teaching	8
EDUL350	Programming and Methodology in Second Language Teaching	8
EDUL360	Practicum or Project in Second Language Teaching	8
EDUT301	Research Methods	6

Equity & Sociocultural Diversity Stream

EDUC323	Curriculum and Program Evaluation	8
EDUC291	Culture, Immigration & Education	8
EDUC292	Gender and Social Justice	8
EDUL314	Language and Ideology	8
EDUE301	Issues in Aboriginal Education	6
EDUE302	Aboriginal Pedagogy	6
EDUT301	Research Methods	6

Educational Psychology & Special Education Stream

EDUC213	Educational Psychology of Typical Children	6
EDUC217	Educational Psychology of Atypical Children and Introductory Educational Measurement	6
EDUF204	Learners with Exceptional Needs	6
EDUF232	Early Intervention and Children with Special Needs	6
EDUF311	Education III	6
EDUE320	Behaviour Management (Not to count with EDUE311)	6
EDUE321	Reading Difficulties (Not to count with EDUE312)	6
EDUE411	Disability issues across the Life Span	6
EDUE412	Programming for Individuals with Moderate to Severe Disabilities	6
EDUT301	Research Methods	6

Electrical, Computer & Telecommunications Engineering

100-Level

ECTE101	Electrical Engineering 1	6
ECTE191	WWW Engineering	6
ECTE195	Design and Management	6
ECTE196	Internet Technology 1	6

200-Level

ECTE202	Circuits and Systems	6
ECTE212	Electronics and Communications	6
ECTE222	Power Engineering 1	6
ECTE233	Digital Hardware 1	6
ECTE281	Embedded Internet Systems	6
ECTE290	Fundamentals of Electrical Engineering	6
ECTE291	Internet Systems	6
ECTE292	Internet Technology 2	6

300-Level

ECTE301	Digital Signal Processing 1	6
ECTE313	Electronics	6
ECTE323	Power Engineering 2	6
ECTE333	Digital Hardware 2	6
ECTE344	Control Theory	6
ECTE363	Communication Theory	6
ECTE364	Telecommunication Networks 1	6
ECTE381	Internet Engineering 1	6

400-Level

ECTE491	Computer Architectures	6
ECTE492	Intelligent and Optimal Control	6
ECTE494	Robotics	6

Employment Relations - Refer to Management

Engineering

100-Level

CIVL196	Engineering Computing 1	6
ENGG153	Engineering Materials	6
ENGG154	Introduction to Design and Innovation	6

200-Level

CIVL272	Surveying	6
ENGG261	Professional Engineers and the Management of Technology	6

400-Level

CIVL487	Traffic Engineering	6
ENGG461	Project Management and Human Factors in Engineering	6
MINE431	Minewater	6
MINE438	Environmental Impact of Minerals Operations	6

English Language Studies – Refer to Modern Languages

English Studies

100-Level

ENGL113	Contemporary Writing in Australia	6
ENGL117	Forms of the Imagination	6
ENGL120	An Introduction to Literature and Screen Studies	6
ENGL121	Text and Gender	6
ENGL199	Understanding Literary Techniques	6

General Schedule

200-Level

ENGL228	English Renaissance Literature and Culture	8
ENGL229	Romantics & Victorians: English Literature From 1790-1900	8
ENGL230	Page to Stage: Modes of Performance	8
ENGL231	Australian Drama and Theatre	8
ENGL243	Fantasy and Children's Literature	8
ENGL244	Children's Literature in Australia	8
ENGL248	Chaucer	8
ENGL253	Major Twentieth Century Writers	8
ENGL255	Eighteenth Century Literature and Culture	8
ENGL259	An Introduction to Canadian Writing	8
ENGL260	Nineteenth Century Australian Literary Culture	8
ENGL264	Modernism	8
ENGL265	English and the Empire	8
ENGL299	The Vikings: Old Norse Culture, Language and Literature	8
GENE216	Women in Society: Images and Representation	8

300-Level

ENGL312	Shakespeare, Jonson and Their Contemporaries	8
ENGL330	Theatre in English Since 1968	8
ENGL331	Modern Drama	8
ENGL334	Critical Theory: Development and Debates	8
ENGL337	Sex, Power & Chivalry: Medieval to Modern Literature	8
ENGL345	Twentieth Century Women Writers	8
ENGL346	Comparative Australian/Canadian Writing	8
ENGL350	Fantasy and Popular Fiction	8
ENGL355	Fourteenth Century Literature	8
ENGL359	Contemporary Australian Drama	8
ENGL365	Nineteenth-Century Women Writers	8
ENGL366	Literatures from Colonised Cultures	8
ENGL371	Twentieth Century Australian Literary Culture	8
ENGL373	Studies in Decolonising Literatures	8
ENGL374	Novel into Film	8
ENGL376	Representing India	8
ENGL398	The Vikings - Old Norse Culture, Language and Literature Advanced	8

Finance – Also see Accounting

200-Level

FIN221	Business Finance I	6
FIN223	Investments I	6
FIN226	Financial Institutions	6
FIN227	Finance in Small Business	6
FIN241	International Financial Management	6
FIN251	Introduction to Financial Planning	6

300-Level

FIN322	Business Finance II	6
FIN323	Investments II	6
FIN324	Financial Statement Analysis	6
FIN325	Banking Practice	6
FIN327	Risk and Insurance	6
FIN328	Retirement and Estate Planning	6
FIN329	Real Estate Planning	6
FIN351	International Business Finance	6
FIN352	Critical Perspectives in Finance	6
FIN353	Global Electronic Finance	6
FIN359	Selected Issues in Finance	6

Compulsory Subjects for Honours Degree (Finance)

FIN491	Honours Finance	48
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Optional Subjects for Honours Degree in Accountancy or Finance

FIN422	Investment Analysis	6
FIN423	Investment Management	6
FIN424	Corporate Financial Information Analysis	6
FIN425	Banking Theory and Practice	6
FIN426	Studies in Business Finance	6
FIN427	Small Business Finance	6
FIN428	Multinational Financial Management	6
FIN487	Special Topic in Finance	6

Financial Planning – Refer to Finance**French - Refer to Modern Languages****Geosciences****100-Level**

GEOS102	Earth Environments and Resources	6
GEOS111	Planet Earth	6
GEOS112	Physical Environments	6
GEOS142	The Human Environment: Problems and Change	6

200-Level

GEOS205	Field Geology I	6
GEOS214	Soils, Landscape and Hydrology	6
GEOS217	Field and Spatial Techniques	6
GEOS219	The Earth in Crisis	6
GEOS220	Climate and Natural Hazards	6
GEOS222	Biogeography	6
GEOS231	Environmental Impact of Societies	6
GEOS233	Discovering Downunder: A Geography of Australia	6
GEOS239	Remote Sensing of the Environment	6
GEOS242	Living in Cities	6
GEOS243	The Bush and Beyond: Rural Society in Australia	6
GEOS246	A Hungry World: Food Resources and the World Economy	6
MARE200	Introduction to Oceanography	6
MARE218	Marine Sediments and Fossils	6

300-Level

GEOS302	Basin Resources	8
GEOS304	Dynamic Earth	8
GEOS305	Field Geology II	8
GEOS307	Mineral Resources	8
GEOS315	Field Studies in Physical Geography	8
GEOS321	Fluvial Geomorphology, Sedimentology and River Management	8
GEOS331	Environmental Management and Decision-Making	8
GEOS333	Cultural Heritage Management	8
GEOS339	Geographic Information Systems	8
GEOS347	Northern Neighbours: Economic and Social Change in the Asia-Pacific Rim	8
GEOS349	Population, Health and Environment	8
GEOS381	Directed Studies in Geosciences A	8
GEOS382	Directed Studies in Geosciences B	8
MARE322	Global Environmental Change	8
MARE323	Coastal Environments: Process and Management	8

History**100-Level**

HIST107	Colonies and the Clash of Civilisations	6
HIST108	War, Dictatorship and Propaganda in Europe 1918-1945	6
HIST121	Dispossessed, Diggers and Democrats: Australia 1788 to 1888	6
HIST124	The Cold War and After	6

200-Level

ARTS211	Social Science Perspectives on Health and Illness	6
HIST210	The European Union: Postwar Integration, 1945 to 1995	8
HIST216	Ancient History: Greece	8
HIST217	Ancient History: Rome	8
HIST218	Consensus, Conflict and Culture: Australia 1888-1988	8
HIST232	Russia in War and Revolution	8
HIST275	The Growth of the United States, 1865-1898	8
HIST276	America's Rise to Globalism Since 1919	8
HIST286	From Ancient Kingdoms to Colonies: Southeast Asia, 1500-1900	8
HIST288	Religion and Military Rule in Southeast Asia	8
HIST291	Film and History	8

300-Level

HIST300	Reporting War: A History	8
HIST315	Comparative Settler Capitalism	8
HIST318	The Making of the Modern Australian Woman	8
HIST325	Theory and Method of History	8
HIST334	Regional History	8
HIST336	Australians and War, The Homefront	8
HIST338	Advanced Topics in the History of Science: 1500-1800	8
HIST360	War, Death and Society: Europe 1350-1650	8
HIST361	Fascism and the Authoritarian Right in Twentieth Century Europe	8
HIST363	Revolutions in World History	8
HIST379	Culture and Identity in Indonesian History, 1870-2002	8
HIST380	Twentieth Century Australian Literary Culture	8
HIST388	Vietnam in War and Revolution: Indo-Chinese Societies 1860-1980	8
HIST394	Commodification History	8

Human Resource Management – Refer to Management**Indigenous Health****200-Level**

NURS240	Current Services in Aboriginal Health	6
NURS242	Functional Community Structures	6
NURS243	Special Topic (Workplace Analysis)	6

300-Level

NURS341	Special Topic	8
NURS343	Community Health Development: Theory & Practice	8
NURS344	Community Health: Theory, Research & Practice	8

These subjects are offered on weekends in block format.

Industrial Relations – Refer to Management**Information Systems****100-Level**

BUSS102	Computer Systems	6
BUSS110	Introduction to Business Information Systems	6
BUSS111	Business Programming I	6

200-Level

BUSS201	User-Centred Business Programming	6
BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS213	Multimedia in Organisations	6
BUSS214	Business Programming II	6
BUSS215	Business Programming III	6
BUSS218	Systems Design & Architecture	6

300-Level

BUSS308	Computer Systems Management	6
BUSS311	Advanced Database Management Systems	6
BUSS312	Distributed Information Systems	6
BUSS315	Knowledge-Based Information Systems	6
BUSS316	Information Systems Development Methodologies	6
BUSS317	Business Programming IV	6
BUSS318	Information Systems Project	6
BUSS391	Special Topics in Information Systems	6

400-Level

BUSS410	Business Information Systems Honours	48
BUSS450	Joint Honours in Business Information Systems	48
BUSS408	Business Information Systems Honours Part 1	36
BUSS409	Business Information Systems Honours Part 2	12

Information & Communication Technology**200-Level**

IACT201	Information Technology and Citizens' Rights	6
IACT202	The Structure and Organisation of Telecommunications	6

300-Level

IACT301	Information and Communication Security Issues	6
IACT302	Corporate Network Planning	6
IACT303	World Wide Networking	6
IACT304	eBusiness Fundamentals (not to count with IACT305)	6
IACT305	eBusiness Technologies (not to count with IACT304)	6

International Business – Refer to Management**Italian – Refer to Modern Languages****Japanese – Refer to Modern Languages****Legal Studies****100-Level**

LAW100	Law in Society	6
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200-Level

LAW210	Contract Law	6
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300-Level

LAW302	Law of Business Organisations	6
LAW303	Children, Families and the Law	6
LAW304	Criminal Law and the Process of Justice	6
LAW308	Administrative Law	6
LAW315	Taxation Law	6
LAW316	Occupational Health & Safety Law	6
LAW317	E-Commerce Law	6
LAW330	Law of Employment	6

General Schedule

LAW331	Intellectual Property Law	6
LAW332	Labour Relations Law	6
LAW334	Environmental Law	6
LAW335	Anti-Discrimination Law	6
LAW343	International Law	6
LAW344	Indigenous Peoples and Legal Systems*	6
LAW348	Media Law*	6
LAW352	Advanced Taxation Law*	6
LAW360	Foreign Investment Law in the People's Republic of China*	6
LAW364	Consumer Protection and Business Regulation*	6

400-Level

The offering of the Honours subjects is dependent on availability of staff and sufficient student enrolments. The session a particular subject will be offered depends on the full time and part time composition of the enrolments and availability of staff.

LAW453	Studies in Taxation*	6
LAW463	Jurisprudence*	6
LAW464	Studies in Business Law*	6
LAW465	Studies in Administrative Law*	6
LAW466	Studies in Industrial Law*	6
LAW467	Studies in Trade Practices and Consumer Law*	6
LAW487	Special Topic in Law-A	6
LAW488	Special Topic in Law-B	6
LAW493	Research Essay*	12

* not available in 2003

Linguistics – Refer to Modern Languages

Management - includes Employment Relations, Industrial Relations, Human Resource Management and International Business

Check subject availability at time of enrolment

100-Level

COMM100	Introduction to Employment Relations	6
MGMT102	Business Communications	6
MGMT110	Introduction to Management	6
MGMT140	Industrial Relations B: Wage Determination in Australia	6
MGMT142	Industrial Relations A	6

200-Level

MGMT200	Management and Electronic Business	6
MGMT201	Organisational Behaviour	6
MGMT202	Management of Change	6
MGMT204	Government Regulation and International Business	6
MGMT205	Recruitment and Selection	6
MGMT206	Managing Human Resources	6
MGMT215	Small Business Management	6
MGMT216	Operations Management	6
MGMT218	Competitive Analysis	6
MGMT220	Organisational Studies	6
MGMT240	Industrial Relations B: Wage Determination in Australia	8
MGMT242	Industrial Relations A	8
MGMT243	Work and Employment Relations	8
MGMT255	Inventory Management	6

300-Level

MGMT300	Innovation and Electronic Commerce	6
MGMT301	Managing Across Cultures	6
MGMT302	Business in Europe	6
MGMT303	Development of Modern Business	6
MGMT305	Business in Asia	6

MGMT306	Business in Australia	6
MGMT308	Introduction to Management for Professionals A	6
MGMT309	Supply Chain Management	6
MGMT310	Introduction to Management for Professionals B	8
MGMT314	Strategic Management	6
MGMT321	Occupational Health and Safety Management	6
MGMT322	Training and Development	6
MGMT328	Transport Logistics	6
MGMT332	Enterprise and Innovation	6
MGMT340	Comparative Studies in Industrial Relations	8
MGMT341	International and Comparative Employment Relations	8
MGMT342	Research Topics in Industrial Relations	8
MGMT348	Employers and Industrial Relations	8
MGMT350	Total Quality Management	6
MGMT352	Negotiation, Advocacy and Bargaining	8
MGMT389	International Business Management	6
MGMT392	Case Study	12
MGMT393	Special Topic A	6
MGMT398	Human Resource Management	6
400-Level		
MGMT404	Honours International Business	48
MGMT405	Joint Honours in Management	48
MGMT406	Honours Human Resource Management	48
MGMT407	Joint Honours Human Resource Management	48
MGMT422	Honours Industrial Relations	48
MGMT428	Honours Research Project	24
MGMT429	Advanced Topics in Management (Honours)	24
MGMT450	Honours Employment Relations	48
MGMT452	Joint Honours in Industrial Relations	24

Marketing

Check subject availability at time of enrolment

100-Level		
MARK101	Introduction to Marketing	6
200-Level		
MARK213	Introduction to Marketing	6
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK240	Marketing and Consumer Behaviour in East and South-East Asia	6
MARK270	Services Marketing	6
300-Level		
MARK301	Marketing on the Internet	6
MARK317	Business to Business Marketing	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK343	International Marketing	6
MARK344	Marketing Strategy	6
MARK356	New Product Marketing	6
MARK359	Sales Management	6
MARK393	Special Topic in Marketing	6
MARK394	Special Topic in Marketing B	6
MARK395	Tourism Marketing	6
MARK397	Retail Marketing Management	6

400-Level

MARK428	Honours Research Project	24
MARK430	Advanced Topics in Marketing (Honours)	24
MARK450	Joint Honours in Marketing	48

Mathematics & Applied Statistics

To satisfy the requirements for a major study in Mathematics, a student shall satisfactorily complete (at a grade of Pass or better) any MATH or STAT subjects listed below, to a total of at least 48 credit points; of which at least 18 credit points must be at 200 level and at least 24 credit points must be at 300 level.

To satisfy the requirements for a major study in Applied Statistics, a student shall satisfactorily complete (at a grade of Pass or better) any MATH or STAT subjects listed below, to a total of at least 48 credit points; of which at least 18 credit points must be at 200 level and must include STAT231 and STAT232; and at least 24 credit points must be for 300 level STAT subjects.

Students are welcome, and encouraged, to consult an academic adviser from the School of Mathematics and Applied Statistics about their choice of subjects. For full details about pre-requisites etc, please refer to the Subject Database. All subjects may not be offered every year.

100-Level

MATH111	Applied Mathematical Modelling 1	6
MATH121	Discrete Mathematics	6
MATH187	Mathematics 1A Part 1	6
MATH188	Mathematics 1A Part 2	6
STAT131	Understanding Variation and Uncertainty	6

200-Level

MATH201	Multivariate and Vector Calculus	6
MATH202	Differential Equations 2	6
MATH203	Linear Algebra	6
MATH204	Complex Variables and Group Theory	6
MATH212	Applied Mathematical Modelling 2	6
MATH222	Continuous and Finite Mathematics	6
STAT231	Probability and Random Variables	6
STAT232	Estimation and Hypothesis Testing	6

300-Level

MATH302	Differential Equations 3	6
MATH305	Partial Differential Equations	6
MATH312	Applied Mathematical Modelling 3	6
MATH313	Industrial Mathematical Modelling	6
MATH316	Applied Dynamics	6
MATH317	Financial Calculus and Logistics	6
MATH321	Numerical Analysis	6
MATH322	Algebra	6
MATH323	Topology and Chaos	6
MATH324	Analysis	6
MATH371	Special Topics in Industrial and Applied Mathematics 3	6
MATH372	Special Topics in Mathematical Analysis 3	6
STAT304	Operations Research and Applied Probability	6
STAT332	Multiple Regression and Time Series	6
STAT333	Statistical Inference and Multivariate Analysis	6
STAT335	Sample Surveys and Experimental Design	6
STAT373	Special Topics in Probability and Statistics 3	6

400-Level

MATH401	Mathematics 4 (Honours)	48
STAT401	Statistics 4 (Honours)	48
INFO411	Data Mining and Knowledge Discovery	6
INFO412	Maths for Cryptography	6
INFO413	Information Theory	6

Other subjects available

Other MATH/STAT subjects available are listed below, but note that these subjects cannot be counted in a Major in Mathematics or Applied Statistics.

MATH122	Probability and Logic	6
MATH141	Mathematics 1C Part 1	6
MATH142	Mathematics 1C Part 2	6
MATH151	General Mathematics 1A	6
MATH161	Mathematics 1E Part 1	6
MATH162	Mathematics 1E Part 2	6
MATH283	Mathematics 2E for Engineers Part 1	6
STAT151	Introduction to the Concepts and Practice of Statistics	6
STAT252	Statistics for the Natural Sciences	6
PSYC354	Design and Analysis	8

Modern Languages**100-Level**

ELS 151	English For Academic Purposes: A Second Language Perspective	6
ELS 152	English Language Studies 1	6
ELS 161	English For Academic Purposes : A First Language Perspective	6
ELS 171	An Introduction to Linguistics	6
FREN110	France and the French	6
FREN151	French IA Language	6
FREN152	French IB Language	6
ITAL110	Italy and the Italians	6
ITAL151	Italian IA Language	6
ITAL152	Italian IB Language	6
JAPA101	An Introduction to Japanese	6
JAPA102	Japanese Studies for Educational Purposes	6
JAPA103	Japanese Studies for Business Purposes	6
JAPA110	Japan and the Japanese	6
JAPA141	Beginners' Japanese I	6
JAPA142	Beginners' Japanese II	6
JAPA143	Beginners' Japanese III	8
JAPA161	Post-HSC Japanese I	6
JAPA162	Post-HSC Japanese II	6
SPAN151	Spanish for Beginners I	6
SPAN152	Spanish for Beginners II	6

200-Level

ELS 271	English Language Studies 2	8
FREN210	France in the Twentieth Century	8
FREN251	French IIA Language	8
FREN252	French IIB Language	8
ITAL251	Italian IIA Language and Literature	8
ITAL252	Italian IIB Language and Literature	8
JAPA261	Intermediate Japanese I	8
JAPA262	Intermediate Japanese II	8
JAPA264	Intermediate Japanese III (Wollongong)	8
LING210	Communicating in a Foreign Language	8
SPAN251	Spanish Intermediate I	8
SPAN252	Spanish Intermediate II	8

300-Level

ELS 371	English Language Studies 3	
EURO320	Nations Without States in the European Union	8
FREN351	French IIIA Language	8
FREN352	French IIIB Language	8
FREN361	French IIIC	8
FREN362	French IIID	8

General Schedule

ITAL351	Italian IIIA Language and Literature	8
ITAL352	Italian IIIB Language and Literature	8
ITAL361	Interpreting I (pre-req. must be ITAL352)	8
ITAL362	Interpreting II (pre-req. must be ITAL361)	8
JAPA310	Japanese Economics and Media	8
JAPA361	Advanced Japanese I	8
JAPA362	Advanced Japanese II	8
LANG305	Literature and Society in Renaissance Europe	8
LANG310	Language and Change in Society	8
LING310	Language and Communication in a Global Context	8

Philosophy

100-Level

PHIL101	Knowledge, World and Values A	6
PHIL102	Body, Mind and Persons A	6
PHIL106	Media, Ethics and Law	6
PHIL112	Logic A	6
PHIL151	Practical Reasoning A	6

200-Level

PHIL201	Knowledge, World and Values B	6
PHIL202	Body, Mind and Persons B	6
PHIL206	Practical Ethics	8
PHIL211	Greek Philosophy	8
PHIL214	Practical Reasoning B	8
PHIL215	Philosophy of the Arts	8
PHIL216	Logic B	8
PHIL231	Formal Logic A	8
PHIL232	Political Philosophy A	8
PHIL255	Interpretation and Communication	8
PHIL256	Ethics and the Environment A	6
PHIL258	Ethics and the Environment B	8
PHIL260	Philosophy of Feminism A	8
PHIL262	Theories of Knowledge and Metaphysics A	8
PHIL270	Philosophy of Law	8
PHIL284	Ethics A	8
PHIL286	Philosophy of Social Science	8
PHIL288	Philosophy of Mind and Action A	8

300-Level

PHIL301	Ethics B	8
PHIL322	Theories of Knowledge and Metaphysics B	8
PHIL351	Philosophy of Mind and Action B	8
PHIL361	Formal Logic B	8
PHIL363	Philosophy of Feminism B	8
PHIL370	Topics in Philosophy of Law	8
PHIL380	Bioethics	8
PHIL383	Political Philosophy B	8
PHIL390	Contemporary Political Philosophy	8

Physics

100-Level

PHYS131	Physics for the Environmental and Life Sciences A	6
PHYS132	Physics for the Environmental and Life Sciences B	6
PHYS141	Fundamentals of Physics A	6
PHYS142	Fundamentals of Physics B	6

200-Level

PHYS205	Advanced Modern Physics	6
PHYS206	Project in Physics	6
PHYS215	Vibrations, Waves and Optics	6
PHYS225	Electromagnetism and Optoelectronics	6
PHYS230	Intermediate Physics	12
PHYS233	Introduction to Environmental Physics	6
PHYS235	Mechanics and Thermodynamics	6
PHYS255	Radiation Physics	6
PHYS295	Astronomy – Concepts of the Universe	6

300-Level

PHYS305	Quantum Mechanics	6
PHYS306	Project in Physics	6
PHYS325	Electromagnetism	6
PHYS335	Classical Mechanics	6
PHYS365	Detection of Radiation: Neutrons, Electrons and X Rays	6
PHYS366	Physics of Radiotherapy	6
PHYS375	Nuclear Physics	6
PHYS385	Statistical Mechanics	6
PHYS390	AstroPhysics	6
PHYS396	Electronic Materials	6

400-Level

PHYS401	Theoretical Mechanics and Electromagnetism	8
PHYS405	Honours in Physics	8
PHYS441	Astro- and Nuclear Physics	8
PHYS444	Quantum Mechanics	8
PHYS446	Solid State Physics	8
PHYS451	Nuclear Medicine	8
PHYS452	Medical Imaging	8
PHYS453	Radiobiology and Radiation Protection	8
PHYS456	Imaging Physics	8
PHYS457	Research Project	24

Politics**100 Level**

POL111	Australian Politics	6
POL121	Politics in a Globalising World	6
POL141	Change and Debate in Contemporary Australian Politics	6

200 Level

POL211	Democracy in Theory and Practice	8
POL216	Politics in the USA	8
POL222	Australian Public Policy	8
POL224	Politics and the Media	8
POL225	International Relations: An Introduction	8
POL226	Australian Political Thought	8
POL230	Latin America: The Politics of Conquest and Colonisation	8
POL290	Women in Society: Productive and Reproductive Labour	8

300- Level

POL314	Power and the Modern State	8
POL315	The Politics of Post Communist Countries	8
POL317	Politics in the South Pacific	8
POL318	The Asian Tigers - Newly Industrialising Countries in Transition	8
POL319	Political Economy in the New Millennium	8
POL323	North and South: Approaches to Relations Between Advanced, Industrialising and Less Developed Countries	8
POL324	Culture and Politics	8
POL368	Protest and Power in America: The Sixties	8

Population Health

100 level

POP101	Population health – current health issues and their determinants	6
POP102	Sex, drugs and rock'n'roll: public health perspectives	6

200 level

POP201	Contemporary population health problems	6
POP210	Epidemiology	6
POP202	Promoting healthy lifestyles	6
POP203	Health policy and service structure	6
POP220	Mass media and population health	6
POP221	Behaviour change for population health	6
POP222	Current Issues in Food and Nutrition	6

300 level

POP320	Project and program design, management and evaluation	8
POP321	Analysis and interpretation of evidence	8
POP331*	Population health project A	24

Psychology

100-Level

Refer to Schedule HS3 under the Faculty of Health and Behavioural Sciences for Pre-requisites, Co-requisites and Remarks

PSYC101	Introduction to Behavioural Science	6
PSYC121	Foundations of Psychology A	6
PSYC122	Foundations of Psychology B	6
PSYC123	Theory, Design and Statistics in Psychology	6

200-Level

PSYC216	Psychology of Physical Activity	6
PSYC231	Personality	6
PSYC232	Research Methods and Statistics	6
PSYC234	Biological Psychology and Learning	6
PSYC235	Introduction to Psychological Assessment	6
PSYC236	Cognition and Perception	6
PSYC241	Developmental and Social Psychology	6

1. Students intending to complete a major in Psychology only, must complete PSYC232, plus 3 Psychology electives. An elective must be a 200-level subject excluding PSYC216 and must include at least one of each of the following groups: Group A - PSYC231, PSYC241, Group B - PSYC234, PSYC236.
2. Students wishing to proceed to honours Psychology must complete PSYC232 and PSYC235 together with 3 electives selected from the following PSYC231, PSYC241, PSYC234, PSYC236. General Pre-Req - 24 credit points of Psychology at 200-level (excluding PSYC216).

300-Level

PSYC315	Psychology of Abnormality	8
PSYC317	Advanced Learning	8
PSYC318	Change Throughout the Lifespan	8
PSYC345	Advanced Cognition	8
PSYC347	Assessment and Intervention	8
PSYC34	History and Metatheory of Psychology	8
PSYC349	Visual Perception	8
PSYC350	Social Behaviour & Individual Differences	8
PSYC352	Psychophysiology	8
PSYC354#	Design and Analysis	8

Students intending to complete three years of Psychology or intending to proceed to Honours refer to Schedule HS3.

400-Level

Note: Entry to the Honours year or to honours subjects shall be determined by the Academic Senate on the advice of the Departmental Head. For specific course requirements refer to Description of Subjects section. In the event a student wishes to take a double major; i.e. major in another subject as well as psychology, and still proceed to take Honours in Psychology, the minimum number of credit points accumulated over 200- and 300-levels of Psychology will be 60: provided that at least 10 credit points of 200- and 300-level non-psychology subjects being taken are recognised as appropriate and closely related to psychology, in which case the credit points for these subjects may be added to the 60 of psychology to make the necessary 70.

Science, Technology & Society**100-Level**

STS100	Social Aspects of Science and Technology	6
STS103	Social Aspects of Science and Technology	6
STS112	The Scientific Revolution: History, Philosophy & Politics of Science	6
STS116	Environment in Crisis: Technology and Society	6
STS117	The Scientific Revolution: History, Philosophy and Politics of Science	6
STS120	Technology in Society: East and West	6
STS128	Computers in Society	6

200-Level

STS200	Social Aspects of Science and Technology	8
STS203	Social Aspects of Science and Technology	8
STS212	The Scientific Revolution: History, Philosophy & Politics of Science	8
STS215	Globalisation: Technology, Culture and Media	8
STS216	Environment in Crisis: Technology & Society	6
STS217	The Scientific Revolution: History, Philosophy and Politics of Science	8
STS218	Environment in Crisis: Technology and Society	8
STS220	Technology in Society: East and West	8
STS221	Technology in Society: East and West	6
STS223	The Politics of Medicine and Health	8
STS228	Computers in Society	8
STS229	Scientific and Technological Controversy	8
STS235	The Politics of Risk	8
STS238	Changing Images of Nature and the Environment	8
STS240	Technological Change, Popular Culture and New Media	8
STS241	Technological Change, Popular Culture and New Media	6
STS250	From Molecular Genetics to Biotechnology	8
STS260	Technology and Body Politics	8
STS288	Science and the Media	8

300-Level

STS300	The Environmental Context	8
STS306	Special Topics in the Social and Policy Aspects of Engineering	6
STS315	Globalisation: Technology, Culture and Media	8
STS323	The Politics of Medicine and Health	8
STS329	Scientific and Technological Controversy	8
STS335	The Politics of Risk	8
STS336	Advanced Topics in the History of Science 1500 - 1800	8
STS338	Changing Images of Nature and the Environment	8
STS340	Technological Change, Popular Culture and New Media	8
STS350	From Molecular Genetics to Biotechnology	8
STS360	Technology and Body Politics	8
STS376	The Politics of Risk	6
STS388	Science and the Media	8
STS390	Media, War and Peace	8
STS399	Research Topics in Science, Technology and Society Studies	8

Sociology

100-Level

SOC103	Aspects of Australian Society	6
SOC104	Communication, Media and Society	6
SOC110	Understanding Audiences	6

200-Level

AUST246	A Sociology of Australia's Indigenous Peoples: Contemporary Issues	8
SOC203	Explaining Society	8
SOC205	Sociology of the Family	8
SOC206	Youth and Popular Culture	8
SOC222	Sociology of Crime and Justice	8
SOC224	Violence, Fear and Civilisation: the Evolution of States	8
SOC231	Social Analysis	8
SOC241	Culture and Communication	8
SOC242	Contemporary Issues in Society	8
SOC243	Contesting Asia: Culture, Diversity, Difference	8
SOC244	Punishment: Purpose, Practice, Policy	8

300-Level

SOC302	Contemporary Social and Political Thought	8
SOC303	The Individual in Society	8
SOC305	Race and Ethnic Studies	8
SOC306	Researching Everyday Life	8
SOC308	Social & Public Policy	8
SOC309	Social Movement and Community Activism	8
SOC318	Modernity, Development and Social Change	8
SOC310	Community Organisations, the Third Sector and Civil Society	8
SOC330	The Sociology of Gender Relations	8
SOC334	Bread & Circuses	8
SOC349	Social Regulation: Policies and Issues	8



University Rules, Policies & Codes

General Information

Admission

1. General Provisions

To be considered for admission to the University for an undergraduate course leading to a degree, you must:

- a) be eligible for admission to the University (see 2. below); and
- b) have lodged an application for admission to the University (see 4. Application for Admission); and
- c) have satisfied any additional selection criteria for the course; and
- d) have been selected for the course.

A candidate admitted to a course must abide by the University Course Rules, which are printed below.

2. Am I Eligible for Admission?

Admission requirements are the minimum qualifications that you must have before you can enter a course.

You may meet the admission requirements for the University of Wollongong if you satisfy one of the following:

- 1) completion of an Australian Year 12 examination attaining the required UAI (NSW & ACT) or TER (SA, NT, Tas & WA) or OP (Q'ld) or ENTER (Vic) as determined by the University Council and meeting any additional selection criteria;
- 2) completion of a limited UAI. Applicants who are at least 21 years of age on 1 March in the year of admission, attempting at one sitting 5 to 9 units of Group A subjects in the NSW HSC may be considered for admission on the basis of an awarded limited Universities Admission Index;
- 3) have obtained an acceptable level of achievement in an approved secondary qualification (at least 12 years schooling) from an overseas institution;
- 4) have obtained an acceptable level of achievement in the University of Wollongong Aboriginal & Torres Strait Islander Entry Program;
- 5) have obtained an acceptable level of achievement in the Wollongong University College Advanced Diploma, or Foundation Studies program (AQF Certificate IV), or University Access Program;
- 6) have obtained an acceptable level of achievement in the Tertiary Preparation Certificate at TAFE;
- 7) completion, at an acceptable level of achievement, of a TAFE Advanced Certificate, or an AQF Level IV Certificate, or Associate Diploma, or Diploma or Advanced Diploma, or
- 8) completion of the Special Tertiary Admissions Test, Multiple Choice version, at an acceptable level of achievement. The test is conducted by UAC for applicants who are at least 21 years of age on 1 March

in the year of admission; however the STAT cannot be used for admission to Law or Engineering degrees.

- 9) other acceptable means as decided by the University.

Eligibility based on the NSW Higher School Certificate

- a) achievement in the HSC shall be measured by the Universities Admission Index (UAI);
- b) only *Board Developed* courses are used in the calculation of the UAI;
- c) the UAI will be based on an aggregate of scaled marks in ten units of Board Developed courses comprising:
 - your best 2 units of English;
 - your best 8 units chosen from your remaining units;
- d) for the purpose of calculation of the UAI, no more than 2 units will be included from Category B subjects.

3. Limitations

Council may limit:

- a) the number of applicants to be granted admission via any of the provisions in Rule 2; and
- b) the number of places available in any undergraduate course or subject.

4. Application for Admission

- 1) a) All current HSC candidates (or interstate equivalent) must lodge their applications for admission with the Universities Admissions Centre (UAC) by 26 September 2003*.

On-time applications attract no fee but late applications (up to 19 January*) incur a fee.

UAC will NOT accept applications after 19 January 2004*.

*Subject to change by UAC.

- b) Any current HSC candidate (or interstate equivalent) who has NOT lodged a UAC application by 19 January 2003* may apply directly to the University of Wollongong via UniAdvice 1300 367 869 or uniadvice@uow.edu.au

*subject to change by UAC

- 2) Australian students NOT currently taking Year 12 examinations may apply directly to the University of Wollongong via UniAdvice 1300 367 869 or uniadvice@uow.edu.au
- 3) International students sitting an Australian Year 12 examination in Australia or the International Baccalaureate in Australia in 2002 must apply through UAC.
- 4) All other International students may apply directly to the University of Wollongong via UniAdvice 1300 367 869 or uniadvice@uow.edu.au

- 5) Applications submitted by overseas applicants for postgraduate coursework programs (ie. Graduate Certificate, Graduate Diploma or Masters by coursework) must be accompanied by an application fee of \$A75, \$US40 or £UK30 pound (non refundable) inclusive of GST.

The fee applies to all applications either direct to the University or through an overseas representative. Credit card details, or a bank cheque made payable to UOW – ITC Ltd must be included with the application form. This fee covers application to two courses, either as Preference 1 and 2 on the original application or as two separate applications. An additional application fee will be payable upon submission of an application for a third course. This fee is not applicable to Wollongong University Programs, Bachelor degrees, Study Abroad programs or Research Degrees.

5. Special Tertiary Admissions Test (STAT)

You may apply for admission to the University on the basis of the STAT if you are at least 21 years of age by 1 March in the year of admission, for all courses except Law (see below) and Engineering.

The Special Tertiary Admissions Test (STAT) is conducted annually and is coordinated by the Universities Admissions Centre (UAC). The current fee is \$82.50*. Contact UAC for further details on (02) 9752 0200.

*Subject to change by UAC.

The STAT is designed to assess a range of competencies commonly considered important for success in tertiary study. It is a two-hour multiple-choice test designed to test the applicant's ability to comprehend, interpret, analyse and make inferences from a variety of material provided. The test questions are grouped in units based on stimulus material presented in a variety of forms, for example: passages of writing; graphical displays of information; diagrams. Any specific information required to answer the questions is contained in the stimulus material.

Applying for the 4 year Law degree through the STAT

You must be at least 25 years of age by 31 January in the year of admission and, in addition to obtaining a certain standard in the STAT, will be required to attempt the Australian Law Schools Entrance Test (ALSET).

6. Wollongong University College

Wollongong University College, the private college of the University of Wollongong, located on campus, provides advanced diploma courses and university entrance programs. These programs have been developed in consultation with the University of Wollongong and are available to both permanent Australian residents and international students who meet entry requirements.

Students who successfully complete a diploma course and meet specific University entrance requirements will be eligible for entry into bachelor degrees at the University of Wollongong. By completing a university entrance program

to a certain standard, students are guaranteed a place in one of the bachelor degrees at the University of Wollongong and may be eligible to apply for bachelor degrees offered at 33 Australian universities and 10 international universities.

Further information is available from:

UniAdvice

University of Wollongong

NSW 2521 AUSTRALIA

Tel: +61 +2 4221 3218

Fax: +61 +2 4221 3233

Or email uniadvise@uow.edu.au

7. Assumed Knowledge / Recommended Studies

Universities often assume students have taken certain NSW HSC subjects (or equivalent). For example, if Mathematics Extension 1 is **Assumed Knowledge** for a particular degree and HSC Mathematics has been studied, then some subjects in the degree may be quite difficult.

Students who have successfully completed **Recommended** NSW HSC subjects (or equivalent) will find subjects in their degree easier to follow.

Financial Information

Student Charges

According to Government regulations, students, both undergraduate and postgraduate, are required to meet the following charges where applicable:

1. Penalty charges such as late charges, parking fines, etc.
2. Administrative charges such as copy of academic transcript and replacement testamur charges, application fee to amend an academic record, or charges for examinations requiring special arrangements.
3. Cost of travel incurred by students attending practical work for courses in social work, teacher training, etc.
4. Cost of travel incurred by external students attending residential schools.
5. Accommodation charges and cost of subsistence on excursions, field work, etc.
6. Charges for special clothing or laundry costs.
7. Purchase of instruments or equipment.
8. Cost of handbooks and notes.
9. Charges associated with the development and operation of unions, student associations, students' representative councils and other student activities.
10. Deposits and refundable charges.

Compulsory Service Charges

In 2003, all students will be required to pay the charges listed below.

Entrance Charges at First Enrolment (exclusive of GST)

Wollongong UniCentre	37.10
Recreation & Aquatic Centre	28.00
Student Representative Council	6.20
WUPA	6.00

Annual Subscriptions	Wollongong Campus (\$)	Shoalhaven Campus (\$)
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Wollongong UniCentre	193.30	96.65
Recreation & Aquatic Centre	99.00	49.50
Students' Representative Council OR	45.40	27.70
Wollongong University Postgraduate Association	54.00	N/A

Total Annual Charges (excluding entrance charges)

Undergraduate 337.70 168.85

Postgraduate 346.30 N/A

Students studying at University Access Centres at Batemans Bay, Bega, Loftus and Sydney are required to pay an annual charge of \$45.40 plus an entrance charge, in their first year of \$6.20.

Conscientious Objection

While the University Council endorses the principle of universal membership of student organisations, the University has established a procedure for students seeking exemption from membership on the basis of genuine conscientious objection. It is important to note that conscientious objectors will still be required to pay the relevant fee, which will be directed towards the Dean of Students' equity awards, established to help students experiencing genuine financial difficulty which impacts on their studies. Please contact the Dean of Students' Office for further information (4221 4355).

Exemptions

Exemption from payment of fees will be granted in certain circumstances:

- Exemption from payment of fees for the Wollongong UniCentre will be granted to life members of the UniCentre and to permanent full - time and limited term staff of the University.
- Exemption from payment of fees for the Recreation and Aquatic Centre will be granted to life members of the Recreation and Aquatic Centre and to permanent full-time and limited term staff of the University.
- Students who have paid fees for six or more years are eligible to apply for life membership of the UniCentre and/or the Recreation and Aquatic Centre.

- Students enrolled at other Universities undertaking cross institutional study at University of Wollongong that are covered by exemption arrangements.

Charges for Off-Campus Students

Students studying for specified University of Wollongong courses offered in an off-campus mode will be required to pay the Student Association entrance and annual fees, but will be exempt from both the Wollongong UniCentre and Recreation and Aquatic Centre fees. The courses specified for this purpose will be determined by the Vice-Principal (Administration) or his/her nominee.

Other Charges

Late payment of Compulsory Service Charges	\$60.00
Reinstatement charge (following termination of enrolment)	\$100.00
Failure to re-enrol by the prescribed date	\$100.00
Charges paid after start of session	\$60.00
Application fee to amend academic record (where a student error)	\$80.00
Replacement Testamur	\$50.00
Transcripts (2 copies)	\$20.00

Parking Charges

Per Annum

Reserved Parking (Guaranteed Places)	\$531.30
Category 1 Places (red zone)	\$177.10
Category 2 Places (blue zone)	\$103.40
Motorcycle parking	\$28.60
Disabled parking	No charge

Daily

Daily Permits	\$4.40
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New Students

All new students are required to attend the enrolment centre and pay all charges by the date shown in their enrolment information.

Withdrawal/Refund Policy

1. Students withdrawing from a course are required to process their withdrawal via Student Online Services (SOLS).
2. Where withdrawal from a course is processed before the first day of their first session, a refund of all charges paid will be made.
3. On notice of withdrawal, on or after the first day of session and prior to the end of the fourth week of session, a full refund of compulsory service charges, other than entrance charges, will be made.
4. Late charges are not refundable.

5. Payments towards the Higher Education Contribution Scheme (HECS) will only be refunded where a student withdraws prior to the appropriate census date.
6. Tuition fee paying students are bound by the terms of the Tuition Fee Policy (see below).

Extension of Time

Extensions of time to pay compulsory service charges are not permitted

Failure to Pay Charges

1. Any student who is indebted to the University and fails to make a satisfactory settlement of this indebtedness upon receipt of due notice ceases to be entitled to membership and privileges of the University. Such a student is not permitted to register for a further session, to attend classes or examinations, or to be granted any official credentials. Enrolment will be cancelled when fees have not been paid in full by the due date. Access to University facilities (email, library) will be withdrawn, examination results will not be provided, and graduation will not be permitted for students who are indebted. Re-enrolment in the next session will not be permitted for students who have fees outstanding. Indebtedness to the University includes the non-payment of charges, late charges, library fines, any arrears in rent or other financial obligations resulting from an accommodation agreement entered into with the University, and any indebtedness incurred as a result of any other financial obligation to the University.
2. When compulsory service charges are not paid in full by the due date, a late fee of \$60 will be charged.
3. In order for an enrolment to be reinstated a student must pay all outstanding amounts, including late fees, plus a Reinstatement Fee of \$100.

Transcript and Reinstatement Charges

Payments such as transcripts and re-instatement charges can be paid at Student Administration.

Tuition Fee Policy

(Refer Part 5, page 505 - Policies & Codes of Practice)

Higher Education Contribution Scheme (HECS)

Students enrolling at the University will be liable under the Higher Education Contribution Scheme (HECS) unless specifically exempted. Summer session enrolment also incurs a HECS liability. HECS is payable each session and the amount of liability is determined by the load (as a proportion of the standard student load for a full year) in which a student enrolls.

Method of Payment

At enrolment, students nominate whether they wish to pay the HECS liability through the Taxation System when earnings reach the threshold prescribed yearly by the Government or whether they wish to pay the HECS liability to the University up-front and receive a discount of 25%.

Students who elect to pay their HECS liability through the taxation system are able to make an up-front payment prior to the HECS census date of at least \$500 (for which they receive a 25% discount). Payments may be made using EFTPOS, credit card or cheque.

For further HECS information please refer to the 'HECS-Your Questions Answered 2003' booklet available from the Academic Registrar's Division on (02) 4221 3927.

Postgraduate Education Loans Scheme (PELS)

PELS is an interest free loans facility for eligible students who are enrolled in fee-paying, postgraduate non-research courses. It is similar to the deferred payment arrangements available under the Higher Education Contribution Scheme (HECS). PELS enables eligible students to obtain a loan from the Commonwealth Government to pay all or part of their tuition fees incurred from 2002 onwards. The Commonwealth pays the amount of the loan directly to the student's institution. Students then repay the loan through the taxation system once their income reaches the minimum threshold for compulsory repayment.

For further PELS information please refer to the 'PELS - Your questions answered 2003' booklet available from the Academic Registrar's Division or call (02) 42213927

Prizes & Scholarships

The University offers over 200 undergraduate and postgraduate scholarships and a range of prizes to students and prospective students. Further information is available at the following web addresses:

<http://www.uow.edu.au/student/scholarship/scholarship.html>
and <http://www.uow.edu.au/student/prizes/>

<http://www.uow.edu.au/student/prizes/>

Rules

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Campus Access & Order Rules

Part I - Preliminary

1. Preamble

The grounds of the University of Wollongong are private property and the University Council has the right to regulate access to the grounds and to control the entry of vehicles and their operations within those grounds.

2. Commencement

These Rules came into operation in this form on 11 August 1989. The Rules incorporate the "Rules for the Control of Motor Vehicles Entering the Grounds of the University of Wollongong", previously approved by Council in 1985.

3. Parts

The Rules are divided into three parts, as follows:

Part I Preliminary

Part II Access to and Order on Campus

Part III Traffic and Parking Control

4. Interpretation

In these Rules, unless the contrary intention appears:

- i) "*Campus*" includes any land which, for the time being, is the property of the University of Wollongong or in its possession or under its control, together with any building or other erection or construction of any kind whatsoever, whether permanent or temporary, standing on or affixed to such land or any part thereof;
- ii) "*Vehicles*" means all motor vehicles and includes motor cycles, but excludes motorised wheelchairs;
- iii) "*Permits*" means annual and half yearly Category 1, Category 2, Disabled, Motor Cycles, Additional and Daily Permits issued in accordance with these Rules;
- iv) "*Authorised Persons*" means the Vice-Chancellor and Principal, the Vice-Principal (Administration), the University Librarian, members of the Security Staff and senior members of the University staff so designated by the Vice-Chancellor and Principal for the purposes of these Rules;
- v) "*Members of Staff*" includes, for the purposes of these Rules, full-time, part-time and casual employees of the University of Wollongong and its associated companies, centres, residential complexes and employees of the UniCentre and its tenants, University Recreation and Aquatic Centre, Students' Representative Council,

Illawarra Technology Corporation and its tenants and other groups/bodies/organisations/companies as specified from time to time by the Vice-Chancellor and Principal for the purposes of these Rules;

- vi) "*Students*" includes full-time and part-time students of the University of Wollongong;
- vii) "*Disabled Person*" means a person who possesses an obvious visible disability or a disability supported by certification from a qualified medical practitioner or who is in possession of a valid "Disabled Persons Parking Authority" issued by an Australian or State Government Authority;
- viii) "*Temporarily Disabled Person*" means a person under a temporary disability supported by certification from a qualified medical practitioner.

Part II - Access to & Order On Campus

1. Persons Eligible for Entry

Persons in the following categories may have access to the campus:

- i) a member of the University Council or of Convocation or a Fellow of the University;
- ii) a member of staff entering or remaining on campus in consequence of being an employee;
- iii) a student entering or remaining on campus in consequence of undertaking studies or research;
- iv) a person who holds a permit authorising entry to the campus and who has observed all conditions, if any, to which the authority contained in the permit is subject;
- v) a member of the Commonwealth or State Police Forces requested by an authorised person to enter and remain on the campus for the purposes of protecting persons or property; and
- vi) a person who otherwise has valid reason to be on the campus, provided entry has not been prohibited by an authorised person.

2. Traffic Access

- i) Pedestrians, bicycles, vehicles which display a permit issued in accordance with these Rules, vehicles making delivery of goods ordered by the University, vehicles operated by contractors to the University, vehicles picking up or setting down passengers or any other vehicle permitted to enter from time to time by an authorised person may have access to the campus.
- ii) All persons having access to the campus whether or not in charge of a vehicle shall conduct themselves and/or use their vehicles in a safe and proper manner at all times in accordance with the Occupational Health and Safety Act.

- iii) All vehicles and bicycles which have access to the campus shall be driven and parked in accordance with these Rules and the directions of authorised persons.
- iv) The University shall not be liable for any damage or loss, including consequential loss, suffered or caused to any person or vehicle (or its accessories or contents) or bicycle while travelling, standing or parked on the campus.

3. Identification Cards

All members of staff of the University and students are issued with Identification Cards which must be carried during attendance at the University and shown in response to any reasonable request from an authorised person or from any other member of staff who might require such identification in the course of their duties.

4. Authority Cards

Persons designated as authorised persons for the purpose of these rules are issued with Authority Cards.

5. Authorised Persons

An authorised person is empowered, under these Rules, to give such directions and to make such requests in the name of the University as may be required to maintain order within the University and to maintain orderly conduct by members of staff, students and visitors, and in particular, but without limiting the generality of the foregoing:

- i) to request persons involved in disorderly conduct to leave the campus and to remove trespassers thereon;
- ii) to request persons to leave inclosed lands owned or occupied by the University and to apprehend and deliver to the custody of the nearest police constable any person found committing an offence against the Inclosed Lands Act, 1901, as amended, or committing a criminal offence;
- iii) to administer and control, in accordance with Part III of these Rules, access to the campus and the traffic and parking provisions therein.

6. Members of the Police Forces

Members of the Commonwealth or State Police Forces may be requested by any authorised person to enter any part of the campus when, in the opinion of such authorised person, the protection of persons and/or property require it. Members of the Police Forces may in instances of likely or actual injury to persons or damage to property take action consistent with the authorities and powers that they possess as officers of the Commonwealth or State Police Forces, as appropriate.

7. Animals on Campus

Animals are not permitted on campus unless authorised by the Vice-Principal (Administration); authorised persons may take action to remove unauthorised animals from the campus by whatever means are necessary.

8. Disorderly Conduct

In the interpretation of these Rules, the following forms of conduct will be construed as "disorderly conduct" and may

lead to action being taken by authorised persons in the interests of maintaining good order and orderly conduct on campus:

- i) failure to comply with by-laws, rules, orders, Council resolutions or other lawful directions of the University in relation to campus access and order;
- ii) any conduct which impairs the reasonable freedom of other persons to pursue their studies, researches, duties or lawful activities in the University or to participate in the life of the University;
- iii) wilful failure to obey any reasonable direction of an authorised person in relation to campus access and order;
- iv) failure to furnish or provide appropriate identification on request by an authorised person;
- v) wilfully entering any place on campus which the person is forbidden by an authorised person, by-law, rule, order or Council resolution to enter;
- vi) wilfully littering the campus or damaging, defacing, or wrongfully dealing with any University property or any other property on campus;
- vii) any other unreasonable conduct disrupting the normal activities of the University.

Where any disorderly conduct under section 8(vi) above, occurs and the person or organisation responsible can be identified, the University may take steps to recover the cost of any repairs to property or the cost of removal of offending material in addition to any disciplinary action that may be taken under the University's Discipline Rules.

9. Complaints of Alleged Disorderly Conduct

Any complaints alleging disorderly conduct against any person may be brought, in writing, by an authorised person or by a student or staff member to the Vice-Principal (Administration) who shall forward the complaint to the Vice-Chancellor and Principal; if the Vice-Chancellor and Principal deems that the matter requires any action to be taken, the matter may be dealt with as misconduct in accordance with the appropriate University Rules and authorities.

Part III - Traffic & Parking Control

1. Preamble

These Rules provide for the orderly movement and parking of vehicles and bicycles on campus. Failure to comply with the Rules may result in fines, wheel clamping, loss of parking privileges and/or disciplinary procedures.

2. Definitions

In these Rules:

- a) "*Authorised Persons*" means the Vice-Principal (Administration), Security Staff, Gatekeepers and any other person designated as an authorised person in accordance with the Campus Access and Order Rules;
- b) "*Disabled Person*" means a person who possesses an obvious visible disability or a disability supported by

General Information

certification from a qualified medical practitioner or who is in possession of a valid "Disabled Persons Parking Authority" issued by an Australian or State Government Authority;

- c) "*Staff Members*" includes full-time, part-time and casual employees of the University of Wollongong and employees of the UniCentre and the Illawarra Technology Corporation and their tenants, and other groups as specified from time to time by the Vice-Chancellor;
- d) "*Students*" includes full-time and part-time students of the University of Wollongong;
- e) "*Temporarily Disabled Person*" means a person with a temporary disability supported by certification from a qualified medical practitioner;
- f) "*The University Campus*" means the real property owned and/or operated by the University of Wollongong in the State of New South Wales;
- g) "*Vehicles*" includes motor cycles and motor vehicles.

3. Access to University Grounds

- a) Pedestrians, bicycles, vehicles which display a permit issued in accordance with these Rules, vehicles making delivery of goods ordered by the University, vehicles operated by contractors to the University, vehicles picking up or setting down passengers or any other vehicles permitted to enter from time to time by an authorised person, may have access to the University campus.
- b) The University shall not be liable for any damage or loss, including consequential loss, suffered or caused to any person or vehicle (or its accessories or contents) while travelling, standing or parked on the University campus.

4. Driving Rules

- a) All vehicles shall observe a speed limit of 25 kph on University roads and 15 kph in single level car parks. Vehicles within the Multi-storey car park will obey a speed limit of 5 kph.
- b) No vehicle shall park or stop on any road or place not specifically road marked or sign posted for parking or stopping (except for a period sufficient to set down and/or pick up passengers).
- c) Vehicles and bicycles shall at all times give way to pedestrians at marked pedestrian crossings and other places.
- d) Vehicles and bicycles shall at all times comply with all road markings, signs and the directions of authorised persons.
- e) Except where these Rules provide to the contrary, the normal rules of the road applicable in New South Wales shall apply to vehicles and bicycles on the campus.
- f) Where a vehicle or bicycle is stopped by an authorised person in relation to a breach of the driving rules or due to the manner in which the vehicle is driven, for

identification purposes the authorised person may demand the licence or other suitable identification of the driver or rider.

5. Parking Rules

- a) No vehicle or bicycle shall park on the campus otherwise than in accordance with these Rules.
- b) Vehicles issued with a Category 1 Permit in accordance with these Rules may park in the areas designated for Category 1 (red) and/or Category 2 (blue) parking.
- c) Vehicles issued with a Category 2 (blue) Permit may park in areas designated Category 2 (blue) parking between 8.00 am and 4.30 pm Mondays to Fridays and may park in Category 1 areas outside these times.
- d) Vehicles issued with a Regular Visitor Permit may park in Category 1 or Category 2 areas.
- e) Only vehicles displaying an authorised Disabled Parking Permit may park in the areas designated for Disabled Parking.
- f) All vehicles shall be parked within the lines designating parking spaces and shall at all times be parked in such a way that no obstruction is caused to the University roadways, or car park access lanes.
- g) Bicycles may only be parked in areas where appropriate stands have been provided by the University; in addition to any penalty that may be imposed, bicycles not parked in these areas may be impounded by authorised persons.
- h) No vehicle shall park on any footpath, reserve or grassed area.
- i) No vehicle or bicycle shall impede or prevent the safe movement of people from any building at any time by standing or parking across, or near, or adjacent to any entrance, exit, fire exit, etc.
- j) The driver of a vehicle shall not cause a vehicle to stand, wait or be parked for period exceeding the time shown or indicated on any sign eg. Visitor Parking.
- k) The holder of a category 1 (red), category 2 (blue) or day permit shall not cause their vehicle to stand, wait or park within a parking space signposted as Visitor Parking.

6. Permits

- a) Transferable permits for Category 1 (red) and Category 2 (blue) parking permits allow for the interchange of vehicles using a permit. These transferable permits are issued to a person and this person will be responsible for any vehicle using this permit. Infringement notices will therefore be issued to this person and will be the responsibility of this person. Additional permits for other owner registered vehicles will not be available at reduced prices.
- b) Any disabled or temporarily disabled person may apply for a Disabled Parking Permit.
- c) Any student or staff member may apply for a Motor Cycle Parking Permit, Reserved Parking Permit,

Category 1 (red) Permit or Category 2 (blue) Permit in writing to the Vice Principal (Administration). Replacement permits will be issued only upon written request to Personnel and Financial Services and subsequent approval of that request. Replacement Permits will incur a fee of \$11.00.

- d) On payment of fees prescribed separately and the due compliance by the applicant with these Rules, a Parking Permit shall be issued by the Vice Principal (Administration) or an authorised person.
- e) Annual Parking Permits shall expire on the first day of Session One in the year following issue. Half yearly parking permits for session one will expire on the first day of session two.
- f) Daily permits may be issued by authorised persons on payment of the fee prescribed separately.
- g) Regular Visitor Permits may be issued by authorised persons on application from sponsoring units, subject to approval by the Vice-Principal (Administration).
- h) Holders of all Parking Permits, shall agree on acceptance of the permit, to be bound by these Rules.
- i) All Parking Permits issued in accordance with these Rules (excepting Daily Parking Permits and Regular Visitor Permits) shall be affixed to the motor vehicle windscreen so as not to obstruct the driver's vision.
- j) All fees paid under these Rules are non-refundable.

7. Offences & Prescribed Penalties for Driving & Parking Infringements

The following is a list of offences derived from the Driving and Parking Rules for which infringement notices may be issued and the prescribed penalty that applies to each offence. Infringement notices may be issued by authorised persons for breaches of the Driving or Parking Rules.

i) Driving Offences

Infringement No.	Offence	Penalty
1.	Not Give Way to Pedestrian	\$60.00
2.	Disobey reasonable direction by authorised person.	\$60.00

All other driving matters may be reported by way of a Breach Report by an authorised person to the Vice Principal (Administration). The breach report will be adjudicated and appropriate action instigated either by way of a fine not greater than \$134.00 or, in the case of staff the matter referred to Head of Unit/Department for counselling or other disciplinary action or by having the matter dealt with under the Occupational Health & Safety Act. In the case of students, the matter may be treated as a misconduct as described in 7(g). Where the offending driver is not a member of the Campus community, other appropriate action may be instigated as deemed appropriate by the University according to the circumstances surrounding the offence.

ii) Parking Offences

Infringement No.	Offence	Penalty
1.	Stand Contrary to Notice: "No Standing" "No Stopping" "Category Parking Signs" "Bus Stop Notices" "Kids Uni Entry Only" "Visitors Parking" "Exceed Time Limit"	\$60.00
2.	Disobey Notice "No Entry" "University & Service Vehicles only beyond this Point" "Authorised Vehicles Only" "Authorised Delivery Vehicles Only" by authorised person.	\$60.00
3.	Not stand wholly in designated parking space	\$60.00
4.	Enter Grounds and park without proper authority	\$60.00
5.	Stand vehicle on footpath, reserve or grassed area	\$60.00
6.	Not Stand Bicycle in Designated Stands or Area. (Infringement Notice should only be issued where bicycle has been impounded.)	\$60.00
7.	Cause Obstruction to Vehicle or Pedestrian	\$60.00
8.	Stand Contrary to Notice "Disabled Parking Space"	\$134.00
9.	Stand Contrary to "No Stopping " or "No Standing" Notices erected at fire hydrants, near fire safety equipment, hazardous liquid stores, hazardous areas	\$134.00
10.	Stand Contrary to Notice "No Stopping" on Ring Road	\$134.00
11.	Stand vehicle or bicycle across or near building egress. eg. entrances, exits, fire exits, etc.	\$134.00

The penalty applied to offences one to seven is \$60.00 on each occasion, the amount being reduced to \$30.00 if paid within three working days. The penalties applied to offences eight to eleven apply to vehicles being parked within or near disabled parking spaces, hazardous areas, hazardous liquid stores, fire hydrants or fire fighting equipment or entrances of buildings where safe egress may be impeded.

General Information

No discounts will apply for payment of these offences numbered eight to eleven.

iii) Wheel Clamping or Impounding of Bicycles

Blatant or persistent infringements may result in the offending vehicle being wheel clamped. Offending bicycles may also be impounded.

iv) Impounded Vehicles and Bicycles - Release

To obtain release of an impounded vehicle a charge of \$134.00 applies.

To obtain release of an impounded bicycle a charge of \$15.00 applies.

Impounding fees may be invoiced where the authorised person is satisfied that adequate proof of identity has been established either through the production of a staff or student identity card or through the production of a New South Wales or other recognised Australian State driving licence bearing the address of the driver or person in charge of the vehicle at the time, and the wheel clamps will then be released.

- a) Notice of an infringement shall be given by:
 - i) leaving a notice in a prominent position on the infringing vehicle or bicycle; or
 - ii) the delivery of a notice to the infringing person or the owner of the infringing vehicle or bicycle; or
 - iii) posting a notice to the infringing person or the owner of the infringing vehicle or bicycle at that person's last known address. Such a notice shall be deemed to have reached the infringing person or the owner of the infringing vehicle or bicycle in the normal course of the post.
- b) An infringement notice given in accordance with these Rules shall contain details of the infringement, the fine imposed and a statement of the rights of the recipient of the infringement notice.
- c) Persistent or blatant infringement of these Rules may result in a Parking Permit being revoked, a vehicle being denied access to the campus and/or wheel clamping of the offending vehicle.
- d) If fines on staff members who are paid by the University remain unpaid after two (2) requests the amount of the fines may be deducted from the salary of the staff member. The authority for that deduction shall be deemed to be made upon signing the application for a Parking Permit.
- e) If fines on students, or staff members not paid by the University, remain unpaid after two (2) requests, the fines shall be treated as a debt due to the University. In the case of students examinations results may be withheld.
- f) Non-payment of fines, or breaches of the driving rules of these Rules by students, may be treated as a misconduct under Part XII of the University By-Laws.

- g) A staff member or student may appeal against any action taken. Such appeal shall be made in writing to the Vice Principal (Administration) whose decision shall be final. Appeals must include the original or copy of the Infringement Notice.

Part IV - Categories of Parking & Fees

1. Transferable Permits

Parking Permits are transferable between vehicles and the electrostatic label must be displayed on the vehicle for entry to and while present on the University Campus.

2. Category "Reserved Spaces"

Single payment of \$531.30 for period 1 January to 31 December in any year. Salary deduction of \$20.46 per fortnight (staff only). Applications for reserved parking are available from Financial Services. Reserved parking is available in the Multi-Storey carpark and under Building No. 3.

3. Category 1 - Red Permit

Single payment of \$177.10. Salary deduction \$6.82 per fortnight (staff only). Single session permits are available at \$88.55. Permits do not guarantee parking. This permit also allows parking in the Multi-storey carpark but not in spaces reserved for Departments, individuals, disabled etc.

4. Category 2 - Blue Permit

Single payment of \$103.40. Salary deduction \$4.02 per fortnight (staff only). Single session permits are available at \$51.70. Permits do not guarantee parking. "Blue" carparks are generally located in the Western part of campus during the hours 8.00am to 4.30pm Monday to Friday and in any carpark outside these hours but not in spaces reserved for Departments, individuals, disabled etc.

5. Daily Permits

\$4.40 per day. Permits do not guarantee parking. These permits provide access to spaces in Category 2 "Blue" carparks during the hours 8.00am to 4.30pm Monday to Friday and in any carpark outside these hours but not in spaces reserved for Departments, individuals, disabled etc.

6. Regular Visitor Permits

Single payment of \$28.60. Permits do not guarantee parking. These permits must be authorised by the Vice Principal (Administration). Requests should be forwarded through the Manager of Security. Permit provides access to all carparks but not in spaces reserved for Departments, individuals, disabled etc.

7. Disabled Permits

NO CHARGE. Permanently Disabled persons will be issued with a special Permit authorising the use of Disabled Parking Spaces. Contact the Disability Services on 4221 4242. Certificate from a medical practitioner or a valid "Disabled Person Parking Authority" issued by an Australian or State Government must be produced.

8. Motor Cycles

Single payment of \$28.60. Access all motor cycle parking areas. Permits do not guarantee parking. Motorcycle permits are available free of charge where a Category 1 or 2 permit is purchased - motor cycle registration papers detailing owner detail for same permit holder must be produced.

9. Bicycles

No charge. Bicycle racks are located throughout campus. Parking outside the racks will be actively discouraged and is covered by the University's parking rules.

10. Replacement Permits

Permits will only be replaced on written application to Financial Services. A \$11.00 fee applies.

11. Salary deductions

Salary deductions apply for a twelve month period and any request for cessation of deductions should be addressed to Financial Services along with the return of the relevant parking permit.

12. Refunds

No refunds will be issued for any reason.

Rules for Student Discipline

Preamble

- 1) These Rules provide discipline procedures in cases of misconduct by students of the University. The Rules are made in accordance with Section 29 of the University of Wollongong Act, 1989, and Section 34 of the University By-law.

Commencement

- 2) These Rules came into operation on 8 October, 1993.

Definitions

- 3) In these Rules, unless the context or subject matter otherwise indicates or requires:

"Act" refers to the University of Wollongong Act, 1989;

"Committee of Appeal" means the Committee of Appeal constituted under Rule 41;

"Council" means the Council of the University of Wollongong;

"Investigation Committee" means the Investigation Committee constituted under Rule 24;

"misconduct" means conduct on the part of a student which:

- a) breaches the University By-law or the Rules made in accordance with that By-law or any Resolutions of Council or is deemed or stated to be misconduct under the By-law, Rules or Resolutions; or
- b) constitutes a serious impediment to the carrying out of the University's functions, including those academic and administrative functions which are

properly ancillary to those set out in Section 6 of the Act or which relate to the participation by any person in the activities of the University; or

- c) is otherwise detrimental to the proper conduct of the University;

"senior officer" means a person holding the position of Pro Vice-Chancellor, Vice-Principal, Dean, Head of a Department or School, Manager or Director of an Administrative Branch, University Librarian or such other positions as Council may from time to time by resolution determine;

"student" means a person enrolled at the University or in any course or program offered in conjunction with the University.

Introduction

- 4) The Vice-Chancellor shall have power in accordance with these Rules to take disciplinary action against any student for misconduct.
- 5) The Vice-Chancellor may, for reasons of convenience or of natural justice, appoint a Pro Vice-Chancellor of the University to exercise any or all of the duties, powers or responsibilities under these Rules; the Vice-Chancellor shall report any such delegation to Council.

Urgency Provisions

- 6) The University Librarian, or in his/her absence the Manager, Client Services, or in both their absences the officer-in-charge, in cases where the misconduct or breach is so serious to warrant it, may exclude any student from, or restrict the use by the student of, any Library facilities for such period as he/she thinks fit, if in the opinion of the University Librarian, Manager, Client Services or the officer-in-charge the student is guilty of misconduct in or about the Library precincts or facilities or is in breach of any rules for the use of Library facilities as may be in force from time to time.
- 7) The Vice-Principal (Administration), or in his/her absence, the Academic Registrar, in cases where the misconduct or breach is so serious to warrant it, may exclude any student from attendance at a particular examination conducted by the University if in the opinion of the Vice-Principal (Administration) or the Academic Registrar the student is guilty of misconduct or is in breach of any rules applicable to the examination.
- 8) The Pro Vice-Chancellor (Information Technology), or in his/her absence, in cases where the misconduct or breach is so serious to warrant it, may exclude any student from using, or restrict the use by the student of, any computing facilities owned or under the control of the University for such period as he/she thinks fit if in the opinion of the Pro Vice-Chancellor (Information Technology) or the Manager, the student is guilty of misconduct or is in breach of any rules applicable to the use of computing facilities.

- 9) Any action taken under Rules (6), (7) or (8) shall be reported in writing forthwith to the Vice-Chancellor who may confirm, vary, quash or postpone the exclusion or restriction, as appropriate, if he/she thinks fit; a copy of the report shall be forwarded to the student by the person taking the action under Rules (6), (7) or (8).
- 10) Where conduct on campus or University-managed premises occasions the intervention of outside legal agencies, resulting in charges being laid or other action taken, that intervention of itself is sufficient for the Vice-Chancellor to take appropriate action including suspension of any student from the University.
- 11) Where the Vice-Chancellor takes action pursuant to (10), notice of this action shall be given to the student affected who may then request the Vice-Chancellor to refer the case to the Investigation Committee under the provisions of clauses (20), (21) and (22).
- 12) Any student excluded or restricted from using the Library or from attendance at examinations or from using the computing facilities pursuant to Rules (6), (7) or (8) respectively may make an immediate oral appeal to the Vice-Chancellor who, without prejudice to any action subsequently taken under Rule (9), may confirm, vary, quash or postpone that exclusion or restriction, as appropriate, if he/she thinks fit.
- 13) Any student excluded or restricted from using the Library or from attendance at examinations or from using the computing facilities pursuant to Rules (6), (7) or (8) respectively may, within 14 days of that action being taken, make a written appeal to the Vice-Chancellor who, notwithstanding any action he/she may have taken under Rule (9), may confirm, vary quash or postpone the action or refer the matter for investigation to the Investigation Committee.

Bringing of a Complaint

- 14) Complaints may be brought by a senior officer against any student for alleged misconduct. The complaint shall be in writing addressed to the Vice-Chancellor and shall give full details of the alleged misconduct.
- 15) The Vice-Chancellor, on receiving the complaint, shall within 14 days of receipt of the complaint or such further period not exceeding 28 days as he/she thinks fit, bring an allegation of misconduct against that student by referring the complaint in writing to the Investigation Committee for investigation unless the Vice-Chancellor forms the opinion that the complaint is unfounded or that the matters complained of do not constitute misconduct.
- 16) The Vice-Chancellor may, of his/her own motion, bring an allegation of misconduct against a student by referring a complaint in writing to the Investigation Committee for investigation.

Immediate Action by Vice-Chancellor

- 17) Notwithstanding any other provision of these Rules, if, in the opinion of the Vice-Chancellor, the circumstances referred to in Rules (6), (7) or (8) or the subject of the complaint brought under Rules (14) or (16) are such that immediate or further action is required, the Vice-Chancellor may:
 - suspend a student from the University; or
 - exclude the student from, or restrict the use by the student of, any Library facilities, or
 - exclude the student from attendance at any examinations and/or withhold the examination result(s) for relevant subject(s) or;
 - exclude the student from using, or restrict the use by the student of, any computing facilities;and shall in such circumstances refer the matter to the Investigation Committee; the action taken by the Vice-Chancellor shall remain in force until the Investigation Committee has dealt with the matter.
- 18) Any action taken by the Vice-Chancellor in accordance with Rule (17) shall be conveyed in writing to the student by the Vice-Principal (Administration).
- 19) Upon being informed by the Vice-Principal (Administration) of any action taken under Rule (17) the student shall cease to attend the University or to enter the Library or to attend examinations or to use the computing facilities as the case may be and, if so directed by the Vice-Chancellor, shall refrain from entering on any premises of the University.

Referral to Investigation Committee

- 20) If the Vice-Chancellor decides pursuant to Rule (15) that the matter warrants referral to the Investigation Committee or if action is taken pursuant to Rule (14), or to a request under Rule (11), the Vice-Principal (Administration) shall forthwith send the student concerned a copy of the reference of the complaint to the Investigation Committee, a copy of the documentation to be considered by the Investigation Committee and a copy of these Rules.
- 21) In addition, a copy of the reference referred to in Rule (20) shall be forwarded to the senior officer who brought the complaint, and, if appropriate to the particular complaint, copies of the reference shall be forwarded, in confidence, to the Dean of the Faculty responsible for the course in which the student is enrolled and to the Head(s) of the Unit(s) offering the subject(s) in which the student is enrolled and for which the complaint is concerned.
- 22) The Vice-Chancellor's reference to the Investigation Committee shall set out a full statement of the alleged misconduct but the Vice-Chancellor shall not be obliged to include a copy of the original complaint.

23) If the matter referred to the Investigation Committee by the Vice-Chancellor relates to a breach of the Examination Rules, the Vice-Chancellor may withhold the examination result(s) for the relevant subject(s) pending the outcome of the investigation by the Investigation Committee.

Investigation Committee

24) The Investigation Committee shall on receipt of a complaint and as promptly as possible investigate the complaint and report its finding to the Vice-Chancellor.

25) The Investigation Committee shall consist of:

for non-academic cases:

- a Pro Vice-Chancellor, as chairperson;
- a senior member of academic staff appointed by the Vice-Chancellor for a one year term of office, or, if the appointee is not available for any investigation, a senior academic staff member nominated by the Vice-Chancellor to act for a particular meeting or meetings;
- the President of the Students' Representative Council in the University or, if not available, another member of the Students' Representative Council nominated by the President.

for academic cases:

- the Chair of the Academic Senate or, if not available, the Deputy Chair of the Academic Senate as Chairperson;
- a senior member of academic staff appointed by the Vice-Chancellor for a one-year term of office, or, if the appointee is not available for any investigation, a senior academic staff member nominated by the Vice-Chancellor to act for a particular meeting or meetings;
- the President of the Students' Representative Council in the University or, if not available, another member of the Students' Representative Council nominated by the President; and
- where both genders are not represented on the Committee, the Vice-Chancellor shall appoint a member of the appropriate group to redress this situation.

26) The Committee shall conduct its proceedings in accordance with the Committee Procedures set out in the Appendix.

27) The Chairperson of the Investigation Committee shall have a deliberative vote but not a casting vote, except in cases where the Committee comprises an equal number of members.

28) If any member of the Investigation Committee is unable or unwilling to act, the Vice-Chancellor may appoint a senior officer or a member of the Senate or a student as the circumstances may require to serve on the Committee.

29) No person having acted on behalf of the University in any one of the matters referred to in a particular complaint shall be qualified to sit on the Investigation Committee investigating the complaint.

30) The Vice-Principal (Administration) or his/her nominee shall be Secretary to the Investigation Committee and shall assist the Committee in whatever way the Committee, through its Chairperson, may from time to time direct.

31) The Investigation Committee shall have the power to require any member of staff of the University or any student to appear before it with a view to assisting the investigation.

32) The Investigation Committee may, in accordance with its findings under Rule 24, recommend to the Vice-Chancellor:

- a) that the allegations be dismissed;
- b) that no further action be taken against the student concerned;
- c) that the student be reprimanded by the Vice-Chancellor;
- d) i) that the student be fined and, in the event of multiple instances of misconduct, multiple fines may be applied; the fine for each instance shall not exceed \$250. (*NB - refer to (h) below*)
 - ii) in addition, where the misconduct is related to a breach of Examination Rules, that the student be awarded a Fail grade for the relevant subject(s);
- e) that the student be suspended from the University for a limited period and in addition, where the misconduct is related to a breach of Examination Rules, the Committee may recommend that the student be awarded a Fail grade for the subject(s); or
- f) that the student be expelled from the University and in addition, where the misconduct is related to a breach of Examination Rules, the Committee may recommend that the student be awarded a Fail grade for the subject(s); or
- g) such other penalty as the Committee may deem appropriate in the particular instance of misconduct;
- h) and, in cases of damage to University property or any other action incurring a cost to the University, that, in addition to any penalty recommended above, the student may be charged for the costs incurred in replacing or repairing the property or in redressing any other results of the misconduct.

In recommending a penalty under clauses (c) to (h) above, the Committee may further recommend that the imposition of the penalty be suspended under whatever conditions and for whatever period of time the Committee deems appropriate to the particular circumstance of the complaint.

Result of Investigation

- 33) On receipt of the recommendation of the Investigation Committee, the Vice-Chancellor may refer the recommendation back to the Committee for further consideration or, in accordance with the recommendations dismiss the allegations, take no further action, reprimand, fine, suspend or expel the student; in addition to fining, suspending or expelling the student, the Vice-Chancellor may (a) award a Fail grade for the relevant subject(s) where the misconduct is related to a breach of Examination Rules; and/or (b) charge the costs of replacing or repairing any damaged property.
- 34) The decision of the Vice-Chancellor, including any decision to refer the matter back to the Investigation Committee, shall be conveyed in writing to the student by the Vice-Principal (Administration), except in the case where a student is to receive a reprimand in which case the reprimand shall be conveyed in writing by the Vice-Chancellor.
- 35) A copy of the letter forwarded to the student in accordance with Rule (34) shall be forwarded, in confidence, to the senior officer who brought the complaint and to any person to whom a copy of the reference of complaint was forwarded in accordance with Rule (19) and, in cases where University Security staff have been called, the Head of Security.

Appeal

- 36) Any student against whom action is taken pursuant to Rule (33) may appeal to Council on the grounds of lack of due process in the investigation of the complaint.
- 37) The appeal must be lodged in writing to the Vice-Principal (Administration) within 14 days, or within such further period as Council shall allow, or the notification of the Vice-Chancellor's action.
- 38) An appeal lodged by a student pursuant to Rule (36) shall be referred by the Vice-Principal (Administration) to the Committee of Appeal if the Vice-Principal (Administration) is satisfied that the appeal is based on grounds of lack of due process.
- 39) If the Vice-Principal (Administration) determines that an appeal lodged by a student is not based on the grounds of lack of due process, he/she shall notify the student accordingly in writing.
- 40) If the Vice-Principal (Administration) determines that the appellant has presented new or additional information in the appeal that was not available to the Investigation Committee, he/she shall refer the matter to the Investigation Committee for reconsideration.

Committee of Appeal

- 41) The Committee of Appeal shall investigate the appeal and shall decide whether due process in terms of the Committee Procedures set out in the Appendix has been followed by the Investigation Committee.

- 42) The Committee of Appeal shall consist of:

- the Deputy Chancellor, as Chairperson;
- the student member of Council or, if not available, another student appointed by Council;
- one other member of Council appointed by Council; and
- where both genders are not represented on the Committee, the Chancellor shall appoint a member to redress this situation.

- 43) The Chairperson of the Committee of Appeal shall have a deliberative vote but not a casting vote, except in cases where the Committee comprises an equal number of members.

- 44) No person who is a member of the Investigation Committee for a particular matter shall be a member of the Committee of Appeal for the same matter.

- 45) The Vice-Principal (Administration) or his/her nominee shall be Secretary to the Committee of Appeal and shall assist the Committee in whatever way the Committee, through its Chairperson, may from time to time direct.

- 46) If any member of the Committee of Appeal is unable or unwilling to act or if the matter of the appeal is of such urgency that the establishment of the Committee of Appeal would be unnecessarily delayed by waiting until the next scheduled meeting of Council, the Chancellor may appoint a member of Council or, in the case of the student member being unable to serve, another student to serve on the committee as the circumstances may require.

Result of Appeal

- 47) In those cases where the Committee of Appeal determines that due process was followed by the Investigation Committee, it will confirm the action taken by the Vice-Chancellor on the advice of the Investigation Committee and the Vice-Principal (Administration) shall inform the student accordingly in writing.

- 48) In those cases where the Committee of Appeal determines that there has been a lack of due process in the consideration of the case by the Investigation Committee, it will refer the matter back to the Investigation Committee with full details of the lack of due process found by the Committee and direct the Committee to reconsider the matter; the Vice-Principal (Administration) shall inform the student accordingly in writing.

Ceases to hold office

- 49) A member of the Investigation Committee or the Committee of Appeal who, during the currency of an investigation by the Committee of which he/she is a member, ceases to hold the office by virtue of which he/she is a member of that Committee shall remain a member of the Committee until its investigation has been completed.

Inability to act

- 50) If during the currency of an investigation by the Investigation Committee or the Committee of Appeal, a member of the Committee becomes unable, for a period as would unduly delay the completion of the investigation, to act through illness or any other cause, the Committee may complete its investigation in his/her absence if at least 2 members are able to act.

Serving of Notices

- 51) A document or notice required to be served on or given to a student under these Rules may be served on the student personally within the University or be sent by certified post addressed to the student's last known place or residence. If posted, service shall be deemed to have been effected on the student on the date on which it would have been delivered in the ordinary course of the post.

Effect of Penalties

- 52) A student who is expelled from the University shall not be re-enrolled except by permission of Council.
- 53) A fine imposed on a student pursuant to Rule (32) shall be paid into the general funds of the University.
- 54) A fine imposed on a student pursuant to Rule (32) shall be payable within 14 days of the date of notification of the fine, but an extension of time for payment may be granted by the Vice-Principal (Administration).
- 55) The payment of a fine shall be suspended while an appeal from the decision imposing it is pending.
- 56) If a fine imposed under Rule (32) is not paid within the time limited for its payment, the student shall be suspended and shall remain suspended so long as the fine remains unpaid.
- 57) When a fine, suspension or expulsion pursuant to Rule (32) is imposed on a student the student shall be notified in writing that he/she has a right to appeal in accordance with these Rules.
- 58) Suspension or expulsion imposed on a student pursuant to Rule (32) shall be deemed to be inoperative while an appeal from the decision imposing it is pending.

Suspension/Termination of Proceedings

- 59) The Vice-Chancellor may at any time suspend any disciplinary proceedings, including the appeal proceedings, against a student if, in the opinion of the Vice-Chancellor, the continuation of such proceedings may be in conflict with other proceedings or action being taken by the student, whether within the University or outside.
- 60) The Vice-Chancellor may terminate any disciplinary proceedings, including the appeal proceedings, if, at any stage, the student withdraws his/her enrolment with immediate effect.

General

- 61) Nothing in these Rules affects the power of any person or body in the University duly authorised to administer any University rule not inconsistent with these Rules and, in particular, nothing in these Rules affects any power of a committee or person or other authority within the University to withdraw a student from a course, or to cancel the enrolment of a student, or to refuse a person further enrolment for any course or subject, or to deal otherwise with his/her case, by reason of his/her failure to satisfy academic requirements or to pay any fee, fine, charge or other money payable to the University.
- 62) Nothing in these Rules affects the power of Council to make rules given by any provision of the By-law.
- 63) Nothing in these Rules shall be interpreted as limiting in any way any power vested in Council by the Act or any other rule of the University or as limiting the right of the University to enforce by any other means any right vested in it or to take any other action which it may be entitled or empowered to take in the circumstances

Appendix: Committee Procedures

A Committee shall conduct its investigation in accordance with the principles of natural justice, shall not be bound to conduct its proceedings in accordance with any rules of evidence or procedure, may disallow, *inter alia*, questions which it considers to be unseemly or irrelevant for the nature of its investigation, and in particular, but without prejudice to the generality of the foregoing, shall:

- a) give the student concerned due notice of the nature of the investigation against him/her;
- b) give the student concerned an opportunity to be heard;
- c) give the senior officer bringing the complaint and/or any other staff member or student involved in the event(s) leading up to the complaint an opportunity to be heard and advise them of Committee procedures and time requirements;
- d) with 7 days prior notice by the student, permit the student to be assisted or represented by such agent as he/she desires, whether a legal practitioner or otherwise;
- e) at the discretion of the chairperson, permit any person appearing before the committee, in accordance with section (c) above, to be assisted or represented by such agent as he/she desires, whether a legal practitioner or otherwise;
- f) warn all persons appearing before the Committee that they are expected to conduct themselves in a reasonable and responsible manner during the proceedings and that any form of behaviour which is an impediment to the proceedings shall of itself be regarded as a breach of the Rules;
- g) where the conduct of any person interferes with any other person's right to be heard, be entitled to remove

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- that person from the meeting and to hear their evidence separately;
- h) permit the student to nominate witnesses to appear in support of his/her defence against the complaint;
 - i) permit any person appearing before the Committee in accordance with (c) above to nominate witnesses to appear in support of his/her evidence;
 - j) in cases where the Committee finds that the complaint is proven, give the student the opportunity to be heard on the issue of penalty and to nominate character references to appear before the Committee;
 - k) hold all its proceedings in camera and keep an adequate record of the evidence and its decision;
 - l) with the consent of the student concerned, allow any member of the University to have access to that record.

The Use of University Computing

Facilities (Note: These rules are under revision)

The computing facilities at Wollongong are provided for the use of Wollongong students, faculty and staff in support of the programs of the University. All students, faculty and staff are responsible for ensuring that these computing facilities are used in an effective, efficient, ethical and lawful manner. The following rules relate to their use.

1. In these rules:
 - a) "University" means the University of Wollongong;
 - b) "computer facilities" refers to:
 - i) all networking services, computer equipment and software, owned, leased or used under licence by the University including the University's administrative computer system;
 - ii) computer facilities maintained by other bodies but available for use through an agreement or agreements with the University; and
 - iii) all other computing facilities wherever situated where access is by means of University provided services;
 - c) "computer user" means any person using the computer facilities.
2. By use of any University computer facilities a computer user agrees to abide by these rules.
3. Each computer account is assigned to one computer user only and is to be used solely for those purposes authorised by that user's head of department/school/branch. The individual is responsible for the proper use of the computer account, including following recommended procedure for password protection. Access to information is provided on a confidential basis and that confidentiality is to be respected. Where access to facilities (including the Library catalogue and many microcomputers) is provided without a formal account and/or password then the provisions of these rules still apply.
4. University computing policy requires that users:
 - a) do not use any other person's computer account (even with the owner's permission);
 - b) do not disclose their own or attempt to discover any other computer user's password;
 - c) do not copy, disclose or transfer any of the computer software provided by the University without the written permission of Information Technology Services or appropriate department or branch;
 - d) do not use any University computer facilities to violate the terms of any software license agreement, or copyright provisions;
 - e) do not copy, rename, change, examine or delete files or information belonging to some other user or to the University (students and staff who use computing facilities have the right to privacy and security of their computer programs and data);
 - f) do not deliberately use computing facilities to harass others, or to interfere with their work (for example to send obscene, abusive, fraudulent, threatening or repetitive messages to a user or users, is a breach of this policy);
 - g) do not attempt to modify system facilities, illegally obtain extra resources, degrade the performance of any system, or attempt to subvert the restrictions associated with any computer system, computer account, network service or microcomputer software protection;
 - h) do not tamper with terminals, microcomputers or any other associated equipment (faults should be reported to the department or to Information Technology Services);
 - i) do not collect or discard any output without the owner's permission;
 - j) do not smoke, eat or drink around terminals, microcomputers or other computer equipment.
5. A computer user may not use computer facilities for or on behalf of any party for the purpose of profit-making or commercial activity, unless written permission has been obtained from the Director of Information Technology Services or a nominee.
6. Where the University decides to levy charges for use of particular computer facilities, each computer user agrees to pay such charges according to the schedules issued by the University. Implementation of, or changes to, these schedules will be announced at least 90 days before the beginning of the session in which they are to take effect.
7. Computing hardware may be connected to the University's networking facilities only after approval by

the Director of Information Technology Services or a nominee.

8. The University reserves the right to upgrade any of its computer facilities, as required, in the manner determined by its officers. Upgrades requiring substantial changes to user procedures will be announced at least 30 days before they are to take effect.
9. The University reserves the right to withdraw the availability of any computer facilities without notice and without penalty under the terms of any agreement concerning use of the computer facilities.
10. The use of computer facilities is provided without any express or implied guarantees as to the accuracy of computational results and output. The University accepts no responsibility for any consequences arising from the inaccuracy of any information generated through use of the computer facilities.
11. The University shall not be responsible for the loss of any information or software stored in the computer facilities. Although standard back-up procedures will be in operation on central computer facilities, the computer user assumes full responsibility for the maintenance of duplicates of any information or software belonging to the computer user.
11. The University reserves the right for authorised staff members responsible for computer systems security to monitor all computer usage, to ensure conformance with these rules and to maintain a secure, efficient and effective computing environment.

Code of Conduct - Library

Preamble

The Code of Conduct - Library applies to the behaviour required of users of the University Library facilities and services. Users are required to respect and comply with the conditions necessary to provide an appropriate atmosphere for study and research.

The Code was approved, as University policy, by the University Council on 8 April 1994.

Disciplinary Action

Any member of the staff of the University of Wollongong Library has delegated authority to require users to abide by the conditions of the Code of Conduct. Failure to respect the conditions of the Code may lead to fines or immediate suspension of access to the Library and its services, including borrowing rights.

Moreover, serious infringement of the Code, causing damage to property, disruption of Library processes and interference with the rights of other users and staff, may be defined as an act of misconduct under the University's Rules for Student Discipline and Rules for Campus Access and Order. The University Librarian and the Associate

Librarian, Client Services are "authorised/senior officers" of the University under the Discipline Rules and, as such, are authorised to initiate procedures that may lead to fine, suspension or exclusion from the University.

Conditions of the Code of Conduct for the Use of the Library

1. All users have a right to use the facilities of the University Library without undue distraction or disturbance.
2. Within the precincts of the University Library, no person shall act in a manner which interferes with the comfort or convenience of other users.
3. Under the University's Rules for Campus Access and Order, University Identification cards must be carried during attendance at the University and shown in response to any reasonable request from any member of staff who might require such identification in the course of their duties. Any Library user, whether or not a member of the University, shall produce identification on request from a member of Library staff.
4. It is a condition of entry into the University Library that all bags, folders or other receptacles capable of containing Library materials and their contents may be inspected by Library staff.
5. In accordance with University policy, smoking is not permitted in the Library.
6. No substance which is liable to cause damage to Library materials may be taken into the University Library; this includes food and drink items and flammable items.
7. Animals, with the exception of guide dogs for the visually and hearing impaired, are not permitted within the University Library.
8. Talking is not permitted in reading areas: quiet conversation is allowed for the purpose of seeking assistance in the use of the catalogues or the collection. Quiet discussion is permitted in Group Study Rooms.
9. The use of mobile phones is not permitted within the Library.
10. The reservation of seats in public reading areas is not permitted.
11. Books and other articles left unattended in the Library for more than twenty minutes on chairs and tables may be removed by the Library staff. Articles left in these areas at closing time will be cleared away and sent to the Security Office lost property section. The University accepts no responsibility for personal belongings left in the building.
12. Library users are responsible for all material borrowed in their name until such time as the items are returned to the Library and deleted from the loans register. Borrowers will be charged the replacement cost of any item not returned.

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13. No user shall deface, mutilate or destroy Library materials: in addition to any penalty that may be imposed for such conduct, the person concerned shall be liable to pay for the full cost of repair or replacement of damaged materials.
14. Fines may be imposed for overdue items. Details of fine rates and borrowing conditions are available in the Library. Other penalties may be imposed for the late return of Library material.
15. Any person within the Library precincts from time to time will, for the purposes of these conditions, be deemed a "user".

Revision of Conditions

The Vice-Chancellor, on the advice of the University Librarian, may revise and update the conditions for the use of the University Library.

Publication of Code & Rules

A copy of the Code of Conduct and the relevant Rules for Student Discipline and Rules for Campus Access and Order are displayed at the entrance to any location or facility used by the University for the provision of library services.

B. General Course Rules

1. Preamble

Students should note that the University's Course Rules are under constant review and may change between the issue of this Calendar and the commencement of the 2003 Academic Year. Students are advised, therefore, to consult the University's On Line Policy and Rules Directory prior to enrolment. The Web address is:

www.uow.edu.au/student/calendar/

2. Introduction

The General Course Rules govern registration, enrolment, progression through and qualification for undergraduate and postgraduate courses offered by the University and are to be read in conjunction with the appropriate Award Rules

These rules became operative on 1 January 1998.

3. Interpretation

In the interpretation and implementation of these Rules, Council will normally act on the recommendation of appropriate authorities within the University.

In these Rules, unless the contrary intention appears:

1. 'Council' is the Council of the University of Wollongong;
2. 'approved' or 'approval' means approval by Council or under authority delegated by Council;
3. 'candidate' is a person registered for a course;
4. 'undergraduate' refers to candidates or courses for bachelor degrees;
5. 'postgraduate' refers to candidates or courses for graduate certificates, graduate diplomas, masters degrees, masters by research degrees and doctoral degrees;
6. 'course' is the subject or combination of subjects which a candidate takes for a certificate or a diploma or a degree;
7. 'double degree' is an approved course leading to the conferral of two degrees as separate awards upon a candidate who has complied with the Course Requirements for double degrees and the two individual Course Requirements inclusively;
8. 'full time candidate' is a candidate enrolled for a program which, for each session of registration, is three eighths or more of an annual requirement for course completion in normal minimum time;
9. 'part time candidate' is a candidate who is not a full time candidate;
10. 'external candidate' is a part time candidate registered for a course which has been approved for offer in an external mode;
11. 'program' is the combination of subjects in which a candidate is enrolled in any one session or year;
12. 'course structure' refers to the specific program of subjects which a candidate undertakes to meet the requirements of a certificate, diploma or degree;
13. 'schedule' refers to all subjects approved for inclusion in a course leading to an award;
14. 'session' is one of the three periods, autumn session, spring session, summer session, in which subjects are offered each year;
15. 'year' or 'academic year' or 'annual' refers to the period comprising autumn session, the following spring session and the following summer session;
16. 'weeks of session' are the weeks counted from the beginning of a session and not including weeks scheduled as University recess;
17. 'subject' is a self-contained unit of study identified by a unique number;
18. 'research subject' is a subject at 900 level with a value of 24 or more credit points, being either a thesis or a minor thesis, and taken for a masters by research degree or a doctoral degree;
19. 'thesis' is a research subject with a value of 48 credit points;
20. 'minor thesis' is a research subject with a value of 24 or 36 credit points;
21. 'credit point' is the value attached to a subject as a component of a degree and, for a subject other than a research subject, each credit point has an implied workload of 28 hours over the duration of that subject;
22. 'weighted average mark' is the average of marks gained by a candidate in a program, programs or course and weighted by credit point value and by level;
23. 'sessional subject' is a subject, other than a research subject, offered during one of autumn session, spring session or summer session;
24. 'double session subject' is a subject, other than a research subject, offered for the duration of two sessions;
25. 'triple session subject' is a subject, other than a 100 level subject or a research subject, offered for the duration of three consecutive sessions;
26. 'modular subject' is a subject, other than a research subject, offered for a defined approved period not constrained by a session of the University, and which may be offered externally;
27. a. '000 level subject' is a subject at Freshman or Foundation level;
'100 level subject' is a subject at first year level;
'200 level subject' is a subject at second year level;
'300 level subject' is a subject at third year level;

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- '400 level subject' is a subject at fourth year level;
- '800 and 900 level subjects' are coursework subjects or research subjects at postgraduate level;
- b. Subjects at the 000 level do not count towards the requirements prescribed in any other Course Rule for satisfying the requirements for the completion of a degree;
28. 'pre-requisite subject' is a subject which must be completed satisfactorily before the subject for which it is prescribed may be taken;
29. 'co-requisite subject' is a subject which must be completed satisfactorily before, taken concurrently with or, at the discretion of the Head, attempted before the subject for which it is prescribed;
30. 'Head' means the Head of the relevant academic unit, or the relevant Course Co-ordinator;
31. 'Supervisor' is a person approved to supervise the work of a candidate in a research subject;
32. 'Academic Adviser' is a person approved to advise candidates on programs of study;
33. A 'major' or 'major study' in a course for a bachelor degree, is an approved combination of subjects which have a minimum value of 48 credit points offered by one or more academic units, and including 300 and/or 400 level subjects with a value of at least 24 credit points which must be completed satisfactorily at Pass grade or better;
34. 'advanced standing' is credit or exemption granted to a candidate;
35. 'credit' is the number of credit points granted towards a course for work completed satisfactorily outside that course;
36. 'specified credit' is credit for a specific subject or subjects listed in a Schedule and is granted on the basis of satisfactory completion of a substantially corresponding subject or subjects at an approved tertiary institution;
37. 'unspecified credit' is credit granted on the basis of satisfactory completion, at an approved tertiary institution, of a subject or subjects not substantially corresponding to subjects listed in the appropriate Schedule;
38. 'exemption' is the waiving of the requirement that a subject prescribed for a course be completed satisfactorily and is granted, as exemption A, B or C, on the basis of the satisfactory completion of an appropriate subject, subjects or other work at an approved tertiary institution or other establishment, as follows:
- exemption A: the subject is regarded as having been completed satisfactorily for all purposes;
- exemption B: the subject is regarded as having been completed satisfactorily for all purposes except the satisfying of a pre-requisite requirement;
- exemption C: the subject is regarded as having been completed satisfactorily, but not for the purposes of either the satisfying of a pre-requisite requirement or the accrual of credit points; and
39. 'leave of absence' is a period of leave from the University for which prior approval has been obtained.

4. Admission

- To qualify for admission as a candidate for:
 - a bachelor degree, a person shall comply with requirements of the Rules for Admission to Undergraduate Courses; or
 - a graduate certificate, a graduate diploma or a masters degree, a person shall have qualified for a bachelor degree of the University or for an equivalent qualification from an approved institution; or
 - a masters by research degree, a person shall have qualified for a bachelor degree in the same discipline as the proposed degree, or in an appropriate discipline of the University or for an equivalent qualification from an approved institution; or
 - a doctoral degree by thesis, a person shall comply with requirements for admission set out in the relevant part of the Rule governing the course, except that, in appropriate circumstances, an applicant who does not qualify for registration under Rule 4(1)b, c) or d) may be permitted to register as a candidate for a postgraduate course provided that evidence is submitted of such tertiary academic and professional attainment as may be approved.
- An application for admission as a candidate shall be made on the prescribed form and be lodged as directed by the specified date.
- Notwithstanding any provisions of these Rules, an applicant may be required to demonstrate fitness for candidature by carrying out such work and satisfactorily completing such examinations as may be prescribed.
- Council may refuse admission to a qualified applicant should there not be appropriate and sufficient personnel or resources to enable the candidate to undertake the course, or should there be a limitation imposed on the number of candidates to be registered for that course, or should other restrictions or limitations be applied to that course.
- A person admitted as a candidate shall register for the particular course for which admission was sought and shall be then subject to all relevant Rules and requirements.
- A candidate for an honours bachelor degree, or for a postgraduate course under Parts 2, 3, 4, 5 or 6 of the Award Rules shall enrol as a full time candidate or as a

part time candidate, or for approved courses, as an external candidate.

7. Continuation of registration is contingent upon compliance with any approved conditions imposed at initial registration or thereafter.
8. Except with approval, and then under approved conditions, a candidate shall not be registered concurrently for more than one course in this University or other tertiary institution.
9. A person who, in the opinion of Council, has an unsatisfactory academic record in, or who is suspended, excluded or expelled from, any tertiary institution shall not be permitted to register for any course.
10. Except with approval in exceptional circumstances, a candidate is subject to the course time limits set out in Rule 6.4.
11. A candidate who changes registration from one type of candidature referred to in Rule 4(6) to another shall be subject to approved time limits.
12. A person who has not completed requirements for a course after expiration of the maximum period of registration set out for that course in Rule 6.4 and for whom continuance of registration has not been approved shall not be permitted to register again for that course.
13. a) Where false documentation is identified on application, the candidate shall not be admitted to the University.
b) Where a student is found to have been admitted on the basis of false documentation, that student shall be immediately suspended from the University by the Vice-Chancellor under section 17 of the Rules for Student Discipline when a complaint is forwarded to him by the Vice-Principal (Administration). If the student wishes to appeal the facts of the matter, the appeal will be heard, under the Rules for Student Discipline, by the Investigation Committee (non-academic). If the Committee finds the allegation proven, they shall recommend to the Vice-Chancellor either that the student be expelled from the University or that the student be suspended for a limited period (under section 32(f) and (e) of the Rules for Student Discipline).

5. Advanced Standing

Students enrolling for courses may seek advanced standing (or credit) on the basis of tertiary studies completed prior to their enrolment at the University of Wollongong. Studies undertaken at other universities, colleges of advanced education, other domestic providers and TAFE may be considered for advanced standing. Applications for advanced standing must be accompanied by full documentation of previous studies, with photocopies of the relevant pages from the Handbook/Calendar of the institution concerned and a certified transcript of results.

Advanced standing will only be awarded for a completed course. Candidates whose qualification is incomplete will be required to negotiate any advanced standing (normally on a pro-rata basis) directly with the Faculty.

Students should note that existing Advanced Standing arrangements are currently under review and further qualifications are being assessed on an ongoing basis. Students are therefore advised to consult the University's On-line Calendar prior to enrolment. The web address is www.uow.edu.au/student/calendar/. You can also apply for credit not covered by the formal arrangements listed on the web site providing relevant documentation is attached. These will be assessed by the Sub-Dean of the relevant faculty.

5.1 Regulations Governing Advanced Standing

1. A candidate who has completed, at an approved tertiary institution or other establishment, one or more subjects or other work approved for the purpose of this Rule may apply for such advanced standing as detailed below.
2. With prior approval, a candidate may be permitted to enrol for a subject at another tertiary institution and, on satisfactory completion of that subject, have it counted towards a course of this University.
3. Except with approval, a candidate who has been granted specified credit for a subject or subjects satisfactorily completed at this University or elsewhere shall not be permitted to count substantially corresponding subjects towards a course of this University.
4. Except when advanced standing is granted, a candidate shall not be eligible to obtain standing towards a course by satisfactory completion at this University of a subject which corresponds substantially with a subject or subjects completed satisfactorily previously and counted towards a qualification at an approved tertiary institution.

5.2 Summary of Advanced Standing Allowable

1. An application for advanced standing shall be made on the prescribed form and lodged as directed.
2. An application for advanced standing for qualifications not herein covered will be determined on merit.
3. Unspecified credit may be converted to specified credit at any level on the recommendation of the Head.

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4. Qualifications completed more than ten years prior to application may attract up to the maximum advanced standing available as:
 - a) specified credit or exemption on the recommendation of the Head;
 - b) unspecified credit determined on the basis of the activities of the applicant subsequent to obtaining the qualification.
5. Notwithstanding the provisions of the Rules and Regulations listed in this Calendar, advanced standing additional to the maximum prescribed may be approved for a specific course to be undertaken at this University.

5.3 Advanced Standing towards Pass Bachelor Degrees

1. Subject to restrictions imposed by Award Rules 105-111, the maximum advanced standing allowable:

- a) for a completed bachelor degree, is one half the credit point equivalent of the completed degree or one half the credit point value of the degree for which the applicant is a candidate, whichever is least;
- b) i) for a completed sub-degree tertiary qualification approved under the AQF guidelines established during 1995 is as follows:

Diploma (or equivalent) - 48 credit points, comprising 42 credit points unspecified at 100 level and 6 credit points unspecified at 200 level;

Advanced Diploma (or equivalent) - 48 credit points, comprising 36 credit points unspecified at 100 level and 12 credit points unspecified at 200 level;

- ii) for a completed sub-degree tertiary qualification approved under the National guidelines established prior to 1995 and with New South Wales Higher School Certificate (or equivalent) entry, is as follows:

Associate Diploma (or equivalent) - 48 credit points, comprising 42 credit points unspecified at 100 level and 6 credit points unspecified at 200 level;

Diploma (or equivalent) - 48 credit points, comprising 36 credit points unspecified at 100 level and 12 credit points unspecified at 200 level;

- iii) for a completed sub-degree tertiary qualification with entry at standard lower than New South Wales Higher School Certificate (or equivalent), is determined by the minimum number of years of equivalent full time post School Certificate study required to attain the qualification as follows:

2 years - 24 credit points unspecified at 100 level;

3 years - 36 credit points unspecified at 100 level;

- c) for a completed approved certificate of general or psychiatric nurse education commenced in or subsequent to 1972, is 24 credit points unspecified at 100 level;
 - d) for more than one completed tertiary qualification, shall be that advanced standing allowable for one only completed tertiary qualification;
 - e) for an incomplete undergraduate bachelor degree, other than a degree of this University, is two thirds of the minimum number of credit points required for the degree for which the applicant is registered; and
 - f) for an incomplete diploma or advanced diploma, is proportional to the fraction of the diploma or advanced diploma completed satisfactorily.
2. No credit granted at 300 level shall comprise part of a major study, except for credit granted on the basis of subjects previously completed at this University and not then included as part of a major study.
 3. Except for the exclusion provided in 5.3(1)(e), the maximum advanced standing allowable is two thirds the minimum number of credit points required for the degree for which the advanced standing is sought.

5.4 Advanced Standing towards Honours Bachelor Degrees

Advanced standing for a course for one of the honours degrees listed in Award Rule 103(5) will not be approved.

5.5 Advanced Standing towards Postgraduate Courses

1. The maximum advanced standing allowable towards courses listed under Parts, 2, 3, 4, and 5 of the Award Rules is 25% of the total credit point requirement for that course, except as provided in (2) below.
2. A candidate for the degree of masters by research under the provision of Award Rule 503, who has completed other relevant qualifications, may be granted up to 24 credit points of advanced standing for the coursework requirement set out in Award Rule 503(2)(b).

6. Enrolment

6.1 General Enrolment Rules

1. During prescribed periods in each year, a candidate shall enrol in a program in accordance with requirements of these Rules and pay any required charges. Prior to the initial registration for a course, a candidate must consult with an Academic Adviser.
2. A candidate may enrol in a subject provided that:
 - a) the conditions for enrolment specified for that subject are satisfied, save that a pre-requisite or

- co-requisite requirement may be waived by the Head;
- b) the candidate is not excluded by any restriction that may be imposed on the number of candidates to be enrolled in that subject;
 - c) the subject is available in the nominated session or sessions, or in modular form;
 - d) the candidate is not suspended, excluded or expelled from any tertiary institution;
 - e) Council has determined that there are appropriate and sufficient personnel and resources to enable the candidate to undertake the subject; and
 - f) the candidate is not indebted to the University.
3. Except with the approval of a Sub-Dean, a student shall not be permitted to enrol in a program which exceeds:
 - a) i. 32 credit points for any autumn or spring session;
 - ii. 64 credit points for autumn and spring session combined;
 - iii. 16 credit points for summer session.
 - b) for a course comprising modular subjects, exceeds 24 credit points at any period in time.
4. For the purposes of Rule 6.1(3), half the value of a double session subject shall be deemed to be taken in each of the two sessions during which the subject is offered and one third the value of a triple session subject shall be deemed to be taken in each of the three sessions during which the subject is offered.
 5. A candidate enrolled in a subject in contravention of the conditions for enrolment specified in the appropriate Schedule shall be withdrawn from that subject unless permitted by the Head to remain enrolled.
 6. A candidate who, in a particular year, is not permitted to enrol in a subject pursuant to these Rules may apply for permission to enrol in a subsequent year.
 7. A candidate who is refused continuation of registration, through suspension, exclusion or expulsion may not enrol in any subject.

6.2 Variation of Course

1. After consultation with an Academic Adviser a candidate may apply to the Vice-Principal (Administration) for permission to change registration from one course to another.
2. Permission for a candidate to change registration is contingent upon any restriction that may be imposed on the number of candidates to be registered for a particular course.
3. Variation of enrolment associated with change of registration is contingent upon restrictions imposed by relevant provisions of Rules 6.1 and 6.3.

4. Upon change of registration, a candidate becomes subject to Rules relating to the course to which registration is changed.
5. At the end of a session, a candidate for a postgraduate degree under Part 5 or 6 of the Award Rules or for an honours bachelor degree may apply to change candidature from full time to part time or from part time to full time.
6. A candidate for masters by research degree may apply to change registration to a doctoral degree in accordance with Course Rule 10.2(9).
7. Except with approval to the contrary, restrictions imposed on enrolment or registration of a candidate prior to, or at the time of a change of registration, shall continue to apply after change of registration. For a candidate for an undergraduate course, the Minimum Rate of Progress Rules will apply immediately upon change of registration, should there be no provisions to the contrary.

6.3 Variation of Subjects (other than Research Subjects)

1. A candidate may withdraw from a subject provided such withdrawal is made no later than the last day of the week (prescribed in Rule 6.3(3) below) of the session in which offer of the subject is completed. A candidate withdrawing from one or more subjects is advised to seek advice from an academic adviser before doing so.
2. Where a variation referred to in Rule 6.3(1) above is withdrawal from:
 - a) an autumn session or spring session subject before the end of the ninth week of the session of offer; or
 - b) a summer session subject before the end of the third week of the session; or
 - c) a double session or a triple session subject before the end of the second week of the second session in which the subject is offered; or
 - d) a modular subject before the end of the week during which 60% of the duration of the subject has expired;

the candidate shall be deemed to have not enrolled in that subject, and that subject will then not appear on the academic record of the candidate.

3. Late withdrawal from:
 - a) an autumn session or spring session subject after the end of the ninth week, but before the end of the last week of the session of offer; or
 - b) a summer session subject after the end of the third week but before the end of the last week of the summer session; or
 - c) a double session or a triple session subject after the end of the second week, but before the end of the eighth week of the second session in which the subject is offered; or

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- d) a modular subject after the end of the week during which 60% of the subject has expired but before the day of the final examination for that subject;
- may only be approved if the student has an acceptable medical, personal or other reason. An application may be made under the University's Special Consideration Policy for 'late withdrawal from a subject without academic penalty'. A Special Consideration Application form is available from the SOLS web page or from the Student Enquiries Counter and must be supported by appropriate documentary evidence.
4. If a student's application for special consideration (late withdrawal from a subject) is approved, the student will be deemed to have withdrawn from the subject without penalty for the purposes of the Minimum Rate of Progress Rules and "Withdrawn late with approval" will appear against the subject on the academic record of the student.
 5. If a student's application for special consideration (late withdrawal from a subject) is not approved, the student's enrolment will stand and a grade will be declared for that subject. The student may appeal the grade received in accordance with Course Rule 8.8 "Amendments to Academic Records/Reassessment of Grades".
 6. After consultation with an Academic Adviser a candidate may apply to the Vice-Principal (Administration) for permission to enrol in an additional subject.
 7. Permission for a candidate to enrol in an additional subject is contingent upon restrictions imposed by relevant provisions of Rules 6.1, 6.3(6) & 6.3(7).
 8. Except with approval of the Head, a candidate may not enrol in:
 - a) an autumn session or spring session subject after the expiration of the second week of the session; or
 - b) a summer session subject after the expiration of the first week of the session; or
 - c) a double session or a triple session subject after the expiration of the second week of the first session in which the subject is offered or after the expiration of the first week should the first session of offer be summer session; or
 - d) a modular subject after the expiration of the week during which 15% of the subject has expired.
 9. Under no circumstances may a candidate enrol in:
 - a) an autumn session or spring session subject after the expiration of the fourth week of the session; or
 - b) a summer session subject after the expiration of the second week of the session; or
 - c) a double session or a triple session subject after the expiration of the fourth week of the first session in which the subject is offered or after the expiration of the second week should the first session of offer be summer session;
 - d) a modular subject after the expiration of the week during which 25% of the subject has expired.

6.4 Time Limits for Course Completion

1. The minimum and maximum time limits for completion of courses (listed in Rule 6.4(2) to 6.4(7) below) apply except when approved to the contrary in exceptional circumstances. For postgraduate courses, the time limits do not include summer sessions.
2. A candidate may be registered for an undergraduate course for a maximum period of three times the normal minimum duration for completion of that course, excluding approved leave of absence. The normal minimum duration for an undergraduate course with value of 144 credit points is three years and pro rata for most courses having other credit point values.
3. A candidate for a graduate certificate may be registered for that certificate for no more than:
 - a) two consecutive sessions as a full time candidate; or
 - b) four consecutive sessions as a part time candidate.
4. A candidate for a graduate diploma or a 48 credit point masters degree may be registered for that diploma or degree for no more than:
 - a) four consecutive sessions as a full time candidate; or
 - b) eight consecutive sessions as a part time candidate.
5. A candidate for a masters by coursework degree may be registered for that degree for no more than:
 - a) six consecutive sessions as a full time candidate; or
 - b) twelve consecutive sessions as a part time candidate.
6. A candidate for a 72 credit point masters by research degree may be registered for that degree for:
 - a) no less than two consecutive sessions, and no more than four consecutive sessions as a full time candidate; or
 - b) no less than four consecutive sessions, and no more than eight consecutive sessions as a part time candidate.
 - c) Candidature may be extended beyond the maximum time period following a satisfactory review of progress.
7. A candidate for a doctoral degree under Part 6 of the Award Rules by thesis may be registered for that degree for:
 - a) no less than four consecutive sessions, and no more than eight consecutive sessions as a full time candidate; or

- b) no less than six consecutive sessions, and no more than sixteen consecutive sessions as a part time candidate; except that:
- c) i) a candidate who, before registration, was engaged upon approved study may be exempted from not more than two sessions;
- ii) in special circumstances, a candidate may be permitted to devote not more than one calendar year to study at another institution provided that the work shall be supervised in an approved manner; and
- iii) in exceptional cases, a candidate may apply to be exempted from not more than two of the sessions stipulated in clause 7(a) or (b) above.
- d) Candidature may be extended beyond the maximum time period following a satisfactory review of progress.

6.5 Leave of Absence

1. A student enrolled in a bachelor degree:
 - a) becomes eligible for leave of absence at the beginning of the second session of enrolment; and
 - b) may take leave of absence for up to one year provided that they notify the University before the end of the fourth week of the first session for which leave is sought.
 - c) may apply to the Academic Registrar for an extension of their leave of absence beyond one year.
2. A student enrolled in an 'end-on' honours bachelor degree may be granted leave of absence for up to one year provided:
 - a) that the student has the written consent of his/her supervisor; and
 - b) that written application is made to the Academic Registrar before the end of the fourth week of the first session for which leave is sought.
3. A student enrolled in a masters by coursework degree, graduate diploma or graduate certificate:
 - a) becomes eligible to apply for leave of absence at the beginning of the second session of enrolment; and
 - b) may be granted leave of absence for up to one year provided that written application is made to the Academic Registrar before the end of the fourth week of the first session for which leave is sought.
4. A student enrolled in a masters by research or doctoral degree may be granted leave of absence for one year or, in exceptional circumstances, up to two years provided:
 - a) that the student has the written consent of his/her supervisor; and
 - b) that written application is made to the Academic Registrar before the end of the fourth week of the first session for which leave is sought.

Students who take leave of absence from their course for more than one year should note that the course rules and conditions under which they originally enrolled may change during their period on leave and that they will be subject to the rules and conditions as they apply at the time that they return to their course.

6.6 Exclusion Rule

1. Where a student fails to perform satisfactorily in a mandatory placement component of a course or for other specified reasons is deemed to be unlikely to perform satisfactorily in that placement and therefore has been assessed as unsuitable to continue in such professional practice by the Academic Course Coordinator, or where the external agency has refused to permit that student access to their facilities, the student may be excluded from the course.
2. Where the Academic Course Coordinator has reason to believe it is necessary to assess a student's suitability to continue to participate in a mandatory placement component, the Academic Course Coordinator must consult and be in agreement with the Faculty Dean before proceeding. The Dean shall advise the student in writing of the decision within three business days of making it, and invite the student to show cause in writing within the next fourteen days why the rule should not be applied to them.
3. If the student is unable to show cause, he/she will have their enrolment in the course cancelled.
4. A student may appeal to the Vice Chancellor against the decision. The appeal must be lodged in writing, within fourteen days of receiving the letter of exclusion.

6.7 Conferral of Awards

1. A course award may be conferred upon a candidate who has complied with relevant parts of these Rules, satisfied any requirement set out in Rule 7.1 and 7.2 and is not indebted to the University, provided that, in addition, a candidate for a bachelor degree has completed the requirements for the 300 level subject component of the major study while so registered, or for prescribed courses, satisfactorily completed subjects with a value of at least 24 credit points while so registered.
2. A candidate who has qualified more than once at this University for the same course award, excepting as set out in Rule 6.7(3) below, and excepting for the Bachelor of Engineering, shall receive only a statement of the additional qualification setting out the subjects completed and the marks and grades attained.
3. A candidate who has qualified twice at this University for the same course award of degree of bachelor or honours degree of bachelor may be awarded the degree of Bachelor of Letters or the honours degree of Bachelor of Letters, as appropriate.
4. **Application for an Academic Award:** Applications for admission to a degree, or diploma must be made on the

appropriate form and by the due date for each session. It is the student's responsibility to make an application to have an award conferred.

7. Other Requirements

In addition to requirements set out in the Course Rules, candidates must satisfy the relevant requirements listed below.

7.1 ILIP Information Literacies Introductory Program

There are two compulsory Information Literacies Introductory programs. LIP100 is for Undergraduate students; and ILIP009 is for new Post Graduate Coursework students, who have not been enrolled at the University of Wollongong for the past five years.

ILIP is a supplementary program that is **compulsory** for students in their first session of undergraduate, or post graduate coursework study. It may also be beneficial for new postgraduate research students. As the skills gained during ILIP are assumed knowledge for some subjects, students are encouraged to complete requirements of the program within the first six weeks of session.

ILIP has been designed to assist students by providing them with the knowledge to use the Universities information environment effectively and efficiently. ILIP provides an essential foundation upon which to build further information literacy skills during both formal study, and the students post graduate career.

Students are required to complete various tasks for ILIP. Students may acquire information about these tasks in one of two ways, either: by attending an information session at the library; or by completing an online tutorial.

To complete ILIP a student must:

1. Have an active student computer account
2. *Either*
 - a) Attend a library class; information on class times may be obtained from the library.

OR

 - b) Complete an online tutorial at <http://www.uow.edu.au/helptraining>, or follow the link from sols to ILIP.
3. Submit the web based assignment

Post Graduate and Undergraduate coursework students must complete their ILIP during their first session of enrolment. Results will be withheld until the ILIP assignment has been completed.

If students have problems they are to contact Robbie Collins, Lecturer Graduate Attributes Program in Building 19 Room G102 or via email Robbie@uow.edu.au, or ph: 4221 4103

8. Assessment

8.1 General Rules

1. In a subject, other than a research subject, the methods of assessment of performance of a candidate shall be determined by the Head.
2. In a research subject, the methods of assessment of performance of a candidate shall be determined by the provisions of Rules 10.4 & 10.5.
3. Any material presented by a candidate for assessment in a subject must be the work of the candidate and not have been submitted for assessment elsewhere unless otherwise approved.
4. a) Standards of achievement required for the approved grades of performance in a subject, other than a research subject, shall be determined by the Head.
b) Such standards may include the requirement that candidates must satisfy minimum attendance levels at lectures, seminars, tutorials, practicals, laboratories or for other modes of instruction. Failure to comply with such requirements may constitute grounds for failure in a subject.
5. A mark and an approved grade of performance as set out in Rule 8.4 & 8.5, shall be determined and declared for each subject in which a candidate is enrolled.
6. Subjects satisfactorily completed at Pass Conceded or Pass Restricted grade may comprise no more than one sixth of the minimum credit point value of a course.
7. Should performance in a subject be affected by illness or other cause beyond the control of a candidate, the circumstances should be reported to the Vice-Principal (Administration) in writing, supported by evidence, normally no later than seven days following the illness or other cause. The circumstances shall be referred to the Head and may be taken into account when assessment of the candidate in that subject is made.
8. A candidate who satisfactorily completes a subject listed in the appropriate Schedule shall count only once the subject or the number of credit points attached to the subject in that Schedule towards the course.
9. Except with prior approval, a candidate who satisfactorily completes a subject shall not count that subject, nor the number of credit points attached to that subject, towards a course unless that subject is listed in the appropriate Schedule.

8.2 Examination & Assessment Rules

Formal University examinations may take place at the end of each session. Timetables showing the time and place at which individual examinations will be held are posted electronically and can be accessed via sols. Misreading of the timetable is not an acceptable excuse for failure to attend an examination. **No information concerning examinations or results will be given by telephone.**

Part I - Interpretation

1. In these Rules, unless the contrary intention appears:
 - a) "assessment work" means all essays, tests, papers, theses, demonstrations, performances and other work whatsoever whether written or otherwise other than examination papers within the meaning of any Course Rules or Schedules;
 - b) "candidate" means any person registered for a degree, diploma, associate diploma or undertaking a non-award program;
 - c) "examination" means any formally supervised examination in a subject held at a specified time and place;
 - d) "examination question paper" means a paper incorporating questions prepared by the examiner for an examination;
 - e) "examination answer paper" means a paper written or dictated by a candidate in answer to the examination question paper during an examination;
 - f) "examination room" means a designated place where an examination is held;
 - g) "examiner" means a person or persons with responsibility for the assessment work in any subject;
 - h) "subject" is a self-contained unit of study identified by a unique number in a schedule;
 - i) "Examination Supervisor" means a person authorised by the Vice-Principal (Administration) with responsibility for the supervision of a particular examination held by the University.

Part II - Conduct at Examinations

2. No candidate shall, during any examination:
 - a) have in his or her possession any material other than material which the examiner for the subject concerned has specified may be taken into an examination room;
 - b) provide assistance to, or communicate with, any other candidate unless expressly approved by the examiner;
 - c) accept assistance from any candidate or other person unless such assistance has been expressly approved by the examiner;
 - d) permit any other candidate to read, copy from, or use his or her examination question or answer paper, unless expressly approved by the examiner;
 - e) use any other material belonging to or written by another candidate or other person unless expressly approved by the examiner;
 - f) by any means whatsoever, except as approved by the examiner, obtain, or endeavour to obtain, assistance in his or her work, or give, or endeavour to give, assistance to any other candidate;

- g) remove from the examination room any examination answer paper or other paper provided for use by the candidate during the course of the examination, or other material which is the property of the University unless permitted by the Examination Supervisor or examiner to remove it;
- h) contravene the Rules and Procedures for the Conduct of Examinations;
- i) cause any disturbance or be guilty of any conduct likely to disturb any other candidate; or
- j) be guilty of any other act of misconduct as defined in Section 3 of the Rules for Student Discipline.

3. Any candidate who wishes to make an enquiry regarding an examination shall direct that enquiry in writing to the Vice-Principal (Administration).

Procedure

4. Should an Examination Supervisor have reason to believe that a candidate has committed, or is attempting to commit, a breach of any provision of clause 2 of these Rules, the Examination Supervisor shall immediately warn the candidate and shall report the matter in writing to the Vice-Principal (Administration). The candidate normally shall be allowed to complete the examination but in circumstances considered appropriate by the Vice-Principal (Administration) or other person authorised by the Vice-Principal (Administration), the candidate may be excluded from the examination room under the provisions of Section 7 of the Rules for Student Discipline.
5. The Examination Supervisor may take possession of any material brought into an examination room in contravention of clause 2(a) of these Rules.
6. The Examination Supervisor shall forward the material referred to in clause 5 to the Vice-Principal (Administration) with the report made pursuant to clause 4.
7. A candidate excluded from an examination room under clause 4 may appeal to the Vice-Chancellor under Section 12 or 13 of the Rules for Student Discipline.
8. The Vice-Principal (Administration) may refer a report pursuant to clause 4 to the Vice-Chancellor, in which event the reference shall be deemed to be a complaint pursuant to Section 14 of the Rules for Student Discipline and the Vice-Chancellor shall either:
 - a) refer it to the Investigation Committee for investigation; or
 - b) not proceed with it further should the Vice-Chancellor form the opinion that the complaint is unfounded or does not constitute misconduct.
9. The material confiscated pursuant to clause 5 shall be returned to the candidate at the conclusion of all action relating to the alleged breach of Rules by the Vice-Chancellor, the Investigation Committee and/or the Council Committee of Appeal.

General Information

10. Should an allegation be made that a candidate has breached any provision of clause 2 of these Rules, the candidate's examination result for the subject concerned shall be withheld by the Vice-Principal (Administration) pending proceedings of the Investigation Committee and/or the Council Committee of Appeal.

Penalties

11. Should the Investigation Committee proceed pursuant to clause 8a) with the report of an alleged breach of any provision of clause 2 and find the candidate guilty of the misconduct alleged against him or her, the Investigation Committee, in addition to recommending penalties set out in Section 32 of the Rules for Student Discipline:
- may recommend to the Vice-Chancellor that the candidate receive a zero mark;
 - may recommend that the candidate be given the opportunity to sit a supplementary, special or other examination and to be assessed on that examination paper.
12. A candidate may appeal to the Council Committee of Appeal on the grounds of lack of due process in the investigation of the complaint.

Part III - Assessment Work

13. For any subject for which they are enrolled, candidates are required to submit the prescribed assessment work in accordance with the instructions of the relevant examiner and the University Rules.
14. Any assessment work submitted by a candidate must be in accordance with Course Rule 8.1(3) which requires that such work must be the work of the candidate and not have been submitted for assessment elsewhere unless otherwise approved; if any material which is not entirely the work of the candidate is used, in whole or in part, fully documented reference to such material must be made. (Refer to Code of Practice – Students, Section 3 and Acknowledgement Practice in this Calendar.)
15. The procedures and penalties set out in clauses 8, 11 and 12, with modifications appropriate to the circumstances, shall apply in relation to an alleged breach of the provisions of Part III of these Rules by a candidate.

Part IV – Rules & Procedures for the Conduct of Examinations

16. a) A candidate must obey any instruction given by an Examination Supervisor for the proper conduct of an examination.
- b) A candidate must produce the student identification card for identification purposes for each examination. Should a candidate fail to do so, the candidate may be refused admission to the examination room. A candidate wearing a veil must remove it for identification purposes; on request by

the candidate this may be done in private before a female Examination Supervisor.

- A candidate should be in place in the examination room not less than ten (10) minutes before the time specified for the commencement of the examination.
- No candidate shall be admitted to an examination room more than thirty (30) minutes after the commencement of the writing time of the examination.
- No candidate shall be permitted to leave the examination room before the expiry of thirty (30) minutes from the commencement of writing time of the examination.
- No candidate shall be re-admitted to the examination room after leaving it unless, during the full period of absence, the candidate is under approved supervision.
- Following the ten (10) minute warning given by the Examination Supervisor before the end of the examination, all candidates shall remain seated until the examination answer papers have been collected.
- Except for candidates who have left the examination room prior to the ten minute warning referred to in sub-clause (g) above, all candidates shall remain seated until all examination answer papers have been collected and the Examination Supervisor permits candidates to leave the examination room.
- Smoking is not permitted in the examination room.
- All answers must be in English unless otherwise directed. An international student with written approval of the Vice-Principal (Administration), may use standard translation dictionaries; the written approval and the dictionary must be shown to the Examination Supervisor prior to the commencement of the examination.
- A candidate who commits any infringement of the Rules governing examinations may be expelled immediately from the examination room, and is liable to such further penalty as may be determined in accordance with the Rules for Student Discipline or Examination and Assessment Rules.

Special Examinations

Students who believe that their attendance at or performance in an examination or assignment has been affected by illness or other cause beyond their control are required to make a written statement to the Vice-Principal (Administration). This statement, together with any supporting evidence, will be considered by the Academic Unit Head who has the authority to take whatever action is deemed appropriate in determining the student's overall results. Students should refer to the Special Consideration policy on page for more details.

Withheld (WM and WE) Results

Students may be granted a withheld result i.e. (WM or WE grade) on the basis of medical, compassionate or other circumstances (see section on Special Consideration).

Where so granted, students should contact the relevant Academic Unit immediately to ascertain assessment requirements. It is the student's responsibility to make contact with the Unit and failure to do so may result in a fail grade being determined.

8.3 Procedure for the use of Foreign Translation Dictionaries in Examinations

- Foreign Language Translation Dictionaries may be used only by students from non-English speaking backgrounds (NESB) who are authorised to use such a dictionary in an examination.
- To be classified as NESB, a student must have been born in a non-English speaking country and have been resident in Australia or other English speaking country for less than ten years.¹
- A student who fails to meet the eligibility criteria referred to in (2) above, may apply to the Dean of Students for special permission to use a foreign translation dictionary in an examination. Such applications will be considered on a case by case basis.
- Such dictionaries may be used by eligible students for the length of their registration for a course at this University.
- Such dictionaries may be used in all subjects, except where otherwise directed to the contrary by the relevant Head of Academic Unit.
- Eligible students who wish to use such a dictionary and who do not have authorisation to do so, must apply for permission to Student Administration no later than four weeks prior to the examination period for which approval is sought.
- At the approved examination:
 - eligible students must show their authorisation to use a foreign translation dictionary to the Examination Supervisor prior to entry into the examination room; and then
 - the dictionary must be submitted for inspection by the Examination Officer prior to the commencement of the examination to establish its suitability, and to ensure that it is not marked in any way. The dictionary may be further checked at any time during the examination by staff in the examination room.
- The use of electronic foreign translation dictionaries in examinations is not permitted.

8.4 Grades of Performance for Undergraduate Subjects Listed in the Schedules & Course Structures

- The approved grades of performance and associated ranges of marks for 100, 200, 300 and 400 level subjects (except for subjects referred to in 8.4(2) below) are:

Satisfactory Completion:

High Distinction	85% - 100%
Distinction	75% - 84%
Credit	65% - 74%
Pass	50% - 64%
Pass Restricted/ Pass Conceded	45% - 49%

Unsatisfactory Completion:

Fail	0% - 44%
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For marks in the range 45-49% either a Pass Restricted or a Pass Conceded grade shall be determined and declared. A Pass Restricted grade may only be awarded for subjects at the 100- and 200- levels.

The performance in some subjects approved for this purpose will be determined as:

Satisfactory Completion: Satisfactory, or

Unsatisfactory Completion: Unsatisfactory.

Such subjects will not be included in the determination of classes of honours as prescribed in 8.4(3) below.

For subjects in which specified assessment components must be satisfactorily completed for the subject to be satisfactorily completed, failure to satisfactorily complete one or more such components will result in failure of the subject, and the mark determined will be the aggregate of marks gained for the components, or 44, whichever is least.

- The approved ranges of marks associated with classes of honours for 400 level 48 credit point subjects comprising the honours courses listed in Rule 103(5) are:

Honours Class I	85% - 100%
Honours Class II, Division 1	75% - 84%
Honours Class II, Division 2	65% - 74%
Honours Class III	50% - 64%
Fail	0% - 49%

- The classes of honours for 4 year prescribed courses will be determined by a weighted average mark determined as:

$$\text{weighted average mark} = \frac{\sum m_l c}{\sum l_c}$$

¹ This is based upon the current DETYA definition, as at September 2001.

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where

m is the actual mark obtained in each attempt at each subject;

c is the credit point value of the subject;

n is the total number of subject attempts; and

l is the weight reflecting the level of the subject.

b) The approved ranges of weighted average marks associated with classes of honours for 4 year prescribed courses are as follows.

i) For the honours degrees of Bachelor of Engineering, in each of Civil Engineering, Environmental Engineering, Materials Engineering, Mechanical Engineering, and Mining Engineering, the weights are:

4 for 400 level;

3 for 300 level;

2 for 200 level;

1 for 100 level;

and the ranges are:

Honours Class I 77.5 - 100%

Honours Class II Division 1 72.5 - 77.5%

Honours Class II Division 2 67.5 - 72.5%

Honours Class III 62.5 - 67.5%.

ii) For the honours degrees of Bachelor of Education, in Physical and Health Education, and Bachelor of Engineering, in each of Computer Engineering, Electrical Engineering, and Telecommunications Engineering & Bachelor of Mathematical Sciences, Bachelor of Mathematics and Economics, Bachelor of Mathematics and Finance the weights are:

4 for 400 level;

3 for 300 level;

2 for 200 level;

1 for 100 level;

and the ranges are:

Honours Class I 77.5 - 100%

Honours Class II Division 1 72.5 - 77.5%

Honours Class II Division 2 67.5 - 72.5%.

iii) For the honours degrees of Bachelor of Information and Communication Technology, the weights are:

4 for 400 level;

3 for 300 level;

2 for 200 level;

0 for 100 level;

and the ranges are:

Honours Class I 77.5 - 100%

Honours Class II Division 1 72.5 - 77.5%

Honours Class II Division 2 67.5 - 72.5%.

iv) For the honours degrees of Bachelor of Environmental Science, & Bachelor of Medicinal Chemistry the weights are:

4 for 400 level;

3 for 300 level;

0 for 200 level;

0 for 100 level;

except for 300 level STS, Law and Management subjects in the Bachelor of Environmental Science, for which the weighting will be 0, and the ranges are:

Honours Class I 80 - 100%

Honours Class II, Division 1 73 - 79%

Honours Class II, Division 2 65 - 72%.

v) For the honours degrees of Bachelor of Biotechnology, the weights are:

4 for 400 level;

1 for 300 level;

0 for 200 level;

0 for 100 level;

except for 300 level Management and STS subjects, for which the weighting will be 0, and the ranges are:

Honours Class I 80 - 100%

Honours Class II, Division 1 73 - 79%

Honours Class II, Division 2 65 - 72%.

vi) For the honours degree of Bachelor of Education, in Primary Education, the weights are:

4 for 400 level;

0 for 300 level;

0 for 200 level;

0 for 100 level;

and the ranges are:

Honours Class I 85 - 100%

Honours Class II, Division 1 75 - 84%

Honours Class II, Division 2 65 - 74%

Honours Class III 50 - 64%.

vii) For the honours degree of Bachelor of Laws the weights are:

1 for every level;

and the ranges, together with the relevant marks for the project subject LLB313 or LLB314 are:

Av mark range Æ	WAM	67.5<	72.5<	WAM
Project mark range Ø	<67.5	WAM ≥72.5	WAM ≥77.5	≥77.5
85 - 100	Pass degree	Hons II – 2	Hons II – 1	Hons 1
75 - 84	Pass degree	Hons II – 2	Hons II – 1	Hons II - 1
65 - 74	Pass degree	Hons II – 2	Hons II – 2	Hons II – 2
45 - 64	Pass degree	Pass degree	Pass degree	Pass degree
≥44	No degree	No degree	No degree	No degree

- c) For a weighted average mark within 0.5 below a break mark, the class of honours may be determined on the basis of improvement or otherwise throughout the course, performance in professional option subjects, and in project or thesis subjects, and such other relevant information as is available.
- d) Every attempt at a subject in the course is to be included in the determination in (b) except for subjects which are graded as satisfactory (S) or unsatisfactory (U).
- e) For subjects recorded as Discontinued Technical Fail, the mark used in the determination in b) is 0.
- f) Honours may be awarded only for those 4 year prescribed courses which contain 300 and 400 level subjects having a total value of at least 60 credit points, including at least 24 credit points at the 400 level, and at least 36 credit points at the 300 level taken by the candidate at this University and including a 400 level thesis or project subject with value of at least 12 credit points, except for the degree of Bachelor of Laws for which course the award of honours has no such requirements.

8.5 Grades of Performance for Postgraduate Subjects Listed in the Schedules & Course Structures

1. The approved grades of performance and associated ranges of marks for 800 and 900 level subjects, not being research subjects, are:

Satisfactory Completion:

High Distinction	85% - 100%
Distinction	75% - 84%
Credit	65% - 74%
Pass	50% - 64%

Unsatisfactory Completion:

Fail	0% - 49%
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The performance in some subjects approved for this purpose will be determined as:

Satisfactory Completion: Satisfactory, or

Unsatisfactory Completion: Unsatisfactory.

For subjects in which specified assessment components must be satisfactorily completed for the

subject to be satisfactorily completed, failure to satisfactorily complete one or more such components will result in failure of the subject and the mark determined will be the aggregate of marks gained for the components, or 49, whichever is least.

2. For 900 level research subjects, performance will be determined as satisfactory or unsatisfactory for each candidate at the completion of the nominated duration of each subject, and after the completion of assessment as set out in the Thesis & Research Degree Rules.

8.6 Restricted Pass

The award of the grade of Restricted Pass in 100 and 200 level subjects will prohibit a student progressing to the next subject in a sequence for which the subject in which the Restricted Pass is awarded is a pre-requisite. However, students are not prevented from repeating a subject for which a Restricted Pass has been awarded.

8.7 Amendments to Academic Records/ Reassessment of Grades

There are two ways in which you may apply to have your academic record amended.

Enrolment Error

If, as a result of an enrolment error, you have either:

- received a 'FAIL' grade for a subject for which you were formally enrolled, but did not attempt; or
- not received a result for a subject which you attempted, but for which you were not formally enrolled;

You may make application to have the necessary amendment made to your academic record. Applications must also be accompanied by a letter giving relevant details.

An academic record will be amended in special circumstances only. The application will be assessed and if it is determined that the error was the fault of the student, the \$80.00 charge will be paid prior to your academic record being altered.

You should note that where an application to amend your academic record by adding a subject for which you are not enrolled is successful, you are required to discharge the increased Higher Education Contribution Scheme (HECS) charge on the same basis that the original HECS liability was to be discharged, ie, either up-front or deferred payment and meet any other fees payable.

Applications must be made to the Student Enquiries Office no later than two weeks after the release of examination results.

Reassessment of Mark/Grade

If students feel that the mark or grade they have been awarded for a subject is not indicative of their performance or that there may have been an error in determining their mark or grade, they should approach the Subject Co-ordinator concerned to discuss the matter.

General Information

If, after this discussion, they feel the mark or grade is not correct, they should approach the Head of the Unit responsible for the subject to discuss the matter further.

After they have taken these steps and if they still feel the mark or grade is not correct, they may write to the Dean of the Faculty, setting out the reasons they believe the mark or grade is not correct and advising the Dean of the member(s) of staff with whom they have discussed the matter. The Dean will respond in writing after he/she has taken whatever advice is required.

Applications to the Dean should be made no later than two weeks after the release of the examination results.

If students are not satisfied with the outcome, they may then approach the Dean of Students and request a further investigation of the matter.

Finally, if students believe there has been a lack of due process in the reassessment procedure outlined above, they may appeal, within two weeks of receiving the response from the Dean, to the Academic Review Committee to review the matter. The letter of appeal must state fully the reasons for the appeal and include any relevant documentary evidence to support the appeal. **Please note**, however, that the Committee's role is to ensure that due process has been followed – the Committee's role is not to reassess the academic quality of the work.

8.8 Minimum Rate of Progress

1. A candidate may enrol in an undergraduate program in accordance with the provisions of the Enrolment Rules provided that the rate of progress is at least the minimum specified by the relevant clauses below.
2. The required minimum rate of progress by a candidate in an undergraduate program is:
 - a) in the first two consecutive sessions of registration (excluding summer session), satisfactory completion of subjects having a credit point value of at least one half the credit points attempted in that year; and
 - b) in each subsequent 12 months (excluding summer session), satisfactory completion of subjects having a credit point value of at least two-thirds the credit points attempted in that year.
 - c) For the purpose of calculating whether a student is making satisfactory progress, summer session results are excluded. Grades of 'Pass Restricted' and 'Pass Conceded' are considered to be passing grades.

3.
 - a) An undergraduate students whose rate of progress is less than the minimum specified in the relevant Rule 8.8(2) above will, in the first instance, be placed on probation. A student on probation will normally be placed on a restricted program for 12 months and will be required to consult with the faculty Sub-Dean prior to re-enrolment. The Sub-Dean may prescribe a remedial program which could, for example, include compulsory attendance at an English language or study skills course. If the same student fails to meet the required minimum rate of progress in the probationary year, and unless they can show cause for this failure, that student will be excluded from the university for a period of one year.
 - b) An undergraduate student who, because of exceptional circumstances, can show cause for failing to meeting the minimum rate of progress as specified in Rule 8.8(2), above may be permitted to re-enrol. However, if that candidate again fails to meet the required minimum rate of progress, that student will be excluded from the university for a period of two years.
 - c) A student who is excluded from re-enrolment may appeal that decision by writing to the Vice-Principal (Administration) within 14 days of notification.

8.9 Guidelines for the Granting of Awards with Distinction

The rules for the granting of an award "with Distinction" were amended on 5 June 2002 and apply to those courses as prescribed below.

To be eligible for the award, a student must be enrolled in one of the following courses:

- a pass bachelor degree
- a pass masters degree

Students enrolled in a graduate certificate, graduate diploma, honours bachelor degree course (including a four year bachelor degree program where there is a built-in honours component; that is, where honours may be awarded depending on the grade achieved), masters by research degree or doctoral degree program are not eligible for the award.

In determining the granting of an award with Distinction, in general, all subjects which constitute the degree course will be taken into account. However, in the case of students who have been granted advanced standing towards their degree or diploma as a result of studies undertaken elsewhere, only their performance in subjects studied at the University of Wollongong will be taken into consideration in determining whether they qualify for the award.

To be eligible to receive their award with Distinction, undergraduate students, including those enrolled in a joint program, must have completed at least 50 percent of their degree at the University of Wollongong and postgraduate

student, must have completed at least 75 percent of their degree at the University of Wollongong.

In order to achieve an award with Distinction, students must gain an average mark of 75% or more in the subjects that comprised their course. In determining a student's average mark, subjects will be weighted for credit point value only.

Students who enrolled in either a Bachelor of Commerce degree, Master of International Business degree or Master of Business Administration degree prior to the 1st January 2001 and who fail to meet the eligibility criteria for the granting of their award "with Distinction", may receive their award "with Merit", provided they meet the eligibility requirements as prescribed for those awards. For further information, students are advised to consult the Faculty of Commerce.

9. Ownership of Work & Intellectual Property

1. The University reserves the right to retain, at its discretion, the original or one copy of any work submitted for assessment in a course, competition or a subject, other than a research subject, conducted by the University.
2. The University retains the right to intellectual property resulting from work undertaken by a candidate excepting that the candidate may negotiate with the University for ownership of some or all of the intellectual property.
3. A candidate retains copyright over a thesis submitted for assessment in a subject or for an award, subject to the requirements prescribed in Rule 10.3 - Procedures Governing the Preparation & Submission of Theses.

10. Thesis & Research Degree Rules

10.1 Supervision for Thesis & Minor Thesis

1. A candidate for a masters or doctoral degree shall carry out the thesis or minor thesis work required for the research subject under the direction of a supervisor or supervisors, of whom at least one shall be a full time member of the academic staff, appointed under approved conditions.
2. Should the supervisor be absent from the University for a period exceeding six weeks, that supervisor shall recommend an alternative supervisor to be appointed under approved conditions for the period of absence.
3. Work in a research subject, other than field work, shall be carried out in an academic unit of this University save that in special cases a candidate may be permitted to conduct work at other places where suitable facilities are available; such permission will be granted on the condition that direction of the work

remains entirely under the control of the supervisor appointed pursuant to Rule 10.1(1) above.

4. After consultation with the Head and on written application from a candidate, a change of supervisor may be approved.
5. Before approving the registration of an applicant as a candidate, Council shall be satisfied that adequate supervision and facilities for the proposed work are available.

10.2 Requirements for Research Subjects

1. A candidate shall, not later than one session after registration, submit the title of the thesis or minor thesis through the Head for approval; upon approval, the title may not be changed except with further approval.
2. A candidate enrolled for a research subject shall submit annually to Council, through the Head, a report on progress of work for the thesis or minor thesis.
3. A candidate shall submit to the Head two months written notice of intention to submit the thesis or minor thesis.
4. On completion of a research subject, a candidate shall submit a thesis or minor thesis embodying the results of the work undertaken in the subject.
5. The thesis or minor thesis shall be presented in a form which complies with the requirements set out in Rule 10.3 below and shall include a certificate indicating the extent to which the work has been performed by the candidate.
6. The candidate may submit for consideration any relevant work that has been published.
7. A candidate may not submit as the major part of a thesis any work or material which has previously been submitted for a degree of the University or other similar award of another tertiary institution, except for the case of a thesis submitted for the degree of Doctor of Philosophy of this University and recommended by the examiners that it be submitted for the masters by research degree.
8. A candidate submitting a thesis for a doctoral degree must comply with the following additional requirements:
 - a) the majority of the work submitted shall have been completed subsequent to registration for the degree;
 - b) the work shall comprise an original and significant contribution to knowledge of the subject;
 - c) the thesis must present an account by the candidate of the study; and
 - d) in special cases, study carried out jointly with other persons may be accepted, provided Council is satisfied that the contribution by the candidate to the joint study is adequate.

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9. A candidate for a Masters by research degree may apply to change registration to a Doctoral degree under these requirements:
- candidates must have completed sufficient study in the Masters by research program at this University to allow an assessment of the capacity of the student to undertake independent research. This would normally mean that candidates admitted to a 48 credit points or greater would complete required coursework components of the degree and have completed approximately nine (9) months of equivalent full-time candidature of their thesis component prior to application to transfer to a doctoral degree.
 - applications from candidates will be assessed by a formal public presentation of a seminar on the research topic to a group which must include as a minimum the primary supervisor; a representative from the Thesis Examination Committee; and the chair of the Faculty Research Committee (or the chair's representative) for the Faculty in which the candidate is enrolled.
 - a report on the candidate's seminar and any other supporting documentation will be prepared by the primary supervisor. The report and recommendation, must be signed by the representative from the Thesis Examination Committee (TEC) and the chair of the Faculty Research Committee (or the chair's representative), and forwarded to the TEC.
 - the final determination will be made by the Thesis Examination Committee.

10.3 Procedures Governing the Preparation & Submission of Theses

- The thesis and other relevant work may be submitted for examination to the Director, Office of Research provided the candidate has completed the required minimum period of registration for the degree and is registered (enrolled) for the degree for which they are submitting the copies of their thesis.
- A candidate required to submit a thesis for a masters by research degree or a doctoral degree shall submit to the Director, Office of Research:
 - a statement from their supervisor stipulating that the thesis is in a form suitable for submission for examination;
 - a statement indicating the extent to which the work is their own work;
 - in the first instance, three spiral bound copies of the thesis and supporting work for submission to examiners; and
 - following examination of the thesis, in accordance with the recommendations in Rule 10.4 (6) a), b), d) or e) the candidate shall make necessary corrections, if any, and present to the Director,

Office of Research two final copies of the thesis, bound in accordance with Rule 10.3 (5).

- The degree will not be conferred until the two final bound copies are lodged with the Director, Office of Research accompanied by a letter from the Head certifying that, if required, corrections have been satisfactorily completed.
- All copies of the thesis shall include a summary of approximately 200 words and a declaration signed by the candidate stipulating that the work has not been submitted for a degree to any other university or institution.
- Theses are to be prepared in accordance with the following specifications, save that variation may be approved after consultation with the supervisor:
 - the text of the thesis, normally in English, shall be in double-spaced or one and a half spaced typescript;
 - the size of the paper shall approximate International Standards Organisation paper size A4 (297mm x 210mm) except for illustrative material such as drawings, photographs, printouts and sleeves for audio records, on which no restriction is placed; the paper used in all copies shall be white opaque paper of good quality;
 - the margins on each sheet shall be not less than 40mm on the bound side, 20mm on the unbound side, 30mm at the top and 20mm at the bottom;
 - in the binding of a thesis which includes mounted photographs, graphs, or similar method, or contains a back pocket, packing shall be inserted at the spine to ensure even thickness of the volume;
 - a completed and signed "Thesis Declaration", as prescribed in Rule 10.3 (9), shall be affixed to the inside of the front cover of each copy of the thesis submitted;
 - the thesis shall be presented in a permanent and legible form as original typescript, offset printing, or copy by other approved technique; and
 - there shall be a title sheet set out in accordance with the approved style sheet.
- The copies of the thesis provided for examination:
 - can be either spiral bound or bound in boards, covered with buckram; and
 - may be printed single or double sided on the paper.
- The two final bound copies of the thesis shall be presented in the following manner:
 - the thesis shall be bound in boards, covered with buckram;
 - the lettering on the spine binding will be 10mm in height and will be:
 - 15mm from the bottom and across - UoW;
 - 70 from the bottom and across - the degree;

- iii) underneath the degree, the year of submission of the thesis; and
 - iv) evenly spaced between the degree and the top, reading upwards, the name of the author, initials of given name or names first followed by family name;
- c) no other lettering or decoration is permitted on the spine or elsewhere on the binding;
 - d) shall be printed single or double sided on the paper;
 - e) the text of the thesis shall be in double-spaced or one and a half spaced typescript.
8. A thesis submitted for a higher degree shall be retained in the Library for record purposes, within copyright privileges of the author, and shall be public property and accessible for consultation at the discretion of the Librarian in accordance with Rule 10.3 (9).
 9. To stipulate the wishes of a candidate for a higher degree regarding utilisation of the contents of the thesis, the candidate is required to complete a "Thesis Declaration" available from the Director, Office of Research:
 - a) Form 1 to permit the University Librarian to retain a copy of the thesis for record purposes and grant public access to it; or
 - b) Form 2 to allow the University Librarian to retain a copy of the thesis for record purposes and under certain conditions restrict access (see Code of Practice - Supervision).
 10. The abstract submitted with a doctoral thesis shall be listed on the University's website.
 11. For information about the University policy on intellectual property, a candidate submitting a thesis should consult the "Intellectual Property Policy", available from the University's website.
- #### 10.4 Examination of Theses
1. Council shall appoint at least:
 - a) three examiners of the thesis, of whom at least one shall be normally a member of the relevant academic unit and at least two shall be external to the University for a candidate for a higher doctoral degree;
 - b) two examiners of the thesis, each of whom shall be external to the University for a candidate for a doctoral degree; and
 - c) two examiners of the thesis, not more than one of whom shall be internal to the University for a candidate for a masters by research degree.
 2. A supervisor of a candidate may not be an examiner of a thesis submitted by that candidate.
 3. A supervisor of a candidate who has submitted a thesis shall provide a certificate indicating:
 - a) whether the supervisor is in agreement with the statement submitted by the candidate in accordance with Rule 10.2(5); and
 - b) whether, in the opinion of the supervisor, the thesis is presented in a form that complies with the requirements of Rule 10.3 and is prima facie worthy of examination.
 4. An examiner of a thesis for a masters by research degree shall be asked to report on:
 - a) whether the thesis demonstrates that the candidate has an adequate understanding of the field of research;
 - b) whether the thesis demonstrates that the candidate has designed, undertaken and reported on an investigation in the specified field of research to a satisfactory level;
 - c) whether the candidate has presented the thesis in a manner and level appropriate to the field of research; and
 - d) whether the literary standard of the thesis is adequate.
 5. An examiner of a thesis for a doctoral degree by thesis shall be asked to report on:
 - a) whether the thesis provides evidence that the candidate conducted original research;
 - b) whether the thesis demonstrates that the candidate has made a significant contribution to the knowledge of the subject concerned;
 - c) whether the thesis reveals that the candidate has a broad understanding of the discipline within which the work was conducted;
 - d) whether the thesis contains material suitable for publication;
 - e) whether the candidate has presented the thesis in a manner and level appropriate to the field of research; and
 - f) whether the literary standard of the thesis is adequate.
 6. After examining a thesis, an examiner may recommend that:
 - a) the candidate be awarded the degree without further examination; or
 - b) the candidate be awarded the degree subject to revisions or corrections to the thesis; or
 - c) the candidate be required to resubmit the thesis in revised form for examination after a specified period of study and/or research; or
 - d) the candidate be required to attend an oral examination; or
 - e) in the case of a candidate for a doctoral degree, the candidate be permitted to submit the thesis for a masters by research degree; or

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- f) the candidate be not awarded the degree.
7. The candidate must make any revisions requested by the examiner/s, as per rule 10.4(6)(b), to the thesis within 12 months from the date of the Thesis Examination Committee Resolution. The candidate and their supervisor may request to the Chair of the Thesis Examination Committee for an extension to this period under exceptional circumstances. If the revised thesis is not received by the Office of Research within 12 months, the candidate will be awarded a fail.

10.5 Procedures for Examination of Work Submitted for Doctor of Philosophy by Publication & Higher Doctoral Degrees

1. Each examiner shall make an independent report on the submitted work or works.
2. Prior to the oral examination of an applicant for a doctoral degree by publication or an applicant for a higher doctoral degree, should such examination be deemed necessary, each examiner shall present questions for the examination.
3. Should the examiners be not satisfied with the performance of the candidate in an oral examination, Council may permit the candidate to present for that examination on a second occasion at a time to be determined by the examiners.
4. Should the examiners not agree in their recommendations or should, for any other reason, further opinion on the merit of the submitted work be needed, Council may appoint an additional examiner or examiners who shall make an independent report on the submitted work and who may, at the discretion of such examiner or examiners, conduct an oral or written examination on that work and on the general relevant field of knowledge.
5. At the conclusion of the examination, the examiners will submit to Council a concise report on the merits of the published work and on the examination results and Council shall determine whether or not the applicant may be admitted to the degree.
6. Should the application for admission to the degree fail, the person may make one only additional application after a period of not less than three years from the date of the original application.
7. An applicant for admission to the degree shall not be present at the relevant deliberations of Council.

11. Refusal of Registration

1. A candidate may be refused registration by reason of:
 - a) suspension from this University for a defined period; or
 - b) exclusion from this University for a defined period; or

- c) expulsion from this University.
2. A person who is:
 - a) suspended may be re-admitted to this University at the conclusion of the defined period of suspension;
 - b) excluded must apply for admission to this University at the conclusion of the period of exclusion should re-admission be sought; and
 - c) expelled shall not be re-admitted except by permission of Council.
3. The period of suspension will comprise one or more sessions and the remainder of the session in which the suspension is applied.
4. The period of exclusion will comprise one or more years and the remainder of the year in which the exclusion is applied.
5. Any record of performance issued by this University in respect of a person refused registration as prescribed in Rule 11.1, shall include detail of such suspension, exclusion or expulsion.

12. Other

1. General Saving Clause

Notwithstanding anything to the contrary herein contained, Council may dispense with or suspend any requirement of, or prescription by, these Rules.

2. Application for Amending Rules

Should an amendment be made to either or both these Rules or the Attachments following these Rules, the amendment shall apply from the date of implementation, but not retrospectively, to all candidates, unless determined otherwise by Council.

3. Appeal

1. A candidate may appeal against any decision made under these Rules.
2. An appeal should be made in writing to the Vice-Principal (Administration) within 14 days of notification of the decision referred to in Rule 12(3)(1).
3. An appeal shall conform with approved guidelines.

C. Award Rules

Part 1. Bachelor Degree Rules

101 Preliminary

Section 1 of these Rules applies to a candidate registered for a bachelor degree, and is to be read in conjunction with relevant provisions of the General Rules.

102 Bachelor Degrees & the Abbreviations

The following Rules apply to undergraduate courses, including approved prescribed double degree courses, leading to:

a) The Pass Bachelor Degrees:

Bachelor of Accountancy.....	BAccy
Bachelor of Arts.....	BA
Bachelor of Biotechnology.....	BBiotech
Bachelor of Business Administration.....	BBA
Bachelor of Business Administration (Logistics)....	BBA(Log)
Bachelor of Commerce.....	BCom
Bachelor of Communication and Media Studies.....	BCM
Bachelor of Computer Bioinformatics.....	BCompBioinf
Bachelor of Computer Geoinformatics.....	BCompGeoinf
Bachelor of Computer Science.....	BCompSc
Bachelor of Creative Arts.....	BCA
Bachelor of Education.....	BE
Bachelor of Engineering.....	BE
Bachelor of Environmental Science.....	BEnvSc
Bachelor of Exercise Science & Rehabilitation.....	BExR
Bachelor of Health Science in Indigenous Health Studies.....	BHlthScIndHlthStud
Bachelor of Information & Communication Technology.....	BInfoTech
Bachelor of Internet Science & Technology.....	BIST
Bachelor of Laws.....	LLB
Bachelor of Letters.....	LittB
Bachelor of Marine Science.....	BMarSc
Bachelor of Mathematics.....	BMath
Bachelor of Mathematics (Advanced).....	BMath(Adv)
Bachelor of Mathematics Education.....	BmathEd
Bachelor of Mathematical Sciences.....	BMathSc
Bachelor of Mathematics & Economics.....	BMathEcon
Bachelor of Mathematics & Finance.....	BMathFin
Bachelor of Medical Physics.....	BMedPhys
Bachelor of Medical Radiation Physics.....	BMedRadPhys
Bachelor of Medical Science.....	BMedSci
Bachelor of Medicinal Chemistry.....	BMedChem
Bachelor of Nursing.....	BNursing
Bachelor of Nutrition & Dietetics.....	BNutrDiet
Bachelor of Psychology.....	BPsyc
Bachelor of Science.....	BSc
Bachelor of Science Education.....	BScEd
Bachelor of Science (Photonics).....	BSc(Photonics)
Bachelor of Teaching.....	BTeach

b) The Honours Bachelor Degrees:

Bachelor of Arts.....	BA (Hons)
Bachelor of Biotechnology.....	BBiotech (Hons)
Bachelor of Biotechnology (Adv).....	BBiotech (Hons)Adv
Bachelor of Commerce.....	BCom (Hons)
Bachelor of Computer Bioinformatics ..	BCompBioinf (Hons)
Bachelor of Computer Geoinformatics.....	BCompGeoinf(Hons)
Bachelor of Computer Science.....	BCompSc (Hons)
Bachelor of Creative Arts.....	BCA (Hons)
Bachelor of Education.....	BE (Hons)
Bachelor of Engineering.....	BE (Hons)
Bachelor of Environmental Science.....	BEnvSc (Hons)
Bachelor of Environmental Science (Advanced)	EnvSci(Hons)Adv
Bachelor of Exercise Science & Rehabilitation	BExR (Hons)
Bachelor of Information & Communication Technology	BInfoTech (Hons)
Bachelor of Internet Science & Technology.....	BIST (Hons)
Bachelor of Laws.....	LLB (Hons)
Bachelor of Letters.....	LittB (Hons)
Bachelor of Marine Science.....	BMarSc (Hons)
Bachelor of Mathematics.....	BMath (Hons)
Bachelor of Mathematical Sciences.....	BMathSc (Hons)
Bachelor of Mathematics and Economics	BMathEcon (Hons)
Bachelor of Mathematics and Finance.....	BMathFin (Hons)
Bachelor of Medical Radiation Physics	BMedRadPhys (Hons)
Bachelor of Medicinal Chemistry.....	BMedChem (Hons)
Bachelor of Medicinal Chemistry (Advanced)	BMedChem(Hons)Adv
Bachelor of Nursing.....	BNursing (Hons)
Bachelor of Psychology.....	BPsyc (Hons)
Bachelor of Science.....	BSc (Hons)
Bachelor of Science (Adv).....	BSci (Hons)Adv

103 Admission & Registration Requirements

- An applicant shall comply with relevant provisions of the Admission Rules and 103 (2) to (8) below.
- To qualify for admission to the conversion course leading to the degree of Bachelor of Education a person shall have:
 - qualified for the appropriate Diploma in Teaching or Bachelor of Teaching of this University or an approved equivalent qualification; and
 - satisfactorily completed other approved requirements.
- To qualify for admission to the course leading to the degree of Bachelor of Laws a person shall have:
 - qualified for the award of a bachelor degree; or

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- b) complied with any other approved requirements as set out by the Bachelor of Laws course structure.
4. To qualify for admission to the conversion course leading to the degree of Bachelor of Nursing a person shall have:
 - a) either:
 - i) qualified for either the Diploma of Applied Science (Nursing) or the Diploma of Nursing of this University or an approved equivalent qualification; or
 - ii) registered or be eligible for registration as a nurse in Australia, and have acceptable qualifications; and
 - b) satisfactorily completed other approved requirements.
5. To qualify for admission to a course leading to an honours degree of Bachelor of Arts, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Creative Arts, Bachelor of Internet Science and Technology, Bachelor of Mathematics, Bachelor of Nursing or Bachelor of Science a person shall have:
 - a) either:
 - i) qualified at this University for the award of a relevant pass bachelor degree, either with merit or in which the 300 level subjects in a relevant major study were completed at an average of Credit grade or better; or
 - ii) qualified at another tertiary institution for the award of a pass bachelor degree containing a coherent study equivalent to a relevant major study and in which the 300 level subjects, or the equivalent, were completed at the equivalent of an average of Credit grade or better; and
 - b) satisfactorily completed other approved requirements.
6. A person who does not satisfy the requirements of Rule 103(5) may be considered under General Course Rule 12(1) for admission to a course for one of the honours bachelor degrees to which Rule 103(5) applies, providing:
 - a) that person has a supporting recommendation from the Head; and
 - b) the recommendation is approved.
7. A person who has qualified for one or more honours bachelor degrees and who is qualified for admission to a further course for honours may be permitted to register for that course provided that it differs significantly from satisfactorily completed courses for honours.
8. A candidate who, at the end of the prescribed period of registration for a course for honours referred to in Rule 103(5), fails to qualify for the award of any class of honours referred to in Rule 114(11) may not register

again as a candidate for an honours bachelor degree in the same academic discipline.

104 Enrolment Requirements

1. A candidate shall comply with the relevant provisions of the General Enrolment Requirements, in addition to which a candidate registered for an honours bachelor degree may enrol in:
 - a) subjects offered or approved by one academic unit; or
 - b) an approved combination of subjects offered by more than one academic unit.

105 Course Requirements for Bachelor of Arts

1. To qualify for award of the degree of Bachelor of Arts a candidate shall accrue an aggregate of at least 144 credit points by satisfactory completion of subjects listed in:
 - a) the Course Structures of the Bachelor of Arts offered by the Faculty of Arts (course code 702, 702A, 702BB, 702BE, 702SH or 702MV);OR
the Course Structures of the Bachelor of Arts offered by the Faculty of Health and Behavioural Sciences (course code 708);
and
 - b) the General Schedule.
2. a) The 144 credit points shall include:
 - i. for course code 702, 702A, 702BB, 702BE, 702SH or 702MV, the subjects prescribed for one of the majors or joint majors listed in the Course Structures for that degree and offered by member units of the Faculty of Arts;OR
for course code 708, the subjects prescribed for one of the major studies specified in the Course Structures of that degree and offered by the Faculty of Health and Behavioural Sciences.
 - ii. not more than 60 credit points in 100-level subjects (single degree).
 - iii. for course codes 702, 702A, 702BB, 702BE, 702SH or 702MV, at least 12 credit points in subjects taught by member units of the Faculty of Arts, undertaken in the first two semesters of study.
- b) Arts Double degree programs:
 - i. In the case of Arts double degrees (course codes 703, 704, 720, 747A, 771), the major study required for the Arts component of the double degree shall be selected from those majors approved for inclusion in the Course Structures of the Bachelor of Arts (702 or 708).
 - ii. Students majoring in Psychology in Arts double degree programs complete the subjects

prescribed for the Psychology major in the course structures of either the Faculty of Arts or the Faculty of Health and Behavioural Sciences.

- iii. Students enrolled in Arts double degree programs must complete at least 36 credit points in subjects taught by member units of the Faculty of Arts.

Exception – Students enrolled in Arts double degree programs and undertaking a major from the course structures of the Faculty of Health and Behavioural Sciences will be exempted from rule 105.2(b)iii.

3. A candidate for this course who has registered for two major studies, for which there are common subjects, may count no more than one subject in common towards these major studies, and may count the credit points for that subject, which may be at any level, once only in the credit point total required for the course.

106 Course Requirements for Bachelor of Commerce

1. To qualify for award of the degree of Bachelor of Commerce a candidate shall accrue an aggregate of at least 144 credit points, including a major study, by satisfactory completion of subjects listed in the General Schedule.
2. The 144 credit points shall include the subjects prescribed for one of the majors or combined majors offered by the Faculty of Commerce.
3. Of the 144 credit points, not more than 72 credit points shall be for 100 level subjects.

107 Course Requirements for Bachelor of Computer Science

1. To qualify for the award of the degree of Bachelor of Computer Science a candidate shall:
 - a) accrue an aggregate of at least 144 credit points, including a major study in Computer Science, by the satisfactory completion of subjects listed in either or both the Computer Science course structure and the General Schedule; and
 - b) satisfy the requirements prescribed in the Computer Science course structure.
2. Of the 144 credit points, not more than 60 credit points shall be for 100 level subjects.

108 Course Requirements for Bachelor of Mathematics

1. To qualify for the award of the degree of Bachelor of Mathematics a candidate shall:
 - a) accrue an aggregate of at least 144 credit points, including a major study in either Mathematics or Applied Statistics, by the satisfactory completion of subjects listed in either or both the Bachelor of

Mathematics course structure and the General Schedule; and

- b) satisfy the requirements prescribed in the Mathematics course structure.
2. Of the 144 credit points, not more than 60 credit points shall be for 100 level subjects.

109 Course Requirements for the Bachelor of Psychology

To qualify for the degree of Bachelor of Psychology a candidate shall accrue an aggregate of at least 192 credit points by satisfactory completion of subjects listed in the Bachelor of Psychology course structure, plus subjects listed in the Health and Behavioural Sciences schedule, the Science schedules or the General Schedule, subject to the following conditions:

- a) Continuation in the Bachelor of Psychology course will be dependent upon achieving, in the psychology subjects approved for the degree:
 - i) an average of at least 70% at the end of 100-level;
 - ii) a cumulative average of 70% for 100 and 200-level subjects at the end of 200-level; and
 - iii) a cumulative average of 70% for 200 and 300-level subjects at the end of 300-level.

Students who do not meet the required average would be transferred to a Bachelor of Science or Bachelor of Arts degree, majoring in Psychology.

- b) Applications for entry to the Bachelor of Psychology (BPsyc) after students have completed 100, 200 and 300-levels will be considered on an annual basis. Because of limited places students will be ranked for inclusion on the basis of the following performance in the psychology subjects approved for the BPsyc:
 - i) an average of at least 70% at the end of 100-level,
 - ii) a cumulative average of 70% for 100 and 200-level subjects at the end of 200-level, and
 - iii) a cumulative average of 70% for 200 and 300-level subjects at the end of 300-level.

110 Course Requirements for Bachelor of Science

1. To qualify for award of the degree of Bachelor of Science, a candidate shall accrue an aggregate of at least 144 credit points by satisfactory completion of subjects listed in one or more of the General Schedule, the Health and Behavioural Sciences Schedule, the Science Schedule and the Engineering Schedule.
2. The 144 credit points shall include a major study and satisfy the requirements prescribed in either:
 - a) the Health and Behavioural Sciences Schedule; or
 - b) the Science Schedule; or
 - c) the Engineering Schedule.

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3. Of the 144 credit points, not more than 60 credit points shall be for 100 level subjects.
4. A major study in the Bachelor of Science, through the Faculty of Science (course code 742), may be taken in Physics, Psychology, Mathematics/Applied Statistics or Computer Science provided that:
 - a) students take at least 12 credit points of 100 level and 32 credit points from 200 level and/or 300 level subjects from the Departments of Biological Sciences or Chemistry or the School of Geosciences;
 - b) the intake for the Computer Science major is based on the same UAI (or equivalent) as that required for the Bachelor of Computer Science; and
 - c) students outside the Faculty of Informatics only be permitted to enrol for CSCI111 Computer Science 1A in Spring session.

Minimum Mathematics Requirement

Prior to conferral of the degree of Bachelor of Science upon a candidate who has completed, for the degree, a major study comprising subjects offered by or for the Faculty of Science, the candidate must satisfy the minimum mathematics requirement by:

- a) producing evidence that upon entry to the University, requirements for enrolment in the subject MATH187 Mathematics IA Part 1 have been satisfied; or
- b) satisfactory completion of one of the subjects:
 - i) MATH187 Mathematics IA Part 1; or
 - ii) MATH141 Mathematics IC Part 1; or
 - iii) MATH151 General Mathematics IA.

111 Course Requirements for Prescribed Courses for Bachelor Degrees

To qualify for the award of the degree of:

Bachelor of Accountancy
Bachelor of Arts
Bachelor of Biotechnology
Bachelor of Business Administration
Bachelor of Computer Bioinformatics
Bachelor of Creative Arts
Bachelor of Education
Bachelor of Engineering
Bachelor of Environmental Science
Bachelor of Exercise Science and Rehabilitation
Bachelor of Health Science in Indigenous Health Studies
Bachelor of Information & Communication Technology
Bachelor of Internet Science & Technology
Bachelor of Laws
Bachelor of Marine Science

Bachelor of Mathematical Sciences
Bachelor of Mathematics and Economics
Bachelor of Mathematics and Finance
Bachelor of Medical Physics
Bachelor of Medicinal Chemistry
Bachelor of Medical Radiation Physics
Bachelor of Nursing
Bachelor of Nutrition & Dietetics
Bachelor of Psychology
Bachelor of Teaching

a candidate shall complete satisfactorily the subjects and the requirements prescribed in one of the course structures in the relevant Faculty.

112 Course Requirements for Prescribed Double Degree Courses for Bachelor Degrees *

To qualify for the award of the degrees of:

Bachelor of Arts-Bachelor of Commerce
Bachelor of Arts-Bachelor of Laws
Bachelor of Commerce-Bachelor of Laws
Bachelor of Computer Science-Bachelor of Laws
Bachelor of Computer Science-Bachelor of Science
Bachelor of Creative Arts-Bachelor of Arts
Bachelor of Creative Arts-Bachelor of Commerce
Bachelor of Creative Arts-Bachelor of Computer Science
Bachelor of Creative Arts-Bachelor of Laws
Bachelor of Creative Arts-Bachelor of Science
Bachelor of Engineering - Bachelor of Arts
Bachelor of Engineering-Bachelor of Commerce
Bachelor of Engineering - Bachelor of Computer Science
Bachelor of Engineering - Bachelor of Laws
Bachelor of Engineering - Bachelor of Mathematics
Bachelor of Engineering - Bachelor of Science
Bachelor of Information & Communication Technology - Bachelor of Laws
Bachelor of Mathematics-Bachelor of Computer Science
Bachelor of Mathematics-Bachelor of Engineering
Bachelor of Mathematics-Bachelor of Laws

*See also – Policy Guidelines for Double Degrees under Part 5, pg. 503 – Policies

Bachelor of Medical Science - Bachelor of Laws
Bachelor of Medical Science - Bachelor of Commerce
Bachelor of Psychology - Bachelor of Commerce
Bachelor of Science - Bachelor of Arts
Bachelor of Science - Bachelor of Commerce
Bachelor of Science-Bachelor of Laws

a candidate shall complete satisfactorily the subjects and the requirements prescribed in one of the double degree course structures in the relevant Faculty.

113 Course Requirements for Honours Bachelor Degrees in Arts, Commerce, Computer Science, Creative Arts, Internet Science & Technology, Mathematics, Nursing & Science

To qualify for award of an honours degree of:

Bachelor of Arts

Bachelor of Commerce

Bachelor of Computer Science

Bachelor of Creative Arts

Bachelor of Internet Science and Technology

Bachelor of Mathematics

Bachelor of Nursing

Bachelor of Science

by either a single or a combined course of study as prescribed in Rule 104, a full time candidate shall, within a period of two consecutive sessions not including summer session, or a part time candidate shall, within a period of four consecutive sessions not including summer session, as prescribed at registration, accrue an aggregate of at least 48 credit points by the satisfactory completion of an approved combination of 400 level subjects listed in the relevant course structure of the relevant Faculty.

114 Conferral of Awards

1. Awards shall be conferred in accordance with the relevant provisions of General Course Rule 6.7 and Rules 114(2) to (11).
2. Notwithstanding the provisions of part (1) of each of Rules 105 to 109 and rule 110, the degree of:

Bachelor of Arts

Bachelor of Commerce

Bachelor of Computer Science

Bachelor of Creative Arts

Bachelor of Mathematics

Bachelor of Science

may be conferred upon a candidate registered for a relevant double degree course and who satisfies the other provisions of the relevant Rule by the satisfactory completion of subjects having a value of at least 144 credit points of which:

- a) a prescribed minimum number of credit points, including a major study, shall be for subjects listed in the General Schedule; and
- b) the other credit points shall be either, or both, for subjects prescribed in the double degree course or for subjects from the General Schedule.

3. The degree of Bachelor of Arts may be conferred upon a candidate for the Bachelor of Arts - Bachelor of Engineering degrees who satisfactorily completes subjects having the value of at least 144 credit points and which satisfy requirements stipulated in Rule 105.
4. Prior to the conferring of a degree of Bachelor of Education or an Honours degree of Bachelor of Education upon a candidate who holds either a Diploma in Teaching or a Bachelor of Teaching of this University, the candidate shall be deemed to have surrendered the testamur for that Diploma in Teaching or Bachelor of Teaching and in so doing shall be deemed to have surrendered all rights relating to the Diploma or Degree.
5. Prior to the conferring of a degree of Bachelor of Biotechnology or an honours degree of Bachelor of Biotechnology upon a candidate who holds a Bachelor of Science of this University attained by satisfactory completion of subjects prescribed for the first three years for the degree of Bachelor of Biotechnology, the candidate shall be deemed to have surrendered the testamur for that Bachelor of Science and in so doing shall be deemed to have surrendered all rights relating to the degree.
6. A candidate who has attained an approved standard of achievement in the course for the pass bachelor degree may be awarded that degree with distinction.
7. Prior to conferring of a degree of Bachelor of Laws upon a candidate who holds a Graduate Diploma in Law, with major other than Court Policy and Administration, of this University, the candidate shall be deemed to have surrendered the testamur for that Graduate Diploma and in doing so shall be deemed to have surrendered all rights relating to the Graduate Diploma.
8. A pass bachelor degree shall not be conferred upon a candidate who is registered for the corresponding honours bachelor degree.
9. Prior to the conferring of an honours bachelor degree upon a candidate who holds the corresponding pass bachelor degree of this University, the candidate shall be deemed to have surrendered the testamur for that pass bachelor degree and in doing so shall be deemed to have surrendered all rights relating to the pass bachelor degree.
10. A candidate for a pass degree of:
 - Bachelor of Biotechnology
 - Bachelor of Education
 - Bachelor of Engineering
 - Bachelor of Environmental Science
 - Bachelor of Information & Communication Technology
 - Bachelor of Laws
 - Bachelor of Mathematical Sciences
 - Bachelor of Mathematics and Economics

General Information

Bachelor of Mathematics and Finance
Bachelor of Medical Physics
Bachelor of Medical Radiation Physics
Bachelor of Medicinal Chemistry
Bachelor of Psychology

who completes satisfactorily the subjects prescribed in one of the courses listed in the relevant course structure at the standard of achievement prescribed in General Course Rule 8.3, shall receive the corresponding honours degree.

11. A candidate who satisfactorily completes relevant requirements may be awarded the honours bachelor degree in one of the classes:

Honours Class I
Honours Class II Division 1
Honours Class II Division 2
Honours Class III

determined as set out in General Course Rule 8.3.

Part 2. Graduate Certificate Rules

201 Preliminary

Part 2 of these Rules applies to a candidate registered for a graduate certificate and is to be read in conjunction with relevant provisions of the General Rules.

202 Graduate Certificates & the Abbreviations

Part 2 of these Rules applies to postgraduate courses leading to the graduate certificates:

GCert in Adult Career Development GCertCareerDev
GCert in Applied Economics GCertApplEcon
GCert in Banking and Finance GCertBankFin
GCert in Business GCertBus
GCert in Business Administration GCertBA
GCert in Cognitive Neuroscience GCertCogNeuro
GCert in Computer-based Learning
..... GCertCompBasedLearn
GCert in Educational Leadership GCertEdLead
GCert in Engineering GCertEng
GCert in Environmental Education GCertEnvEd
GCert in Forest Conservation & Management
..... GCertForestCons&Mgmt
GCert in Gifted Education GCertGiftedEd
GCert in Health Informatics
GCert in Health Policy and Management GCertHP&M
GCert in Higher Education GCertHigherEd
GCert in History Education GCertHistEd
GCert in Indigenous Health Studies GcertIndHealth
GCert in Industrial Relations GCertIR
GCert in Information & Communication Technology
..... GCertInfoTech
GCert in International Business GCertIB

GCert in Information Systems GCertIS
GCert in Literacy GCertLit
GCert in Logistics GCertLog
GCert in Maintenance Management GCertMaintMgmt
GCert in Management GCertMgmt
GCert in Maritime Studies GCertMaritimeStud
GCert in Marketing GCertMark
GCert in Mental Health GCertMntlHlth
GCert in Migration and Development GCertMigrDev
GCert in Multicultural Journalism GCertMultiJour
GCert in Nursing GCertNurs
GCert in Nutrition Management GCertNutrMgmt
GCert in Occupational Health & Safety GCertOHS
GCert in Outdoor Education CCertN
GCert in Public Health Research Methods
..... GCertPubHlthResMth
GCert in Special Education GCertSpecialEd
GCert in Social Change and Development GCertSCD
GCert in TESOL GCertTESOL
GCert in Textual Studies, Media & Linguistics
..... GcertTextStudMedLing
GCert in Transnational Crime Prevention
..... GCertTransCrimePrev
GCert in Quality Management GcertQM
Post GCert in Advanced Training in Clinical Psychology
..... GCertAdvClinPsych
Post GCert in Professional Psychological Practice
..... PGCertProfPsychPrac

203 Course Requirements for the Graduate Certificate

To qualify for award of a graduate certificate, a candidate shall:

- accrue an aggregate of at least 24 credit points by the satisfactory completion of subjects approved by the Head and prescribed in one of the course structures offered by the relevant Faculty; and
- be subject to any provisions of the Course Requirements for that particular graduate certificate.
- For a candidate for a Postgraduate Certificate in Prof and Practice, the course shall comprise subjects having a value of 36 credit points selected from the relevant course structure.

Part 3. Graduate Diploma Rules

301 Preliminary

Part 3 of these Rules applies to a candidate registered for a graduate diploma and is to be read in conjunction with relevant provisions of the General Rules.

302 Graduate Diplomas and the Abbreviations

Part 3 of these Rules controls postgraduate courses leading to the graduate diplomas:

GDip in Adult Education & Training	GDipAdultEd
GDip in Arts	GDipArts
GDip in Business Administration	GDipBA
GDip in Commerce	GDipCom
GDip in Education	GDipEd
GDip in Engineering	GDipEng
GDip in Indigenous Health Studies	GDipIndHealth
GDip in Information Systems	GDipIS
GDip in Law	GDipLaw
GDip in Legal Practice	GDipLegPrac
GDip in Materials Welding & Joining	GDipMWJ
GDip in Maintenance Management	GDipMtceMgt
GDip in Natural Resources Law	GDipNatResLaw
GDip in Nursing	GDipNursing
GDip in Public Health	GDipPH
GDip in Science	GDipSc
GDip in Statistics	GDipStat
GDip in TESOL	GDipTESOL
GDip in Total Quality Management	GDipTQM
Post Gdip in Advanced Training in Clinical Psychology	PGDipAdvClinPsych

303 Admission & Registration Requirements

1. A candidate shall comply with the relevant provisions of the General Admission Rules and 303(2) or (3).
2. An applicant for registration for the Graduate Diploma in Educational Studies must have qualified for a three year teaching diploma or the equivalent from an approved institution and have at least one year, or the equivalent, of acceptable professional experience.
3. An applicant for registration for the Graduate Diploma in Science with major in Mental Health must have qualified for an approved three year health profession diploma or the equivalent from an approved institution and have at least one year, or the equivalent, of acceptable professional experience.

304 Course Requirements for the Graduate Diploma

To qualify for award of a graduate diploma, a candidate shall:

- a) accrue an aggregate of at least 48 credit points by the satisfactory completion of subjects approved by the Head and prescribed in one of the courses structures offered by the relevant Faculty; and

- b) be subject to any provisions of the Course Requirements for that particular graduate diploma.

305 Conferral of Awards

1. A Graduate Diploma in Law with major other than Court Policy and Administration, shall not be conferred upon a candidate who is registered for the degree of Bachelor of Laws.
2. Prior to the conferring of a graduate diploma upon a candidate who holds a graduate certificate of the University and which was a component of the graduate diploma, the candidate shall be deemed to have surrendered the testamur for that graduate certificate and in doing so shall be deemed to have surrendered all rights relating to that graduate certificate.
3. A candidate who has attained an approved standard of achievement in the course for a graduate diploma may be awarded that graduate diploma with distinction.

Part 4. Masters Degree Rules

401 Preliminary

Part 4 of these Rules applies to a candidate registered for a masters degree and is to be read in conjunction with relevant provisions of the General Rules.

402 Masters Degrees & the Abbreviations

Part 4 of these Rules applies to postgraduate courses leading to the masters degrees:

Master of Accountancy	MAccy
Master of Applied Finance	MAppFin
Master of Applied Management in Social Change and Development	MAppMgmtSocChgDev
Master of Arts	MA
Master of Business Administration	MBA
Master of Business Innovation	MBI
Master of Clinical Psychology	MClinPsyc
Master of Commerce	MCom
Master of Computer Science	MCompSc
Master of Computer Studies	MCompStud
Master of Court Management	MCourtMgmt
Master of Creative Arts	MCA
Master of Economics	MEcon
Master of Economics	Mecon(Adv)
Master of Education	MEd
Master of Electronic Commerce	MElecComm
Master of Engineering	MEng
Master of Engineering Practice	MEngPrac
Master of Engineering Studies	MEngStud
Master of Finance	MFin
Master of Health Informatics	MHealthInfo
Master of Health Management	MHM
Master of Indigenous Health Studies	MIndHealth
Master of Industrial Relations	MIndRel

General Information

Master of Industry-based Information Technology.....	MIIT
Master of Information & Communication Technology	MInfoTech
Master of Information Systems.....	MInfoSys
Master of Information Technology Management	MITM
Master of International Business	MIB
Master of Internet Technology.....	MIT
Master of Journalism.....	MJ
Master of Laws.....	LLM
Master of Laws International	LLIntl
Master of Maritime Studies.....	MMS
Master of Mathematics	Mmath
Master of Multimedia	
Master of Natural Resources Law	MNatResLaw
Master of Nursing.....	MNursing
Master of Nursing (Mental Health)	
Master of Nutrition Management	MNutrMgmt
Master of Policy.....	Mpol
Master of Professional Accounting	MPA
Master of Public Health	MPH
Master of Quality Management	MQM
Master of Science	MSc
Master of Social Change & Development.....	MSCD
Master of Statistics.....	MStat
Master of Strategic Human Resource Management	MHRM
Master of Strategic Marketing.....	MSM
Master of Transnational Crime Prevention	MTransCrimePrev

403 Course Requirements for the Masters Degree

- To qualify for award of a masters degree, a candidate shall:
 - undertake an approved course recommended by the Head;
 - accrue the required number of credit points by satisfactory completion of subjects comprising the course as set out in Rule 403(2),(3) or (4); and
 - be subject to any provisions of the Course Requirements for that particular masters degree.
- For a candidate who has satisfactorily completed a relevant major study or approved work equivalent to a relevant major study, either as part of a completed bachelor degree or in addition to a completed bachelor degree, the course shall comprise subjects having a value of at least 48 credit points at 900 level and selected from the relevant course structure offered by the relevant Faculty.
- For a candidate who has completed a bachelor degree, or an approved equivalent qualification, which does not include a relevant major study or the equivalent of a relevant major study, the course shall comprise subjects having a value of at least 72 credit points of which:

- at least 48 credit points at 900 level shall be for subjects selected from the relevant course structure offered by the relevant Faculty; and
- the credit points constituting the remainder of the course shall be for subjects at 200, 300, 400, 800 or 900 level selected from the relevant Schedules and/or course structures; a maximum of 12 credit points may be for subjects at 200 level.

- For a candidate for a degree of Master of Business Administration, the course shall comprise subjects having a value of at least 72 credit points, selected from the relevant course structure.

404 Conferral of Awards

- Awards shall be conferred in accordance with the relevant provisions of General Course Rule 6.7 and Rule 404(2).
- Prior to the conferring of a masters degree upon a candidate who holds a graduate certificate or a graduate diploma of this University and which was a component of the masters degree, the candidate shall be deemed to have surrendered the testamur for that graduate certificate or graduate diploma and in doing so shall be deemed to have surrendered all rights relating to that graduate certificate or graduate diploma.
- A candidate who has attained an approved standard of achievement in the course for the pass masters degree may be awarded that degree with distinction.

Part 5. Masters by Research Degree Rules

501 Preliminary

Part 5 of these Rules applies to a candidates registered for a Masters by Research degree and is to be read in conjunction with relevant provisions of the General Rules.

502 Masters by Research Degrees & the Abbreviations

Part 5 of these Rules controls postgraduate courses leading to the Masters by Research degrees:

Master of Accountancy - Research	MAccy - Res
Master of Arts - Research	MA - Res
Master of Computer Science - Research.....	MCompSc - Res
Master of Court Management – Research.....	MCourtMgmt - Res
Master of Creative Arts – Research	
Master of Economics - Research	MEcon - Res
Master of Education - Research.....	MEd - Res
Master of Engineering - Research.....	MEng - Res
Master of Environmental Science - Research	MEnvSc - Res
Master of Finance- Research	MFin - Res
Master of Industrial Relations - Research.....	MIndRel - Res
Master of Information and Communication Technology - Research	MInfoTech - Res

Master of Information Systems- Research....	MInfoSys - Res
Master of Laws - Research.....	MLaws - Res
Master of Management- Research.....	MMgmt - Res
Master of Marketing - Research.....	MMark - Res
Master of Natural Resources Law - Research	MNRL - Res
Master of Science - Research.....	MSc - Res
Master of Social Change and Development - Research	MSocChgDev - Res

503 Course Requirements for the Masters by Research Degree

1. To qualify for award of a Masters by Research degree a candidate shall:
 - a) undertake an approved course as recommended by the Head;
 - b) accrue the required number of credit points by satisfactory completion of subjects comprising the course as set out in Rule 503(2);
 - c) be subject to any provisions of the Course Requirements for that particular Masters by Research degree; and
 - d) satisfactorily complete such examinations and other work as may be prescribed.
2. The course shall comprise subjects having a value of at least 72 credit points including:
 - a) a research thesis subject having a value of 48 credit points; and
 - b) other coursework subjects having a value of 24 credit points at 900 level.

504 Conferral of Awards

1. Awards shall be conferred in accordance with the relevant provisions of General Course Rule 6.7 and 504(2).
2. Prior to the conferring of a Masters by Research degree upon a candidate who holds either a graduate diploma or a masters degree of this University and which was a component of the Masters by Research degree, the candidate shall be deemed to have surrendered the testamur for that graduate diploma or masters degree and in doing so shall be deemed to have surrendered all rights relating to that graduate diploma or masters degree.

Part 6. Doctoral Degree Rules

601 Preliminary

Part 6 of these Rules applies to a candidate registered for a doctoral degree by thesis and is to be read in conjunction with relevant provisions of the General Rules.

602 Doctoral Degrees & the Abbreviations

Part 6 of these Rules applies to postgraduate courses leading by thesis to the doctoral degrees:

Doctor of Philosophy.....	PhD
Doctor of Business Administration.....	DBA
Doctor of Creative Arts.....	DCA
Doctor of Education.....	EdD
Doctor of Psychology.....	DPsych
Doctor of Public Health.....	DPH

603 Admission & Registration Requirements

1. An applicant shall comply with the provisions of the General Admission Rules and 603(2) to (4)
2. An applicant for registration as a candidate for a doctoral degree shall have qualified for a bachelor degree with Honours Class II, Division 2 or higher of this University or possess an approved equivalent qualification from another institution.
3. Notwithstanding any other provisions of these Rules, the Head shall recommend whether the applicant is fit to undertake study leading to the award of a doctoral degree and certify that the unit has the necessary resources to provide supervision in the discipline in which the applicant proposes to study.
4. A candidate shall register as a full time candidate for a doctoral degree except that:
 - a) a member of the full time staff of the University; or
 - b) a person who is not a member of the full time staff of the University, but who, in the opinion of Council, is engaged in an occupation which provides opportunity to pursue study in the relevant academic unit, may be accepted as a part time candidate for the degree, in which cases a minimum period for the duration of study shall be prescribed.

604 Course Requirements for Doctor of Philosophy, Doctor of Business Administration, Doctor of Creative Arts, Doctor of Education, Doctor of Psychology & Doctor of Public Health.

A candidate for a degree by thesis of Doctor of Philosophy, Doctor of Creative Arts, Doctor of Education, Doctor of Psychology or Doctor of Public Health shall enrol in a research subject comprising a thesis and undertake an approved study which may include specified course and/or practical work and/or performance as recommended by the Head.

605 Outside Work

A full time candidate may be permitted to undertake teaching in the University or other work which, in the judgement of Council, will not interfere with pursuit of the course.

606 Unsatisfactory Progress

The candidature of a student making unsatisfactory progress may be made subject to probation. Outcomes may include transfer to a different degree program or termination of candidature, in accordance with the Code of Practice - Supervision, Rule 9.

Part 7. Doctoral Degree by Publication Rules

701 Preliminary

Part 7 of these Rules applies to a candidate for a doctoral degree by publication and is to be read in conjunction with the relevant provisions of the General Rules.

702 Doctoral Degree & the Abbreviation

Part 7 of these Rules applies to the postgraduate course leading to the doctoral degree by publication:

Doctor of Philosophy PhD

703 Requirements for Doctor of Philosophy by Publication

1. A person may apply for admission as a candidate for the degree of Doctor of Philosophy by publication provided that person:

- a) i) is a graduate of this University or of the University of New South Wales at the Wollongong University College; and
- ii) has standing of not less than eight years after admission to the first degree for which the candidate has qualified; or
- b) is not a graduate of this University but is a member of the full time academic staff for a minimum period of five (5) years, with standing of not less than eight years after admission to a first degree of another University.

2. An application, accompanied by the prescribed charge, shall be made in writing to the Vice Principal (Administration) and shall include:

- a) identification of the academic unit with which the contribution to scholarship is considered to be most closely associated;
- b) five copies of a list of published works on which the claim for admission to the degree is based;
- c) five copies of the works listed in 703(2)b), all works, apart from quotations, to be presented in, or translated into, English, unless otherwise approved; and

d) a statement, which shall be an overview of normally not less than 5,000 words, setting out ways in which the collective publications provide an original and significant contribution to knowledge and incorporating:

- i) details of sources from which the works were derived;
- ii) details of the extent to which work of others has been availed upon;
- iii) details of the extent to which the applicant was responsible for the initiation, conduct and direction of any joint works submitted as part of the application;
- iv) evidence that the publications have standing as significant contributions to knowledge; and
- v) a declaration identifying any of the works referred to in Rule 703(2)b) which have been submitted for any qualification of any tertiary institution.

704 Course Requirements for Doctor of Philosophy by Publication

A candidate for the degree of Doctor of Philosophy by publication shall enrol in a research subject comprising a thesis in accordance with the provisions of Rule 10(1).

705 Examination

- 1. Should Council be satisfied that the submitted work is of sufficiently high quality to be prima facie worthy of examination for the degree, it shall appoint examiners as prescribed in Rule 10(4).
- 2. The applicant may be required to respond orally or in writing to questions concerning the work and the general relevant field of knowledge to which it pertains.
- 3. The examination of the work submitted shall be conducted as prescribed in Rule 10(5).

Part 8 Higher Doctoral Degree Rules

801 Preliminary

Part 8 of these Rules applies to a candidate for a prestigious higher doctoral degree and is to be read in conjunction with relevant provisions of the General Rules.

802 Higher Doctoral Degrees & the Abbreviations

Part 8 of these Rules applies to postgraduate courses leading to the higher doctoral degrees:

Doctor of Laws LLD
 Doctor of Letters..... DLitt
 Doctor of Science..... DSc

803 Requirements for Doctor of Laws, Doctor of Letters & Doctor of Science

1. A person may apply for admission as a candidate for the degree of Doctor of Laws, Doctor of Letters or Doctor of Science provided that person:
 - a) i) is a graduate of this University or of the University of New South Wales at the Wollongong University College; and
 - ii) has standing of not less than eight years after admission to the first degree for which the candidate has qualified; or
 - b) is not a graduate of this University but is a member of the full time academic staff with standing of not less than eight years after admission to a first degree of another University.
2. An application shall be made in writing to the Vice-Principal (Administration) and shall include:
 - a) identification of the academic unit with which the contribution to scholarship is considered to be most closely associated;
 - b) five copies of a list of published and/or unpublished works on which the claim for admission to the degree is based;
 - c) five copies of the works listed in 803(2)b), all works, apart from quotations, to be presented in, or translated into, English, unless otherwise approved; and
 - d) a statement, which shall be an overview of normally not less than 5,000 words, setting out ways in which the collective works provide an original and significant contribution to knowledge and incorporating:
 - i) details of sources from which the works were derived;
 - ii) details of the extent to which work of others has been availed upon;
 - iii) details of the extent to which the applicant was responsible for the initiation, conduct and direction of any joint works submitted as part of the application;
 - iv) evidence that the publications have standing as significant and sustained contributions to knowledge; and
 - v) a declaration identifying any of the works referred to in Rule 803(2)b) which have been submitted for any qualification of any tertiary institution.

2. The applicant may be required to respond orally or in writing to questions concerning the work and the general relevant field of knowledge to which it pertains.
3. The examination of the work submitted shall be rigorous and conducted as prescribed in Rule 10(5).

804 Examination

1. Should Council be satisfied that the submitted work is of sufficiently high quality to be prima facie worthy of examination for the degree, it shall appoint examiners as prescribed in Rule 10(4).

Policies & Codes of Practice

Policies

The University has a range of policies to give guidance to students and staff.

Policies exist on the following issues:

Policy	Web Address
Acknowledgment Practice (printed below)	http://www.uow.edu.au/student/calendar/rules/plagiarism.html
Special Consideration Policy (printed below)	http://www.uow.edu.au/student/calendar/specialconsideration.html
Policy Guidelines for Double Degrees (printed below)	http://www.uow.edu.au/student/calendar/double_degree.html
Tuition Fee Policy (printed below)	http://www.uow.edu.au/student/calendar/feespol.htm
Anti-Bullying Policy	http://www.uow.edu.au/admin/eeo/antibullyingguide.rtf
Assignments submitted by Facsimile or Email	http://www.uow.edu.au/about/teaching/teaching_code.htm#electronic
Authorship	http://www.uow.edu.au/research/researchmanagement/authorship.html
Children on Campus Policy	http://www.uow.edu.au/eeo/childrenoncampus.htm
Grievance Resolution Procedures	http://www.uow.edu.au/admin/personnel/awards/ac_enterprise00.html#S-5
Guideline on the use of the Parents Room	http://www.uow.edu.au/admin/eeo/parentsroomguide.htm
Freedom of Information	Secretariat
Intellectual Property	http://www.uow.edu.au/research/researchmanagement/1998IP.html
Health & Safety	http://www.uow.edu.au/admin/personnel/ohs/ohspolicy.html
Non-Discriminatory Language Practice and Presentation	http://www.uow.edu.au/admin/eeo/nondiscrimlanguage.htm
Principles under which Subject Material may be Sold to Students by Academic Units	Secretariat
Policy for People with Disabilities	http://www.uow.edu.au/admin/eeo/childrenoncampus.htm
Privacy	http://www.uow.edu.au/admin/personnel/policy/all_privacy.html
Reconciliation Statement	http://www.uow.edu.au/admin/eeo/reconciliationstatement.htm
Respect for Cultural Diversity	http://www.uow.edu.au/admin/eeo/sdcommrelations.htm
Sexual Assault Protocol	http://www.uow.edu.au/admin/eeo/sexualassaultprotocol.rtf

Sexual Harassment Policy	http://www.uow.edu.au/eeo/sexualharassment.htm
Students and Staff Working Alone on University Property	http://www.uow.edu.au/admin/personnel/ohs/workingalone.htm

A copy of all Policies can be obtained from the online Policy Directory accessed via SOLS or from the secretariate Office in the Administration Building.

Acknowledgement Practice / Plagiarism

(See also Codes of Practice - Student and Code of Practice - Teaching & Assessment)

In a university, ideas are important, and it is also important to give people appropriate credit for having ideas.

There are several reasons why you should give people credit when using their ideas; three of the more important of those reasons are:

"fairness to authors and other students, the responsibility of students to do independent work, and respect for ownership rights."¹

If, in writing an essay or report, you copy a passage from a book word-for-word and don't give a reference to the book, this is:

- unfair to the author who wrote the passage in the book;
- unfair to other students who do their own work without copying;
- failure to do independent work as expected in a university; and
- breach of copyright.

Giving and gaining credit for ideas is so important that a violation of established procedures has a special name: **plagiarism**. Plagiarism means using the ideas of someone else without giving them proper credit. That someone else may be an author, critic, journalist, artist, composer, lecturer, tutor or another student. Intentional plagiarism is a serious form of cheating. Unintentional plagiarism can result if you don't understand and use the acceptable scholarly methods of acknowledgment. In either case, the University may impose penalties which can be very severe.

Over many years, procedures have been developed for acknowledging ideas in all forms of expression. In published writings, for example, authors are expected to give references to articles and books on which they have relied, and to give written thanks to people who have helped them in preparing their work.

There are several methods for giving credit in written work and the lecturers and tutors in the academic units in which you study should inform you about methods that are acceptable to them. A good way to gain a better understanding of those methods in a particular discipline is

¹ Barry M Kroll, "How college freshmen view plagiarism", *Written Communication*, Vol 5, No 2, April 1988, pp 203-221 (quote from p 203).

to read articles published in academic journals of that discipline.

The following examples will help you understand some of the common methods for acknowledging your sources. If you have any questions about these methods, check with your lecturer or tutor.

Acknowledging Sources of Quotations

If you copy part of a sentence, whole sentence(s) or paragraph(s) from an article, a book, lecture notes, an essay, report or any other source, it should be put in quotation marks and the article, book or other source should be referenced using an appropriate method.

Example 1: "The subjugation of thought in Australia through stringent censorship and draconian defamation laws has existed throughout the 200 years of white settlement" (Pollak, 1990, p 7).

Correct.

The bibliography should then include:

Pollak, Michael. *Sense and Censorship: Commentaries on Censorship Violence in Australia* (Sydney: Reed Books, 1990).

Example 1 is presented using the author-date system in which the author of the work and the date the work was published are listed in brackets.

Example 2: "The subjugation of thought in Australia through stringent censorship and draconian defamation laws has existed throughout the 200 years of white settlement."²

Correct - see the footnote.

Example 2 is presented using the footnote system in which the full reference is given as a footnote. You should be aware that, depending on the system your lecturer or tutor prefers, you may use either footnotes at the foot of the page or endnotes at the end of the text.

Example 3: The subjugation of thought in Australia through stringent censorship and draconian defamation laws has existed throughout the 200 years of white settlement.

Wrong and very bad: this is a direct quote from Pollak and therefore should be placed in quotation marks followed by a reference using the author-date system or the footnote or endnote system.

If you use a quote, the words in quotation marks must be copied exactly as they are in the original source.

Example 4: "In Australia, stringent censorship and draconian defamation laws have existed throughout the two hundred years of White settlement" (Pollak, 1990, p.7).

Wrong: the quote is inaccurate in several places.

If you change or add anything, use square brackets [] to indicate the place where the alteration is located.

² Pollak, Michael. *Sense and Censorship: Commentaries on Censorship Violence in Australia* (Sydney: Reed Books, 1990), p 7.

or as reference number 2 in the List of References at the end of the essay or report.

If you omit something from the quote, use a line of dots to indicate the location of the omission.

Example 5: Pollak claims that censorship and defamation law have been the means for "[t]he subjugation of thought in Australia throughout the 200 years of white settlement" (Pollak, 1990, p.7).

Correct.

Acknowledging Sources of Ideas

Even if you are not using the exact words of somebody else, it is wrong to use their ideas unless you give appropriate credit. For example, if you write an essay or paper on the censorship of the press and you structure it using the same set of topics as Pollak uses in his book *Sense and Censorship*, you should say this in a sentence or note and thus give credit to Pollak.

Example 6: In this essay, the use of censorship against Dorothy Hew

ett, Terry Hayes, Chris Masters and Brian Toohey will be described.

Wrong: the last four chapters of Pollak's book are on these individuals, so you should give Pollak credit for having picked them out – and more credit if you used his book for your analysis.

Paraphrasing

This means taking the ideas of somebody else and expressing them with different words. Since you are using your own words, you do not need to use quotation marks. However, you must make enough changes so that what you have written is distinctly different, and you must acknowledge your source.

Example 7: Stringent defamation laws combined with tight censorship practices have meant that independent thought has been under attack since white settlement began in Australia (Pollak, 1990, p.7).

Correct.

Example 8: In Australia, stringent censorship and draconian defamation laws have led to the subjugation of thought in Australia throughout the 200 years of White settlement (Pollak, 1990, p 7).

Wrong: this is too close to Pollak's original wording.

Example 9: Stringent defamation laws combined with tight censorship practices have meant that independent thought has been under attack since white settlement began in Australia.

Wrong: there is no citation of Pollak.

It is often better to avoid paraphrasing altogether and write things in your own words. One good way to do this is to first read the book or article and make brief notes. Then close the book or turn over the article and write what you want to say without looking at the source. In other words, don't refer to the source material while you are writing, unless you are transcribing a direct quote. Then, afterwards, put in the

citations, in the appropriate form and at the appropriate places. Common Knowledge

It is unnecessary to give a citation to something that is common knowledge. Common knowledge is what 'everyone knows' about a particular subject, or which can be found in many sources such as newspapers, magazines, popular journals and radio and television reports.

Example 10: Defamation laws are quite severe in Australia.

Correct: this is common knowledge. No citation is needed.

How to Avoid Plagiarism

Unwitting plagiarism is often the result of poor study methods. The habit of copying verbatim (word-for-word) from a source as you read is dangerous. It is easy to forget that the notes you make are verbatim and to later write them into an essay or report. The only material you should write verbatim are those absolutely delightful, pithy, witty or incisive phrases which you need to make a special point in your essay or report.

The distinction between what needs to be acknowledged and what is common knowledge is not always clear. As you gain experience in expressing yourself, you will learn to discriminate and you will learn the acceptable practices for acknowledgment in the disciplines in which you study. But while you are learning, always play safe and acknowledge, acknowledge, acknowledge.

Academic Unit Procedures for Investigating Plagiarism and Other Forms of Cheating

These are detailed in Section 3 of the Code of Practice – Teaching and Assessment in this Calendar.

Special Consideration

1. Background

This policy has been developed to ensure equity and consistency across the University in the handling of special consideration requests. It applies to all faculties, requiring them to ensure consistent procedures, criteria and results in the handling of requests for special consideration for all forms of assessment¹.

2. What is special consideration?

Special consideration is a process to help students minimise the impact of certain adverse and unforeseen circumstances on their progression in a degree and their performance in subjects. In some circumstances the application of special consideration will be limited to the remedy of withdrawal without academic penalty²; it is not possible for special consideration to compensate for every

consequence of misadventure or illness on attendance and participation in a subject. Examples of special consideration in operation are:

- (i) the student is given extensions of time to submit work;
- (ii) the student is given a supplementary exam, in addition to or instead of, the final exam or an in-class or mid-session test;
- (iii) the student's composite result is reconsidered without any additional work being required;
- (iv) the student submits additional written work;
- (v) the student is permitted to:
 - withdraw without academic penalty
 - make fees-credit arrangements³
 - repeat a subject without financial penalty⁴
 - substitute an equivalent subject for a required subject
 - have a fail grade converted to withdrawn
 - have pre-requisite or co-requisite requirements waived.

Reasonable accommodation for a student with a temporary or permanent disability may include any, or all, of the above and, where appropriate, the provision of alternative forms of assessment.

3. Eligibility

Students applying for special consideration must produce supporting documentation, unless this requirement has been waived, which demonstrates that they have:

- (i) suffered illness or other circumstances beyond their control which have affected or are likely to affect their academic performance in a subject or which has prevented them from meeting scheduled assessment requirements;
- (ii) been unable to sit for the standard examination for religious reasons;
- (iii) have validated conflicts between scheduled assessments and other commitments such as their carer's duties, court appearances, participation in sporting or cultural activities at a national or international level. These conflicts must be notified well in advance and as soon as the need is identified, to the relevant Academic Unit.

4. Criteria for the assessment of applications include:

- (i) the magnitude of the impact of the circumstances forming the basis of the application;
- (ii) the extent to which the circumstances and their impact were beyond the applicant's control and the extent of

¹ Forms of assessment include, but are not limited to, the following: theses, projects, essays, assignments, oral presentations, participation, in-class and mid-term tests, final exams, laboratory work, field trips and practicums.

² For example, supplementaries for clinical practicums and field trips will not normally be arranged.

³ Authority to approve refunds of fees or fees credit arrangements rests with the Academic Registrar (or nominee).

⁴ These guidelines do not cover HECS refunds which are a matter for DETYA.

any contributory negligence on the applicant's part in producing the circumstances or in failing to act so as to minimise the impact of these circumstances;

- (iii) whether the consideration sought would in any way unfairly advantage the applicant as against other students enrolled in the relevant course; and
- (iv) whether there is independent and temporally valid evidence of the illness or event forming the basis of the application.
- (v) whether the consideration sought for a pass or higher result in the relevant subject is of a magnitude that compromises the academic integrity of an award;
- (vi) the likelihood, based on the student's performance in other aspects of work required for the subject, of the student achieving at least a PC grade in the subject;
- (vii) the record of the student in other subjects in which the student is or has previously been enrolled; and
- (viii) previous applications for special consideration.

5. Process

5.1 Applications:

Applications must be on a standard form⁵, accompanied by supporting documentation and submitted according to the procedures listed in section six of this policy or as otherwise advised in the subject outline or Departmental or Faculty Handbooks.

5.2 Confidentiality:

Members of staff are obliged to preserve the confidentiality of the information contained in applications for special consideration.

5.3 Timing of Applications:

For all forms of assessment students are normally required to seek special consideration **before** the date scheduled for submission or performance of the assessment item, but no more than five working days after the date when the item was due.

5.4 Applications for special consideration after the declaration of grades:

In exceptional circumstances students may be unable to apply for special consideration before grades have been declared. In these cases students may seek special consideration to have the fail grade changed to withdrawn.

Students must submit a case to the relevant Sub-Dean in accordance with the procedures outlined in 5.1 and 5.4 and specifically addressing the issue of their failure to make an application within the time limit. Lack of awareness of these rules will not be grounds for special consideration. Applications must be made within **one year** of the declaration of grades. After graduation no applications will be accepted.

5.5 Supporting documentation:

- (i) a medical certificate, stating in reasonable detail:

- the dates of any relevant consultations or attendances;
- if relevant, the general nature of the complaint and the treatment; and
- a specific statement of the opinion that, as a result of the complaint or treatment, the student is, or was, unfit to complete the required assessment or examination on or by the date specified; (medical certificates which do not contain all this information will not be accepted); **or**

- (ii) a letter from the University Counselling Service or a professional counsellor of equivalent standing setting out the general nature of the problem affecting the student, and the opinion of the person signing the letter, that the student, because of the problem, is or was unfit to complete the required assessment or examination on or by the date specified; **or**
- (iii) a declaration setting out the facts upon which it is suggested that special consideration should be given, attaching any supporting documents.

5.6 Scheduling of Supplementaries and Other Work:

The time period available for:

- (i) the completion of assessment items for which an extension has been granted; and
- (ii) the scheduling of supplementary exams is normally within five weeks of the relevant Examination Committee meeting.

In exceptional circumstances, a further five weeks may be available but the total time allowed must not exceed ten weeks after the Examination Committee meeting. If a student cannot sit for a supplementary examination or meet an extended deadline within that period, a fail grade will be awarded or approval may be granted to withdraw the student without academic penalty.

5.7 Penalties Applying for Late Submission:

If students fail to apply for an extension, or the extension is refused, they may submit their work late. In such cases penalties (loss of marks) will normally apply. No work will be accepted for marking after the work submitted by other students for that assessment item has been returned. After this, extensions will be granted only in exceptional circumstances and on the basis that new work will be set.

5.8 Responsibility:

Students must ascertain whether their request for special consideration has been granted. They must include a contact address with their application to the relevant academic unit.

If granted:

a supplementary examination:

students must be available to sit for the examination at any time immediately following the application (providing that five working days notice has been given); and

extensions of time on forms of written assessment:

⁵ With the exception of items ten percent or less.

students must hand in the work on the new submission date which has been advised in writing by the academic unit.

5.9 Form of Supplementary Assessment:

This can take any form that is appropriate in the circumstances. However, the student must be informed in advance concerning the method of assessment to be used, particularly if there is to be any departure from the format announced at the start of the subject, or from that used in the standard examination. This information must be conveyed to the student in writing. Faculties or academic units may determine that supplementary examinations may be oral, but should notify students in advance if this is the case. Students must accept the form of supplementary assessment determined by the academic unit.

- (i) where a written examination is conducted, academic units will ensure that, so far as possible, the security procedures and the venue for the examination, are as similar as possible to those followed in the standard examination periods;
- (ii) where an oral examination is conducted, a record of the questions asked and marks awarded must be kept in the unit;
- (iii) students should keep originals and copies of all essays, assignments or reports submitted in any subject, as special consideration may involve the reconsideration of that work, and they must be prepared to resubmit such work immediately upon request.
- (iv) supplementaries for in-class and mid-session tests are covered by Sections 6.4, 6.5 and 6.6.

6. Special Consideration for all forms of assessment

6.1 Supplementary Examinations

For exams supplementary to the final exam:

- (i) A written application, together with supporting documentation, must be lodged normally no later than seven days after the examination, with Student Administration which will be responsible for transmitting the request to the appropriate academic units.

It is the responsibility of the applicant to check the outcome with the relevant academic unit as soon as possible, but not later than five working days after lodging the application.

- (ii) Students must be advised in writing whether a supplementary examination has been granted within seven days of the receipt of the application or not later than seven days after the relevant Examination committee.

6.2 Timing of Supplementary Exams:

Students granted special consideration for examinations will normally be permitted to sit for:

- (i) a supplementary examination after the scheduled examination period; or
- (ii) the standard examination for the subject, provided that during the time other students are sitting for that

examination and until the time the student sits for the examination, the student:

- is under the constant supervision of a person approved by the University; and
 - sits for the examination as soon as possible after the scheduled examination time; or
- (iii) the standard examination **before** the scheduled examination time having signed a statutory declaration not to disclose the contents of the examination paper and having agreed to return the paper with their script;
 - (iv) an early examination in cases of serious medical or personal circumstances. It will not normally be granted on grounds such as clashes with recreational activities, work or family commitments, participation in sporting or cultural activities below national level and travel arrangements.

6.3 Honours Theses:

- (i) applications must be on the standard form providing detailed reasons and supporting documentation such as medical certificates and any application for confidentiality;
- (ii) applications must be lodged with the subject coordinator;
- (iii) a panel of at least two staff, one of whom should not be currently teaching the applicant, must consider the application;
- (iv) the panel may elect to interview the applicant;
- (v) the panel's decision on an application, together with brief written reasons addressing relevant standard criteria, shall be kept on file and communicated in writing to the applicant;
- (vi) the panel's decision shall be forwarded to the relevant course examiners meeting;
- (vii) where the reasons for the application are so personal as to warrant confidentiality and the student has requested strict confidentiality;
 - All panel members shall still be apprised of all details of an application;
 - Only the decision shall be forwarded to the exam committee;
- (viii) copies of each application, reasons, decisions and corresponding recommendations, reasons and decisions shall be retained for a minimum of three years following the final decision;
- (ix) the applicant will be informed in writing, within five working days of receiving the application, whether the outcome is successful.

6.4 Work worth 30% or more of total assessment:

- (i) applications must be on the standard form providing detailed reasons and supporting documentation such as medical certificates;
- (ii) all applications must be lodged with the subject coordinator who will retain a copy for a year;

- (iii) the applicant will be informed in writing within five working days of receiving the application whether the application is successful. Where the special consideration granted is an extension that written advice will include the length of time of the extension. Where the special consideration granted is to resit an exam or test, the advice will specify the time and venue of the repeat exam or test.

6.5 Work worth between 10% and 30% of total assessment:

- (i) applications must be on the standard form providing detailed reasons and supporting documentation such as medical certificates;
- (ii) all applications must be lodged with the subject co-ordinator (or nominee) who will retain a copy of the application and the decision for twelve months;
- (iii) applicants will be informed in writing within five working days of receiving the application whether the application is successful. Where the special consideration granted is an extension that written advice will include the length of time of the extension. The subject co-ordinator or nominee must record the decision and confirm this with the student. Where the special consideration granted is to resit an exam or test, the advice will specify the time and venue of the repeat exam or test.

6.6 Work worth 10% or less of total assessment:

- (i) applications must be made to the subject co-ordinator either electronically or on paper following the procedures specified in the subject outline.
- (ii) the subject co-ordinator will advise students of the outcome according to the procedures specified in the subject outline.

6.7 Decision

Acceptance or rejection of an application for special consideration is determined by:

- (i) the Head of Department concerned or a member of the academic staff of the Department designated by the Head for the purpose; or
- (ii) the Departmental Assessment Committee; or
- (iii) in a Faculty not made up of separate academic units, the Associate Dean, on the advice of the examiners for the subject or course co-ordinator, and/or year director, as appropriate.

7. Appeal

Students who are not satisfied with the result of their request for special consideration may appeal in writing to the relevant Dean within 14 days of the giving of the decision by the academic unit.

Policy Guidelines for Double Degrees

1. Preface

A double degree is defined by the University of Wollongong Course Rules as "an approved course leading to the conferral of two degrees as separate awards upon a candidate who has complied with the Course Requirements for double degrees and the two individual Course Requirements inclusively".

The University's double degree programs are designed to enhance students' educational, academic and professional qualifications whilst minimising the costs of their studies. Students with the skills and the high level of motivation required are able, for example, to complete two 144 credit point, three-year courses in 4 years. Double degrees aim to broaden a student's knowledge and skills base and improve career options in competitive, increasingly interactive fields.

2. A Note on Participating Faculties

- 2.1 A double degree program may involve more than two Faculties (eg, for the BSc-LLB, Law, Science and Health and Behavioural Sciences).

3. Course Development and Design

- 3.1 The course patterns for double degrees shall be:

Component Course	Credit Points (minimum)	Maximum Credit Point Saving (see 3.2 below)
3yr + 3yr	216	72
4yr + 3yr	264	72
4yr + 4yr	286	96

- 3.2 The credit point savings listed in this table are maximums. The maximum saving will not be available in all double degree programs, for example:

- (i) the number of credit points saved by a student may be limited by the prescribed structure of some degrees;
- (ii) the saving may not necessarily be distributed across both component degrees and may be possible in relation to only one of them.

- 3.3 The Law component of a double degree is defined as 4 year component for purpose of course design and load.

- 3.4 A double degree Course Proposal shall be defined as a Major Amendment to current offerings but, on application, the Pro Vice-Chancellor (Academic) may waive the normal requirement for an ECAC where both degrees already exist.

- 3.5 A double degree Course Proposal shall be submitted, on a special Double Degree Application Form, by the "owner" Faculty, and:

General Information

- (i) include a "Calendar" entry in a common format, specifying: entry requirements, course objective, double degree course schedule, requirements for academic advice at enrolment and throughout course;
- (ii) identify the "owner" Faculty (see current list attached, APPENDIX 1);
- (iii) include entry for Course Rules (incl. course requirements, degree title and abbreviation, noting that a dash (-) is to be used between the two titles);
- (iv) demonstrate that timetabling issues have been addressed;
- (v) provide estimates of enrolments/viability demonstrated by market research;
- (vi) be 'signed off' by the Deans of all participating Faculties.

4. Entry Requirements

- 4.1 Eligibility for entry to a double degree program shall be based on achievement of the highest UAI course entry (or equivalent) requirement (where there are different Faculty entry levels).
- 4.2 When these requirements are not met, the student shall be referred to the Faculty with the lower entry requirement for possible enrolment in another degree.
- 4.3 In the case of transfer from a single degree, the Sub-Deans from each participating Faculty shall consult with each other to determine the entry requirements and include them in their formal course information.

5. Enrolment

- 5.1 The Web Enrolment and Re-enrolment worksheets for a double degree student shall include a provision for the student to have the course program checked by the Sub-Dean or designated Double Degree Enrolment Officer from each participating Faculty.
- 5.2 Faculties with prescribed courses shall consult with the other participating Faculty/ies to ensure that the workload requirements for their courses can be accommodated in the double degree program.

6. Advice to Students

- 6.1 The Sub-Dean of the "owner" Faculty shall ensure that the double degree student receives a copy of the Double Degree Student Guide (see APPENDIX 2) at enrolment and is referred to it throughout the course.
- 6.2 The Sub-Deans of the participating Faculties, in consultation with each other and the student, shall:
 - (i) advise the student on the structure of a study program for the double degree course, giving attention to workload demands, performance requirements* and timetabling issues;
 - (ii) approve, for their respective Faculty, any advanced standing from one degree to another.

*Note: Some Faculties may require double degree students to maintain a credit average during the course.

7. Honours

- 7.1 Where the component pass degree program is a 3-year degree, an end-on Honours program shall add 48 credit points to the duration of the double degree.
- 7.2 In the case of an end-on Honours program, an Application to undertake Honours shall make provision for checking and signature by the Head of the Department/Program and the Dean/Sub-Dean of the Faculty offering the Honours studies.
- 7.3 Honours studies may involve joint Honours between academic units in the same Faculty.
- 7.4 The Course Code for the Honours component of a Double Degree shall be the same as that for the pass double degree with the addition of an identifying letter.

8. Publication of Double Degree Student Guidelines

The Double Degree Student Guide shall be made available on-line to students and staff via the Student Calendar Home Page and in the print Calendar and access details shall be provided in the Student Guide. A list of "owner" Faculties shall also be made available.

Appendix 1

The "Owner" Faculty of each Double Degree:	List of Double Degree Courses
Arts	BA, BCom
Engineering	BE-BA BE-BCom BE-BSc
Creative Arts	BCA-BCom BCA-BA BCA-BCompSci BCA-BSc
Informatics	BE-BA BE-BCom BE-BMath BE-BSc BCompSc-BSc BMath-BCompSc
Science	BSc-BA BSc-BCom
Law	BA-LLB BCA-LLB BCom-LLB BMath-LLB BSc(Health Science)-LLB BMedSc - LLB BCompSc-LLB BInfoTech-LLB

Health & Behavioural Sciences	BE-LLB
	BSc-LLB
	BPsych-BCom
	BSc-BCom
	BMedSc - BCom

Appendix 2

Double Degree Student Guide

- All double degree students are required to comply with the course requirements for double degrees and with the requirements of the two individual degrees for which they are enrolled.
- All double degree students are obliged to consult with the Sub-Deans of the Faculties participating in the degree before finalising enrolment.
- The number of credit points saved by a student in a double degree program may vary due to the prescribed structures of some degrees and may not necessarily be distributed across both component degrees.
- The designated "owner" Faculty for the degree course are obliged to ensure the student is aware of and has access to (via the Web and in printed University or Faculty publications) a course schedule for the double degree.
- The relevant Sub-Deans shall ensure that the student has a copy of this Guide, assist the student to prepare a study program and plan timetable and workload, and advise on a schedule for further consultation.
- A student wishing to undertake Honours should note that:
 - where the component pass degree program is a 3-year degree, an end-on Honours program shall add 48 credit points to the duration of the double degree.
 - for an end-on Honours, an "Application to undertake Honours in a Double Degree program" must be checked and signed by the Head of the Department/Program and the Dean/Sub-Dean of the Faculty offering the Honours studies.

Tuition Fee Policy

The University of Wollongong fees policy applies to both commencing and re-enrolling students.

1. Course Fees

Tuition fees are normally set as an annual fee for a course and are charged per credit point of enrolment. Tuition fees are subject to annual review. Students who enrol in a course over more than one year will be charged in each year of enrolment at the approved rate for that year. For International students fees are fixed for the duration of the course, provided the course is completed in the minimum

time, and are fixed at the level quoted in the final offer letter. Fees for any study after the minimum time has lapsed will be payable at the level set at the commencement of each subsequent year. International students are required to pay a full session of fees in their first session of enrolment.

Applicants who have a conditional offer, or who request a change in their offer in any way, will be subject to the fee quoted in the final unconditional offer.

Tuition fees must be paid each session before enrolment can be completed for that session.

An instalment plan may be available for the payment of tuition fees. Where available, fifty percent of the tuition fee for that session plus an administration fee (currently \$80 per session) is due before enrolment can be completed for that session, with two instalments of 25% of the tuition fee during the session. For International students an Instalment plan may be available to re-enrolling students who experience hardship in paying fees. Fifty percent of the tuition fee plus an administration fee (currently \$100) is due prior to the commencement of session, with two instalments of 25% of the tuition fee due during the session.

2. Transfers & Deferments

Students who transfer from one course to another are liable to pay the fee prescribed for the new course for that year.

A student who defers, or takes leave of absence from a course (not applicable to International students), or recommences a course following an unapproved absence, will be subject to the fees prescribed for the course in the year of recommencement.

3. Refunds

All applications for a refund must be accompanied by the required documentary evidence. Any refund approved will only be paid to the applicant/sponsor. For international students applications for a refund must be submitted on the appropriate application form and any refund approved will only be paid to the applicant, and will only be made in the student's country by Australian Dollar Draft.

A **total refund** will be made before the commencement of study when:

An offer of a place is withdrawn by the University of Wollongong. (Unless the offer was made on the basis of incorrect or incomplete information being supplied by the applicant, in which case 80% of the fee will be refunded.)

The University of Wollongong is unable to provide the course for which the student has applied and/or the subject (not applicable to International students) in which the student requests enrolment.

The student is not permitted to enrol or re-enrol because the relevant requirements (usually course or subject prerequisites, or the terms of a conditional offer) are not satisfied.

The applicant is unable to obtain a visa from an Australian Diplomatic Post.

General Information

A **partial refund** of tuition fees will be made when a student is unable to continue study due to serious illness. Students may elect to credit the full fee over to another session for up to one year.

Partial refunds for applications received before the commencement of a session will be 80% of the tuition fee.

Partial refunds for applications received before the census date or first quarter of a non-standard session) will be 50% of the tuition fee; **after this date fees are not refundable.**

International students who withdraw from subjects prior to the international students' census date will have their tuition fee credited to the next session.

Where an International student withdraws from a course the Department of Immigration and Multicultural Affairs will be advised.

4. Permanent Resident Status (International Students only)

A total refund of fees will be payable if the student has:

- i) Obtained permanent resident status by the international students' census date for that session and a written request for change of status is received by the Academic Registrar by that date; and
- ii) Satisfied Section 41 of the Higher Education Funding Act 1988, that is, has completed a HECS Payment Options Form by the census date.

Permanent resident status is recognised from the date stamped on the student's passport.

5. Penalties for Non-Payment & Reinstatement Fee

Any student who is indebted to the University and fails to make a satisfactory settlement of this indebtedness upon receipt of due notice, ceases to be entitled to membership and privileges of the University. Such a student is not permitted to register for a further session, to attend classes or examinations, or to be granted any official credentials. Enrolment will be cancelled when fees have not been paid in full by the due date. Access to University facilities (email, library) will be withdrawn, examination results will not be provided, and graduation will not be permitted for students who are indebted. Re-enrolment in the next session will not be permitted for students who have fees outstanding. Indebtedness to the University includes the non-payment of charges, late charges, library fines, any arrears in rent or other financial obligations resulting from an accommodation agreement entered into with the University, and any indebtedness incurred as a result of any other financial obligation to the University.

When fees are not paid in full by the due date, a late fee of \$200 will be charged. For International students the late fee is \$450.

In order for an enrolment to be reinstated a student must pay all outstanding amounts, including late fees, plus a Reinstatement Fee of \$100.

6. Transfer of International Students to other Institutions

The Department of Immigration and Multicultural Affairs has a policy which prevents international students from transferring to another institution within the first 12 months after their arrival in Australia or, if the course is less than twelve months duration, students must remain at the original institution for the duration of their course. For further information on this policy and the process for applying for permission to transfer on the grounds of exceptional circumstances, students should contact the Department of Immigration and Multicultural Affairs.

7. Special Circumstances

The Academic Registrar **may** consider special cases where the fees policy does not adequately encompass individual circumstances. Such cases must be received in writing and include supporting documentation, including a recommendation from either the Dean of Students or the Faculty.

Codes of Practice

The University has Codes of Practice which govern the conduct of its members, both staff and students.

The current Codes are:

Students	507
Teaching & Assessment	508
Practical Placements	514
Supervision	516
Research	521

Code of Practice - Students

Teaching at the University involves the active participation of students who share with staff the responsibility to ensure that teaching is conducted efficiently and effectively, enabling students to achieve their maximum potential. A separate Code of Practice - Teaching & Assessment sets out the responsibilities of staff to the students they teach and covers every aspect of the presentation, delivery and assessment of subjects.

1. Responsibilities of Students

- (i) become familiar with the rules governing the degree in which they are enrolled;
- (ii) check their enrolment status at audit dates in each session, and inform themselves of deadlines for withdrawal/ addition of subjects;
- (iii) abide by the policies and practices of the Faculty and/or of the Academic Unit from which they take subjects, as explained in the subject outline handed out by the end of the first week of lectures for every subject;
- (iv) take the initiative and consult with appropriate academic staff when problems arise (see below Reviewing Assessment Marks and Grades and Late Submission of Work);
- (v) maintain satisfactory academic progress as set out in the degree rules;
- (vi) meet deadlines for work to be submitted as set out in the subject outline;
- (vii) attend all lectures, tutorials, seminars and practical work as stipulated in subject outlines for subjects in which they are enrolled;
- (viii) submit original work for assessment, without plagiarising or cheating, abiding by the University's policies on Plagiarism (see below) as set out under University Policies, and in Faculty handbooks and subject guides;
- (ix) abide by the Rules for Student Discipline, Rules for Campus Access & Order, Rules for Governing the Use of University Computing Facilities, Code of Conduct - Library and the Code of Practice - Practical Placements; and

- (x) respect the diversity of members of the campus community.

2. Responsibilities of Staff

Teaching staff of the University have responsibilities towards the students they teach, including preparing and presenting material at an appropriate standard within the resources available; informing students, by the end of the first week of formal contact for each subject, of the requirements for the subject and of the method(s) of assessment to be used for the subject; being available for reasonable periods of time during most weekdays of session, the study weeks and the examination periods so that students may discuss aspects of the subject with them; assessing students' work fairly, objectively and consistently across the candidature for the subject; being available to students after marked material has been returned and after the final results have been released so that any student who seeks it can be shown how his/her result was determined.

3. Plagiarism

Plagiarism is the use of another person's work or idea as if it is your own.

The other person may be an author, critic, lecturer or another student. When it is desirable or necessary to use other people's material, take care to include appropriate references and attribution - do not pretend the ideas are your own. Be sure not to plagiarise unintentionally. The University's policy concerning plagiarism is set out in "Acknowledgment Practice/Plagiarism".

Academic Unit Procedures For Investigating Plagiarism and other Forms of Cheating are set out under Section 3 of the Code of Practice – Teaching and Assessment.

Plagiarism has led to expulsion from the University.

4. Subject Information

In the first week of lectures for every subject, students will receive written information about the subject which will provide details of the requirements of the subject, the method of assessment and all other relevant information about the subject.

5. Required Reading

The information sheet referred to above will also contain information about the text books for the subject, the reference books and any other required reading. As academic staff are constantly keeping up to date with new developments in their areas of interest, students should be aware that other relevant material that becomes available during the period in which the subject is taught may also be introduced as required reading.

6. Reviewing Assessment Marks & Grades

Result notices are distributed to students at the end of each session setting out the aggregate mark and grade awarded for each subject completed in that session. If students wish

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to have their mark reviewed they must approach staff listed below in order given, progressing to the next line if they are unhappy with the resolution achieved at that level:

1. The Tutor/Marker
2. The Subject Co-ordinator
3. The Head of Department (Program or School)
4. The Dean of the Faculty
5. The Dean of Students

Marks for essays and assignments can also be reviewed under this procedure if students feel that the mark awarded is not a true indication of their performance. As required by the Code of Practice - Teaching and Assessment staff are always available to discuss students' work and to explain how the assessment was determined. Students should consult Appendix 6, Section 1.5 of the Code of Practice - Teaching and Assessment for further information on this matter.

7. Late Submission of Work

Extensions of time to submit material for assessment can only be granted in exceptional circumstances such as illness or misadventure. Written notice is given at the beginning of lectures for each subject of the requirements for the subject and this information includes the dates for the submission of work for assessment. "Pressure of work", either from employment or from other subjects, is not an acceptable reason for seeking an extension of time.

Code of Practice - Teaching & Assessment

- The University of Wollongong is committed to creating and sustaining an effective environment for learning, recognising that the aim of University teaching is:

"to enable students to reach their highest possible level of learning during their time of enrolment, and to prepare them for life-long learning. In practice this means that staff collectively are responsible for ensuring that the design, management and teaching of their subjects facilitate effective learning"¹

- The University of Wollongong is committed to equitable treatment of all students because:

"all university teachers have a professional responsibility to teaching their subjects in such a way that all students, regardless of their background or characteristics, have an equal opportunity to learn and to demonstrate that learning, in accordance with the aims of the subject. Good teaching practices will vary in relation to context, discipline and the diversity of the student body."²

It follows, therefore, that:

- The University of Wollongong aims to ensure congruence between the stated student outcomes, the content and the assessment methods of all subjects.

- Students at the University of Wollongong will receive adequate and prompt feedback on their assessed work as set out in Feedback on Assessment (Appendix 1).

1. Responsibilities

1.1 Institution

The University of Wollongong values good teaching practice and is responsible for providing a quality learning environment. It does so through its endorsement of ethical policies, fair and open practices on assessment and supervision and rigorous procedures for the introduction of new and review of existing subjects.

1.2 Heads of Academic Units

The Head will ensure that:

- 1.2.1 academic staff are familiar with relevant University policies, including this Code;
- 1.2.2 academic staff provide subject and course documentation which comply with University policy and provisions of this Code;
- 1.2.3 assessment methods and practices comply with University policies and provisions of this Code;
- 1.2.4 academic staff carry out all assessment fairly, objectively and consistently across the candidature for the subject;
- 1.2.5 group activities are assessed by means which will allow the real contribution of each member of the group to be determined;
- 1.2.6 academic staff are available to students for consultation;
- 1.2.7 the academic unit keeps a copy of every subject outline distributed by staff in each subject. This file will be available to all students and staff;
- 1.2.8 academic staff abide by Occupational Health & Safety regulations while conducting classes;
- 1.2.9 there are consultation hours for subjects taught by staff who are not full-time;
- 1.2.10 all students undertaking Double Degree administered by the Faculty receive a copy of the Double Degree Student Guide and advice on programs of study at enrolment and regular advice on progress;
- 1.2.11 unclaimed assessment items worth 20% or more of the aggregate mark of the subject must be retained for a period for one month after the end of session; those worth less than 20% for one month after the date of submission. Examination papers should be kept for a period of twelve months following the end of the exam period; and
- 1.2.12 allegations of plagiarism are investigated in accordance with the procedures set out in Section 3 of the this Code – "Academic Unit Procedures For Investigating Plagiarism and Other Forms of Cheating".

1.3 Staff

Academic staff carry out their teaching responsibilities under the authority of the Head. Staff have the following responsibilities:

- 1.3.1 to identify the student outcomes of the subject clearly and in terms which enable students to understand what skills and knowledge they are expected to achieve, and what values and attitudes will be fostered by satisfactorily completing the subject; these student outcomes must be included in the Subject Outline (Appendix 3);
- 1.3.2 to assess students' work fairly, objectively and consistently and to provide adequate feedback on performance (Appendix 1);
- 1.3.3 to prepare and present subject material at an appropriate standard and within the resources available;
- 1.3.4 to ensure that students are aware of the University's Acknowledgement Practice, monitor assessment tasks for evidence of plagiarism and initiate an investigation if required in accordance with the procedures set out in Section 3 of this Code – "Academic Unit Procedures for Investigating Plagiarism and Other Forms of Cheating".
- 1.3.5 to provide, where appropriate and possible, opportunities for students to participate in identifying their learning needs and planning their learning experiences and ways in which they will be assessed;
- 1.3.6 to inform students in writing by the end of the first week of formal contact for each subject of the requirements for the subject including the method(s) of assessment to be used, or no later than the second week in cases where assessment methods and practices are to be finalised after consultation with the enrolled students. (Essential requirements are listed in Appendix 3 Subject Outline Checklist);
- 1.3.7 to ensure that no change is made to assessment methods or weightings after the second week of session without the consent of every student enrolled in the subject. The subject co-ordinator must seek approval from the head of the academic unit of any proposed changes in advance and the way in which students are to be notified;
- 1.3.8 to be available at least four hours a week over at least two days (these times to be publicly displayed in the academic units and notified in the subject outline) during session, so that at reasonable times students may discuss aspects of the subject with staff, taking into account the needs of part-time students¹; to be available to students after marked

material has been returned and after the final results have been released, so that students who seek information can be shown how their result was determined;

- 1.3.9 to make reasonable accommodation within the established teaching environment for students with a disability;
- 1.3.10 to notify the Head of the academic unit or Dean as appropriate, of potential or actual conflicts of interest;
- 1.3.11 to maintain the principles set out in the University of Wollongong Privacy Policy, chiefly the confidentiality of personal information including marks;
- 1.3.12 to attend meetings of the Assessment Committee to advise the Head on marks and grades;
- 1.3.13 to ensure that all assessment work and other teaching commitments have been completed and that marks have been considered by the Assessment Committee of the Academic Unit before departing on discretionary leave. Another member of staff of the unit must be available to answer any subsequent enquiries about the subject; and
- 1.3.14 to exercise their responsibilities under the Occupational Health & Safety legislation and Anti - Discrimination legislation.

1.4 Students

Students have a responsibility to:

- 1.4.1 comply with the requirements of assessment;
- 1.4.2 comply with the document 'Acknowledgement Practice';
- 1.4.3 submit for assessment their own individual and unassisted work, except as otherwise permitted; and
- 1.4.4 in general respect the rights of other students and staff engaged in the teaching process and to conform to the 'Code of Practice—Students' which details student responsibilities.

2. Principles Governing Assessment Practice

2.1 Purposes of Assessment

Assessment is an essential part of the teaching and learning process. Properly selected assessment tasks signal the importance of developing the attributes of a Wollongong graduate through particular content, concepts and skills. They influence approaches to study and help students to allocate their time appropriately. Constructive and timely feedback on assessment helps students to gain a sense of achievement and progress, an appreciation of the performance and standards expected in a particular discipline or professional area, and to learn from their endeavours.²

Staff need to consider the functions of each component of assessment, selecting methods and practices which ensure

¹ Senate Resolution (93/47) 21 July 1993: (ii) that academic staff be required to place on their office doors a notice indicating at least four hours per week, over at least two days, when they will be available for consultation with students without appointments or come to some other arrangement for publishing availability as agreed with the Head of Department.

² Guidelines for Effective University Teaching, *The University Teacher and Effective Teaching Practice*, Australian Vice-Chancellor's Committee, April 1993, Canberra, p.3.

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that these can be achieved. Information about these functions should be communicated to students. The functions are:

- 2.1.1 to judge performance, by awarding marks which indicate whether and how well a particular student has attained the stated learning outcomes;
- 2.1.2 to determine whether a particular student is sufficiently well-prepared in a subject area to proceed to the next level of instruction;
- 2.1.3 to provide feedback to students which indicates levels of attainment, and to indicate and diagnose misunderstandings and learning difficulties,
- 2.1.4 to provide feedback to teaching staff to indicate areas in which students are experiencing difficulties, and to identify and diagnose ineffective teaching; and
- 2.1.5 to promote learning.

2.2 Good Practice in Assessment

- 2.2.1 Assessment should promote learning and improve student performance.
- 2.2.2 Assessment should be in a form which allows the determination of how well each student has achieved; measured against the stated student outcomes of that subject and provides appropriate feedback.
- 2.2.3 Weightings for each assessment component, and deadlines for submission of material for assessment should take into consideration the stated student outcomes of the subject and the required function of the assessment.
- 2.2.4 Feedback on performance be provided to students before mid-session, in time for withdrawal without penalty, and to improve performance before further assessment; undue delay in providing feedback is unacceptable practice.
- 2.2.5 Material submitted for assessment which is also intended to inform students and/or which is relevant to the final examination for the subject, should be marked and returned before the study week before the formal examinations.
- 2.2.6 Assessment should be based on more than one piece of work and should require demonstration of achievement in a range of outcomes.
- 2.2.7 As part of the assessment in every subject, students should produce some written work and at least one piece of individual work from which the unaided capability of each student can be assessed.
- 2.2.8 No component of assessment should count for more than 70% of final mark, except in subjects designated research projects.
- 2.2.9 Assessment methods should provide reasonable accommodation for students with disability.

2.2.10 Students may ask for a review of any piece of assessable work. Such review may involve a re-mark of the piece of work. In the case of oral presentation this is subject to 2.4.5(ii).

2.2.11 Group work may not constitute more than 50% of assessment.

2.3 Administration of Assessment

2.3.1 The Role of Heads of Units

- (i) Heads of Academic Units have general responsibility for the assessment process but will be advised by the Assessment Committee which comprises all academic staff of the unit.
- (ii) The Head, after receiving advice from the Assessment Committee, shall determine:
 - the methods for assessing the performance of students, and
 - the standard of achievement required for the approved grades of performance according to the provisions of Course Rule 010 Assessment.³
- (iii) While attendance at prescribed classes is not a component of assessment in any subject, the Head may prescribe that participation in class activities be a consideration for determining pass or fail.
- (iv) The Head may prescribe that attendance at specified classes be a mandatory requirement for satisfactory completion of a subject and in such cases mechanisms must be in place to ensure fulfilment of any mandatory requirements.

2.3.2 The Role of the Unit's Assessment Committee

The Assessment Committee for each academic unit should advise the Head of the Academic Unit on assessment used in the Unit including all major components of assessment for each subject, particularly examination papers. It has responsibility for reviewing examination papers to determine whether the requirements set out in Section 2.4 below are satisfied and, if not, to collaborate with relevant examiners to ensure that appropriate amendments are made.

In advising the Head on the final mark for each student in a subject, the Assessment Committee exercises academic judgement by:

- (i) reviewing the results of assessment of each student and the grade distribution for each subject;
- (ii) ensuring that any modification or scaling of marks (as advised to students in the subject outline) has been applied systematically and consistently; and

³ Course Rule 8.1, General Assessment Rules, 1996. *General Information Calendar*, p.57.

- (iii) ensuring that the marks presented to the Faculty Examination Committee for determination and declaration properly reflect the levels of performance of individual students.

2.3.3 Determinations of Marks and Grades

- (i) Students must be advised in the subject outline how all marks and grades are to be determined.
- (ii) Students must be informed of their numerical mark for every component of assessment in the subject. Final examination marks can be obtained on application to the academic unit.
- (iii) Unless otherwise approved, the final assessment mark for each student in a subject shall be determined on the scale of 0 to 100% by the methods set out in the subject outline. Examiners should ensure that marks are awarded appropriately across the range.
- (iv) Students must be informed in the subject outline whether any marks gained in part or all of the assessment will be modified or scaled and what the system of modification or scaling will be.

2.3.4 Reviewing Assessment Marks and Grades for Assignments, Mid-Session Quizzes and Final Examinations

- (i) If students have grievances concerning assessable work they should approach the marker with their request for explanation and/or remarking. If the grievance is unresolved they should contact the subject co-ordinator, Head of Academic Unit, then Sub-Dean, *OR* Dean of Faculty, then Dean of Students, in this order, the next person only after receiving an unsatisfactory resolution from the previous person on the list. Students may consult the Dean of Students at any time for advice about these procedures.
- (ii) If a student believes there has been a lack of due process in the reassessment procedures outlined above, such students may formally appeal, within two weeks of receiving the response from the Dean, to the Academic Review Committee to review the matter. The letter of appeal must state fully the reasons for the appeal and include any relevant documentary evidence to support such appeal. Please note, however, that the Committee's role is to ensure that the proper procedures have been followed in relation to the assessment of the subject—the Committee's role is not to reassess the academic quality of the work.
- (iii) Special consideration is available to students whose work is affected by documented illness or misadventure. (Please refer to University Policy on Special Consideration).

2.4 Assessment Processes

2.4.1 Administration and Timing of Examinations

The University conducts examinations on behalf of the Academic Units during specified periods at the end of each session, as set out in the University Calendars. The organisation of these examinations is the responsibility of the Vice-Principal (Administration). Additionally, academic units may conduct examinations during the scheduled teaching periods, during the University examination periods or at other times.

Other tests and practical/laboratory examinations may be conducted at other times during the session, provided:

- (i) students are advised at the beginning of the session that the test/examination will be held during one of the normal teaching periods;
- (ii) the time for the test/examination does not exceed the normal teaching period;
- (iii) the subject outline must inform students about the intention to conduct such an examination. Information about the date, time and place of the examination must be made available to the students as early as possible and confirmed, particularly should the examination be scheduled at an unusual time such as a Saturday;
- (iv) that when held during a scheduled teaching period, the total time devoted to the examination must not exceed the scheduled class time, unless it is possible, with the unanimous consent of the class, to arrange additional time;
- (v) that only with the express permission of the Pro Vice-Chancellor (Academic) shall an examination be conducted during a study recess period, and request for that permission must be made before the beginning of the relevant session; students must be notified;
- (vi) Faculties offering subjects which enrol students from other faculties where the study recess is timetabled for a different week must make special arrangements for examining students which does not deprive them of their study recess;
- (vii) alternative examination arrangements for students with special needs comply with the University's requirements for reasonable accommodation.

2.4.2 Submission of Examination Results

There are procedures laid down by the University for submitting grades to the Faculty Examination Committee and these are circulated to Academic Units each session. Although these procedures make provision for withholding results in certain circumstances (see below), it is University policy that the Examination Committees determine a grade for every student in every subject. Except in rare instances, every student should know at the time of release of examination results of their performance in every

enrolled subject. The only acceptable reasons for withholding results are as follows:

- (a) 'WM' grade: given where there are acceptable medical or compassionate reasons ('pressure of work' alone is not an acceptable reason);
- (b) 'WA' grade: given where, though the work is submitted on time, there are unavoidable delays in assessing the material (e.g. delayed response from an external examiner);
- (c) 'WO' grade: given where it is in the best interests of the students to withhold an autumn session result until the end of spring session.

Extensions of time to submit any material for assessment (including in (a) above) should be given only where there are clearly extenuating circumstances. It is unfair to those who have striven to submit work on time for any student to be given more time to complete work without a compelling case. Each case should be scrutinised closely by the Unit and not simply left to an Examinations Committee to ensure fairness. If an Examinations Committee does not accept the reason given for withholding the result, it will declare a FAIL.

'Pressure of work' (i.e. workload rather than a job transfer after the specified withdrawal date) should not be accepted as a reason for an extension.

2.4.3 Examination Papers

The Head of Unit must approve all examination papers. Papers should:

- (i) be appropriate to the stated student outcomes of the subject;
- (ii) contain questions which are fair, appropriate to the level of the subject and answerable;
- (iii) contain instructions and questions which are clear, concise, unambiguous and free from error;
- (iv) use commonly accepted terminology and language appropriate to the subject; and
- (v) be of a duration appropriate to the demands of the questions.

2.4.4 Documentation of Assignment Receipt and Return

Academic units must provide a system for recording the submission and return of work, to safeguard against claims of non-receipt and non-return. The recommended approach is to use cover sheets with two tear-off sections, one to provide a receipt for the student upon submission of the work to which the cover sheet is attached, and the other to provide a receipt for the unit upon return of the marked work to the student. Any alternative system must provide safeguards against claims of non-receipt and non-return.

2.4.5 Oral Presentations

- (i) Staff who allot marks for oral presentations must set out the criteria for marking in the subject outline.

These criteria should be reproduced on a marking sheet given to every member of the class each time an oral presentation is made. Marks awarded by students may or may not be used to determine the mark given to the student, but the sheets will be kept by the tutor and used as part of any reassessment requested by the presenter.

- (ii) Where the oral presentation is 10% or less of the aggregate mark for the subject these review procedures are advisory only and reviews may be conducted by considering the oral presentation marks in the context of marks for all other pieces of assessment. If oral presentations are more than 10% of the aggregate mark these procedures become mandatory.
- (iii) Where marks are allotted for class participation, at each tutorial, staff should enter in a notebook their comments on student's participation. This running commentary forms the basis of the student's final mark for participation and for reviewing the student's mark if requested.

2.4.6 Electronic Submission of Assignments

- (a) Where assignments must be submitted via email the University will ensure that:

Students

- (i) have access to appropriate hardware and software;
- (ii) have a guarantee of security at least as good as current procedures for submitting hard copy;
- (iii) have a receipting procedure; and
- (iv) have an undertaking that they can submit hard copy if they are unable to access appropriate equipment except where the electronic submission is part of assessment;

Staff

- (v) establish procedures for receipting and recording submission, for downloading (if necessary) or for marking on screen and include instructions on these procedures in subject outlines.

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- (vi) ensure that as part of assessment procedure, instructions are provided to students as to the format for submission and the appropriate software;
- (vii) set up the appropriate IT infrastructure for reception and marking of assignments to be determined at Faculty level or by the Faculty Department;
- (viii) provide written instructions (handbook, subject outline or website) to students about practical matters such as ensuring that student's name and number and short titles are on every page of the emailed assignment.

- (b) Students may not e-mail assignments without prior approval from the subject co-ordinator;
- (c) Students may not fax assignments without prior approval from the subject co-ordinator.

2.4.7 Acknowledgement Practice

- (i) The document Acknowledgement Practice is available on-line to all students and in the Student Guide. A shortened version shall be included in every Subject Outline. This sets out general information to help students become aware of their responsibilities in ensuring that they do not deliberately or inadvertently plagiarise the work of others.
- (ii) Subject Outlines should direct students to the document Acknowledgement Practice and provide additional information about acknowledgement methods specific to the subject and to the relevant academic unit.
- c) Students must be advised about penalties that the relevant committee in the faculty or academic unit may apply in cases of proven plagiarism.

3. Academic Unit Procedures for Investigating Plagiarism and Other Forms of Cheating

3.1 Investigation by a Staff Member

If a staff member suspects that plagiarism has occurred in a task submitted for comment or assessment that staff member must refer the matter to the Subject Co-ordinator for interviewing the student.

At any stage the subject co-ordinator may refer the matter to the Faculty Investigation Committee (FIC).

Following the interview, the Subject Co-ordinator must make a decision as to whether plagiarism has occurred. The Subject Co-ordinator may conclude that the student's actions do not constitute plagiarism or there are mitigating circumstances which demonstrate that no intentional plagiarism occurred. In such cases, no further action is the appropriate course to be taken. If the Subject Co-ordinator is satisfied that plagiarism has occurred, the Subject Co-ordinator must make and retain a written summary of the allegation and the student's response, together with a copy of the allegedly plagiarised assessment task. If the Subject Co-ordinator is satisfied that plagiarism has occurred he or she may impose a penalty in the form of a deduction of marks. The maximum penalty that may be imposed by a subject co-ordinator is a mark of zero for that assessment task.

It is recognised that in situations where the assessment item is a compulsory component (that is, it must be passed in order to pass the subject) awarding a zero for that assessment task is equivalent to awarding a fail for the subject.

The Subject Co-ordinator must advise the student in writing as to their decision within seven days.

If the Subject Co-ordinator decides that plagiarism has occurred, they must provide the Dean and Head with a memorandum outlining the decision and the penalty, and a copy of the interview summary. The advice to the student must include notification of the option to appeal to the Faculty Investigation Committee. The Subject Co-ordinator must also advise the Exams Officer in the Academic Registra's Division within seven days of the interview.

If the student does not accept that plagiarism has occurred, or does not accept the penalty imposed by the Subject Co-ordinator, the student may appeal to the FIC. The appeal application must be in writing and must be made within seven days of the date on which the student is advised of the Subject Co-ordinator's decision.

If the Subject Co-ordinator considers that a more serious penalty is warranted on account, for example, of a previous breach of these rules or collusion with other students, the matter must be referred to the FIC within seven days of the interview. This referral must be made in writing in the form of a memorandum, with the relevant assessment task/s, and copies of the alleged original sources (where appropriate), attached. The memorandum should be signed and dated by the subject co-ordinator and should include the following information:

- the name and student number of each student involved;
- the date of the interview;
- the subject for which the assessment task was submitted, and the value and nature of the task; and
- an outline of the Subject Co-ordinator's reasons for characterising the student's conduct as plagiarism.

3.2 Faculty Investigation Committee (FIC)

3.2.1 The FIC will be comprised of, at least, the Dean (or the Dean's nominee) as Chair, and two members of academic staff from the faculty who are not involved with the teaching or assessment of the subject concerned.

3.2.2 The FIC must convene a meeting within twenty-one days of receiving the Subject Co-ordinator's referral or student appeal.

3.2.3 In the case of a Subject Co-ordinator referral, the FIC Chair must write to the student within seven days of receiving the referral, outlining the allegation and inviting the student to:

- submit a written response within seven days; and
- attend a hearing on a nominated date within fourteen days.

3.2.4 In the case of a student appeal, the FIC Chair must write to the Subject Co-ordinator within seven days

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and notify them that they are required to provide, within seven days, a written statement outlining their reasons for characterising the student's conduct as plagiarism and for the penalty imposed.

- 3.2.5. At the meeting, the allegation will be explained to the student by the FIC Chair with a view to ensuring that the student understands the nature of the allegation. Also at the meeting, the student will be given the opportunity to respond to the allegation.
- 3.2.6. Members of the FIC may question the student. The student may bring to the meeting a support person (who will not have speaking rights).
- 3.2.7. If a student elects not to attend, or fails to attend the FIC as arranged, the Committee is expected to proceed with the process and reach a determination.
- 3.2.8. In the absence of the student, the FIC will discuss the case and come to a decision as to whether plagiarism has occurred. Minutes of the meeting shall be kept. Copies of these minutes must be given to the Dean and Head and be made available for inspection by the student, and the Exams Officer in ARD advised of the outcome for the purposes of 3.3.
- 3.2.9. If the FIC determines that plagiarism has occurred it may impose a penalty. The maximum penalty that may be imposed by the FIC is a fail grade for the subject.
- 3.2.10 If the FIC considers that a more serious penalty is warranted on account, for example, of repeated violations of these rules, the matter must be referred by the Chair to the University's Academic Investigation Committee, convened under the Student Discipline Rules.
- 3.2.11 The FIC Chair must advise the student and subject co-ordinator in writing as to the outcome within seven days of the hearing, and include information as to the student's further appeal options.
- 3.2.12 If the student does not accept that plagiarism has occurred, or does not accept the penalty imposed by the FIC, the student may appeal to the University Academic Investigation Committee. The appeal application must be in writing to the Vice-Principal (Administration) and must be made within seven days of the date on which the student is advised of the FIC's decision.

3.3 Maintenance of Records

A record of determinations that plagiarism and other forms of cheating have occurred will be maintained by the Academic Registrar's Division and will be made available to the Faculty and University Investigation Committees.

Where decisions are overturned on appeal, such records will be deleted. Access to the information of the database will be strictly limited.

3.4 Appendices

The Appendices referred to in the Code of Practice are listed below:

Appendix 1: Feedback On Assessment

Appendix 2: Group Work

Appendix 3: Subject Outline Checklist

If you wish to refer to these Appendices, they are available at:

http://www.uow.edu.au/about/teaching/teaching_code.html

Code of Practice - Practical Placements

Introduction

The Code of Practice - Practical Placements sets out the current policies and practices relating to the workplace experience and other practical training requirements which comprise the whole or part of subjects offered at the University of Wollongong. Its purpose is to make clear what is expected from students, supervisors and the University, and to minimise difficulties caused by misunderstanding or poor communication. The Code does NOT apply in its entirety to placements or work experience, such as professional experience requirements not formally assessed, but which students must complete before becoming eligible for the award of a degree. However, academic units responsible for such placements or experience should apply those parts of the code that are appropriate.

A practical placement is a learning experience which enables students to develop their knowledge and skills. Where students have a disability or personal difficulty which may affect their capacity to undertake the placement, the University will discuss the nature of the problem, but where it cannot be accommodated the University will assist the student in exploring alternatives.

Definitions

In this Code of Practice:

- 'placement' includes any element of work, observation and experience in a workplace outside the University which is a requirement of any [course or] subject offered by the University;
- 'placement co-ordinator' means the member of the staff of the University responsible for supervision of the experience or placement;
- 'supervisor' means the person in the workplace responsible for the direction of the student during the placement.
- 'client' means any person or persons to whom a service is being provided.

Responsibilities of the Student

Students will:

- behave ethically and in a manner which upholds the good name of the University of Wollongong.
- adhere to the professional ethics and codes of conduct appropriate to their discipline.
- be familiar with the goals and requirements of the practicum.
- sign a document acknowledging that they have read and agreed with the Code of Practice - Practical Placements.
- advise the placement co-ordinator of any fact which may affect their capacity to undertake the placement, such as a disability or personal difficulty. Students should be aware that the Disability Liaison Officer is legally obliged to disclose to the Placements Co-ordinator any disability that could place the student or the public at risk during a placement.
- keep information gained about clients from any sources in strictest confidence.
- actively participate in the management of their placement program.
- contact placement site prior to their first day on placement and introduce themselves to the supervisor.
- consult with supervisor with regard to accommodation and arrange own accommodation and travel. Students must meet the costs of these arrangements.
- ensure that all documentation on progress is made available to supervisors on progressive placement sites.
- provide any assessment forms and make them available to supervisors as necessary.
- ensure that the work or function is completed in a timely manner to satisfy assessment requirements of the university and supervisors.
- be punctual and inform their supervisor and Department if they will be late or cannot attend the placement for any reason.
- work the hours specified by the supervisor (or by a specialist if the student has a disability). If there is no specific agreement, students will work the normal hours of other staff in that workplace. Where more than 8 hours is worked on any one day, students are entitled to take time in lieu for the additional time, at a time negotiated with the supervisor.
- provide a medical certificate for absences of 2 or more days to the supervisor and the Department.
- report all absences to the Placement Coordinator. If significant absence affects progress of the student, then additional time on the placement may be required.
- adhere to policies and procedures of the placement site.

- use resources available at the placement site for the purposes they are intended.
- take responsibility for one's own health status and, if necessary, take appropriate action/care to protect the well being of clients.

Responsibilities of the Supervisor

The supervisor will:

- ensure that students read the Code of Practice-Practical Placements.
- act as a role model introducing students to acceptable professional behaviour.
- adopt the role of helper and facilitator of learning.
- provide a positive learning environment.
- provide a variety of learning experiences in keeping with the placement requirements.
- clarify aims and expected outcomes of the placement with the student.
- assist the student in identifying resources.
- arrange regular and sufficient interviews with the student to discuss progress or difficulties.
- where necessary, investigate accommodation options for students and assist them in arranging accommodation and travel.
- arrange and provide a safe work environment.
- arrange and provide adequate work space.
- orient students on the first day of the placement to reduce the student's anxiety about working in an unfamiliar environment.
- make adequate observations of the student's work and provide continuing feedback, both verbal and written, to ensure learning progress. Where appropriate, documents provided by the University should be used for this purpose.
- report on student progress using documentation provided and notify the Placement Coordinator as soon it becomes apparent that the student is having difficulties meeting the placement objectives.
- evaluate the supervision process with students.

Responsibilities of the Placement Coordinator & University

The Placement Coordinator will:

- organise and plan the placement program with students and supervisors and negotiate on aspects of student progress and assessment.
- facilitate placement contracts with sites where necessary or desired.
- be in regular contact with placement sites and approve each site as appropriate.

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- be accessible by telephone for communication on placement issues.
- if necessary, mediate between supervisors and students on placement issues.
- provide information on placement requirements. This may be in the form of a 'Supervisor's Practical Placement Manual' and a 'Student Practical Placement Manual' or other written guidelines.
- evaluate the placement component and report to the appropriate Faculty or Departmental Committee of the University on progress and developments.
- report to the University on any relevant assessment of students in this subject where the practicum is an assessable component of the course.

The University will:

- insure students to cover them against injury while on practical placement.
- advise students enrolled for programs in Health of the State Government requirement for criminal record checks to be conducted by the New South Wales Police Service *prior* to any clinical, practical or employment placement in the New South Wales Health Care System.
- advise students enrolled for programs in Education of the State Government requirement for criminal record checks to be conducted by the New South Wales Police Service on all prospective employees/individuals who will access schools on a regular basis once eligible for employment.

Code of Practice - Supervision

Preamble

Research training at a University involves the active participation of both staff and students. The responsibility to ensure that research is conducted in the most beneficial, efficient and effective manner is shared by the University collectively, its Academic units, its staff, and its students. All four parties are expected to work towards completion of the thesis within the time frame of DEST funding.

The primary responsibility for carrying out research and writing the thesis rests with the student. The primary responsibility of the supervisor is to supervise the work of the student. This includes providing help, support and mentoring to enable the student to complete the research and produce a thesis to the best of the student's ability.

The primary responsibility of the academic unit within which the student is registered is to provide suitable academic infrastructure for the research to be undertaken and successfully completed. The primary responsibility of the University is to provide a framework of policies and procedures within which postgraduate research and

research supervision are carried out efficiently and effectively.

Registration of the research students take place within the faculties, under the jurisdiction of the Dean. However Faculty structures differ, lines of responsibility for research and research students vary from one Faculty to another, and the supervision of research students will frequently involve research units that cross Faculty boundaries. Procedures laid down in this Code of Practice should be interpreted along lines of responsibility clarified within each Faculty according to its structure, and in accordance with the Research Management Plan of the University.

1. Responsibilities of the University

- 1.1 To specify clearly minimum entry standards for each level of award;
- 1.2 To ensure that a reasonable share of space and resources are made available to students;
- 1.3 To take measures to protect the intellectual property arising from the work of students in accordance with the University policy on IP;
- 1.4 To administer annual reporting requirements and monitor their effectiveness;
- 1.5 To set out clear guidelines for examiners outlining the University's expectations for the particular award;
- 1.6 To provide procedures by which either the student or the supervisor may make representations as appropriate should significant difficulties arise (see Grievance Procedures);
- 1.7 The University will provide each student with a copy of the relevant policies at enrolment, including: a copy of this document; the Rules governing the appropriate degree; the Library rules; and the policy relating to intellectual property, as it pertains to students.

2. Responsibilities of the Academic Unit

The academic units and the Faculty Research Committees should negotiate agreed areas of responsibility for students.

- 2.1 to ensure that the student meets the minimum requirements set down by the University for admission to candidature and is capable of undertaking the proposed project;
- 2.2 to ensure that the proposed research project is appropriate for the award;
- 2.3 to ensure that each research project is situated in the most appropriate discipline area;
- 2.4 to prepare and distribute postgraduate material that sets out the conditions, milestones, and monitoring procedures for undertaking postgraduate research within their unit;
- 2.5 to foster a supportive environment for research students;
- 2.6 to ensure that procedures are in place to select the most appropriate supervisor(s) or supervisory panel for the research project;

- 2.7 to ensure that high quality supervision is provided continuously throughout the research period;
- 2.8 to provide appropriate opportunities for students to develop their presentational skills;
- 2.9 (i) to set in place procedures for a formal review of the research proposal. For doctoral candidates (both full-time and part-time) the research proposal should be presented preferably after six months, but not later than one year after first registration. For masters by research candidates (both full-time and part-time) the research proposal should be presented preferably after three months, but not later than six months after first registration.
- (ii) Assessment of the Research Proposal Review must include a written research proposal (according to the discipline conventions of the degree undertaken) and an oral presentation. The presentation must be made before a Research Proposal Review Committee which consists as a minimum the supervisor(s), two appropriate members of academic staff capable of assessing the thesis proposal, and a postgraduate research student representative as observer. Where relevant, a person external to the academic or research unit may be nominated. A report on this review must be lodged with the Office of Research and placed on the student's file.
- (iii) If the Research Proposal Review Committee determines that the proposal is unacceptable, the student must re-present a research proposal within three months. If, after the second presentation of the research proposal, the Research Proposal Review Committee determines that the proposal is unsatisfactory, the student's candidature will be terminated.
- (iv) Students may appeal against the Research Proposal Review Committee decision under section 11 of the Code of Practice – Supervision.
- 2.10 to ensure compliance with the University's policy on intellectual property.
- ### 3. Responsibilities of the Supervisor
- The overriding responsibility of supervisors is to provide continuing support to students in researching and producing a thesis to the best of the student's ability. Specific responsibilities are:
- 3.1 to advise students of their procedural and substantive rights and responsibilities contained in this Code of Practice and other matters as detailed in Appendix A at their first meeting or within a month of this meeting;
- 3.2 to negotiate an agreement/contract of work to be done and schedules to be adhered to, and which is to be reviewed regularly (see Appendix A: First Interview Checklist);
- 3.3 to identify any shortcomings in a student's background and to suggest appropriate remedial studies (see Appendix B: Directory of Services);
- 3.4 to support students in developing a formal thesis proposal for review (see 2.9) within a negotiated time frame;
- 3.5 to maintain regular contact with the student and to ensure that a reasonable timetable is set to permit the degree to be completed within DETYA funding limits;
- 3.6 to require contact with and feedback from the student on a pre-arranged basis and agreed schedule so that the development of the student can be assessed at regular intervals;
- 3.7 to provide appropriate, helpful, and explanatory feedback to the student on any submissions, to return such feedback in reasonable time, and to assist students to develop solutions as problems are identified;
- 3.8 to monitor carefully the performance of the student relative to the work agreement and the standard required for the award, and to ensure that the student is made aware of whatever the supervisor may regard as inadequate progress or work below the standard generally expected;
- 3.9 to complete progress reports as scheduled by current University policy, including the assessment of any required written material in sufficient time to allow for comments and discussions before proceeding to the next stage;
- 3.10 to provide accurate feedback on the progress of the student in relation to the milestones established for the award by the Faculty, as required by the University and scholarship authorities;
- 3.11 to counsel students to enrol for a lower award if after one year, progress has been unsatisfactory. Alternatively students may choose to go on probation for the higher award by meeting certain goals as agreed between student, supervisor and a member of the URC from outside the Faculty (see Probation);
- 3.12 to refer problems which cannot be resolved to the Head of the Academic unit, in the first instance; and if further resolution is necessary to the Dean or the Chair of the Faculty Research Committee as appropriate, and as a last resort to the PVC Research (see Grievance Procedures);
- 3.13 to advise the Faculty Research Committee of the names and credentials of suitable examiners;
- 3.14 to advise the student as to when and whether the thesis is suitable, in form and content, for submission, and to write a short factual report on the period of study;

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3.15 to comply with the University's policy on intellectual property in all interactions with the student.

4. Responsibilities of Students

The primary responsibility for the undertaking, active prosecution and completion of the research rests with students. Specific responsibilities are:

- 4.1 to become familiar with the procedural and substantive rights and responsibilities of research students at the University of Wollongong;
- 4.2 to negotiate an agreement/contract of work to be done and schedules to be adhered to with the supervisor(s), which is to be reviewed regularly in the course of the candidature;
- 4.3 to discuss with the supervisor(s) the most useful type of help required for successful completion of the degree;
- 4.4 to undertake appropriate remedial work identified by the supervisor(s) should this be necessary;
- 4.5 to complete and present within an agreed time limit a formal thesis proposal;
- 4.6 to maintain regular contact with the supervisor(s) and to ensure that a reasonable timetable of meetings and submitted work is agreed and maintained;
- 4.7 to present required written material in sufficient time to allow for comments and discussions before scheduled meetings;
- 4.8 to negotiate with the supervisor(s) appropriate ways of documenting meetings including agreed actions arising from supervision sessions;
- 4.9 to complete progress reports as scheduled by current University policy;
- 4.10 to accept responsibility for the final copies of the thesis and to submit a thesis which meets the University's requirements on presentation and content.

5. General Issues Relating to Supervisors

- 5.1 The academic unit should take care to avoid situations where there is a conflict of interest between the supervisor and the student. In appointing supervisors, ensure that they are not engaged in assessing or supervising the research of students with whom they have a close personal relationship, which could give rise to undue advantage or disadvantage. Supervisors, both actual and potential, must advise their Head of Unit of any such relationship.
- 5.2 Supervisors will be responsible to the Head of the Unit and to the Dean or the Chair of the Faculty Research Committee as appropriate, for the supervision of students in their charge.
- 5.3 The University recommends co-supervision, where two or more supervisors may take differing roles and responsibilities depending on their expertise and experience with supervision. The principal supervisor has primary responsibility for coordinating

communication between the supervisors and the student. Where a supervisor is inexperienced co-supervision is mandatory.

- 5.4 In general all members of the academic staff are eligible to become principal supervisors of students for higher degrees if they have at least:
 - a degree equivalent to or higher than that being supervised; or
 - are currently active researchers or have proven research records; or
 - have previous successful experience in supervision of post graduate students.
- 5.5 Members of the academic staff who are themselves students for higher degrees should not normally have major responsibility for students undertaking degrees at the same level. They can be co-supervisors provided there is no conflict of interest with their topic and that of the student.
- 5.6 Co-supervisors should generally be appointed at the outset of the program, particularly if any lengthy absences of the supervisor are planned or if expertise additional to that provided by the supervisor is required; this could be a staff member or members from the University or from another institution or from industry.
- 5.7 Any co-supervisor should be involved as soon as practicable in the development of the student's research plan and should maintain a level of communication with the student and the other supervisors to allow adequate supervision whenever necessary.
- 5.8 In some cases, e.g. where the topic is multi-disciplinary or staff inexperienced, a panel could be formed to advise the student; again, the site of primary responsibility must be made clear.
- 5.9 The University and its academic units should provide opportunities to assist academic staff in improving their understanding and skill in the supervision of postgraduate students. All staff who supervise or expect to supervise postgraduate students should work to improve their skills by using these opportunities.

6. Leave

- 6.1 Supervisors should ensure that students have accurate information about any planned, long leave (or retirement) during the candidature and about the arrangements to be made to provide for supervision during absences.

7. Reports

- 7.1 Written reports from the student and the supervisor are an important and formal means to monitor the progress of the student. Each report should be a frank appraisal of the student's progress by both the supervisor and the student. The annual report is the means by which the University assesses whether the candidature will continue into the following year.

8. Grievance Procedures

- 8.1 Any problems encountered during the candidature or any disagreements between the student and the supervisor in relation to the annual reporting process or to other matters during the candidature that cannot be easily resolved between the student and the supervisor are to be referred, by either the student or the supervisor, to the Head of Unit, in the first instance (in faculties with units) and then to the Dean or the Chair of the Faculty Research Committee as appropriate;
- 8.2 if the Head of Unit is also the supervisor then there is a clear conflict of interest and the student may go straight to the Dean or the Chair of the Faculty Research Committee, who may co-opt an independent person from outside the unit;
- 8.3 at any stage in this process the student may consult the Dean of Students for confidential advice and guidance and may formally request that the Dean of Students negotiates with the Faculty;
- 8.4 if, after this process, the student is not satisfied with the outcome, the student may refer the matter, in writing, to the Pro-Vice Chancellor (Research) and ask that the Dean of Students negotiate on his or her behalf.

9. Probation

- 9.1 If either supervisor or student expresses dissatisfaction in an annual report then, the Dean or the Chair of the Faculty Research Committee (as appropriate) should consult with both parties independently not later than one month after lodgement of the unfavourable report. After such consultation, the Dean or the Chair of the Faculty Research Committee may decide that the matter has been resolved; if the matter is not resolved, the Dean or the Chair of the Faculty Research Committee may recommend a period of probation. If there is a conflict of interest, the Chair of the Faculty Research Committee will substitute for the Dean or vice versa;
- 9.2 (i) Probation is a process of testing of the performance of the candidate over a set period subject to a special supervisory regime.
- (ii) If either the student or supervisor objects to the probation then the matter can be referred to a Panel consisting the Chair of the Faculty Research Committee (or nominee), a senior academic from outside the Faculty nominated by the URC, and the President of the Post-graduate Association (or nominee). This panel will decide whether or not the probation should be imposed.
- (iii) If the panel recommends probation and the student refuses to accept this recommendation, then the PVC(R) can terminate the candidature.
- 9.3 If probation is to be imposed, the PVC(R) will appoint a senior academic to oversee the supervision process and research progress for a period of not less than three months and not more than one year. At the end of

probation, in a report to the PVC(R), the senior academic will make recommendations addressing any perceived problems. The recommendations may include: continuation of enrolment; termination of candidature; transfer of award; change of supervisor or appointment of a panel of supervisors; including members from outside the academic unit.

- 9.4 (i) If the student fails to make satisfactory progress during the probationary period and the recommendation is transfer to Masters by research, but the student refuses then the PVC(R) can terminate the candidature.
- (ii) If the recommendation is termination then the PVC(R) has the power to terminate the candidature.
- 9.5 Students and supervisors shall be informed of the outcomes of the recommendations. If they disagree with any of the outcomes, then they may appeal the decision to the appeals committee.
- 9.6 If the outcome of probation is termination then a student may appeal this decision to an appeals committee consisting of the Chair of Academic Senate, the President of the Postgraduate Students' Association and a third member from the Research Training Management Committee nominated by the Pro-Vice Chancellor (Research) (no members of this committee shall be from the Faculty in which the candidate is enrolled).

10. Examination & Examiners

- 10.1 The examination of theses submitted for higher degrees is undertaken, in the case of Doctoral students, by at least two examiners who are external to the University. For Masters by research students, at least two examiners are used, no more than one of whom is an internal examiner; the supervisor cannot be an examiner.
- 10.2 The selection of examiners is of critical importance. In considering examiners, account should be taken of the examiners understanding and position on the thesis topic and on the methodology employed and their prestige and status in the field.
- 10.3 Examiners should normally be active in research/scholarship in the relevant area, thus ensuring that their knowledge of the field remains current;
- 10.4 They should have empathy with the theoretical framework used by the student.
- 10.5 They should have proven familiarity with the supervision/examination of research theses.
- 10.6 The choice of examiners is a process involving both the student and the supervisor. Together they should generate a list of examiners, having regard to the known disciplinary biases of those suggested. The final choice will be finalised from this list by the supervisor and the head of the academic unit. The

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names of these examiners and their credentials should be submitted to the Faculty Research Committee for appointment.

- 10.7 Formal invitations to examine the thesis will be issued by the Thesis Examination Committee. Examiners are normally allowed eight weeks to examine the thesis and provide a report to the Thesis Examination Committee.
- 10.8 If the list of names agreed upon between student and supervisor is exhausted then the student must be consulted in drawing up a new list.
- 10.9 Examiners should be made familiar with the requirements of the University and the essential parts of the Rules governing the particular degree.
- 10.10 Students must not contact any examiner until the examination is complete and the report returned to and acted on by the thesis committee.
- 10.11 The reports from the examiners are considered by the Thesis Examination Committee, after receiving the comments of the Head on the reports. The Thesis Examination Committee determines the outcome of the examination.
- 10.12 The names of the examiners and copies of the examiner's reports are made available to the student after the Thesis Examination Committee has made its determination.

11. Appeals

- 11.1 As a result of the complex and special relationship with examiners of research degrees, the University has established a procedure which gives students, in certain circumstances, the right of appeal against the examination and evaluation of their candidature.
- 11.2 Appeals are permitted on procedural grounds only: appeals by students simply rejecting the assessment of the merit of their work are not permitted. Appeals on grounds of inadequacy of supervisory or other arrangements during the period of study, are normally not permitted, unless the student can show that persistent efforts to deal with these issues were not adequately addressed; the grievance procedures outlined above, as well as the possibility of probation, should be used for these matters at the appropriate time during the candidature.

12. Grounds for Appeal

The only grounds normally permitted for an appeal against a decision not to award a postgraduate research degree or not to allow re-submission of a thesis for reexamination, are:

- i) procedural irregularities in the conduct of the examination, that may have had an effect on the outcome of the examination;
- ii) circumstances affecting the student's performance of which the examiners were not made aware;
- iii) documented evidence of prejudice or of bias on the part of one or more of the examiners;

- iv) failure to consult the student about the choice of examiner.

13. Procedures

- 13.1 The appeal must be made by the student to the Chair of the Thesis Examination Committee, in writing, within one month of the decision of the Thesis Examination Committee being made known to the student; the student must set out fully the grounds for the appeal and provide documentary evidence in support of the appeal.
- 13.2 On receipt of the appeal, the Chair of the Thesis Examination Committee will, in the first instance, interview the supervisor/s and the Head of Postgraduate Studies (or Dean if appropriate), and the student (where practicable), for advice on the circumstances of the case. The Chair will then refer the matter to the Thesis Examination Committee for reconsideration, if appropriate, of its decision in the light of any information provided by the student that was not known to the Committee at the time it made its original decision. The Thesis Examination Committee may choose to: a) uphold its original decision; b) rescind its original resolution and determine a new resolution; or c) refer the matter to the Academic Review Committee for further investigation.
- 13.3 On receipt of advice from the Thesis Examination Committee, the student may appeal to the Academic Review Committee. Any such request must be lodged in writing with the Vice-Principal (Administration) within one month of the Thesis Examination decision.
- 13.4 The Academic Review Committee will limit itself to considering the matter only on one or more of the four grounds outlined above and will not consider the academic merits of the examination. Unless they are relevant to particular points made in the case put forward by the student, the examiners' reports will not normally be placed before the Committee.
- 13.5 The Committee may determine that the appeal be dismissed or, if it finds that one of the four grounds for appeal above is satisfied, it will refer the matter back to the Thesis Examination Committee with a direction that the thesis be re-examined. In this circumstance, the student must re-submit the original thesis for re-examination by new examiners.

14. Intellectual Property

The University's *Intellectual Property Policy – July 1998* sets out, *inter alia*, the University's position in relation to intellectual property and ownership of work developed by students in the course of their candidature.

14.1 Ownership

Normally the University will not claim any proprietary interest in intellectual property developed solely by students during their enrolled studies. However, the University may assert a proprietary interest in such intellectual property where:

- (a) development of the intellectual property has involved substantial use of University resources and/or services beyond those needed to meet subject or course requirements;
- (b) development of the intellectual property has resulted from use of University intellectual property;
- (c) the intellectual property forms part of the intellectual property generated by a team of which the student is directly or indirectly a member;
- (d) the intellectual property has been developed as the result of project specific funding provided by, or obtained by, the University. The University will have a proprietary interest in any intellectual property developed by a student in the course of candidature for a degree of the University.

14.2 Agreement

The onus is on the supervisor to inform the student fully, in writing before enrolment, of any aspects of the research which are likely to result in the generation of intellectual property and/or which is funded by any contractual arrangement(s) and of any restrictions on disclosure or communication with colleagues likely to result from such arrangements.

- 14.3 If the student agrees to take part in such a project, a written agreement on the conditions of disclosure etc., should be concluded over the signature of the student, principal supervisor and the Head.
- 14.4 Where patentable intellectual property is generated unexpectedly during the candidature and there is no initial agreement on intellectual property, the student, the principal supervisor and the Head should meet as soon as possible and produce a written understanding on the matter.

15. Access to theses

- 15.1 Following examination of the thesis and subsequent to any corrections required to the thesis as a result of the examination process, one copy of the thesis will be deposited in the University Library.
- 15.2 At the time of submission of the thesis, the student will be requested to complete a form to advise the Librarian on access rights to the thesis. Normally, the University expects that free access to all theses deposited in the Library should be permitted, but recognises that in exceptional circumstances, such as commercial confidences, it may be necessary to restrict access for a period of time. Where access is restricted, it should be for as short a time as possible.

16. Other Provisions

- 16.1 All other provisions relating to intellectual property and to the role of the Illawarra Technology Corporation Ltd in relation to the assessment of and arrangements for the protection of intellectual property are set out in University's *Intellectual Property Policy – July 1998*,

copies of which are available from Heads and from the Office of Research and Postgraduate Studies;

- 16.2 Agreement should be reached between the student and the supervisor concerning authorship of publications and acknowledgment during and after the candidature. There should be open and mutual recognition of the student's and the supervisor's contribution on all published work contributions on all published work arising from the project.

Appendix A

Checklist 1: First formal Meeting Supervisor(s) and Student

At their initial meeting or within a month after this the student and supervisor should discuss the Code of Practice with particular reference to the sections dealing with the responsibilities of the supervisor(s) and student. Where there is more than one supervisor, the student is notified of particular responsibilities of each supervisor. Student and supervisor(s) then discuss and agree upon or note:

1. the duration, location and timing of future meetings;
2. the structure of future meetings, including which supervisors will attend and the responsibilities of student and supervisor(s) in the event of postponement of meeting;
3. timetabling of and completion and presentation of research proposal; the details of what is required in the thesis proposal and criteria for an acceptable thesis proposal;
4. a broad timetable, taking into account the level of the thesis, the student's timetable for the thesis, any foreseen intervening matters (e.g. major conferences) coursework required and the timetable agreed for completion and criteria of such work;
5. 'remedial' work required and a timetable agreed for completion and criteria of such work;
6. processes for submission of work e.g. whether material should be submitted before meetings;
7. access to equipment, study space, computer/software, access to email and funds, and where and when these are/will be available and likely resource implications;
8. obligations under the University's Annual Reporting system;
9. requirements to attend seminars, and how details of these will be communicated;
10. Intellectual Property Policy, and the consequences of this for the student's research are explained carefully;
11. Human Ethics Policy and its requirements;
12. The question of whether or not to keep a diary of meetings or another method of record keeping;
13. Grievance Procedures Policy;
14. Probation;

15. Normal progress requirements and other University Course Rules and where these are available to the student.

Code of Practice - Research

1. Introduction

The Code of Practice - Research sets out the current policy and best practice relating to procedures for responsible practices in research and dealing with problems of research misconduct. The Code and associated reporting requirements for publication of research results applies to all research undertaken at the University of Wollongong. The Code was compiled in consultation with the University Research Committee and has been endorsed by the Academic Senate. The University of Wollongong acknowledges the guidelines provided by the AVCC and the NH & MRC in the original drafting of this document.

2. The Code

This Code sets out a Code of Conduct for the Responsible Practice of Research. Research and the pursuit of knowledge are vital institutional functions. The broad principles that guide research have long been established. Central to these are the maintenance of high ethical standards, and validity and accuracy in the collection and reporting of data. The responsibility of the research community to the public and to itself is acknowledged.

Communication between collaborators; maintenance and reference to records; presentation and discussion of work at scholarly meetings; publication of results, including the important element of peer refereeing; and the possibility that investigations will be repeated or extended by other researchers, all contribute to the intrinsically self-correcting nature of research.

Competition in research can have a strong and positive influence, enhancing the quality and immediacy of the work produced. However, competitive pressures can act to distort sound research practice, encouraging misconduct such as:

- the fabrication and/or falsification of data, including changing records;
- plagiarism; and
- misleading ascription of authorship.

It may also encourage the premature release of research results before they are adequately validated and the division of reports on substantial bodies of work into multiple small reports to enhance the "publication count" of the author(s).

3. Advice on Integrity in Research

A member of staff or student should in the first instance contact the Pro Vice-Chancellor (Research) if he/she requires confidential advice about what constitutes misconduct in research, the rights and responsibilities of a potential complaint, and the procedures for dealing with allegations of research misconduct within the institution. The

University has nominated a group of people who are familiar with the literature and guidelines on research misconduct to be advisers on integrity in research.

4. Code of Conduct for the Responsible Practice of Research

4.1 Approval Process for Research

The University has established several committees that have a role in the review and approval of some kinds of research. These are the Human Research Ethics Committee, the Animal Ethics Committee, the Biosafety Committee and the Occupational Health and Safety Committee. Among their responsibilities, these committees aim to ensure that the University and its researchers comply with statutory and other requirements. If research falls under the terms of reference of any of these committees, it must be approved by the relevant committee(s) before research can begin. Researchers must comply with the conditions that the committees deem necessary for approval, including conditions about the conduct of the approved research

4.2 General Ethical Considerations

- It is a basic assumption of institutions conducting research that their staff members are committed to high standards of professional conduct. Research workers have a duty to ensure that their work enhances the good name of the institution and the profession to which they belong.
- Research workers should only participate in work which conforms to accepted ethical standards and which they are competent to perform. When in doubt they should seek assistance with their research from their colleagues or peers. Debate on, and criticism of, research work are essential parts of the research process.
- Institutions and research workers have a responsibility to ensure the safety of all those associated with the research. It is also essential that the design of projects takes account of any relevant ethical guidelines.
- If data of a confidential nature are obtained, for example from individual patient records or certain questionnaires, confidentiality must be observed and research workers must not use such information for their own personal advantage or that of a third party. In general, however, research results and methods should be open to scrutiny by colleagues within the institution and, through appropriate publication, by the profession at large.
- Secrecy may be necessary for a limited period in the case of contracted research.

4.3 Specific matters

a) Retention of Data

- Data must be recorded in a durable and appropriately referenced form.

- Wherever possible, a copy of the original data should be retained in the department or research unit in which they were generated.
- There may be cases where retention of original data may be difficult, such as:
 - a large volume of source material; in these cases source material should be clearly referenced in any published material; or
 - data obtained from limited access databases or in a contracted project, in such cases a written indication of the location of the original data or key information regarding the limited access database from which it was extracted must be kept in the department or research unit.
- if at all possible, it is in the interests of all research workers to ensure that original data are safely held for periods of at least five years.

b) **Publication**

- No unpublished research results should be publicised by others without the agreement of all the researchers concerned.
- Where there is more than one author of a publication, one author (by agreement among the authors) should formally accept overall responsibility for coordinating the submission and revision of the manuscript. Such formal acceptance must be in writing and kept on file in the department or unit of that author together with the names of all other authors.
- The authors of the publication must read the final paper and sign a statement indicating that each of them has met the minimum requirements for authorship - see policy on Authorship - and who is the author taking overall coordinating responsibility for the publication. If, for any reason, one or more co-authors is unable to sign the statement, the head of the research unit or department may sign on his/her behalf, noting the reason for his/her non-availability.
- The coordinating author must keep the signed statement in his/her possession and submit a copy for retention in the department or unit when the work is accepted for publication.
- Where possible, it would be wise for papers submitted for publication to be read by a staff member outside the immediate group. This helps to ensure that the paper readily communicates its findings and major conclusions. It is, in any event, good practice to encourage discussion between members of different research groups.
- Publication of multiple papers based on the same set(s) or sub-set(s) of data is improper unless there is full cross-referencing (for example, by reference to a preliminary publication at the time of publication of the complete work which grew from

it). Simultaneous submission to more than one journal or publisher of material based on the same set(s) or sub-set(s) of data should be disclosed at the time of submission.

c) **The Role of Research Supervisors**

- Members of the academic staff of the University (other than those who are themselves candidates for higher degrees) who are currently active researchers, who have proven research records and who have previous experience in supervision may be permitted to be sole supervisors of candidates for higher degrees. In the case of newer, less experienced members of staff, a co-supervisor, who will be a more experienced and, generally, more senior member of staff, will also be appointed. Staff whose previous supervisory experience has been less than satisfactory will not be appointed as sole supervisors.
- The ratio of research students/trainees to supervisors should be small enough to ensure effective interaction, as well as effective supervision of the research at all stages.
- As part of the formal Department induction procedures research supervisors should advise each research student/trainee of applicable government and institutional guidelines for the conduct of research, including those ethical requirements for studies on human or animal subjects, and requirements for the use of potentially hazardous agents.
- Research supervisors should be the primary source of guidance to research students/trainees in all matters of sound research practice.
- As far as possible, research supervisors should ensure that the work submitted by research students/trainees is their own and that, where there are data, they are valid.
- Where possible, the Head of the research unit should be personally involved in active research supervision and observe the research activities of those for whom he or she is responsible. Professional relationships should be encouraged at all times. In particular, there should be wide discussion of the work of all individuals by their peers.

d) **Disclosure of Potential Conflict of Interest**

Disclosure of any potential conflict of interest is essential for the responsible conduct of research. The formal written disclosure of such interests will be to: the Pro Vice-Chancellor (Research); the editors of journals to which papers are submitted; and to bodies from which funds are sought.

e) **Special needs in different disciplines**

In some disciplines there will be special areas which require regulation, for example the handling of

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hazardous materials. The rules for this activity should form part of the general code of ethics for each discipline.

4.4 Misconduct

Misconduct in research includes:

- the fabrication of data; that is, claiming results where none has been obtained;
- the falsification of data, including changing records;
- plagiarism, including the direct copying of textual material, the use of other people's data without acknowledgment and the use of ideas from other people without adequate attribution;
- misleading ascription of authorship including the listing of authors without their permission, attributing work to others who have not in fact contributed to the research, and the lack of appropriate acknowledgment of work produced by others involved in the research, such as a research student/trainee or associate.

It does not include honest errors or honest differences in interpretation or judgements of data. Examples of research misconduct include but are not limited to the following:

- Misappropriation: A researcher or reviewer shall not intentionally or recklessly:
 - a. plagiarise, which shall be understood to mean the presentation of the documented words or ideas of another as his or her own, without attribution appropriate for the medium of presentation;
 - b. make use of any information in breach of any duty of confidentiality associated with the review of any manuscript or grant application;
 - c. intentionally omit reference to the relevant published work of others for the purpose of inferring personal discovery of new information.
- Interference: A researcher or reviewer shall not intentionally and without authorization take or sequester or materially damage any research-related property of another, including without limitation the apparatus, reagents, biological materials, writings, data, hardware, software, or any other substance or device used or produced in the conduct of research.
- Misrepresentation: A researcher or reviewer shall not with intent to deceive, or in reckless disregard for the truth:
 - a. state or present a material or significant falsehood;
or
 - b. omit a fact so that what is stated or presented as a whole states or presents a material or significant falsehood.

The list above is not meant to be all inclusive. There may be other misdemeanours. For example, in human or animal experimentation departing from approved protocols accepted by a specific discipline might constitute misconduct.

4.5 Procedures for Dealing with Allegations of Misconduct in Research

A working party of the University Research Committee is at present working on an additional section on how to deal with allegations in establishing a prima facie case, as the disciplinary conditions can only come into play after this.

This Code of Conduct for the Responsible Practice of Research aims to ensure a research environment that minimises the incidence of misconduct in research. It is inevitable, however, that there will be some allegations of misconduct. The procedures to cover the situation where allegations of misconduct are made against a staff member at the University of Wollongong are covered in the Management Handbook, under Rules for Staff Discipline.

Undergraduate Calendar 2003

University of Wollongong NSW 2522 Australia

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Web: www.uow.edu.au/student/calendarindex.html

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