

University of Wollongong



Calendar

Postgraduate



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 session subjects without financial penalty (HECS refunded/International Student Fees credited if withdrawn by):	31 March	31 August	20 December 2003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 session subjects without financial penalty (HECS refunded/International Student Fees credited if withdrawn by):	31 March (full refund)	31 August (spring session only)	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 (Fail grade recorded if subject withdrawn after this date).	11 May	21 September	13 January 2004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 (Fail grade recorded if subject withdrawn after this date).		3 August	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.



POSTGRADUATE CALENDAR

2003

UNIVERSITY OF WOLLONGONG

Postal Address: University of Wollongong,
Wollongong, NSW 2522
Australia

Telephone: (02) 4221 3555

Facsimile: (02) 4221 3477

Email: studenq@uow.edu.au

URL: www.uow.edu.au

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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 SCIENCE →

FACULTY OF INFORMATICS →

FACULTY OF LAW →

FACULTY OF SCIENCE →

GENERAL INFORMATION →

RULES →

POLICIES AND CODES OF PRACTICE →

Faculty of Arts

Courses Offered

The Faculty of Arts offers the following postgraduate qualifications in the Schools of:

English Literatures Philosophy and Languages

History and Politics

Social Sciences, Media and Communication

Research Degrees

Doctor of Philosophy

Master of Arts – Research:

Communication and Cultural Studies

English Studies

History

International Relations

Maritime Policy

Modern Languages (French, Italian, Japanese and
Linguistics)

Philosophy

Politics

Science, Technology and Society

Sociology

Master of Social Change and Development - Research
(offered by CAPSTRANS)

Coursework Degrees

Master of Applied Management in Social Change and
Development (offered by CAPSTRANS)

Master of Arts by Coursework (General degree)

Master of Arts (Applied Ethics)

Master of Arts (International Relations)

Master of Policy (Social Policy)

Master of Social Change and Development (offered by
CAPSTRANS)

Graduate Diploma in Arts:

Modern Languages

Japanese

Philosophy

Science, Technology and Society

Sociology

Graduate Certificate in Social Change & Development
(offered by CAPSTRANS)

Current Areas of Study and Research

Programs may be taken in:

Communication and Cultural Studies

English Studies

French

History

International Relations

Italian

Japanese

Linguistics

Maritime Policy

Philosophy

Politics

Science, Technology and Society

Sociology

Research Units

The Institute of Social Change & Critical Inquiry (ISCCI)

The Centre for Asia Pacific Transformation Studies (CAPSTRANS)

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.

Research Degrees

Doctor of Philosophy

Entry Requirements

To enrol in the degree, students need a Bachelor of Arts (or equivalent qualification) with Honours at Class II Division ii or higher, or a Master of Arts - Research with a strong performance in the major thesis.

Length of Thesis

The Doctoral Thesis must be a minimum of 80,000 words and no longer than 100,000 words in length. The thesis will be on a topic to be decided by the student in consultation with the appointed supervisor/s.

Time Limits

A full-time candidate should normally complete the Doctorate in three years. The Faculty requires the candidate to complete in not less than four (4) consecutive sessions, not including Summer sessions, and not more than eight (8) consecutive sessions, not including Summer sessions, from the date of registration. A part-time candidate shall complete the Doctoral Thesis in not less than six (6) consecutive sessions, not including Summer sessions, and not more than sixteen (16) consecutive sessions, not including Summer sessions, from the date of registration. Candidates may be extended beyond the maximum time period following a satisfactory review of progress.

Fields of Study

Students of the Faculty enrol for the PhD in one of the following subjects.

Communication and Cultural Studies		
CCS 999	Major Thesis	48
English Studies		
ENGL999	Major Thesis	48
French		
FREN975	Major Thesis	48
History		
HIST973	Major Thesis	48
International Relations		
INTR970	Major Thesis	48
Italian		
ITAL975	Major Thesis	48
Japanese		
JAPA975	Major Thesis	48
Linguistics		
LANG903	Major Thesis	48
Maritime Policy		
MPOL970	Major Thesis in Maritime Policy	48
Philosophy		
PHIL999	Major Thesis	48
Politics		
POL951	Major Thesis	48

Science, Technology and Society		
STS924	Major Thesis	48
Sociology		
SOC999	Major Thesis	48

Social Change and Development (CAPSTRANS)

CAPSTRANS students enrol in the degree under one of the above subjects, depending on the field of study.

Master of Arts - Research

Important Note: This course has replaced the former Master of Arts (Honours) by Research. Students currently enrolled in that course may complete the degree under that course title and course code, but it is closed to new enrolments.

Entry to the program

There are two entry points for this degree:

- 1. From the Bachelor of Arts.** Students entering the degree from the Bachelor of Arts (Pass) degree will complete a 72 credit point degree, consisting of the 24 credit point subject, ARTS901 Master of Arts Research Methods and, subject to satisfactory completion of the coursework component (see below in Program Structure) a 48 credit point thesis on a disciplinary or interdisciplinary topic.
- 2. From the Bachelor of Arts (Honours) or the Master of Arts by Coursework (or equivalent qualification).** Students having a Bachelor of Arts with Honours Class II, division ii or higher, or a Master of Arts by Coursework (or equivalent) with an average of at least 70% may apply for admission into the Master of Arts - Research degree with Advanced Standing for the 24cp of coursework. They will then complete a 48 credit point thesis in a discipline or interdisciplinary area.

All applications must be approved by the Associate Dean (Research and Graduate Studies). Approval also depends on the availability of supervision within the Faculty for the proposed thesis and its relationship to the key areas of research in the Faculty, The Institute of Social Change & Critical Inquiry (ISCCI) and The Centre for Asia Pacific Transformation Studies (CAPSTRANS).

Time limits

Full time students should complete the 72 credit point degree in no fewer than two sessions (not including Summer Session) and not more than four sessions (not including Summer Session). Full-time students should complete the 48 credit point course in no fewer than two sessions (not including Summer Session and not more than four sessions (not including Summer Session). Part-time students normally complete half of the full-time load in the same period and take proportionately longer to complete the degree.

Program Structure

- 1. Entry from the Bachelor of Arts (Pass degree) or equivalent:** Students will complete one 48 credit point thesis in a field of study and the 24 credit point coursework subject, ARTS901 Master of Arts Research Methods:

ARTS901	Master of Arts Research Methods	24
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Fields of Study

Students of the Faculty enrol for the MA - Research in one of the following areas.

Communication and Cultural Studies

CCS 999	Major Thesis	48
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English Studies

ENGL999	Major Thesis	48
---------	--------------	----

French

FREN975	Major Thesis	48
---------	--------------	----

History

HIST973	Major Thesis	48
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International Relations

INTR970	Major Thesis	48
---------	--------------	----

Italian

ITAL975	Major Thesis	48
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Japanese

JAPA975	Major Thesis	48
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Linguistics

LANG903	Major Thesis	48
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Maritime Policy

MPOL97	Major Thesis in Maritime Policy	48
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Philosophy

PHIL999	Major Thesis	48
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Politics

POL951	Major Thesis	48
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Science, Technology and Society

STS924	Major Thesis	48
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Sociology

SOC999	Major Thesis	48
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Students who achieve a Credit average or higher in ARTS901 will proceed to the thesis component of the degree. Students who achieve a Pass average in this subject will be offered the opportunity to transfer to the Master of Arts by Coursework with 24 credit points of Advanced Standing.

The thesis topic will be determined by discussion between the student and the Postgraduate Co-ordinator in the School in which the student is enrolled.

The 24 credit point Coursework subject, ARTS901, Master of Arts Research Methods, provides students with training in the theories and research methodologies current in their chosen areas. This training involves three modules of study:

- a specific theory and methods module;
- an advanced content-based module in the student's discipline area;
- a module in which the student writes a detailed research proposal for the Master of Arts thesis.

The precise content of these modules will be determined on a case-by-case basis, with the student and the Academic Program. It will be approved by the Associate Dean (Research and Graduate Studies)

The content-based subject will normally be selected from the range of subjects available in the Master of Arts by Coursework in the student's chosen discipline or interdisciplinary area of study.

- 2. Entry from the BA (Honours) or equivalent:**

Students who have completed a Bachelor of Arts Honours degree with Class II division ii or higher, or appropriate research subjects in the Master of Arts by Coursework may apply for Advanced Standing for the 24cp of coursework. They will then enrol in the 48 Credit Point thesis subject in one of the following fields of study.

Fields of Study

Students of the Faculty enrol for the MA - Research in one of the following areas.

Communication and Cultural Studies

CCS 999	Major Thesis	48
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English Studies

ENGL999	Major Thesis	48
---------	--------------	----

French

FREN975	Major Thesis	48
---------	--------------	----

History

HIST973	Major Thesis	48
---------	--------------	----

International Relations

INTR970	Major Thesis	48
---------	--------------	----

Italian

ITAL975	Major Thesis	48
---------	--------------	----

Japanese

JAPA975	Major Thesis	48
---------	--------------	----

Linguistics

LANG903	Major Thesis	48
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Maritime Policy

MPOL970	Major Thesis in Maritime Policy	48
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Philosophy

PHIL999	Major Thesis	48
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Politics

POL951	Major Thesis	48
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Science, Technology and Society

STS924	Major Thesis	48
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Sociology

SOC999	Major Thesis	48
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Master of Social Change and Development - Research

Important Note: This course has replaced the former Honours Master Degree by Research. Students currently enrolled in that course may complete the degree under that course title and course code, but it is closed to new enrolments.

Entry to the program

There are two entry points for this degree:

- 1. **From the Bachelor of Arts.** Students entering the degree from the Bachelor of Arts (Pass) degree will complete a 72 credit point degree, consisting of 24 credit points of coursework chosen from CAPSTRANS subjects listed below, and subject to satisfactory completion of the coursework component, a 48 credit point thesis in a discipline or interdisciplinary area.
- 2. **From the Bachelor of Arts (Honours) or the Master of Arts by Coursework (or equivalent qualification).** Students having a Bachelor of Arts with Honours Class II, division ii or higher or a Master of Arts by Coursework (or equivalent) may apply for admission into the Master of Social Change and Development - Research degree with Advanced Standing for the 24cp of coursework. They will then complete a 48 credit point thesis in a discipline or interdisciplinary area.

All applications must be approved by the Associate Dean (Research and Graduate Studies). Approval also depends on the availability of supervision within the Faculty for the proposed thesis.

Time limits

Full time students should complete the 72 credit point degree in no fewer than two sessions (not including Summer Session) and not more than four sessions (not including Summer Session). Full-time students should complete the 48 credit point course in no fewer than two sessions (not including Summer Session and not more than four sessions (not including Summer Session). Part-time students normally complete half of the full-time load in the same period and take proportionately longer to complete the degree.

Program Structure

- 1. **Entry from the Bachelor of Arts (Pass degree) or equivalent:** Students will complete one 48 credit point thesis in a field of study and 24 credit points of coursework to be chosen from the CAPSTRANS subjects listed below:

Core Subjects

CAPS901	Social Change and Development	6
CAPS902	Issues in Developing Economies	6
CAPS904	Social Program Evaluation and Planning	6
CAPS933	Social Science Research Methods	6

Specialisation Subjects

CAPS903	Migration and Multicultural Societies	6
CAPS905	Labour Relations, Regulation and Organisation	6
CAPS906	Human Resources in Developing	6
CAPS907	Managing the Production and Diffusion of Knowledge	6
CAPS908	Special Project A	6
CAPS909	Special Project B	6

At least 2 subjects must be chosen from the Core subjects.

Thesis

CAPSTRANS students enrol in one of the thesis subjects listed above for the Master of Arts - Research degree, depending on the field of study.

Students who achieve a Credit average or higher in the coursework component will proceed to the thesis component of the degree. Students who achieve a Pass average in the coursework component may be offered the opportunity to transfer to the Master of Social Change and Development or the Master of Applied Management in Social Change and Development (whichever is deemed to be the more appropriate for the student) with 24 credit points of Advanced Standing.

- 2. **Entry from the BA (Honours) or equivalent:** Students who have completed a Bachelor of Arts Honours degree with Class II division ii or higher, or appropriate research subjects in the Master of Arts by Coursework may apply for Advanced Standing for the 24cp of coursework. They will then enrol in the 48 Credit Point thesis subject in one of the thesis subjects listed above for the Master of Arts - Research degree, depending on the field of study.

Coursework Degrees

Master of Applied Management in Social Change and Development

The Master of Applied Management in Social Change and Development (MAMSCD) is ideal for students with a professional interest in the processes of social transformations in the Asia Pacific region.

This course is being offered by CAPSTRANS in conjunction with the Graduate School of Business and Professional Development and the Department of Management of the University of Wollongong.

The MAMSCD is a 12 month full-time course offered on a flexible modular basis through both the University of Wollongong and the University of Newcastle.

Subjects Offered

Master of Applied Management in Social Change and Development students will complete eight subjects:

Core Subjects

CAPS901	Social Change and Development	6
CAPS904	Social Program Evaluation and Planning	6
CAPS933	Social Science Research Methods	6
MGMT928	Public Policy and Administration	6
TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6

Elective Subjects

Take any two subjects from the following:

CAPS902	Issues in Developing Economies	6
CAPS903	Migration and Multicultural Societies	6

CAPS905	Labour Relations, Regulation and Organisation	6
CAPS906	Human Resources in Developing Countries	6
CAPS907	Managing the Production and Diffusion of Knowledge	6
MGMT911	Leadership and Team Dynamics	6
MGMT915	Leading Organizational Change: Framing the Management of Change	6
MGMT946	Personal Learning: The Reflective Manager	6
MGMT949	Performance Management	6
MGMT978	Cross Cultural Management	6
MGMT983	Leading Organizational Change: Politics, Power and Change Agency	6
TBS950	Quality in Management	6
CAPS908	Special Project A	6
CAPS909	Special Project B	6
* at the discretion of the course co-ordinators, two optional subjects may be replaced by the following subject:		
CAPS934	Research Project in Social Change and Development	12

Master of Arts

The Master of Arts allows students to further their knowledge and skills in the humanities and social sciences. Students will be able to select a course with flexible content - either an interdisciplinary or selected discipline based major study, learn generic arts skills (especially comprehension and communication), and develop their research-based language skills.

Entry to the Degree

Entry to the degree is normally from the Bachelor of Arts degree, but students with an equivalent qualification will also be considered.

Time Limits

The course takes one year of full time study or two years for part-time students.

Please Note: Because all subjects require assumed knowledge of the relevant discipline or studies area, students will need to discuss their program with the course co-ordinator, Associate Dean (Research and Graduate Studies).

Program Structure

Students take six subjects from the schedule of subjects (48 credit points).

Where there is one major study, the remaining 24 credit points are chosen from any other subjects in the schedule.

The areas of major study currently available are:

Communication and Cultural Studies
 English Studies (including Postcolonial literatures)
 History (not available in 2003)
 Philosophy
 Politics (not available in 2003)
 Science, Technology and Society
 Sociology

Schedule of Subjects

(Please note: Not all subjects will be available in any one year. Please check subject descriptions for availability)

Communication and Cultural Studies

CCS951	Regulating Culture	8
CCS966	Special Topic	8
CCS975	Reading Cultural Differences	8
CCS977	Media Studies: industries, Texts, Practices	8
CCS990	Critical and Cultural Theories	8

English Studies

ENGL903	Contemporary Literary Issues	8
ENGL906	Modernism and its others	8
ENGL913	Literature, Memory and Forgetting	8
ENGL916	US Literature: Modernity and Post-modernity	8
ENGL918	Special Topic	8
ENGL921	Turning points: An introduction to post-colonial literary History	8
ENGL923	Indigenous Literatures in Canada, New Zealand and Australia	8
ENGL930	History and Romance in Early modern Britain	8
ENGL933	Early women Writers	8
EGL944	The dominant Sound: Australian women Novelists Between the Wars	8

History (this specialisation not available in 2003)

HIST904	Themes in History	8
HIST942	Themes in Historiography	8
HIST951	Philosophy of History	8

Modern Languages

ELS 901	English for Postgraduate Studies (Arts)	8
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Philosophy

PHIL935	Applied Ethics	8
PHIL955	Theoretical Ethics	8
PHIL990	Contemporary Political Philosophy	8

Politics (this specialisation not available in 2003)

POL902	Advanced Topics in Politics	8
POL 914	Political Theory: New Departures for a New Millennium	8
POL931	Comparative Politics in a New World Order	8
POL941	Politics of Developing and Lesser Developed Countries	8

Science, Technology & Society

STS 916	Theories and Methods in Science and Technology Studies	8
STS 917	Advanced Topics in Science and Technology Studies	8
STS 920	The Dynamics of Science and Technology	8
STS 929	Studies in Resource and Environmental Policy	8

Sociology

SOC 904	Policy and Program Evaluation	8
SOC910	Developing a Social Science Thesis	8
SOC918	Modernity, Development and Social Change	8
SOC 921	Advanced Studies in Sociology	8
SOC 933	Advanced Research Techniques	8
SOC 940	Contemporary Social Policy, Theory and Practice	8
SOC 942	Advanced Race and Ethnic Studies	8

Master of Arts (Applied Ethics)

The course aims to provide professionals and others who have a general interest in applied ethics with a philosophical education in one or more areas of applied ethics. Applied areas on offer in 2002 (subject to enrolments) are: Bioethics, Ethical Issues in Research, Applied Ethics Topics and Environmental Ethics.

It has become increasingly obvious with the proliferation of ethics committees and the demand for public accountability that health care professionals, public policy makers, lawyers, public servants, business people, scientists, researchers, and others, are required to make well-reasoned, informed judgements about issues that are essentially ethical. Such judgements require philosophical expertise - one needs to be able to recognise the factual and evaluative complexity of the issues, to recognise evaluative issues as evaluative, critically to evaluate competing ethical claims, and to reason to a conclusion soundly. Yet the development of such expertise is typically not included in the professional training of people who are called to act as ethical decision-makers. The Master of Arts (Applied Ethics) helps make good this lack.

It would be expected that students undertaking the course would benefit at least in the following ways. Firstly, they would sharpen their critical reasoning skills. Secondly, they would gain a good grounding in ethical theory and a comprehensive understanding of the specific issues in their chosen applied area. Third, they would enhance their ability to make difficult, ethically sensitive decisions.

The Master of Arts (Applied Ethics) is a course in applied philosophy, in which ethical theory, as studied in a core subject (PHIL955 - Theoretical Ethics) is applied to various areas of practical concern. The course may be co-taught by members of the Philosophy Program and lecturers from the Faculties of Law and Health and Behavioural Sciences.

Entry to the Degree

Admission is open to holders of a Bachelor's degree (pass or honours) in any field or others who satisfy the Board of Research and Postgraduate Studies of comparable professional standing or attainments.

Program Structure

The Degree is available by Coursework and Minor Thesis. Candidates shall successfully complete a program of 48 credit points, normally comprising a minor thesis (24 credit points) in applied ethics, together with the two 8 credit point core subjects and one 8 credit point elective

Candidates who have done the undergraduate subject PHIL206, or equivalent, are required to take one core subject PHIL955 and two electives. Candidates who have done the undergraduate subject PHIL251/301, or equivalent, are required to take one core subject PHIL935 and two electives.

All students enrol in PHIL923 Minor Thesis.

Core Subjects

PHIL935	Applied Ethics	8
PHIL955	Theoretical Ethics	8
PHIL923	Minor Thesis	24

Elective Subjects

PHIL965	Bioethics	8
PHIL976	Ethical Issues in Research	8
PHIL986	Applied Ethics Topics	8
PHIL995	Environmental Ethics	8

Master of Arts (International Relations)

The degree is intended to provide opportunities for graduates of diverse disciplinary backgrounds to develop their academic understanding and professional skills in the field of international relations, broadly defined. The program is expected to be especially useful to students with relevant, professional experience or ambitions, including diplomats, other government officials, business persons, journalists, specialists in public affairs, government relations, etc.

The program is multi-disciplinary in nature, focussing on international politics, economics, management, and law and diplomatic practice, in particular, but allowing both for specialisation within the program as well as for the inclusion of area studies, and other relevant subjects, in accordance with students' needs.

Students take part in simulations and professional seminars, workshops, exchanges with other institutions, including relevant Government agencies, and, where possible, professional placements. Special classes are provided in computing and (where appropriate) English language, study, analytical, public speaking and other skills. A special centre (with computing, video and short-wave radio facilities, plus a range of pertinent periodicals) has been set aside for use by students in the program.

Entry to the Degree

Students normally have a Bachelor's degree with a minor sequence in the area studied.

Program Structure

Students must complete 48 credit points from the following list of subjects (or such greater number as may be required in individual cases). Except with the permission of the Convenor of Program, students are required to complete the following four core subjects in order to graduate in the program:

Core Subjects

INTR905	Case Studies in Diplomacy	8
INTR910	Politics of International Relations	8
INTR920	Advanced International Economic Relations	8
INTR931	Public Policy	8

Elective Subjects*

INTR911	Politics in the South Pacific	8
INTR912	Pacific Rim and Pacific Basin	8
INTR921	Advanced International Economics	8
INTR922	Advanced Topics in Economics	8
INTR932	Selected Topics in Management	8

INTR940	Case Study in International Politics A	8
INTR941	Case Studies in international Politics B	8
INTR957	Post-War Economic and Social Development in the Asia - Pacific	8
INTR958	Selected Topics on Post-war Developments in the Asia - Pacific	8
INTR960	Research Project in International Relations	16
INTR961	Research Project in International Relations	16

*Not all subjects are available each year. Please refer to the School of History and Politics before enrolment. Students may apply to enrol in other Postgraduate subjects with the permission of the Co-ordinator of the course.

Master of Policy (Social Policy)

The objective of the Master of Policy is to allow pass graduates in Arts with other approved areas of study or experience, to pursue advanced studies in theoretical and practical aspects of contemporary Australian social policy. The tightly structured program will prepare students for work in corporations, government or voluntary organisations, or in policy related areas. Students shall be admitted under the Rules covering the Masters Degree, with the additional qualifications below.

Entry to the Degree

Normal entry requires a pass Bachelor with a major study in a relevant field.

Program Structure

Students are required to complete successfully an approved program of study of 48 credit points drawn from the list below. Students shall not include in their program subjects substantially similar to those already completed as part of their previous undergraduate or graduate studies. Students shall discuss their proposed program with the Co-ordinator of the Master of Policy (Social Policy) prior to enrolment.

Students may be required to undertake additional work as a pre-requisite for subjects included in the Schedule below. The Master of Policy shall be available as a part-time and full-time program. Full-time students are expected to complete the degree in two academic sessions, part-time students in not less than three and not more than six academic sessions.

Core Subjects

SOC904	Policy and Program Evaluation	8
SOC933	Advanced Research Techniques	8
SOC940	Contemporary Social Policy, Theory and Practice	8

Elective Subjects

at least three of the following:

POL984	Selected Topics in Australian Politics (not offered in 2003)	8
SOC905	Social Policy Research Project	8
SOC918	Modernity, Development and Social Change	8
SOC921	Advanced Studies in Sociology	8
SOC942	Advanced Race and Ethnic Studies	8

SOC949	Advanced Social Regulation, Policies and Issues	8
SOC959	Advanced Sociology of Gender Relations (not offered in 2003)	8
SOC970	Social Movement and Community Activism	8
LAW960	Law for Professionals	8

Master of Social Change & Development (CAPSTRANS)

CAPSTRANS is a joint initiative of the Universities of Wollongong and Newcastle. It is a Key Centre of Research and Teaching funded by the Australian Research Council, the two universities and by partners in business and government.

This degree (48 credit point by coursework) is designed to provide students with the knowledge and skills to understand the processes of social change and development, and to improve their problem solving skills and effectiveness as administrators, researchers, development planners, educators, or managers. The course combines theoretical perspectives with empirical studies and policy-oriented perspectives.

CAPSTRANS' postgraduate teaching program complements the Centre's research programs so that all courses are informed by the most recent high quality research. Students are offered the opportunity to study in a research and teaching centre with extensive international networks staffed by some of the best scholars in their respective fields.

On-campus study is possible at the University of Wollongong or University of Newcastle, while flexible delivery modes and delivery at partner Universities are currently being developed.

Entry to the Degree

Students normally have a Bachelors degree with a minor sequence in the area studied.

Program Structure

Masters of Social Change and Development students will complete eight subjects -

Core Subjects

CAPS901	Social Change and Development	6
CAPS902	Issues in Developing Economies	6
CAPS904	Social Program Evaluation and Planning	6
CAPS933	Social Science Research Methods	6

Specialisation Subjects*

One or more specialisation subjects linked to CAPSTRANS research programs:

CAPS903	Migration and Multicultural Societies	6
CAPS905	Labour Relations, Regulation and Organisation	6
CAPS906	Human Resources in Developing Countries	6
CAPS907	Managing the Production and Diffusion of Knowledge	6

*at the discretion of the course co-ordinators, two specialisation subjects may be replaced by the following subject:

CAPS908	Special Project A	6
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CAPS909	Special Project B	6
CAPS934	Research project in social Change and Development	12

Elective Subjects

Please note: Not all electives are available in any one year.

Students may complete up to three electives from a wide range of special-interest subjects from both Universities. It is necessary to consult the teaching co-ordinator before enrolling in electives.

University of Wollongong Electives

CCS951	Regulating Culture
MGMT955	Comparative Studies in Industrial Relations
ENGL923	Indigenous Literatures in Canada, New Zealand and Australia
INTR910	Politics of International Relations
INTR911	Politics in the South Pacific
INTR912	Pacific Rim and Pacific Basin
INTR920	Advanced International Economic Relations
INTR931	Public Policy
INTR957	Post-War Economic and Social Development in the Asia-Pacific
INTR958	Selected Topics in Post-War Economic and Social Developments in the Asia-Pacific
MGMT928	Public Policy and Administration
MGMT978	Cross Cultural Management
MPOL902	International Maritime Policy
POL931	Comparative Politics in a New World Order
POL941	Politics of Developing and Lesser Developed Countries
SOC918	Modernity, Development and Social Change
SOC940	Social Policy and Theory
SOC942	Advanced Race and Ethnic Studies
TBS905	Economic Analysis of the Business Environment in Australia and Asia
TBS920	International Management

Graduate Diploma in Arts (Japanese)

The Graduate Diploma in Arts (Japanese) is a twelve-month, 48 credit point, Japanese language program..

The purpose of the Graduate Diploma in Arts (Japanese) is to provide candidates with one year as a full-time student at a Japanese University with which the University of Wollongong has an exchange agreement. The Diploma is awarded after successful completion of the exchange University's course and examination upon return to the University of Wollongong.

Minimum requirement for entry: a degree at Bachelor level, preferably in Japanese language. (This degree is not intended for students whose first language is Japanese).

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

JAPA550	Japanese Studies Abroad	48
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Graduate Diploma in Arts (Modern Languages)

The purpose of the Graduate Diploma in Arts is to provide, in a recognised university course, a means for graduates with limited acquaintance with European or Asian languages, thought and culture to acquire competence in these areas at a reasonably advanced level.

Students are required to complete 28 credit points from Undergraduate Arts subjects listed under Languages. The remaining 20 credit points may be chosen from subjects listed under Modern Languages or other Programs in the Arts Course Structures. These will be approved by the Head of the Modern Languages Program.

Graduate Diploma in Arts (Science, Technology and Society)

The aim of this course is to enable graduates with a limited acquaintance with the history and philosophy of science and technology or the role of science and technology in contemporary society, to acquire an understanding of these subjects to a reasonably advanced level.

Entry to the Course

Candidates will normally have a Bachelor's degree. Admission to candidature for the Graduate Diploma is on recommendation of the Associate Dean, Research and Graduate Studies in consultation with the Head of the Head of the Science, Technology and Society. Program

Course Program

The Graduate Diploma shall be subject to the Course Rules for the Award of Graduate Diplomas together with the following conditions: candidates are required to complete subjects totalling 48 credit points from those listed in the Undergraduate Arts Course Structures under Science, Technology and Society. Of these at least 24 must be from 300-level subjects and the remainder from 200-level subjects. Subject to the joint approval of the Head of the Science, Technology and Society Program and the Head of the other program concerned, up to 12 credit points may be taken from suitable subjects listed in the Arts Course Structures under other Programs; a candidate may not include in his or her graduate diploma program any course component which substantially duplicates a subject or part of a subject previously passed by the candidate as part of any degree or diploma already held or previously attempted; the selection of courses and the program of study shall be approved by the Associate Dean, Research and Graduate Studies in consultation with the Convenor of Program.

Duration of the Course

A full-time candidate shall normally complete the diploma in one academic year, a part-time candidate in no less than two and no more than three academic years.

Graduate Diploma in Arts (Sociology)

The purpose of the Graduate Diploma in Arts is to provide graduates who have a limited knowledge of Sociology a means of acquiring a sociological competence at a reasonably advanced level. The Convenor of Program will advise intending students on which course structure is most appropriate to their interests.

Entry to the Course

Candidates will normally have a Bachelor's degree. Admission to the Graduate Diploma is on recommendation of the Associate Dean, Research and Graduate Studies in consultation with the Head of the Sociology Program who shall assess the applicant's aptitude for sustained sociological study at a reasonably advanced level.

Course Program

The Graduate Diploma will be subject to the Course Rules for the award of Graduate Diplomas together with the following conditions: candidates are required to complete subjects totalling 48 credit points from those listed in the undergraduate Arts Course Structures under 'Sociology'. Of the 48 credit points, at least 24 must be from 300-level subjects and the remainder from 200-level subjects; a candidate may not include in his or her Graduate Diploma program any course component which substantially duplicates a subject or part of a subject previously passed by the candidate as part of any degree or diploma already held or previously attempted. The selection of subjects and the program of study shall be approved by the Convenor of Program.

Duration of the Course

A full-time candidate shall normally complete the diploma in one academic year, a part-time candidate in no less than two and no more than three academic years.

Graduate Certificate in Social Change & Development (CAPSTRANS)

CAPSTRANS is a joint initiative of the Universities of Wollongong and Newcastle. It is a Key Centre of Research and Teaching funded by the Australian Research Council, the two universities and by partners in business and government.

This Graduate Certificate (24 credit point by coursework) is designed to provide students with the knowledge and skills to understand the processes of social change and development, and to improve their problem solving skills and effectiveness as administrators, researchers, development planners, educators, or managers. The course combines theoretical perspectives with empirical studies and policy-oriented perspectives.

The post graduate teaching program complements the Centre's research programs so that all courses are informed by the most recent high quality research.

Students are offered the opportunity to study in a research and teaching centre with extensive international networks staffed by some of the best scholars in their respective fields.

On-campus study is possible at the University of Wollongong or University of Newcastle, while flexible delivery modes and delivery at Asia partner Universities are currently being developed.

Entry to the Degree

Students normally have a Bachelor's degree with a minor sequence in the area studied.

Course Program

Graduate Certificate in Social Change and Development students will complete four subjects:

Core Subjects

students select two subjects

CAPS901	Social Change and Development	6
CAPS902	Issues in Developing Economies	6
CAPS904	Social Program Evaluation and Planning	6
CAPS933	Social Science Research Methods	6

Specialisation Subjects

students select at least one subject

CAPS903	Migration and Multicultural Societies	6
CAPS905	Labour Relations, Regulation and Organisation	6
CAPS906	Human Resources in Developing Countries	6
CAPS907	Managing the Production and Diffusion of Knowledge	6

Elective Subjects

The remaining subject may be selected, in consultation with the course co-ordinators, from any of the remaining specialist subjects or from electives offered by the Faculties of Arts and Commerce and the Graduate Business Schools at each of the two institutions, subject to any noted restrictions.

ARTS SUBJECT DESCRIPTIONS

Note: Except where shown, all subjects are offered on the Wollongong campus.

ARTS901 Master of Arts Research Methods 24cp

Autumn / Spring

Contact Hours: 9 hours per week.

Assessment: Module 1: A total of 5,000-7,000 words which may include one short paper and one long essay. Module 2: This subject is chosen from the MA Coursework schedule. See subject descriptions for assessment. Module 3: Survey of sources (annotated bibliography) (40%); Documentation of thesis proposal (40%); Oral presentation of thesis proposal (20%).

Subject Description: This subject provides students enrolled in the Master of Arts (Research) degree with training in the theories and research methodologies current in their chosen discipline areas. This training involves three modules of study: 1. a specific theory and methods module; 2. an advanced content-based module in the student's discipline area and 3. a module in which the student writes a detailed research proposal for the Master of Arts thesis. The precise content of these modules will be determined on a case-by-case basis, with the student and the Academic Program. It will be approved by the Associate Dean (Graduate Studies and Research). Students who have completed a Bachelor of Arts (Honours) with Class II, division ii or above, or have completed appropriate subjects in the Master of Arts by Coursework (or equivalent), may apply for Advanced Standing for this part of the course. Students who achieve a Credit average or higher in this subject will proceed to the thesis component of the degree. Students who achieve a Pass average in this subject will be offered the opportunity to transfer to the Master of Arts by Coursework with 24 credit points of Advanced Standing.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Grasp (at an advanced level orally and in writing), and be able to analyse the theoretical debates and methodological principles in their chosen discipline or interdisciplinary areas; 2. Understand the intellectual debates, key participants, major texts, and essential forums in a key area pertinent to their field of study; 3. Plan a detailed thesis proposal which will lay the basis for the subsequent Master of Arts thesis. It will include a thesis question, chapter divisions and the sources to be consulted.

CAPS901 Social Change and Development 6cp

Autumn Wollongong Flexible

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Assessment: Continuous assessment 60% Project 40%

Subject Description: The key elements of social change in the Asia-Pacific are the forces of globalisation in relation to states and societies. This subject examines the elements of change internal to states in terms of relationships between ethnicity, gender, urbanisation and social movements. States in the Asia-Pacific have responded through various forms of authoritarianism, but since the late 1990s have undergone crises due to international pressures. In identifying the major elements of those pressures this subject will provide students with a new understanding of the issues conventionally understood in terms of "development". The new middle classes, environmental issues and consumption are both causes and effects of these social changes which will be studied.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Analyze in a disciplined way the rapid changes taking place in the Asia-Pacific region; and 2. Appreciate the linkages between different processes of social change in a way which transcends the more limited approaches of economic determinist development theory.

CAPS902 Issues in Developing Economies 6cp

Spring Wollongong Flexible

Contact Hours: 3hr seminar/lecture per week.

Assessment: Continuous assessment 60% Project 40%

Subject Description: The purpose of this subject is to increase students' awareness of the problems caused by poverty and underdevelopment, to advance their understanding of strategies for overcoming poverty and underdevelopment, and increase their awareness of the role and limitations of the state in promoting development. Topics covered will be: defining & measuring economic development; theories of economic development; growth, poverty and income distribution; population growth and development; employment & unemployment; migration and urbanisation; rural development; education and development; women & development; development & the environment; the role of the state in development.

Subject Objectives: At the end of this course students should be able to: 1. Apply a disciplined framework in the analysis of empirical material presented in other parts of the course and elsewhere; and 2. Deploy enhanced skills in the analysis of statistical and other socio-economic data.

CAPS903 Migration and Multicultural Societies 6cp

Autumn Wollongong Flexible

Contact Hours: 3 hours per week.

Assessment: Continuous assessment 60% Project 40%

Subject Description: This subject is concerned with the ways in which migration and ethnic diversity influence processes of social transformation in the Asia Pacific region. Both internal and international migration will be discussed. In the case of internal migration, the types to be discussed include rural-urban movements, displacement through development projects and government migration programs (such as transmigrasi in Indonesia). For international migration, the types include permanent settler movements, labour migration, skilled migration, family reunion and refugee movements. A range of multicultural societies will be discussed, including both longstanding situations of multi-ethnicity and more recent immigration societies. In all cases, themes include gender issues, community relations, social and economic aspects, culture, identity and citizenship. These themes are examined from various disciplinary perspectives, including anthropology, economics, sociology, demography and geography. Cross-disciplinary approaches will also be introduced, such as migration systems theory and transnational communities theory.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. develop an understanding of the complex linkages between economic development, population mobility and social transformation 2. critically compare and apply theories of migration and multicultural societies and their associated methodologies

3. examine the effects of population mobility and ethnic diversity on populations in both migrant-sending and migrant-receiving areas 4. discuss and critically evaluate the strategies of various social actors (including government, international bodies and non-governmental organisations) in responding to migration and ethnic diversity.

CAPS904 Social Program Evaluation and Planning 6cp

Spring / Autumn

Contact Hours: 3 hours per week.

Assessment: Continuous assessment 60% Project 40%

Subject Description: This course introduces students to both the theory and practice of policy and program evaluation. It is divided into four modules, each suitable for offering as short courses or workshop sequences. The first deals with such theoretical debates as whether (or to what degree) evaluation is a form of experimentation in social science or a political process; the second with various conceptual organising frames for evaluation design; the third with methods of data collection relevant to program and policy evaluation; and the last with theories and methods in impact evaluation. The course will be student-centred, problem oriented and delivered in a multi-media format. All heuristic material will relate to the Asia-Pacific region (including Australia).

Subject Objectives: This course aims to give students enough theoretical insight and practical design and analysis skills to enable them to undertake basis evaluations of social programs with reasonable confidence.

CAPS905 Labour Relations, Regulation and Organisation 6cp

Spring Wollongong Flexible

Contact Hours: 3 hours per week.

Assessment: Continuous assessment 60% Project 40%

Subject Description: This subject focuses on the evolution and regulation of labour relations in the Asia-Pacific region. It examines the relationship between markets, production and consumption in the shaping of labour processes, and deals comparatively with the transitions from pre-capitalist to colonial to post-colonial societies in Indonesia, The Philippines, Vietnam, Thailand and Australia. Attention will be paid to the roles of international bodies and regulations in the shaping of labour organisations.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Describe the relations between labour, management and the state (historical and contemporary at both national and organisational levels) in selected countries of the Asia-Pacific region 2. Critically analyse these relationships 3. Demonstrate how international and national labour regulations are applied within the Asia-Pacific region 4. Evaluate the consequences of labour relations for past and future performance of organisations and national economies in the region.

CAPS906 Human Resources in Developing Countries 6cp

Autumn Wollongong Flexible

Contact Hours: 3 hours per week.

Assessment: Continuous assessment 60% Project 40%

Subject Description: This subject focuses on the main arguments in favour of investing in human resources, and explains why investing in people is important to individuals, their families and society. It introduces ways of measuring returns to investments in education and health and of relating levels of human and physical capital to the determinants of economic development. It reviews policies that are supportive of human resource development, and examines the roles government, the private sector and international agencies. It also examines how globalising forces have influenced the HRD policies of national and international public and private sector organisations and contributed to the internationalisation of labour markets.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. examine the role that human resource development plays in economic development and social transformation 2. demonstrate the links between the process of globalisation and the internationalisation of education and the professions 3. critically evaluate policies for the promotion of education and health development 4. analyse the role that education plays in fertility and gender equity 5. analyse the causes, consequences and cures for child labour 6. develop an understanding of the role of human resource development in organisations.

CAPS907 Managing the Production and Diffusion of Knowledge 6cp

Spring Wollongong Flexible

Contact Hours: 3 hours per week.

Assessment: Continuous assessment 60% Project 40%

Subject Description: This subject introduces students to the rapid changes in the way that organisations and structures are generating scientific knowledge and contributing to technological innovation, and achieving their diffusion and application in industry and the community. Globalisation of knowledge is contrasted with cultural change and community knowledge at the local level. The course focuses on practical management and policy issues related to research and technology, drawing upon case studies from Australia and the Asia-Pacific region.

Subject Objectives: Specialisation subject in Masters of Social Change and Development for Centre for Asia Pacific Social Transformation Studies.

CAPS908 Special Project A 6cp

Spring / Autumn

Contact Hours: Minimum of 1 hour per week.

Pre-requisites: 24 credit points of CAPSTRANS subjects

Assessment: Continuous assessment 60% Project 40%

Subject Description: This subject provides students with an opportunity to engage in detailed research on a particular aspect of social change and development approved by the Co-ordinator of the Postgraduate Program. The project may focus on an issue, an actor (or actors), or a theoretical or methodological question which the student has previously encountered through reading or practical experience. Enrolment requires the Co-ordinator's approval, and may be determined by the availability of suitably qualified staff.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Critically analyse a selected topic of social change and development 2. Demonstrate awareness of different ways of approaching social change and development 3. Apply methodologies developed in other CAPSTRANS subjects to a selected topic.

CAPS909 Special Project B**6cp****Autumn / Spring****Contact Hours:** Minimum 1 hour per week.**Pre-requisites:** 24 Credit points of CAPSTRANS subjects**Assessment:** Continuous assessment 60% Project 40%

Subject Description: This subject provides students with an opportunity to engage in detailed research on a particular aspect of social change and development approved by the Co-ordinator of the Postgraduate Program. The project may focus on an issue, an actor (or actors), or a theoretical or methodological question which the student has previously encountered through reading or practical experience. Enrolment requires the Co-ordinator's approval, and may be determined by the availability of suitably qualified staff.

Subject Objectives: On successful completion of this subject, a student should have: 1. Commitment to independent learning and critical analysis 2. Ability to logically analyse issues 3. An understanding of information literacy 4. A desire to continually seek improved solutions and to initiate, and participate in, organisational, social and cultural change.

CAPS933 Social Science Research Methods 6cp**Autumn Wollongong Flexible****Contact Hours:** 3 hours per week.**Assessment:** Continuous assessment 60% Project 40%

Subject Description: The overall objectives of this course are to provide students with a good grounding in the range of research methods relevant to the wider teaching program of CAPSTRANS, and also to provide an awareness of some of the relevant debates in the area of methodology. Both quantitative and qualitative research methods will be covered in the course, the former being taught largely through the use of the SPSS computer package. The course will be student-centred problem oriented and delivered in a multi-media format. It will be divided into modules suitable for offering in a short-course format and all heuristic material will relate to the Asia-Pacific region (including Australia).

Subject Objectives: On successful completion of this subject, a student should be able to: 1. criticise in an informed manner the research methods and the interpretation of data found in their reading for other courses; 2. design research frameworks appropriate to the research tasks arising from other parts of the course; 3. utilise a statistical computer package; and 3. manipulate basic statistical concepts in both descriptive and inferential modes.

CAPS934 Research Project in Social Change and Development 12cp**Annual Wollongong On Campus****Spring 2003 / Wollongong On Campus****Autumn 2004****Autumn Wollongong Flexible****Contact Hours:** by appointment.

Assessment: Production of 8000 word research report. Students assessed on: quality of literature search and data collection, quality of analysis and data processing, quality of presentation.

Subject Description: The subject will consist of the execution of, and report on, a research project in consultation with, and under the supervision of, a tutor nominated by CAPSTRANS. The students will utilize theoretical and empirical material as well as data-processing and analysis skills taught in other CAPSTRANS subjects.

The subject will develop the students' skills in applied empirical research and deepen their understanding of concepts and procedures taught in other CAPSTRANS courses by utilizing them in the context of this research.

Subject Objectives: On successful completion of this subject, a student should have: 1. Enhanced ability to plan, execute and report upon empirical research 2. Completed research project of relevance to student's professional / social situation 3. Enhanced analytical, data-processing and presentation skills 4. Valuable addition to student's professional portfolio.

CCS 951 Regulating Culture**8cp****Contact Hours:** Not on offer in 2003**Assessment:** essay 40%, case study 60%

Subject Description: This subject will examine the regulation of cultural production as a process of contestation between government cultural policy, economic regulation and community ethical codes. This investigation will be conducted within the context of Cultural Policy Studies, which emphasises the critical study of institutional practice; regulatory practices such as censorship and language control will therefore be considered as a combination of institutional strategies of meaning production.

CCS 966 Special Topic**8cp****Spring / Autumn****Contact Hours:** 3hrs seminar per week.

Assessment: Assignments to be negotiated with Subject Co-ordinator in the first week of session.

Subject Description: Directed reading, research and other investigative activities at an advanced level in a field of study selected by the student in consultation with the co-ordinator of Postgraduate Studies in Communication and Cultural Studies and approved by the Convenor of Program.

CCS 975 Reading Cultural Differences**8cp****Autumn**

Assessment: seminar paper 30%, major essay 50%, oral presentation and participation 20%

Subject Description: This subject introduces students to the study of how cultural differences, race and ethnicity inform debates around post-colonialism, multiculturalism and identity politics. We begin by examining the theoretical shifts and forms of cultural analysis that emerged following the break-up of European colonial empires. We then explore the impact of theoretical, critical and minority cultural practices in terms of the representation of differences in third world, Asian and Australian texts (film, television, newspapers, novels, music etc). Topics to be studied include: popular music; nationalism, language and education, tourism, arts policy and the politics of postcolonial writing.

CCS 977 Media Studies: Industries, Texts, Practices**8cp****Spring**

Subject Description: This subject examines the production and reception of media texts and the key theoretical approaches to the analysis of such texts. It also investigates the professional practices of a range of communication industries (multimedia, film, television, advertising, radio, journalism). Students will be encouraged to develop their practical experience through case studies/projects.

CCS 990 Critical and Cultural Theories 8cp

Autumn

Contact Hours: 2.5 hour seminar.

Assessment: Discussion activities 30%, paper proposal 20%, research paper 50%

Subject Description: This subject provides an introduction to a range of contemporary critical and cultural theories which question fundamental assumptions about culture, knowledge and relations of power. Readings will draw on various thinkers who have tackled questions concerning the nature of power, the role of discourse and the relevance of culture, including Marxists, anthropologists, philosophers, critical theorists and poststructuralist thinkers. Course materials will also include some films to be screened during seminars. The assessment work will offer opportunities for students to build connections between the theoretical positions introduced in the seminar and their own research interests.

CCS 999 Major Thesis 48cp

Annual / Spring 2003 - Autumn 2004

Contact Hours: Annual consultation as req, Spring 2003/Autumn 2004.

Assessment: As appropriate for MA(hons) or PhD degrees

Subject Description: This subject should enable students to undertake the production of an MA(Research) thesis or a Doctoral Dissertation in Communication and Cultural Studies.

ELS 900 English for Postgraduate Studies 6cp

Spring / Autumn

Assessment: 4 essays 60%, 1 exam 20%, tutorial attendance and participation 20%

Subject Description: This subject provides an overview of the kind of English used in the academic context, particularly in postgraduate Studies. It is designed for Non-English Speaking Background students who want an induction into writing and speaking for Postgraduate studies. This subject aims to identify and discuss important issues related to the culture of postgraduate education; to develop academic skills relevant to postgraduate studies and thesis writing. Students should develop a critical and analytical approach to research and learning, an understanding of how the grammatical resources of English are used for different purposes in postgraduate studies; and expertise and confidence in using a range of resources for learning.

Subject Objectives: On successful completion of this subject, a student should be able to demonstrate: 1. a range of research skills using English texts 2. a range of listening, speaking, reading and writing strategies to enhance research and thesis writing 3. note-taking and planning skills appropriate to a range of writing purposes 4. the ability to identify and use key language resources used in English for postgraduate studies 5. the ability to identify and use different text types commonly used in PG studies: exposition, discussion, explanation, account and report. 6. the ability to plan and present a spoken presentation related to individual research topics 7. the ability to plan, draft and present effective essays at postgraduate level.

ELS 901 English for Postgraduate Studies 8cp (Arts)

Spring / Autumn

Assessment: 4 essays 60%, 1 exam 20%, tutorial attendance and participation 20%

Subject Description: This subject provides an overview of the kind of English used in the academic context, particularly in postgraduate Studies. It is designed for Non-English Speaking Background students who want an induction into writing and speaking for Postgraduate studies. This subject aims to identify and discuss important issues related to the culture of postgraduate education; to develop academic skills relevant to postgraduate studies and thesis writing. Students should develop a critical and analytical approach to research and learning, an understanding of how the grammatical resources of English are used for different purposes in postgraduate studies; and expertise and confidence in using a range of resources for learning.

Subject Objectives: On successful completion of this subject, a student should be able to demonstrate: 1. a range of research skills using English texts 2. a range of listening, speaking, reading and writing strategies to enhance research and thesis writing 3. note-taking and planning skills appropriate to a range of writing purposes 4. the ability to identify and use key language resources used in English for postgraduate studies 5. the ability to identify and use different text types commonly used in PG studies: exposition, discussion, explanation, account and report. 6. the ability to plan and present a spoken presentation related to individual research topics 7. the ability to plan, draft and present effective essays at postgraduate level.

ENGL903 Contemporary Literary Issues 8cp

Autumn / Spring

Contact hours: 3 hour seminar per week.

Assessment: To be advised

Subject Description: Designed to enable students to undertake a sustained reading program, often in parallel with an existing subject, in Contemporary Literary Issues, under close supervision. Enrolment, selection of appropriate subject or themes and readings, are subject to the approval of the Convenor of Program.

ENGL906 Modernism and Its Others 8cp

Autumn

Contact hours: 3 hour seminar per week.

Subject Description: Subject focus will change from year to year, alternating primarily between European modernism and post-colonial poetry of the modern age. Check with postgraduate co-ordinator

One focus of Modernism and Its Others is on writing from England, Europe and the Americas produced in the early 20th century - a period marked by radical questioning of the categories that defined and often determined social and self construction. Writers were fascinated with the allure of 'the other' that against which the self and its community of belonging is defined. Writers explored in this subject include T.S. Eliot, Ezra Pound, Amy Lowell, Radclyffe Hall, Virginia Woolf, D.H. Lawrence, E.M. Forster, Franz Kafka, Herman Hesse, Thomas Mann, Jean Rhys and Claude McKay. This subject also looks at the politics of free voice. It will focus on the 20th century English language poetry of the former British colonies with particular reference to the historical implications of linguistic colonisation and the post-colonial poetic imperative to decolonise the mind, to (re)discover and (re)assert a multiplicity of voice.

ENGL913 Literature, Memory and Forgetting 8cp**Not Available in 2003****Assessment:** Main essay; seminar presentation; journal; and class participation

Subject Description: This thematic subject examines the role of memory in the creation of literature, and the role of literature in the creation of both personal and cultural memory. Beginning with a consideration of the notion of writing as a form of memory, it goes on to examine such issues as memory and history, memory and identity, memory and national mythologies, amnesia in fiction, and futuristic memories. This subject will examine a historically and culturally diverse range of texts, although its emphasis will be on more recent writings. The subject also introduces students to a range of theoretical and historical perspectives on memory and writing, such as those offered by poststructuralist, feminist, and postcolonial theorists. Visual materials will also be used, including images from medieval manuscripts, artworks, and video footage.

ENGL916 US Literature: Modernity and Postmodernity 8 cp**Spring****Contact hours:** 3 hour seminar per week.

Subject Description: The subject examines a variety of twentieth-century US fictional, autobiographical and journalistic prose works in relation to generic, cultural and political developments. A particular focus of the course is critical examination of the concepts of modernity and postmodernity, and modernism and postmodernism. Other topics of discussion include: the construction and articulation of racial, classed, sexual and gendered identities; contexts of the production and consumption of individual texts; tensions and connections between realism and experimentalism as modes of writing practice; the relations of literary genres to other media such as film and TV.

ENGL918 Special Topic 8cp**Spring / Autumn****Contact hours:** 3 hour seminar per week.

Subject Description: Directed reading, research and other investigative activities at an advanced level in a field of study selected by the student in consultation with the English Studies Postgraduate Co-ordinator and approval prior to enrolling from the Convenor of Program.

ENGL921 Turning Points: An Introduction 8 cp
to Post-colonial Literary History**Autumn****Contact hours:** 3 hour seminar per week.

Subject Description: The course will survey novels that are the first in their field or which have become key points of reference in discussions of post-colonial writing.

The subject asks such questions as: How does newness occur; spontaneous generation; socio-historical determinism; killing off the father; creative misprision; evolution; intertextual ars combinatoria; retrospection from some pre-conceived end? What are the possibilities for post-colonial texts 'intervening' in literary practice and/or social thought to imaginatively effect cultural liberation? What are we doing when we write literary history, design courses? What use do we make of reading texts? Can we institutionalise 'reading (and writing) against the grain'?

ENGL923 Indigenous Literatures in 8cp
Canada, New Zealand and Australia**Autumn****Contact hours:** 3 hour seminar per week.

Subject Description: This subject will study indigenous writing and theory in the context of world movements, though it will focus on Canada, New Zealand and Australia. The subject will centre on identity politics, on the appropriation of voice debate, and on the question of what constitutes the 'literary'. The course will interrogate a range of post-colonial practices, as articulated by indigenous theorists and guest speakers.

ENGL930 History and Romance in Early 8 cp
Modern Britain**Not Available in 2003**

Subject Description: The subject focuses on texts which deal with history and romance in late Tudor and Stuart England, looking particularly at the way such texts deliberately lend themselves to varying readings, how they become part of the ideology of a culture, legitimating or questioning the powerful, and how both well-known and less familiar men and women writers (and readers) dealt with issues presented in the trappings of history and romance.

ENGL933 Early Women Writers 8 cp**Not Available in 2003**

Subject Description: This subject looks at the work of women writers from the mid-fifteenth century to the early eighteenth century. The texts represent different types of writing: fiction, poetry, diaries, letters and autobiographical writings. The subject will examine the establishment of the female writing self within the appropriate cultural structure and historical context, and the engagement of that self with the social and literary conventions of the time.

ENGL944 The Dominant Sound: Australian 8 cp
Women Novelists Between the Wars**Spring****Contact hours:** 3 hour seminar per week.

Subject Description: The course offers a detailed investigation of novels, written by Australian women and published between the wars. It was in this period of time that female authors dominated the Australian Literary scene. The subject considers a number of important issues and historical events - including race, class, the depression, nationalism, the spectre of world war and gender. It also explores the generic and authorial approaches employed by these writers.

ENGL999 Major Thesis 48cp**Annual / Spring 2003 - Autumn 2004**

Pre-requisites: Entry to the Master of Arts (Honours) or PhD in English Studies.

Subject Description: Students enrolled in either the Honours Master of Arts by Research (English Studies) or the PhD in English Studies enrol in ENGL999 (Major Thesis). In the case of the MA (Honours) by Research the thesis must be at least 50,000 words long, and in the case of the PhD, the minimum length is 80,000 words. The thesis topic must be chosen in consultation with a supervisor. For details of time limits and thesis requirements, please refer to the Postgraduate Course Structures for English Studies.

FREN975 Major Thesis 48cp**Spring 2003 - Autumn 2004 / Annual**

Subject Description: This subject should enable students to undertake the production of an MA (Research) thesis or a Doctoral Dissertation in French studies.

HIST904 Themes in History 8cp**Contact Hours:** Not on offer in 2003**Assessment:** 2 essays, 1 research paper

Subject Description: Designed to enable students to undertake a sustained reading program in selected themes in History under close supervision. Enrolment, selection of appropriate themes and readings are subject to the approval of the Convenor of Program.

HIST942 Themes in Historiography 8cp**Contact Hours:** Not on offer in 2003

Assessment: 2 essays 60% (30% each); 1 research paper 40%

Subject Description: This subject provides students with an opportunity to engage in detailed research on a particular aspect of historiography approved by the Convenor of Program. The project may focus on an issue, an actor (or actors), or a theoretical or methodological question which the student has previously encountered through reading or practical experience. Enrolment requires the Convenor's approval, and may be determined by the availability of suitably qualified staff.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Critically analyse a selected topic of historiography. 2. Demonstrate awareness of different ways of approaching historical analysis. 3. Apply methodologies developed in other History subjects to a selected topic.

HIST951 Philosophy of History 8cp**Contact Hours:** Not on offer in 2003**Assessment:** 9,000 words in essays/tutorials

Subject Description: Examines certain fundamental problems associated with historical enquiry, including the core question, 'How do we come to know the past?' Some related questions explored are: Is the historical discipline a science? Are there historical laws? What role is played by chance in determining the outcome of events? What is meant by explanation? Is it possible for historians to be objective? Can a knowledge of the past provide the historian with the ability to predict?

HIST973 Major Thesis 48cp**Annual / Spring 2003 - Autumn 2004**

Pre-requisites: Bachelor's degree with Honours in History with a grade of 2(i) or better.

Subject Description: In addition to completing a major thesis, postgraduate students in the History and Politics Program are required to attend a postgraduate seminar series. During the period of their enrolment, full-time postgraduate students should attend not less than 70% of the seminars offered, and part-time postgraduate students about 35%. All candidates for Master of Arts Honours shall give at least two, and candidates for doctoral degrees shall give three, work-in-progress seminars over the course of their candidature.

HIST975 MA Minor Thesis 24cp**Annual / Spring 2003 - Autumn 2004**

Pre-requisites: Bachelor's degree with a History major or equivalent.

Co-requisites: 24 credit points MA coursework subjects.

Subject Description: Students undertaking the degree must submit a dissertation of 20,000 words on a research topic to be determined in consultation with the supervisor. Students are required to attend Postgraduate Seminars and to give at least one work-in-progress seminar over the course of their candidature.

INTR905 Case Studies in Diplomacy 8cp**Spring****Contact Hours:** 3 hours per week.**Assessment:** Essays and Examination

Subject Description: This subject deals with important examples of modern international diplomatic behaviour. It includes an overview of diplomatic practice including various theoretical and historiographical concerns.

INTR910 Politics of International Relations 8cp**Autumn****Assessment:** Essays and examination.

Subject Description: Approaches to and methods of study, theories and concepts of international relations: idealist, legal, institutional, realist, Marxist, Neo-Marxist, globalist, feminist, systems, regimes, etc. The role of international law and diplomacy. Foreign policy making and implementation. Political order, multi-dimensional security, international order and the balance of power, both international and regional. The United Nations and other international organisations, including peace-keeping. Issues, blocs, and the politics of international economic, environmental and functional co-operation, including foreign aid.

INTR911 Politics in the South Pacific 8cp**Contact Hours:** Not on offer in 2003**Assessment:** Essays and examination.

Subject Description: Politics in and among South Pacific island countries. Regional and sub-regional co-operation. Relations with external actors, including governments, international organisations non-governmental organisations and multi-national corporations. Vulnerability and multi-dimensional security. The politics of race, ethnic and class relations. Class work and assignments provide occasions for detailed examination of particular case studies.

INTR912 Pacific Rim and Pacific Basin 8cp**Spring****Contact Hours:** 3 hours per week.**Assessment:** Essays and examination.

Subject Description: The subject analyses aspects of relations between advanced, industrialising and less developed countries on the Pacific Rim and in the Pacific Basin. The subject addresses significant issues in defence, aid, trade, investment and other kinds of international inter-actions.

Particular attention is paid to nuclear and environmental issues; security and vulnerability; colonialism and self-determination as well as Asia-Pacific and other forms of international economic co-operation.

INTR931 Public Policy 8cp

Autumn

Contact Hours: 3 hours per week.

Assessment: Email discussions 20%; Policy submission 30%; Major essay 50%

Subject Description: This subject examines a broad range of policy areas in the (post) modern world. Students are expected to select issues for study from a range of policies including: media, industrial restructuring, political economy, education, health care, transport, defence, policing, urban and regional renewal, housing and the arts. Students are encouraged to study the impact of Globalisation and global trends on the creation and execution of public policy in advanced industrial countries. The subject offers an approach to policy studies, which focuses on quality of life issues and outcomes. An emphasis on recent developments in Australian public policy is maintained within a comparative perspective.

INTR932 Selected Topics in Management 8cp

Autumn / Spring

Contact Hours: 3 hours per week.

Assessment: Essays and examination.

Subject Description: A special topic selected from any area of management. The selection is made by the Head of Program concerned, taking into account the expertise of academic staff, including visiting staff, and the interests of students

INTR940 Case Study in International Politics A 8cp

Autumn

Contact Hours: Min 1 hour per week.

Assessment: Research paper.

Subject Description: This subject provides students with an opportunity to engage in detailed research on a particular aspect of international relations approved by the Co-ordinator of the Postgraduate Program in International Relations. The project may focus on an issue, an actor (or actors), or a theoretical or methodological question which the student has previously encountered through reading or practical experience. Enrolment requires the Co-ordinator's approval, and may be determined by the availability of suitably qualified staff.

INTR941 Case Study in International Politics B 8cp

Spring

Contact Hours: Min 1 hour per week.

Assessment: Research paper.

Subject Description: This subject provides students with an opportunity to engage in detailed research on a particular aspect of international relations approved by the Co-ordinator of the Postgraduate Program in International Relations. The project may focus on an issue, an actor (or actors), or a theoretical or methodological question which the student has previously encountered through reading or practical experience. Enrolment requires the Co-ordinator's approval, and may be determined by the availability of suitably qualified staff.

INTR957 Postwar Economic and Social Development in the Asia-Pacific 8cp

Autumn

Contact Hours: 3 hours per week.

Assessment: Essays and examination.

Subject Description: This subject traces economic and social development in the Asia Pacific since World War II. It covers major issues of economic development faced by countries of the region from the end of the colonial period to the present day and includes discussion of the colonial economic legacy, the formation of new social classes and their role in independence struggles, indicators of modernisation such as industrialisation, education, urbanisation, women and work, etc. Environmental issues are also discussed.

INTR958 Select Topic in Postwar Economic and Social Development in the Asia-Pacific 8cp

Spring

Contact Hours: 3 hours per week.

Assessment: Essays and examination.

Subject Description: The subject examines the politics of identity in the Asia-Pacific using a number of case studies. Issues explored include the relationship between nationalism, modernity and politics, the ways history and culture are viewed by present governments, the role of minority groups and relationships between military rule and democracy.

INTR960 Research Project in International Relations 16cp

Spring / Autumn

Contact Hours: 1 hour per week.

Assessment: Research project

Subject Description: A detailed analysis of a significant actor, issue or period in international relations, drawing on research relevant primary and other sources, bodies of theory and/or comparative materials. Enrolment requires the prior approval of the Co-ordinator of the Postgraduate Programme in International Relations and may depend on the availability of appropriate sources and suitably qualified staff.

INTR961 Research Project in International Relations 16cp

Spring 2003 - Autumn 2004 / Annual

Contact Hours: 1 hour per week.

Assessment: Research project.

Subject Description: A detailed analysis of a significant actor, issue or period in international relations, drawing on research relevant primary and other sources, bodies of theory and/or comparative materials. Enrolment requires the prior approval of the Co-ordinator of the Postgraduate Programme in International Relations and may depend on the availability of appropriate sources and suitably qualified staff.

INTR970 Major Thesis in International Relations 48cp

Annual / Spring 2003 - Autumn 2004

Contact Hours: Min 1 hour/2 weeks,

Pre-requisites: (Bachelor's degree with Honours in International Relations with a grade of 2(i) or better) or (MA INTR with a minimum credit average)

Assessment: Thesis only, following satisfactory completion of such pre-requisites as may be required.

Subject Description: The subject consists of research, on an approved topic in the area of international relations, broadly defined, including preparation of a detailed proposal outlining objectives, methodology and sources. Both the subject of the thesis and the methodology employed will generally draw on multi- or inter-disciplinary perspectives. Students are required to participate in a regular Postgraduate Seminar series.

ITAL975 Major Thesis 48cp

Spring 2003/Autumn 2004 - Annual

Subject Description: This subject should enable students to undertake the production of an MA (Research) thesis or a Doctorial Dissertation in Italian studies.

JAPA975 Major Thesis 48cp

Spring 2003/Autumn 2004 - Annual

Subject Description: This subject should enable students to undertake the production of an MA (Research) thesis or a Doctorial Dissertation in Japanese studies.

LANG903 Major Thesis 48cp

Spring 2003/Autumn 2004 - Annual

Subject Description: This subject should enable students to undertake the production of an MA (Research) thesis or a Doctorial Dissertation in Language studies.

PHIL923 Minor Thesis 24cp

Spring 2003 - Autumn 2004 / Annual

Assessment: Minor thesis of 15,000 words

Subject Description: The subject involves the writing of a dissertation of 15,000 words on a research topic to be determined in consultation with the supervisor.

PHIL935 Applied Ethics 8cp

Autumn

Contact Hours: 3 hrs lectures/discussion per week.

Pre-requisites: Bachelor degree (pass or honours) in any field, or equivalent.

Exclusions: PHIL206

Assessment: One or two essays totalling approximately 6,000 words and seminar presentation/participation

Subject Description: A systematic study of a range of problems of applied ethics. Among the topics for discussion will be a selection of the following: Discrimination and Affirmative Action; Abortion; Sexual Issues; Warfare; Suicide and Death.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate, orally and in writing, an advanced 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.

PHIL955 Theoretical Ethics 8cp

Spring

Contact Hours: 3 hours per week.

Pre-requisites: Bachelor or equivalent

Exclusions: PHIL251 or PHIL301

Assessment: One or two essays totalling approximately 6,000 words and seminar presentation/participation

Subject Description: A systematic study of some central issues in moral philosophy and moral psychology. Among the topics for discussion will be a selection of the following: subjectivist and objectivist theories of morality; facts and values; moral realism; consequentialism; virtues and vices; evaluative thinking and motivation; morality and self-interest.

PHIL965 Bioethics 8cp

Spring

Contact Hours: 3hr lect/disc per week

Pre-requisites: Bachelor degree or equivalent

Assessment: One or two essays totalling approximately 6,000 words and seminar presentation/participation

Subject Description: Systematic study of a range of bioethical problems. Topics will include: euthanasia; physician-assisted suicide; reproduction technology; anonymous donor programs; genetic counselling, screening and testing; surrogacy; embryo and fetal research; health resources allocation; organ transplantation; experimentation involving human subjects; research involving animals; 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.

PHIL976 Ethical Issues in Research 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: Bachelor degree (pass or honours) in any field, or equivalent

Assessment: Research project, 2 seminars

Subject Description: Examines areas of ethical concern in different kinds of research involving human subjects or participants and justifications for such research. Topics discussed include: consent; confidentiality; fraud; disadvantaged participants; use of research findings; institutional ethics committees; codes of research practice and responsibilities in research.

PHIL986 Applied Ethics Topic 8cp

Autumn / Spring

Contact Hours: Autumn 3 hrs per week, Spring 3 hours per week.

Pre-requisites: Bachelor degree or equivalent.

Assessment: One or two essays totalling approximately 6,000 words and seminar presentation/participation

Subject Description: Offers students enrolled in the MA (Applied Ethics) the opportunity to investigate applied ethics issues at an advanced level.

Students wishing to enrol must discuss their proposal with the Convenor of Program. Normally this is a reading program. Content and assessment is determined by the supervisor and student.

PHIL990 Contemporary Political Philosophy 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: Bachelor degree or equivalent

Assessment: Essays equivalent to 5,500 words; seminar

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 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.

PHIL995 Environmental Ethics 8cp

Autumn

Contact Hours: 3 hr lecture/discussion per week.

Pre-requisites: Bachelor degree or equivalent. Not to count with PHIL256

Assessment: One or two essays totalling approximately 5,500 words and seminar presentation/participation

Subject Description: A systematic study of problems in environmental ethics. Topics include the place of humankind in nature; the status of non-human animals and their use in research and as food; our moral obligations to the 3rd world and to future generations, 'deep' versus 'shallow' theories of environmental ethics.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate, orally and in writing, an advanced 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 will 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.

PHIL999 Major Thesis 48cp

Annual / Spring 2003 - Autumn 2004

Assessment: Thesis

Subject Description: Students enrolled in either the Honours Master of Arts by Research (Philosophy) or the PhD in Philosophy enrol in PHIL999 Major Thesis.

In case of the MA (Honours) by Research the thesis must be at least 50,000 words long, and in the case of the PhD, the minimum length is 80,000 words. The thesis topic must be chosen in consultation with the Program Head and Postgraduate Co-ordinator.

POL 902 Advanced Topics in Politics 8cp

Contact Hours: Not on offer in 2003

Assessment: 5,000 words in essays and tutorial papers

Subject Description: This subject examines the role the mass media play in the process of globalisation. Topics covered include the increasing concentration of ownership and control, the Americanisation of culture and the corporatising of communication. Film, television, radio, book publishing, theme parks and the Internet will all be examined as elements of the globalising dynamic. Cultural and political resistance to globalisation will also be investigated.

POL 914 Political Theory: New Departures 8cp for a New Millennium

Contact Hours: Not on offer in 2003

Assessment: 5,000 words in essays and tutorial papers

Subject Description: The subject builds on recent and classical approaches to the study of Political Theory to address key questions concerning politics, the modern state, culture and the main traditions of political thought. Western Liberal Democratic, Republican, Conservative, Libertarian, Political Economic, Democratic Socialist, Feminist, Environmentalist, Anarchist, Modernist, Post-Modernist and Marxist writers can be selected for advanced study by students. Students may select to follow recent trends in the history of political thought or more interpretive concept-based forms of analyses to further their understanding of specific thinkers or problems. Concepts students are invited to study can include: the state, civil society, difference, human nature, authority, agency, culture, freedom, equality, justice, obligation and rights.

POL 931 Comparative Politics in a New World Order 8cp

Contact Hours: Not on offer in 2003

Assessment: 5,000 words in essays and tutorial papers

Subject Description: This subject encourages students to use contemporary comparative frameworks to analyse politics in liberal democratic countries, including the USA, Western Europe and Australia, post communist countries and the transitional regimes in Latin America or East Asia. Students will select a specific country or group of countries for examination. Key themes include: sovereignty and Globalisation, the role of the state, building and maintaining civil society, the relationship of state and civil society, political parties, the rule of law, media, human rights, classes, genders, ethnicities, concepts of power and authority and respective approaches to political economy.

POL 941 Politics of Developing and Lesser Developed Countries 8cp

Contact Hours: Not on offer in 2003

Assessment: 5,000 words in essays, seminar and tutorial papers

Subject Description: The subject examines a broad range of political economic and cultural problems specific to developing and lesser-developed countries.

Such problems include large disparities in income and wealth, corruption, political instability, exploitation of workers and peasants, environmental degradation, resource depletion, pressures on food and an increasing urban rural gap. First world initiatives such as population policies, green revolution and free trade policies are studied. Regions covered reflect a wide range of student choice: Latin America, Central and East Asia including China, South East Asia and the South Pacific. Analysis of particular countries or regions pays particular attention to recent developments in theories of Globalisation, development and under development.

POL 951 Major Thesis 48cp

Annual / Spring 2003 - Autumn 2004

Pre-requisites: Bachelor's degree with an Honours major in Politics at a minimum level of 2(i) or equivalent.

Assessment: Thesis

Subject Description: In addition to completing a major thesis, in close consultation with their appointed supervisor(s), postgraduate students are required to attend postgraduate seminars and to give work-in-progress seminars at least once a year. Students may also be required to complete such coursework as the Professor of Politics, acting in consultation with the supervisor(s), shall determine.

SOC 904 Policy and Program Evaluation 8cp

Spring

Contact Hours: 2hrs seminar per week

Assessment: Continuous assessment 60%; project 40%

Subject Description: The course covers the full range of techniques and applications involved in the evaluation of social programs. It starts with a brief history of evaluation research and then goes on to cover diagnostic procedures, means of fitting evaluation designs to particular problems, program monitoring, data collection and processing, cost-benefit analysis and strategies for impact analysis such as randomised designs and quasi-experimental assessments.

SOC 905 Social Policy Research Project 8cp

Autumn / Spring

Restrictions: Approval from Convenor of Program

Subject Description: The research report shall be based on empirical research into a social policy issue which demonstrates significant problems for policy analysis and response. The issue will relate to the substantive area of study chosen as a focus for the student's course work program.

SOC 910 Developing a Social Science Thesis 8cp

Autumn / Spring

Contact Hours: Autumn 2hrs seminar per week, Spring 2hr seminar per week

Assessment: Small projects; Research proposal; Seminar presentations

Subject Description: This subject aims to prepare Masters and Honours students for the successful completion of their thesis. It will provide appropriate skills in argumentation, information technology and bibliography formation.

At its completion, students should be equipped with a well-researched and well thought through research proposal and timetable, and bibliography and should be practised in the oral and written presentation of scholarly ideas and argument, and in criticising them as well. The subject is organised around a series of projects which will enhance abilities to plan time use, to work on several projects at one time and to meet consecutive deadlines. Collegial team work is also an important aspect of the work of the subject.

SOC 911 Postgraduate Sociology Seminar 6cp

Autumn / Spring

Contact Hours: 2hr seminar per week.

Assessment: Small projects; Research proposal; Seminar presentations

Subject Description: This subject aims to prepare Masters and Honours students for the successful completion of their thesis. It should provide appropriate skills in argumentation, information technology and bibliography formation. At its completion, students should be equipped with a well-researched and well thought through research proposal and timetable, and bibliography and should be practised in the oral and written presentation of scholarly ideas and argument, and in criticising them as well. The subject is organised around a series of projects which will enhance abilities to plan time use, to work on several projects at one time and to meet consecutive deadlines. Collegial team work is also an important aspect of the work of the subject.

SOC 918 Modernity, Development and Social Change 8cp

Spring

Contact Hours: 1 hour lecture, 2 hour tutorial

Assessment: Analysis of development issue and policy 30%; Seminar presentation & paper 30% (oral presentation 20%+ Critical summary 10%); class test 15%; 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 921 Advanced Studies in Sociology 8cp**Autumn / Spring****Assessment:** One essay & tutorial assignments

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 SOC900 subject. This will be a reading subject offered under the direct supervision of a member of staff. For information of availability of topics offered, students should consult the Convenor of Program.

SOC 933 Advanced Research Techniques 8cp**Autumn****Contact Hours:** 2 hr Lecture/seminar per week**Assessment:** Review Paper 10%; Short-answer quiz 20%; Annotated bibliography 30%; Research project report 40%

Subject Description: Will explore social science techniques of enquiry with a focus of appropriate methods, both qualitative and quantitative, for different types of enquiry. Students will review some of the traditional social science tools of analysis as well as some alternative methods such as unobtrusive research. In addition students should become familiar with a statistical computer package for presenting and analysing quantitative data.

SOC 940 Contemporary Social Policy, Theory and Practice 8cp**Spring****Contact Hours:** 2 hrs lecture/seminar per week**Assessment:** E-mail group discussion; Book review; social policy research project; seminar paper.

Subject Description: This subject explores the relationship between social policy and sociological theory. The subject will review major debates in contemporary sociology in these areas and move towards developing a paradigm for the evaluation of policy in Australia. The discussion of social policy in Australia will focus on understanding the 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.

SOC 942 Advanced Race and Ethnic Studies 8cp**Autumn****Contact Hours:** 1 hour lecture, 2 hour seminar per week**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 949 Advanced Social Regulation: Policies and Issues 8cp**Autumn****Contact Hours:** 1 hour lecture, 2 hour seminar per week**Assessment:** Essay 50%; Concept Paper 30%; 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 more 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 950 Advanced Studies of the Individual in Society 8cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject examines some of the most fundamental aspects of the human life cycle. One broad aim of the subject is the gaining of some personally meaningful understanding of the extent to which an individual is 'socially constructed'. The subject starts with the historical, cultural and institutional context of the individual in 'modern' times. On that basis the nature of sex, love, death and change will be considered in the context of identity formation and social and cultural reproduction. These themes will involve some treatment of 'post-structural' and 'post-modern' theoretical issues.

SOC 959 Advanced Sociology of Gender Relations 8cp**Contact Hours:** Not on offer in 2003**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 socially constructed nature of gender identity; 2. evaluate different sociological perspectives that have been utilised to explain gender relations; 3. apply sociological analyses to several current issues in gender relations; 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 970 Social Movement and Community Activism 8cp

Spring

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

Assessment: Major essay: Seminar presentation; Project paper; Class participation

Subject Description: This subject will examine, historically and sociologically, local and global power relations with particular reference to traditional and recent channels of resistance and change. Firstly some of the traditional channels, such as trade unions, will be analysed as agents of change. Secondly, new social movements including the women's movement, urban movements, environmental and minority liberation movements will be examined. Thirdly, students will also investigate recently emerged web-based protest groups.

SOC 990 A Minor Thesis 24cp

Annual / Spring

Subject Description: Students will be required to engage in an extensive program of study - reading, research and fieldwork - that will explore in depth and detail one issue (or a set of issues) that arises from or is related to the concepts and material dealt within coursework subjects. This program will result in the submission of an essay of 15,000 words, OR a fieldwork report of 15,000 words (or equivalent taking into account diagrams, tables and other graphics) OR some other equivalent body of work, as arranged with the course administrative panel. Whilst the dissertation can be nominated by the student, they will require the approval of the Board six weeks into the course and this has to be validated by the ninth week, when a formal supervisor will be allocated.

SOC 999 Major Thesis 48cp

Annual

Subject Description: This subject should enable students to undertake the production of an MA (Research) thesis or a Doctoral Dissertation.

STS 903 Minor Thesis 24cp

Spring / Autumn

Contact Hours: 3 hrs per week

Pre-requisites: Approval of Convenor of Program

Assessment: Thesis

Subject Description: A thesis embodying the results of an original investigation under the supervision of a staff member. The topic and programme of research must be approved by the Convenor of Program.

STS 916 Theories and Methods of Science and Technology Studies 8cp

Autumn / Spring

Contact Hours: By arrangement

Pre-requisites: Approval of Convenor of Program

Assessment: Essays, presentations and class participation

Subject Description: Students will study topics appropriate to their field of special interest, subject to the approval of the Convenor of Program.

STS 917 Advanced Topics in Science and Technology Studies 8cp

Autumn / Spring

Contact Hours: 3 hours per week.

Pre-requisites: Approval of Convenor of Program

Assessment: Essays, presentations and class participation

Subject Description: Students will study topics appropriate to their field of special interest, subject to the approval of the Convenor of Program.

STS 920 The Dynamics of Science and Technology 8cp

Autumn / Spring

Contact Hours: By arrangement.

Pre-requisites: Approval of Convenor of Program

Assessment: Essays, presentations and class participation

Subject Description: This subject introduces current research and theory in the social dynamics of science and technology. It examines alternative explanations of scientific and technological change and how they inform the promotion and regulation of science and technology. It takes a variety of case studies and considers the implications of this work for those involved in managing, or developing policies for, science and technology.

STS 924 Major Thesis 48cp

Annual / Spring 2003 - Autumn 2004

Contact Hours: 2 hrs per week

Pre-requisites: Approval of Convenor of Program

Assessment: Thesis

Subject Description: A thesis embodying the results of a significant and original investigation under the supervision of a staff member. The programme of research must be approved by the Convenor of Program.

STS 929 Studies in Resource and Environmental Policy 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: Approval of Convenor of Program or Subject Coordinator

Assessment: Essays, presentations and class participation

Subject Description: This subject examines the social, economic and political processes through which environmental policy is developed. Case studies will be used to understand environmental impacts of technological development. Theoretical perspectives may include the politics and sociology of scientific controversy, global, national and regional developments in environmental regulation, theories of state regulation and intervention, and the choice and negotiation of different environmental strategies.

STS 946 Management of Technological 6cp
Change

Contact Hours: Not on offer in 2003

Pre-requisites: Approval of Convenor of Program

Assessment: Essays, presentations and class participation

Subject Description: This subject examines concepts and techniques available for managing technology in private and public sector organisations in the context of the changing role of technology in the national and global economy, and the implications of these changes for national, industry and company strategies. The subject covers issues of technology strategy formulation and management, marketing of technology, models and mechanisms of government intervention, new manufacturing technologies, work organisation and skill formation, and management information systems.

STS 947 Case Studies in Science and 6cp
Technology Policy

Spring / Autumn

Contact Hours: By arrangement.

Pre-requisites: Approval of Convenor of Program

Assessment: Essays, presentations and class participation

Subject Description: This subject provides practical insights and experience in analysis, policy formulation, implementation and monitoring of scientific or technological changes and their impacts. A case study is chosen according to student interests and expertise, and staff availability. Issues might include: a hazard control policy; a set of national research priorities; a set of performance indicators for research or education funding; or negotiating the purchase and implementation of a major computing system.

STS 952 Research Report 8cp

Autumn / Spring

Contact Hours: 3 hours per week.

Pre-requisites: Approval of Convenor of Program

Assessment: Report

Subject Description: A report providing a survey and analysis of arguments and information, undertaken under the supervision of a staff member and on a topic approved by the Convenor of Program.

Faculty of Commerce

Courses Offered

The Faculty of Commerce offers the following postgraduate qualifications in the School of Accounting and Finance; School of Economics and Information Systems; School of Management, Marketing and Employment Relations; Graduate School of Business and Professional Development and CAPSTRANS (refer to Faculty of Arts chapter):

Accounting

Doctor of Philosophy
Master of Accountancy – Research
Master of Accountancy
Master of Professional Accounting
Graduate Diploma in Commerce (Accountancy)

Finance

Master of Finance –Research
Master of Finance
Master of Applied Finance (Banking)
Graduate Certificate in Banking and Finance

Economics

Doctor of Philosophy
Master of Economics – Research
Master of Economics – Advanced
Master of Economics
Graduate Diploma in Commerce (Economics)
Graduate Certificate in Applied Economics

Information Systems

Doctor of Philosophy
Master of Information Systems – Research
Master of Information Systems
Master of Electronic Commerce
Graduate Diploma in Information Systems
Graduate Certificate in Information Systems

Management

Doctor of Philosophy
Master of Management – Research
Master of Commerce (Leadership and Change)
Master of Commerce (Management)
Master of Strategic Human Resource Management

Marketing

Doctor of Philosophy
Master of Marketing – Research
Master of Strategic Marketing
Graduate Diploma of Commerce (Marketing)
Graduate Certificate in Marketing

Industrial Relations

Doctor of Philosophy
Master of Industrial Relations – Research
Master of Industrial Relations
Graduate Diploma in Commerce (Industrial Relations)
Graduate Certificate in Industrial Relations

The Graduate School of Business and Professional Development

Doctor of Philosophy
Doctor of Business Administration
Master of Business Administration
Master of Business Innovation
Master of International Business
Master of Science (Logistics)
Graduate Diploma in Business Administration
Graduate Certificate in Business
Graduate Certificate in Business Administration
Graduate Certificate in Business Innovation
Graduate Certificate in International Business
Graduate Certificate in Logistics

Current Areas of Study and Research

Please see under relevant School in this chapter.

School of Accounting and Finance

Accounting

Courses Offered

- Doctor of Philosophy
- Master of Accountancy – Research
- Master of Accountancy
- Master of Professional Accounting
- Graduate Diploma in Commerce

Current Research Areas

The following areas of research are available to candidates undertaking the Masters by Research degrees and the Doctor of Philosophy degree:

- Accounting and information systems
- Accounting and EDI
- Auditing
- Controllershship
- Critical accounting theory
- External financial reporting
- Government and not for profit accounting
- History of accounting thought
- International accounting
- Management accounting
- Small business management

Doctor of Philosophy

Candidates with good Masters or Honours degrees, Class 2 Division II or the equivalent can apply to undertake a Doctor of Philosophy. Full time study of a minimum of three years is normally required or the equivalent in part-time study. Candidates would be expected to work under supervision on problems related to the School's research areas and may be required to attend coursework classes in order to develop skills necessary for their doctoral research. Candidates for this degree enrol in ACCY996.

Master of Accountancy - Research

The Master of Accountancy - Research is a 72 credit point degree, comprising 24 credit points of coursework and a 48 credit point thesis. This degree is primarily a research degree for those who have completed a bachelors honours at a standard of Class II, Division 2 or higher in accountancy, economics, finance or management.

The degree is 72 credit points and may be studied full-time over one and one half years or may be studied part-time.

Candidates who have completed a coursework masters degree at an appropriate standard may be admitted to the program.

Advanced Standing of up to 24 credit points may be awarded for the coursework component of this degree to students who have completed research related subjects at an appropriate standard as assessed by the Head of School.

A candidate may not undertake subjects for this degree that are similar in content to subjects included in their honours or masters course.

Core Subjects

ACCY903	Theoretical Foundations of Research	6
ACCY907	Empirical Research Methods	6

Elective Subjects

12 credit points from the 900 level subjects offered by the School of Accounting and Finance, provided those electives are appropriate to the course of research the student intends to pursue. Subject selection to be approved by the Head of School.

Other coursework subjects may be substituted with the permission of the Head of School

Thesis

ACCY996	Thesis	48
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Master of Accountancy

The purpose of this pass degree is to provide graduate students, who have completed the accountancy major for the Bachelor of Commerce degree, with the opportunity of further in-depth study of advanced topics in accounting. The degree of 48 credit points may be studied full-time over one year, or may be studied part-time. Candidates may qualify for the Master of Accountancy degree by completing the course of study as set out below.

Program of Study Candidates who do not have a major in Accountancy and wish to complete an accounting program may be permitted to study for the degree provided that they include the undergraduate accountancy subjects amounting to 24 credit points, recommended by the Head of the School; thus the total credit points required for these candidates is 72.

Members of not less than five years standing of CPA Australia or the Institute of Chartered Accountants in Australia with appropriate experience are permitted to enrol for the degree even though they do not hold an undergraduate degree; such candidates will be required to pass subjects aggregating 72 credit points.

ACCY903	Theoretical Foundations of Research	6
ACCY904	Financial Accounting	6
ACCY905	International Accounting	6
ACCY913	Management Accounting	6
ACCY914	Management Planning and Control Systems	6
ACCY936	Management and Information Systems	6
ACCY968	Insolvencies	6
ACCY974	Accounting Regulation	6

With permission of the Head of School of Accounting and Finance, it is possible for students to substitute for the subjects listed above with ACCY985 Special Topic in Accounting A or ACCY986 Special Topic in Accounting B and up to three subjects offered in the Master of Finance degree.

Master of Professional Accounting

The Master of Professional Accounting degree offers graduates in other disciplines the opportunity to meet the admission requirements of the accounting professional bodies, providing them with the necessary skills to undertake the work of an accountant.

To gain entry to the program, candidates are required to have a degree from a university recognised by the National Office of Overseas Skills Recognition (NOOSR).

The course is designed to be taken over three semesters on a full-time basis or six semesters on a part-time basis. The program consists of twelve subjects totalling 72 credit points.

Program of Study

ACCY901	Accounting for Managers	6
ACCY903	Theoretical Foundations of Research	6
ACCY908	Applied Financial Accounting	6
ACCY918	Applied Management Accounting	6
FIN921	Managerial Finance	6
ACCY936	Management and Information Systems	6
ACCY961	Professional Practice - Accounting	6
ACCY962	Professional Practice – Auditing, Risk, Assurance and IS	6
ACCY963	Professional Practice - Taxation	6
ECON910	Economics for Accounting Professionals	6
ECON940	Statistics for Decision Making	6
LAW960	Legal Studies for Professionals	6

Graduate Diploma in Commerce (Finance or Accountancy)

In accordance with the general regulations governing graduate diplomas, candidates for the Graduate Diploma in Commerce must have been admitted to the degree of Bachelor in the University or other approved institution. In special circumstances a professional person holding a tertiary qualification (for example, an experienced accountant with the Commerce (Accounting Procedures Certificate) may be permitted to enrol. The main requirement is that subjects aggregating not less than 30 credit points of the 48 necessary for the Graduate Diploma are to be obtained from 200-level and/or 300-level subjects offered by the School of Accounting and Finance. The Graduate Diploma requires one year full-time study or part-time equivalent.

The Graduate Diploma serves a wide variety of interests. On the one hand Science or Engineering graduates may study first the second year accounting or take, say, Management Accounting to third year, and on the other hand, Accountancy students may specialise further for professional purposes.

Specific requirements for the Graduate Diploma are:

1. not less than 30 credit points (of the minimum required of 48) are to be obtained from 200-level and/or 300-level subjects offered by the School of Accounting and Finance;
2. with the approval of the Head of the School of Accounting and Finance subjects may be selected from 900-level subjects offered by the School of Accounting and Finance. (Any subjects selected under this clause may be included in the 30 credit points required under 1.); and
3. the whole course for the diploma is to be approved by the Head of the School of Accounting and Finance as providing a coherent course of study.

Finance

Courses Offered

Master of Finance –Research
Master of Finance
Master of Applied Finance (Banking)
Graduate Certificate in Banking and Finance

Current Research Areas

The following areas of research are available to candidates undertaking the Masters by Research degrees and the Doctor of Philosophy degree:

Banking
Behavioural Finance
Corporate Finance
Financial Markets
Financial Planning / Superannuation
International Finance
Mathematical Finance
Portfolio Analysis
Risk Management
Small Business Finance
Venture Capital

Master of Finance - Research

The Master of Finance - Research is a 72 credit point degree, comprising 24 credit points of coursework and a 48 credit point thesis.

This degree is primarily a research degree for those who have completed a bachelors honours at a standard of Class II, Division 2 or higher in accountancy, economics, finance or management. Students who do not have an undergraduate honours degree at this standard or equivalent may be permitted to study for the program.

The degree is 72 credit points and may be studied full-time over one and one half years or may be studied part-time.

Candidates who have completed a coursework masters degree at an appropriate standard may be admitted to the program.

Advanced Standing of up to 24 credit points may be awarded for the coursework component of this degree to students who have completed research related subjects at an appropriate standard as assessed by the Head of School. A candidate may not undertake subjects for this degree that are similar in content to subjects included in their honours or masters course.

Core Subjects

ACCY903	Theoretical Foundations of Research	6
ACCY907	Empirical Research Methods	6

Elective Subjects

12 credit points from the 900 level subjects offered by the School of Accounting and Finance, provided those electives are appropriate to the course of research the student intends to pursue. Subject selection to be approved by the Head of School.

Other coursework subjects may be substituted with the permission of the Head of School.

Thesis

FIN996	Thesis	48
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Master of Finance

The purpose of this pass degree is to provide graduate students, who have completed the finance major for the Bachelor of Commerce degree, with the opportunity of further in-depth study of advanced topics in finance. The degree of 48 credit points may be studied full-time over one year, or may be studied part-time. Candidates may qualify for the Master of Finance degree by completing the finance course of study.

Program of Study

Members of not less than five years standing of CPA Australia or the Institute of Chartered Accountants in Australia with appropriate experience are permitted to enrol for the degree even though they do not hold an undergraduate degree; such candidates will be required to pass subjects aggregating 72 credit points.

ACCY901	Accounting for Managers	6
FIN921	Managerial Finance*	6
FIN922	Investment Analysis	6
FIN923	Investment Management	6
FIN924	Corporate Financial Information Analysis	6
FIN925	Banking Theory and Practice	6
FIN926	Studies in Business Finance	6
FIN927	Small Business Finance	6
FIN928	Multinational Financial Management	6
FIN929	Risk, Development and venture capital	6

With the permission of the Head of the School of Accounting and Finance it is possible for students to substitute for the subjects listed above up to three of the subjects offered in the Master of Accountancy degree.

Note: ACCY901 and FIN921 must be taken in the first semester of commencement in degree.

*FIN921 is available only to students who have no previous finance studies. Students who are not permitted to enrol in FIN921 can select FIN987 Special Topic in Finance or ECON 984 Financial Economics. Students who have completed a finance major in their undergraduate degree are recommended not to include FIN922 Investment Analysis in their program.

Master of Applied Finance (Banking)

This degree has been developed to meet a demand in the banking and finance sector for graduates as well as the need for a professional development program. The program is accredited by the Australian Institute of Banking and Finance (AIBF) and is therefore attractive to professionals working in the banking and finance sectors. The program is also designed to meet the needs of international students.

Candidates who have completed the requirements for a Bachelor of Commerce degree in accountancy or finance will be permitted to enrol in the degree. The degree of 48 credit points may be studied full-time over one year, or may be studied part-time.

Program of Study

Candidates may qualify for the Master of Applied Finance (Banking) by completing the following.

FIN922	Investment Analysis	6
FIN923	Investment Management	6
FIN925	Banking Theory and Practice	6
FIN926	Studies in Business Finance	6
FIN928	Multinational Financial Management	6
FIN955	International Banking	6
FIN956	Banking, Lending and Securities	6
LAW970	Banking and Financial Institutions Law	6

Graduate Certificate in Banking and Finance

This course is designed to meet the needs in the banking and finance sector for professional and career development. The program has been accredited by the Australian Institute of Banking and Finance (AIBF). The 24 credit point course is offered part time. It may also be offered as a block by flexible delivery, please check with the School of Accounting and Finance.

For admission to the Graduate Certificate candidates are required to have completed a degree from a recognised tertiary institution. In special circumstances, applicants, who do not have an undergraduate qualification but can clearly demonstrate several years of senior management experience in the banking industry, can apply to the Head of School for consideration.

Program of Study

FIN925	Banking Theory and Practice	6
FIN955	International Banking	6

FIN956	Banking, Lending and Securities	6
Plus either		
FIN922	Investment Analysis	6
or		
LAW970	Banking and Financial Institutions Law	6

School of Economics and Information Systems

Economics

Courses Offered

Doctor of Philosophy
 Master of Economics – Research
 Master of Economics – Advanced
 Master of Economics
 Graduate Diploma in Commerce (Economics)
 Graduate Certificate in Applied Economics

Current Research Areas

Main research concentrations are:
 Labour and Human Resources
 International Trade and Investment
 Economic Growth and Development
 Small and Medium enterprises
 Industrial and Business Economics
 Regional Development

Current and recent projects include:

Child labour
 Determinants of economic growth
 Economic development policy with special reference to social sectors
 Economics of education
 Electronic commerce
 Exchange rate movements and their effect on prices, trade and employment
 Exchange rate policies in Asian countries
 Geographical mobility of labour force participants
 Global environmental issues
 Health economics
 Measuring the intensity of poverty
 Regional development policies
 Regulation of Aboriginal labour
 Savings, investment, productivity and economic growth
 Technological change, the learning curve and profitability
 Vietnam's reforms and economic growth
 SME's in Australia and Asia

Doctor of Philosophy

For the degree of Doctor of Philosophy, candidates enrol in the subject ECON993 Thesis. One semester of coursework is normally required.

Master of Economics – Research

The students must normally undertake a program of 72 credit points consisting of 24 credit points of coursework plus 48 credit points research thesis over 18 months full-time. This degree may be studied part-time.

The Master of Economics - Research degree provides graduate students who have completed a Bachelor of Commerce or Arts degree (or equivalent) with the opportunity to study a specialised area in Economics. It prepares students for a professional career in economics and provides direct entry into the PhD program. Entry requires a Bachelor of Commerce or Arts Honours degree or equivalent at a standard of Class II, Division 2 or higher in Economics or a related discipline. Students who hold an honours Class II, Division I or higher in Economics may be given up to 24 credit points advanced standing for the coursework component of the program.

The course rules governing the Masters by Research degree will apply.

Program of Study

ECON996	Advanced Macroeconomic Theory	6
ECON997	Advanced Microeconomic Theory	6
Plus		
ECON921	Econometric Models	6
or		
ECON939	Quantitative Economic Analysis	6
Plus six credit points at 900 level as approved by the Course Coordinator		
Plus		
ECON993	Thesis	48

Master of Economics – Advanced

The student normally undertakes a program of 72 credit points consisting of 48 credit points of coursework plus a 24 credit points research project over 18 months. This degree may be studied part-time.

The Master of Economics (Advanced) provides graduates, who have a Bachelor of Commerce or Bachelor of Arts or equivalent with a major in Economics, with an opportunity to undertake a more advanced, in-depth study of Economics subjects than the Master of Economics.

Students who do not have the normal entry requirements may be accepted but will be required to complete satisfactorily a preliminary program of an additional 24 credit points of coursework. [Total of 96 credit points]

Students must, subject to advanced standing or exceptions, complete 72 credit points comprising:

ECON996	Advanced Macroeconomic Theory	6
ECON997	Advanced Microeconomic Theory	6
ECON992	Research Policy	24

Plus 36 credit points of 900 level subjects as approved by the Course Coordinator.

Master of Economics

The degree of 48 credit points may be studied full-time over one year, or may be studied part-time.

The purpose of this pass degree is to provide graduate students who have completed the Economics major for the Bachelor of Commerce degree (or equivalent) with the opportunity for further in-depth study of advanced topics in Economics as a preparation for a professional career in economics.

The Course Rules governing the Masters degree will apply.

Entry requires a Bachelor of Commerce degree with a major in Economics or an equivalent degree. Candidates who do not have a major in Economics but who have the equivalent of Economics to second-year level in their undergraduate degree may be permitted to study for the degree provided they have first passed a program of 24 credit points of 300-level Economics subjects approved by the Head of School; thus the total credit points required for these candidates is 72.

In special cases, a 96 credit point course may be approved. Students may include ECON991: Project, within their course.

Program Of Study

For the Master of Commerce degree, normally students must complete 48 credit points at 900-level according to the following program of study:

Compulsory subjects

ECON936	Graduate Macroeconomics	6
ECON937	Graduate Microeconomics	6
ECON939	Quantitative Economic Analysis	6

Plus 30 credit points from one of the following areas of study:

International Business Economics

Eighteen credit points from the following

ECON902	Advanced International Monetary Economics	6
ECON913	Industrial Organisation	6
ECON982	International Economic Relations	6
ECON984	Financial Economics	6

Plus 12 credit points of 900-level subjects, six of which can be selected from outside the Discipline of Economics, with the approval of the Course Co-ordinator.

Trade Growth and Development

Eighteen credit points from the following

ECON904	Trade, Growth and Development	6
ECON908	Advanced Topics in the Economics of Development	6
ECON982	International Economic Relations	6
ECON983	Trade and Industry in East Asia	6

Plus 12 credit points of 900-level subjects, six of which can be selected from outside the Discipline of Economics, with the approval of the Course Co-ordinator.

Money, Banking and Finance

ECON901	Monetary Economics	6
ECON902	Advanced International Monetary Economics	6
ECON984	Financial Economics	6

Plus 12 credit points of 900-level subjects, six of which can be selected from outside the Discipline of Economics, with the Approval of the Course Co-ordinator.

Human Resource Economics

Eighteen credit points from the following

ECON912	Labour Economics	6
ECON916	Economics of Education, Health and Welfare	6
ECON918	Economics of Health Care	6
ECON983	Trade and Industry in East Asia	6

Plus 12 credit points of 900-level subjects, six of which can be selected from outside the Discipline of Economics, with the approval of the Course Co-ordinator.

Graduate Diploma in Commerce

The purpose of this diploma is to provide graduate students who have not completed an Economics major in their undergraduate degree with the opportunity for advanced study in Economics.

The Course Rules governing Graduate Diplomas will apply. Accordingly, candidates for the Graduate Diploma in Commerce will normally hold a Bachelor degree from an approved institution. In special circumstances a professional person holding a tertiary qualification other than a Bachelor degree may be permitted to enrol.

The Graduate Diploma in Commerce requires two sessions of full-time study or the part-time equivalent.

For the Graduate Diploma, students must complete 48 credit points including

Program Of Study

ECON205	Macroeconomic Theory and Policy	8
ECON215	Microeconomic Theory and Policy	8

Plus 32 credit points of approved 200, 300 and 900-level subjects, one of which can be selected from subjects outside the Discipline of Economics.

Graduate Certificate in Applied Economics

The purpose of this certificate is to provide graduate students an opportunity for advanced study in Applied Economics. The award is suitable for students who have not completed an Economics major in their undergraduate degree or for those who have completed an undergraduate major in Economics and who would like to pursue a short course with advanced study in a specialist area.

Program Of Study

For the Graduate Certificate in Applied Economics, students must complete 24 credit points of approved 200 and 300 level subjects.

Information Systems

Courses Offered

- Doctor of Philosophy
- Master of Information Systems – Research
- Master of Information Systems
- Master of Electronic Commerce
- Graduate Diploma in Information Systems
- Graduate Certificate in Information Systems

Current Research Areas

The following areas of research are available to candidates undertaking research degrees or projects as part of their programs in Information Systems.

Systems in Context

This area addresses contextual, interpretive and reflexive approaches to the description and development of work practices, workplaces, organisations and their associated information systems. Current research activities focus on:

- a) Systemic Semiotics
- b) the Application of Activity Theory and Other Techniques to the Study of Information Systems in Organisations
- c) Analysing, Developing and Integrating Internet Commerce Technologies in Organisations
- d) Knowledge Management
- e) Human Computer Interaction

Decision Systems

This area addresses theoretical and practical questions relating to modelling, prototyping, implementing and testing complex information systems applications to support specific classes of decisions and business processes. Technologies employed may include object-relational, object-oriented and OLAP databases, hypermedia, internet programming, data mining, groupware, knowledge-based systems, constraint based reasoning, and agent oriented systems. Current research activities focus on:

- a) Decision Support for Scheduling Decisions
- b) Knowledge-Based Software Engineering
- c) Database Querying of the World-Wide Web
- d) Data Mining and Data Sharing

Doctor of Philosophy

Candidates for the degree enrol in BUSS999 Doctoral Thesis, (48 credit points) and will be required to complete satisfactorily BUSS929 Information Systems Research Methods (6 credit points) if they have not already completed a subject equivalent to BUSS929 prior to commencing the course.

Master of Information Systems - Research

The Master of Information Systems - Research is a 72 credit point degree consisting of 24 credit points of coursework subjects and a 48 credit point thesis. The program may be studied full time over 1.5 years or part time over three years.

This degree is primarily a research degree for those who have completed an undergraduate degree in Information Systems, or equivalent, with distinction, for example a BCom(Honours) in Business Information Systems at a standard of Class II Division 2 or higher.

Program of Study

BUSS929	Information Systems Research Methods	6
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Plus

18 credit points of 900-level subjects offered in Information Systems to be approved by the course co-ordinator.

Plus

BUSS987	Thesis	48
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Advanced Standing of up to 24 credit points may be awarded for the coursework component of this degree to students who have completed research related subjects at an appropriate standard as assessed by the course co-ordinator.

Master of Information Systems

The Master of Information Systems provides graduates with the opportunity to study advanced topics in information systems and to undertake a research project in one of the areas of research interest in the discipline. The program aims to both deepen and broaden the knowledge and skills of students in systems development methodology, systems management and a selected area of Information Systems research.

Graduates from the program would be qualified to take on a senior analyst or project management role, to plan and initiate innovative use of Information Technology and Information Systems within their organisations, or to pursue further research via doctoral studies. The one year full-time course may also be studied part time. Applicants must have:

- i) a degree in computing and or Information Systems; or

- ii) a degree with a major study in computing and/or Information Systems; or
- iii) a graduate diploma in computing and/or Information Systems.

Program of Study

BUSS945	Information Systems Project	12
BUSS950	Systems Development Methodologies	6
BUSS951	Critical Issues in Information Systems	6
BUSS952	Strategic Information Systems Management	6
BUSS953	Management of Systems Development	6

Plus 12 credit points of 900-level BUSS subjects selected from the following:

BUSS906	Strategic Information in Organisations	6
BUSS907	Fundamentals of E-Business	6
BUSS909	Office Automation and Intranets	6
BUSS910	Qualitative Analysis of Systems	6
BUSS911	Intelligent Systems	6
BUSS924	Systems Modelling and Simulation	6
BUSS926	Decision Support Systems	6
BUSS927	Human Computer Interaction	6
BUSS929	Information Systems Research Methods*	6

*Enrolment in BUSS929 requires the approval of the Head of School.

Master of Electronic Commerce

Introduction

This degree is designed to prepare managers for the Electronic Commerce world. The recent surge in the use of the Internet to conduct all forms of business has left many graduates without the required skills to maximise their effectiveness in the new business economy. Employees skilled in electronic commerce concepts and practices will be well placed to operate more effectively and take advantage of the opportunities of doing business in the e-world.

Entry Requirements

Applicants are required to have a three-year Bachelor degree in computer science, information technology, computer engineering, commerce, management or a related discipline from a recognised Australian university or institution of equivalent standing.

Students who do not have this qualification may be admitted to a 96 or 72 credit point program, in which undergraduate and/or postgraduate subjects are completed to ensure students have the prerequisite understanding to undertake the program.

Program of Study

Students must complete two compulsory core subjects, and choose at least two subjects from Group A (Applied E-Commerce), at least two subjects from Group B (E-Commerce Management) plus two elective subjects from Group C.

Program of Study

Core Subjects

ITCS938	eBusiness Technologies	6
BUSS907	Fundamentals of E-Business	6

Group A Subjects: Applied E Commerce

Students must choose at least 12 credit points from the following:

BUSS909	Office Automation and Intranets	6
IACS906	Business On-Line	6
IACS924	Corporate Network Design & Implementation	6
ITCS932	Web Design	6
ITCS936	Detailed Design of Integrated Solutions for eBusiness	6
ITCS937	Security, Risk Management and Control in Electronic Commerce	6

Group B Subjects: E Commerce Management

Students must choose at least 12 credit points from the following:

ACCY936	Management and Information Systems	6
BUSS952	Strategic Information Systems Management	6
BUSS953	Management of Information Systems Development	6
ECON915	Electronic Commerce and the Economics of Information	6
MARK901	Marketing on the Internet #	6
TBS908	Supply Chain Management	6

Plus 12 credit points of electives to be chosen from subjects in Group A, B or C or any other subject approved by the Course Co-ordinator/s

Group C Subjects: Electives

ACCY901	Accounting for Managers	6
or		
TBS901	Accounting for Managers	6
and		
BUSS950	Systems Development Methodologies	6
BUSS951	Critical Issues in Information Systems	6
CSCI946	Multimedia Studies	6
IACS917	Information Management	6
ITCS923	The Wired World	6
ITCS933	Software Engineering Requirements & Specifications	6
ITCS934	Software Process Management	6
MARK922	Marketing Management	6
or		
TBS904	Marketing Management	6
and		
TBS903	Managing People in Organisations	6
TBS905	Economic Analysis of Business	6
TBS906	Information Systems for Managers	6

#Pre-requisites apply

Any advanced standing granted for this course will be deemed to be Electives not Core, students must still complete 12 credit points from Group A & 12 credit points from Group B.

Graduate Diploma in Information Systems

This course aims to provide graduates from a recognised tertiary course, a program of studies which will enable them to function as an information systems professional within an organisation or business concern. The course curriculum provides a balanced approach to the technical knowledge and skills as well as the human emphases of the information systems field.

The course is specifically designed for those who hold tertiary qualifications in areas not related to the discipline of information systems and who wish to gain essential initial education in information systems.

Specific admission requirements for the Diploma:

- i) a university degree or equivalent;
- ii) completion of at least the equivalent of one introductory computer or programming subject at tertiary level.

Applicants not meeting this requirement may do the Summer Session subject BUSS111 at this University prior to commencement.

In appropriate circumstances a person may be admitted if he/she submits evidence of such academic and professional attainments deemed to be equivalent to the requirements above.

Course Duration

The course is available by part-time study over four sessions (two years), in which case each student takes two subjects in any session, or by full-time study over two sessions.

Program of Study

The course is a coherent program of study which involves the successful completion of eight subjects (48 credit points) as listed below.

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

Pre-requisites will not apply to Graduate Diploma and Graduate Certificate students. Students may substitute other 200 or 300 level BUSS subjects with approval from the Head of School.

Graduate Certificate in Information Systems

This one year part-time course is designed for graduates from a recognised tertiary institution seeking an introductory course in the field of information systems.

Specific entry requirements for the Certificate are:

- i) a University degree or equivalent;
- ii) completion of at least the equivalent of one introductory computer programming subject at tertiary level. Applicants not meeting this requirement may do the Summer Session subject BUSS111 Business Programming I at this University prior to commencement.

The course is specifically designed for, and restricted to those who hold qualifications in areas not related to the discipline of information systems. Students performing at a satisfactory level in the Graduate Certificate may be permitted to continue with the Graduate Diploma in Information Systems with up to 24 credit points of specified credit.

Program of Study

BUSS211	Requirements Determination and Systems Analysis	6
BUSS212	Database Management Systems	6
BUSS311	Advanced Database Management Systems	6
BUSS316	Information Systems Development Methodologies	6

School of Management, Marketing and Employment Relations

Management

Courses Offered

The following postgraduate courses are available:

Doctor of Philosophy
 Master of Management – Research
 Master of Commerce (Leadership and Change)
 Master of Commerce (Management)
 Master of Strategic Human Resource Management

Current Research Areas

The following areas of research are available to candidates undertaking research degrees.

Public private partnerships
 Regulatory reform and business
 Local government reform
 Owner-manager learning
 Project based learning

- Organisational change and leadership
- Technological change and innovation
- Company performance
- Competitive advantage
- Internationalisation of companies
- OHS management
- Human resource management policies and practices of multinational companies
- Strategic management in SE Asian firms

Doctor of Philosophy

Candidates for this degree enrol in MGMT991 Major Thesis (48 credit points). Candidates should refer to the University's general PhD Rules.

Master of Management - Research

Entry Requirements

The Master of Management - Research is a 72 credit point degree, comprising 24 credit points of coursework and a 48 credit point thesis. Candidates will undertake.

1. COMM980 Business Research Methods or another research-oriented subject approved by the Head of School (6 credit points);
2. Three 6 credit point 900 level Management subjects as approved by the Head of School (18 credit points) and
3. MGMT991 Major Thesis (48 credit points)

A candidate may not include for this degree subjects similar in content to subjects included in any previous degree course.

This degree is primarily a research degree for those who have completed a Bachelors Honours degree in the Faculty of Commerce at a standard of Class II, Division 2 or higher, or an equivalent degree. Candidates who have completed a Masters degree may be admitted to the program. Honours and Masters candidates may be awarded advanced standing of up to 24 credit points for the coursework component of this degree on the basis of previous research related subjects.

Candidates who hold a Bachelor of Commerce degree at credit level or above may be admitted to the program.

+Master of Commerce (Leadership and Change)

Entry Requirements

A first degree in business, commerce, the social sciences, social administration or similar. Applicants without a relevant degree will be required to undertake additional subjects as agreed by the Course Coordinator.

Applicants without a degree but with five years or more of managerial work experience in an approved management context will be considered and will undertake additional subjects as agreed by the Course Coordinator at an appropriate location. Applicants will be required to take such additional subjects at either the Sydney or Wollongong locations as approved by the Course Coordinator.

Program of Study

Students must undertake all of the subjects in list A and any three of the subjects in list B or other Management subjects offered, after consultation with the Course Coordinator.

List A

MGMT911	Leadership and Team Dynamics	6
MGMT915	Leading Organisational Change: Framing the Management of Change	6
MGMT933	Organisational Design: Tools and Techniques	6
MGMT946	Personal Learning: The Reflective Manager	6
MGMT983	Leading Organisations: Politics, Power and Change Agency	6

List B

MGMT909	Export Management	6
MGMT910	Strategic Technology Management	6
MGMT913	Global and Comparative Human Resource Management	6
MGMT941	Small Business Management I	6
MGMT978	Cross Cultural Management	6
MGMT984	Global Business Regulation	6

Students may substitute one of the above subjects with another of equal credit weighting, following the approval of the Course Coordinator.

Subject availability may vary each session, location and year, depending upon demand.

Master of Commerce (Management)

The purpose of this pass degree is to provide graduate students, who have completed a Bachelor of Commerce, Bachelor of Business degree or equivalent, normally at a credit average level or above, from a recognised University or equivalent tertiary institution, with the opportunity of further in-depth study of advanced topics in management. The degree of 48 credit points may be studied full-time over one year, or may be studied part-time.

A wider range of programs can be made available, depending upon student interest and demand. In particular, work related research programs can be designed.

Candidates who do not have a Bachelor of Commerce or Bachelor of Business but have successfully completed a degree, will be required to study an extra 24 credit points of 900-level management subjects.

Students can choose eight subjects from any of the following, subject to demand.

MGMT908	Human Resource Development	6
MGMT909	Export Management	6
MGMT911	Leadership and Team Dynamics	6
MGMT913	Global and Comparative Human Resource Management	6
MGMT915	Leading Organisational Change: Framing the Management of Change	6
MGMT916	Management and Employment Relations	6
MGMT920	Organisational Analysis	6
MGMT933	Organisational Design Tools and Techniques	6
MGMT940	Innovation and Entrepreneurship	6
MGMT941	Small Business Management I	6
MGMT946	Personal Learning: The Reflective Manager	6
MGMT949	Performance Management	6
MGMT953	Human Resource Management	6
MGMT963	Management of Occupational Health and Safety	6
MGMT969	Job Analysis, Recruitment and Selection	6
MGMT978	Cross Cultural Management	6
MGMT983	Leading Organisations: Politics, Power and Change Agency	6
MGMT984	Global Business Regulation	6
MGMT985	Management Consulting	6

Master of Strategic Human Resource Management

This course work degree has been designed to provide students with in depth study of advanced topics in Strategic Human Resource Management. Human Resource managers are now focused on the achievement of effective learning organisations in a world of rapid local and global change. The emphasis on these aspects, together with more traditional areas of concern will equip the successful graduate with advanced Human Resource Management skills for the organisation in the 21st Century.

Entry Requirement

Candidates are required to have a first degree in a relevant area. Applicants without a relevant degree will be required to undertake additional subjects as agreed by the Course Coordinator. Applicants without a degree but with a minimum of five years experience in a Human Resource Management context will be considered and will undertake additional subjects as agreed by the Course Coordinator.

Program of Study

Choose eight subjects from any of the following, after consultation with the Course Coordinator:

MGMT908	Human Resource Development	6
MGMT911	Leadership and Team Dynamics	6
MGMT913	Global and Comparative Human Resource Management	6
MGMT915	Leading Organisational Change: Framing the Management of Change	6
MGMT916	Management and Employment Relations	6
MGMT920	Organisational Analysis	6
MGMT930	Strategic Human Resource Management	6
MGMT946	Personal Learning: The Reflective Manager	6
MGMT949	Performance Management	6
MGMT963	Management of Occupational Health and Safety	6
MGMT969	Job Analysis, Recruitment and Selection	6
MGMT978	Cross Cultural Management	6
MGMT983	Leading Organisations: Politics, Power and Change Agency	6

Students may substitute one of the above subjects with another of equal credit weighting, following the approval of the Course Coordinator.

Marketing

Courses Offered

Doctor of Philosophy
Master of Marketing – Research
Master of Strategic Marketing
Graduate Diploma of Commerce (Marketing)
Graduate Certificate in Marketing

Current Research Areas

The following areas of research are available to candidates undertaking research degrees:

Advertising
Consumer Behaviour
Customer Satisfaction
International Marketing
Internet Marketing
Marketing Communication
Marketing Research
New Products Marketing
Professional Services Marketing
Relationship Marketing
Strategic Planning and Marketing
Sales Management
Services Marketing
Supply Chain Management

Doctor of Philosophy

Candidates with demonstrated research potential, exhibited usually by a Bachelor Honours, Masters by Research degree or other Masters degree that includes a research project, can apply to take a Doctor of Philosophy in the School. Full-time study of three years, or the part-time equivalent, is normally required. Candidates will be expected to work under supervision on research projects related to their thesis area and may be required to complete coursework classes in order to acquire theory and develop methodological skills necessary for their doctoral research. Candidates for this degree enrol in the subject MARK991: Major Thesis.

Master of Marketing - Research

The Master of Marketing - Research is a 72 credit point degree, comprising 24 credit points of coursework and a 48 credit point thesis. Candidates will be expected to undertake:

- MARK977 Research for Marketing Decisions or another research-oriented subject approved by the School,
- Three 6cp 900 level marketing subjects as approved by the Head of School.
- MARK991 Major Thesis (48 credit points)

A candidate may not include for this degree subjects similar in content to subjects covered in a previous degree course.

Candidates who have completed the requirements for the award of Bachelor of Commerce (Honours) in the Faculty of Commerce at a standard Class II, Division 2 or higher, or an equivalent degree, with appropriate research training, may be given advanced standing up to 24 cp for the coursework component of this degree.

This degree is primarily a research degree for those who have completed a Bachelors Honours degree in the Faculty of Commerce at a standard of Class II, Division 2 or higher, or an equivalent degree. Candidates who have completed a Masters degree may be admitted to the program. Masters candidates may be awarded advanced standing of up to 24 cp for the coursework component of the degree on the basis of previous research related subjects.

Candidates who hold a Bachelor of Commerce degree at a credit level or above may be admitted to the program.

Master of Strategic Marketing

The purpose of this degree is to provide graduate students, who have completed a Bachelor of Commerce, BBus degree or equivalent, normally at a credit average level or above, with the opportunity of further in-depth study of advanced topics in Marketing.

The degree of 48 credit points may be studied full-time over one year, or may be studied part-time.

Candidates who do not have a Bachelor of Commerce or BBus but have successfully completed Marketing/Commerce subjects to second year level in their undergraduate degree, which must normally have been completed at a level of credit average or higher, may be permitted to study for the degree provided they first pass a program of 24 points of 200 or 300 or 900-level "Commerce" subjects approved by the Head of School. Thus the total credit points required for these candidates is 72.

Candidates who have successfully completed the Master of International Business may apply to enrol in the Master of Strategic Marketing. MIB candidates who have successfully completed TBS982 and two (2) marketing 900 level subjects as electives in their MIB, will receive advanced standing of 18 credit points towards a 48 credit point Master of Strategic Marketing.

Program Of Study

Subjects to be taken from the following list after discussion and approval from the Head of School:

MARK901	Marketing on the Internet	6
MARK917	Business to Business Marketing	6
MARK922	Marketing Management	6
MARK935	Marketing Strategy	6
MARK936	Consumer Behaviour	6
MARK937	Relationship Marketing	6
MARK938	Managing Services Marketing	6
MARK939	Contemporary Issues in International Marketing	6
MARK940	Advertising and Promotions Strategy	6
MARK956	New Product Marketing	6
MARK957	International Marketing Strategy	6
MARK959	Sales Management	6
MARK970	Contemporary Issues in Marketing	6
MARK977	Research for Marketing Decisions	6
MARK997	Retail Marketing Management	6

Graduate Diploma of Commerce (Marketing)

Entrants to this degree should hold a three year Bachelor's degree or equivalent from a recognised University or tertiary institution. Applicants holding other acceptable academic or professional qualifications (such as TAFE qualifications) with relevant work experience of at least three years may be admitted. Applicants without a qualification, but with substantial (a minimum of five years) relevant work experience may also be admitted.

On successful completion of this Graduate Diploma, students will be eligible to apply for the Master of Strategic Marketing degree or the Master of Business Administration (MBA) degree.

Graduate Diploma candidates who progress to the MSM will receive advanced standing of up to four (4) 900 level marketing subjects completed in the Graduate Diploma, and be required to successfully complete a further four (4), marketing subjects at 900 level, according to MSM program of study. Graduate Diploma candidates who enrol in a MSM program may not enrol in subjects they have already completed in the Graduate Diploma course for the Masters degree.

Program of Study

Subjects totalling 48 credit points to be taken from the following list after discussion and approval from the Head of School:-

MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK343	International Marketing	6
MARK397	Retail Marketing Management	6
MARK901	Marketing on the Internet	6
MARK917	Business to Business Marketing	6
MARK922	Marketing Management	6
MARK935	Marketing Strategy	6
MARK936	Consumer Behaviour	6
MARK937	Relationship Marketing	6
MARK938	Managing Services Marketing	6
MARK939	Contemporary Issues in International Marketing	6
MARK940	Advertising and Promotions Strategy	6
MARK956	New Product Marketing	6
MARK959	Sales Management	6
MARK970	Contemporary Issues in Marketing	6
MARK997	Retail Marketing Management	6

MARK922 must be taken in the first session; pre-requisites for the undergraduate-level subjects will then be waived.

Note: Some subjects have pre-requisites. Check subject descriptions for details.

Graduate Certificate in Marketing

Entrants to this degree should hold a three year Bachelor's degree or equivalent from a recognised University or tertiary institution. Applicants holding other acceptable academic or professional qualifications (such as TAFE qualifications) with relevant work experience of at least three years may be admitted. Applicants without a qualification, but with substantial (a minimum of five years) relevant work experience may also be admitted. On successful completion of this Graduate Certificate, students will be eligible to apply for the Graduate Diploma program, Master of International Business (MIB) or the Master of Business Administration (MBA) degree.

Program of Study

The Graduate Certificate in Marketing will consist of 4 subjects to be taken from the following list after discussion and approval from the Head of School:-

MARK922	Marketing Management	6
and also including at least one additional 900-level subject.		
MARK217	Consumer Behaviour	6
MARK239	Information for Marketing Decisions	6
MARK240	Marketing and Consumer Behaviour in East and South-East Asia	6
MARK319	Applied Marketing Research	6
MARK333	Advertising and Promotions Strategy	6
MARK343	International Marketing	6
MARK397	Retail Marketing Management	6
MARK901	Marketing on the Internet	6
MARK917	Business to Business Marketing	6
MARK922	Marketing Management	6
MARK935	Marketing Strategy	6
MARK936	Consumer Behaviour	6
MARK937	Relationship Marketing	6
MARK938	Managing Services Marketing	6
MARK939	Contemporary Issues in International Marketing	6
MARK940	Advertising and Promotions Strategy	6
MARK956	New Product Marketing	6
MARK959	Sales Management	6
MARK970	Contemporary Issues in Marketing	6
MARK997	Retail Marketing Management	6

MARK922 must be taken in the first session; pre-requisites for the undergraduate-level subjects will then be waived. Note: Some subjects have pre-requisites. Check subject descriptions for details.

Industrial Relations

Courses Offered

Doctor of Philosophy
Master of Industrial Relations – Research
Master of Industrial Relations
Graduate Diploma in Commerce (Industrial Relations)
Graduate Certificate in Industrial Relations

Current Research Areas

Current and recent projects in industrial relations include:
Aboriginal labour
Employee rights and human rights
Children's work and child labour
Gender and work
Employee participation, innovation and economic growth
Conceptions of human resource development
Regional employment patterns
Integration of market economies and the rights of labour
International migration and labour regulation
Commerce/Labour industrial relations history
Transmission of ideas

The employment relationship
History of ideas in commerce and labour
Business history and ideas

Doctor of Philosophy

For the degree of Doctor of Philosophy, candidates enrol in the subject MGMT991 Major Thesis.

Master of Industrial Relations - Research

Students must normally undertake a program of 72 credit points consisting of 24 credit points of coursework plus 48 credit points research thesis, over 18 months full-time or may be studied part-time.

The Master of Industrial Relations - Research degree provides graduate students who have completed a Bachelor of Commerce or Arts degree (or equivalent) with the opportunity to study a specialised area of Industrial Relations. It prepares students for a professional career as an Industrial Relations expert and provides direct entry into the PhD program. Entry requires a Bachelor of Commerce or Arts degree (or equivalent) at a standard of Class II, Division 2, or higher, in a relevant discipline. Students who hold an Honours Class II, Division I or higher in Economics may be given up to 24 credit points advanced standing for the coursework component of the program.

The course rules governing the Masters by Research degree will apply.

Program of Study

Three of:

MGMT976	Advanced Topics in Industrial Relations A	8
MGMT950	Gender and Work	8
MGMT952	Work and Enterprise Industrial Relations	8
MGMT958	Industrial Relations and Management	8

Plus

MGMT991	Thesis	48
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Master of Industrial Relations

The purpose of this pass degree is to provide graduate students who have completed the Industrial Relations major for the Bachelor of Commerce or the Bachelor of Arts degrees or equivalent with the opportunity for further in-depth study of advanced topics in Industrial Relations in preparation for a career in industrial relations. The Course Rules governing the Masters Degree will apply.

Program Of Study

24 credit points from the following

MGMT950	Gender and Work	8
MGMT952	Workplace and Enterprise Industrial Relations	8
MGMT954	Political Economy of Australian Wage Determination	8

MGMT958	Industrial Relations and Management of Thought	8
Plus 24 credit points from the following		
ECON912	Labour Economics	6
ECON913	Industrial Organisations	6
MGMT948	Employers and Industrial Relations	8
MGMT955	Comparative Studies in Industrial Relations	8
MGMT956	Negotiation, Advocacy and Bargaining	8
MGMT957	Productivity and Labour	8
MGMT973	Employers and Industrial Relations - A	6
MGMT976	Advanced Topics in Industrial Relations - A (Research Methods)	8
MGMT977	Advanced Topics in Industrial Relations - B	8
MGMT979	Advanced Topics in Industrial Relations - C	6
MGMT987	Special Topics B	12
MGMT990	Minor Thesis	24
MGMT953	Human Resource Management	6
LAW966	Studies in Industrial Law	6
LAW969	Occupational Health and Safety Law	6

Graduate Diploma in Commerce (Industrial Relations)

The purpose of this diploma is to provide graduate students who have not completed an Industrial Relations major in their undergraduate degree with the opportunity for advanced study in Industrial Relations.

The Course Rules governing the Graduate Diploma will apply. The Graduate Diploma will normally occupy two sessions of full-time study or the part-time equivalent.

Program Of Study

Students must complete 48 credit points approved by the Head of School including at least 24 credit points from the subjects listed below:

MGMT240	Industrial Relations B: Wage Determination	8
MGMT242	Industrial Relations A	8
MGMT243	Work and Employment Relations	8
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
MGMT352	Negotiation, Advocacy and Bargaining	8

Graduate Certificate in Industrial Relations

Program Of Study

Students must complete:

MGMT240	Industrial Relations B: Wage Determination	8
MGMT242	Industrial Relations A	8
MGMT352	Negotiation, Advocacy and Bargaining	8

The Head of School may approve the substitution of one or more industrial relations subjects for those listed above.

The Graduate School of Business and Professional Development

The Graduate School of Business and Professional Development manages a broad variety of courses relevant to the changing world of business and management. These include Master degree programs in Business Administration, International Business, Business Innovation and Logistics. The Graduate School of Business and Professional Development also delivers a range of related executive development courses and in house programs tailored to meet client organisations specifications. The School also works closely with the Faculties of Health and Behavioural Sciences, Informatics, Commerce, Engineering and Education to deliver a range of cross faculty/graduate degree programs (for details on these programs please refer to the relevant Faculty entry).

The Graduate School of Business and Professional Development has two key operational units, the on campus facility based at the University of Wollongong and the Sydney Business School. Programs are delivered at campuses in Wollongong, Sydney and Dubai.

The School also has educational partnerships with off shore providers in Hong Kong, Singapore and Malaysia.

Mode Offered

Programs offered through the Graduate School of Business and Professional Development and the Sydney Business School are undertaken on a full-time or part-time basis.

International students must study on a full-time basis. Subjects are offered in modular, flexible delivery mode in Wollongong and Sydney.

The School has offered specific tailored courses leading to Graduate Certificate, Graduate Diploma or Masters degrees for corporate clients.

Courses Offered

Program

Doctor of Philosophy
 Doctor of Business Administration
 Master of Business Administration
 Master of Business Innovation
 Master of International Business
 Master of Science (Logistics)
 Graduate Diploma in Business Administration
 Graduate Certificate in Business
 Graduate Certificate in Business Administration
 Graduate Certificate in Business Innovation
 Graduate Certificate in International Business
 Graduate Certificate in Logistics

All degrees are available through the Graduate School of Business and Professional Development and the Sydney Business School.

Executive Training

An extensive range of customised executive training and development programs for a wide range of organisations in the public and private sectors are offered by the Graduate School. Client-based programs are available in the following areas:

Change Management
 Quality Management
 Financial Management
 Marketing Management
 Supply Chain Management
 Strategic Policy and Planning
 Services Management
 Project Planning and Management
 Negotiation and Conflict Resolution

Doctor of Philosophy

Candidates with a good Masters or Honours degree, Class 2 Division II, can apply to undertake a Doctor of Philosophy. Full time study of a minimum of three years is normally required or the equivalent in part time study. Candidates would be expected to work under supervision on problems related to the Graduate School's research areas and may be required to attend coursework classes in order to develop skills necessary for their doctoral research. Candidates for this degree enrol in TBS994.

Doctor of Business Administration

Course Description

The Doctor of Business Administration (DBA) is an advanced postgraduate research degree that focuses on professional business practice, providing managers with the necessary research skills that can be applied to issues of organisational leadership concern. The course is designed to provide a framework which will enable participants to expand their knowledge in one or more business areas, drawing on the disciplinary expertise of Faculties across campus.

In addition, it provides the opportunity, through its two-thirds research component, for participants to undertake an independent research project leading to a thesis. The course is designed to build on existing strengths of the participants and provide a formal educational opportunity for them to demonstrate their managerial capacities in order to gain a competitive advantage in business.

Entry Requirements

To gain entry to the Doctor of Business Administration, candidates must:

1. have a minimum of five (5) years experience at a managerial level and currently be working in a business or have access to a business / industry / sector such that the research requirements of the course can be met; and
2. hold the University of Wollongong Master of Business Administration with at least a credit average, or a qualification deemed to be equivalent, from a recognised Australian institution, or have a Bachelor degree with a minimum of Class 2 (Division 1) honours.

Coursework Component

The coursework component accounts for one third of the degree and consists of eight six credit point subjects:

- TBS941 Advanced Business Studies
- TBS942 Advanced Business Specialisation Studies
- TBS943 Advanced Business Research Methods
- TBS944 Advanced Business Specialisation Research

plus four TBS subjects or other 900 level subjects from the University's cross-Faculty offerings, as agreed with the Program Co-ordinator after consideration of the student's background and research aims.

Thesis Component

The thesis component accounts for two thirds of the degree. Candidates enrol in the following subject:

- TBS995 Doctoral Thesis

Master of Business Administration

Course Description

This degree is designed for those who require the knowledge, competencies and managerial skills necessary to operate in a challenging and changing global environment. The program of study requires a commitment to teamwork and enthusiasm to achieve. Candidates are required to complete 12 subjects. The compulsory subjects of the program tackle practical issues and concepts and develop the skills required by a modern manager. Some of the subjects have a strong strategy focus.

The Master of Business Administration (MBA) program is designed to enable candidates to undertake four elective subjects in a specialised area of interest. Alternatively students may use their electives as an opportunity to study generally across a wide range of advanced management issues. In most cases it is expected that the compulsory subjects will be studied first, followed by the elective units.

The Master of Business Administration (MBA) is a 12 to 18 month full-time or 24 to 36 month part-time course and is offered on a, modular basis.

The degree is awarded at either Pass or Distinction level. For award at Distinction level, a student must achieve an average mark across all subjects of 75% or higher for the course.

Candidates are required to complete 12 subjects at 900 level (72cps) according to the sequence of study listed below. The first section of the program offers an introduction to key managerial concepts and the skills required of the modern manager, providing a foundation for the elective subjects that follow.

Core Subjects

TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
TBS904	Marketing Management	6
TBS905	Economic Analysis of Business	6
TBS906	Information Systems for Managers	6
TBS907#	Financial Strategy	6
TBS920*	International Business	6
TBS921*	Strategic Decision Making	6

#TBS901 is a prerequisite for this subject.

* these capstone subjects are to be undertaken only after all compulsory subjects have been completed.

Elective Subjects

Four subjects to be selected from other 900 level Graduate School of Business and Professional Development or Faculty of Commerce subjects or any other 900 level subjects, as approved by the MBA Program Co-ordinator.

Two elective subjects that are highly recommended because they provide important skills for a modern manager are:

TBS902	Statistics for Decision Making	6
and		
TBS908	Supply Chain Management	6

Note: Students undertaking the program through the Sydney Business School will have a restricted range of electives available.

These capstone subjects are to be undertaken only after all compulsory subjects have been completed.

Entry Requirements

Candidates must have a Bachelor degree from a recognised tertiary institution with a grade average of at least 60%.

Applicants holding a relevant undergraduate degree from a recognised university or institution of equivalent standing with a grade average between 50% and 59% may also be admitted, provided that they have completed a minimum of two years full-time relevant work experience, since graduating.

In special circumstances, applicants who hold other academic or professional qualifications and have a minimum of five years full-time, or ten years part-time, relevant work experience, may be granted admission to the program, by the Program Co-ordinator.

Applicants must meet the University's English Language requirements (refer to the University's website at www.uow.edu.au/discover/international for details).

Note: Due to different entry criteria and programs of study, students will not be permitted to transfer between the MBA and Master of Commerce programs.

Articulation

Other Graduate School Masters Programs into the MBA

Candidates who have successfully completed one of the Graduate School's eight subject Masters programs (e.g. the Master of International Business) may apply to enrol in the MBA. Candidates will be required to complete seven subjects according to approved enrolment patterns.

Applicants should consult the MBA Co-ordinator, Associate Professor Peter Gibson.

MBA into other Graduate School Masters Programs

Candidates who have successfully completed the MBA may apply to enrol in one of the Graduate School's eight subject Masters programs. Candidates will be required to complete six subjects according to the enrolment patterns of those individual degrees. Applicants for any of these courses should consult the relevant Program Co-ordinator.

Articulation from degrees offered by other Faculties

Candidates who have successfully completed a selected range of eight subject Masters programs from the Faculties of Commerce, Health and Behavioural Sciences, Informatics, Engineering and Education who fully satisfy the entry criteria for the Master of Business Administration, may apply to enrol in the MBA program with advanced standing.

Applicants should consult the MBA Program Co-ordinator, Associate Professor Peter Gibson

Master of Business Innovation

Many graduates, especially from scientific and technological disciplines, are recognising a need to obtain business-related masters qualifications to extend their careers into management. The Master of Business Innovation bridges the gap between business management and innovative thinking. It is widely recognised that innovation is the strategic key to future competitive advantage.

This course offers choice in the form of five streams, and is suitable both for those with some experience in industry and new graduates. There is an emphasis on innovation and the commercialisation or social development of novel ideas. In addition, the course will be attractive to more senior managers, particularly those managing technical and sociotechnical functions, who have identified areas where their original education requires enhancement. The MBI streams will provide students with a range of subjects to enable choices that are suitable for individuals and industries and agencies that are relying on innovation for future prosperity.

Core Subjects

TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
TBS913	Innovation Topics and Cases	6
TBS929	Management of Process Innovation	6

And either

or

TBS926	Manufacturing Management	6
or		6
TBS930	Operations Management	6
or		6
TBS932	Service Operations	6

Elective Subjects

Plus one of the following streams:-

Engineering

Choice of three subjects from:

ENGG950	Innovation and Design	6
ENGG951	Engineering Project Management	6
ENGG952	Engineering Computing	6

Or other 900 level ENGG subject approved by the Program Co-ordinator.

Information and Communication Technology

Choice of three subjects from:

IACT901	IT Strategic Planning	6
IACT905	Information Technology and Innovation	6
IACT906	Business On-line	6
IACT916	Organisational Issues in Information Technology	6
IACT922	Case Studies in Information Technology Applications	6

Information Systems Management

Choice of three subjects from:

BUSS907	Fundamentals of E-Business	6
BUSS952	Strategic Information Systems Management	6
BUSS953	Management of Information Systems Development	6
TBS906	Information Systems for Managers	6

Global Spatial and Social Development Support Policy

Choice of three subjects from:

GEOS951	Environmental Policy and Management	8
GEOS963	Population and Health: Dynamics Analysis and Policy	8
GEOS965	Changes in the Asia - Pacific Rim	8
or		
GEOS966	Urban and Regional Studies	8

Management

Choice of three subjects from:

MGMT910	Strategic Technology Management	6
MGMT915	Leading Organisational Change: Framing the Management of Change	6
MGMT940	Innovation and Entrepreneurship	6
MGMT941	Small Business Management I	6
MGMT983	Leading Organisations: Politics, Power and Change Agency	6

The degree will be awarded at either the Pass or Distinction level. For award at Distinction level, a student must obtain an average of 75% or higher across the whole degree.

Entry Requirements

Candidates must have a Bachelor degree from a recognised tertiary institution of equivalent standing. In special circumstances, applicants holding other academic or professional qualifications and with a minimum of four years full-time or eight years part-time relevant work experience may be granted admission to the program by the Program Co-ordinator.

Applicants must meet the University's English Language requirements (refer to the University's website at www.uow.edu.au/discover/international for details).

Articulation from the Master of Business Administration

Candidates who have successfully completed the Master of Business Administration, and who fully satisfy the entry criteria for the Master of Business Innovation, may apply to enrol in the MBI program.

MBA candidates who progress to the MBI will be required to successfully complete a further six subjects at 900 level, according to the approved schedule of study.

Applicants should consult the MBI Program Co-ordinator, Associate Professor Peter Gibson.

Articulation into the Master of Business Administration

Candidates who have successfully completed the MBI may apply to enrol in the Master of Business Administration. Candidates will be required to complete seven subjects according to the approved schedule of study.

Applicants should consult the MBA Program Co-ordinator, Associate Professor Peter Gibson.

Master of International Business

Course Description

The Master of International Business (MIB) program is primarily designed for new graduates about to embark on their first line managerial position. It is also suitable for experienced managers who wish to enhance their knowledge and expertise in global management issues.

The MIB is a 12 months full-time or 24 months part-time course, at both Wollongong and Sydney and is offered on a modular basis. The program comprises six compulsory subjects, plus two elective subjects (48 credit points). The elective stream within the International Business program is designed to allow candidates to focus their studies into a thematic area of interest. Candidates are required to complete 8 subjects at 900 level, according to the sequence of study listed below.

Compulsory Subjects

TBS979*	Accounting for a Global Economy	6
TBS980	International Financial Analysis and Decision Making	6
TBS981	Employment Relations in an International Context	6
TBS982	Advertising and Marketing in a Global Economy	6
TBS983	International Economic Environment of Business	6
TBS984**	International Business	6

plus 2 elective subjects at 900 level to be approved by the MIB Program Co-ordinator.

* Students with a strong background in Accounting and/or Finance may, if approved by the MIB Program Co-ordinator, be permitted to undertake an additional elective in lieu of TBS979.

** This capstone subject is to be completed only after a minimum of three core subjects have been successfully completed.

The degree will be awarded at either Pass or Distinction level. For award at Distinction level, a student must obtain an average of 75% or higher across the whole degree.

Entry Requirements

Candidates must have a Bachelor degree from a recognised tertiary institution. In special circumstances, applicants holding other academic or professional qualifications and with a minimum of four years full-time or eight years part-time relevant work experience may be granted admission to the program by the MIB Program Co-ordinator.

96 Credit Point Program

The extended (96-credit points) two-year program may be granted to some applicants by the Program Co-ordinator. For those admitted to the extended program, the first year of the MIB will be made up of eight compulsory subjects chosen from the undergraduate schedule of the Faculty of Commerce.

Applicants from Taiwan with a four year bachelor degree in any discipline are eligible for entry to the 48 credit-point program. Taiwanese applicants with 14 years of education plus extensive work experience (as a guide a minimum of 5 years of supervisory or managerial work experience with appropriate documentary evidence) may be granted admission to the 96 credit-point MIB program.

NOTE: NO admissions to the MIB (one or two years) will be made to students of Taiwan who have only a two-year diploma after 12 years schooling (ie. 14 years education) OR five year diploma after nine years of schooling (again, 14 years of education).

Applicants who hold a recognised two-year degree from the Indian sub-continent, and with a minimum of five years work experience as evidenced by a certificated transcript of work history may be granted admission to the 96-credit point MIB.

Applicants from the People's Republic of China with a three-year diploma in a recognised academic discipline (excluding vocation studies) from a recognised institution with a minimum of five years relevant work experience as evidenced by certified transcript of work history may be granted admission to the 96- credit point MIB.

Applicants must meet the University's English language requirements (refer to the university's web site at www.uow.edu.au/discover/international for details).

Articulation from the Master of Business Administration

Candidates who have successfully completed the Master of Business Administration, and who fully satisfy the entry criteria for the Master of International Business, may apply to enrol in the MIB program.

MBA candidates who progress to the MIB will be required to successfully complete a further six subjects at 900 level, according to the approved schedule of study

Applicants should consult the MIB Program Co-ordinator, Dr J Rajendran Pandian.

Articulation into the Master of Business Administration

Candidates who have successfully completed the MIB may apply to enrol in the Master of Business Administration. Candidates will be required to complete seven subjects according to the approved schedule of study. Applicants should consult the MBA Program Co-ordinator, Associate Professor Peter Gibson.

Master of Science (Logistics)

Course Description

This course provides senior managers with knowledge of logistics and operations management theory and practice. It is an extension of existing operations management teaching and research and has been specifically designed to provide an approved program of study for managers within the manufacturing, transport, service and retailing industries.

The Master of Science (Logistics) may be completed over 12 months of full-time study or 24 months of part-time study and is offered on a modular basis.

Candidates are required to complete 4 compulsory and 4 elective subjects (48 credit points) at 900 level according to the sequence of study listed below:

Core Subjects

TBS901	Accounting for Managers	6
TBS908	Supply Chain Management	6
TBS928	Transport Logistics Management	6
TBS930	Operations Management	6

Select 2 of the following subjects:

Elective Subjects

Electives A

TBS925	Inventory Management	6
TBS926	Manufacturing Management	6
TBS932	Service Operations Management	6
TBS933	Procurement Management	6

Plus 2 of the following subjects:

Electives B

BUSS907	Fundamentals of E-Business	6
BUSS926	Decision Support Systems	6
MGMT940	Innovation and Entrepreneurship	6
MGMT941	Small Business Management	6
TBS902	Statistics for Decision Making	6
TBS906	Information Systems for Managers	6
TBS929	Management of Process Innovation	6

Or remaining subjects from Electives A or any other two 900-level subjects as approved.

The degree will be awarded at either Pass or Distinction level. For award at Distinction level, a student must satisfactorily pass all subjects at the first attempt and maintain a grade average across all subjects of 75% or higher.

Entry Requirements

Candidates must have a Bachelor degree from a recognised tertiary institution. In special circumstances, applicants holding other qualifications and with a minimum of four years full-time, or eight years part-time relevant work experience may be granted admission to the program by the Program Co-ordinator.

Applicants must meet the University's English language requirements (refer to the University's website at www.uow.edu.au/discover/international for details).

Articulation from the Master of Business Administration

Candidates who have successfully completed the Master of Business Administration, and who fully satisfy the entry criteria for the Master of Science (Logistics), may apply to enrol in the MSci program.

MBA candidates who progress to the MSci will be required to successfully complete a further six subjects at 900 level, according to the approved schedule of study

Applicants should consult the MSc Program Co-ordinator.

Articulation into the Master of Business Administration

Candidates who have successfully completed the MSci may apply to enrol in the Master of Business Administration. Candidates will be required to complete seven subjects according to the approved schedule of study.

Applicants should consult the MBA Program Co-ordinator, Associate Professor Peter Gibson.

Graduate Diploma in Business Administration

Course Description

Candidates who wish to undertake a Business Administration program of shorter duration than the MBA may enrol in the Graduate Diploma in Business Administration.

The objective of the Graduate Diploma program is to provide practicing managers with an understanding of the core issues of management skills and concepts. The core subjects covered in the Graduate Diploma provide postgraduate level education with an applied emphasis in the major functional areas of management and administration. Subjects are offered in a modular format.

Candidates are required to complete eight subjects at 900 level, according to the sequence of study listed below.

TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
TBS904	Marketing Management	6
TBS905	Economic Analysis of Business	6
TBS906	Information Systems for Managers	6
TBS907	Financial Strategy	6
TBS920	International Business	6
TBS921	Strategic Decision Making	6

Entry Requirements

As for the Master of Business Administration.

Graduate Certificate in Business

(Open to Doctor of Philosophy candidates currently enrolled at the University of Wollongong only)

Course Description

The Graduate Certificate is specifically designed for University of Wollongong PhD students. In today's environment of intense competition, the aim is to provide students with an introduction to business, management and professionally related skills and knowledge that will give them an edge.

The course consists of 4 subjects. There are 2 core subjects:

TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations.	6

The 2 remaining subjects are electives chosen in consultation with the Program Co-ordinator of the Graduate Certificate from the following:

Engineering

CAPS904	Social Program Evaluation and Planning	6
ENGG951	Engineering Project Management	6

Information Technology Systems

TBS906	Information Systems for Managers	6
BUSS907	Fundamentals of E-Business	6

Law

LAW960	Legal Studies for Professionals	6
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Ethics

PHIL935	Applied Ethics	6
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Tertiary Teaching

EDGA997	Introduction to Tertiary Teaching	6
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Innovation and Entrepreneurship

ENGG950	Innovation and Design	6
TBS929/	Management of Process Innovation 1	6
MGMT933		
MGMT940	Innovation and Entrepreneurship	6
MGMT941	Small Business Management	6
CAPS907	Managing the Production and Diffusion of Knowledge	6
ECON915	Electronic Commerce and the Economics of Information	6

Marketing

TBS904	Marketing Management	6
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Statistics

STAT903	Survey Design and Analysis	6
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Entry Requirements

Applicants must be enrolled as a candidate for the Doctor of Philosophy degree at the University of Wollongong.

Graduate Certificate in Business Administration

Course Description

Candidates who wish to undertake a Business Administration program of shorter duration than the MBA or the Graduate Diploma in Business Administration may enrol in the Graduate Certificate in Business Administration.

The objective of the Graduate Certificate is to provide a meaningful introductory study of the concepts of management, and is structured to allow for different programs of study, including off-campus programs for employment and professional groups.

The Graduate Certificate is intended to be completed over 6 months of full-time study or 12 months of part-time study. The program requires that each candidate complete four compulsory subjects. Subjects are offered in a modular format. Candidates are required to complete four subjects at 900 level, as listed below.

TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
TBS904	Marketing Management	6
TBS905	Economic Analysis of Business	6

Entry Requirements

As for the Master of Business Administration.

Graduate Certificate in Business Innovation

Course Description

The Graduate Certificate in Business Innovation is designed for students from wide ranging backgrounds but especially scientific and technological disciplines, who now wish to develop their careers managing their technical specialty.

The Graduate School, in cooperation with excellent partners in adjacent faculties, is well placed, staffed and structured to meet the innovation challenge, particularly in offering cross-disciplinary graduate courses.

Through the Graduate School of Business and Professional Development and the Sydney Business School, the Graduate Certificate may be completed over 12 months of part-time study. Candidates are required to complete the four subjects listed below:

TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
TBS913	Innovation Topics and Cases	6
TBS929	Management of Process Innovation	6

Entry Requirements

As for the Master of Business Innovation

Graduate Certificate in International Business

Course Description

Candidates who wish to undertake an International Business program of shorter duration than the MIB may enrol in the Graduate Certificate International Business.

The objective of the Graduate Certificate is to provide a meaningful introductory study of global management issues.

The program requires that each candidate complete three of the six foundation subjects for the MIB plus one elective. Subjects are offered in a modular format.

Core Subjects

Candidates are required to complete three subjects at 900 level, selected from the subjects listed below.

TBS979	Accounting for a Global Economy	6
TBS980#	International Financial Analysis and Decision Making	6
TBS981	Employment Relations in an International Context	6
TBS982	Advertising and Marketing in a Global Economy	6
TBS983	International Economic Environment of Business	6
TBS984	International Business	6

Elective Subject

Plus

One elective subject selected from other 900 level Graduate School of Business and Professional Development or Faculty of Commerce subjects or any other 900 level subject, as approved by the MIB Program Co-ordinator.

Please note this subject has a pre-requisite.

Entry Requirements

As for the Master of International Business.

Graduate Certificate in Logistics

Course Description

This course provides a foundation in the area covered by the Master of Science (Logistics) degree.

The Graduate Certificate is intended to be completed over 6 months of full-time study or 12 months of part-time study. The program requires that each candidate complete four subjects which are offered in a modular format.

Candidates are required to complete four subjects at 900 level, selected from the subjects listed below.

Core Subjects

TBS930	Operations Management	6
TBS932	Service Operations	6

Elective Subjects

Plus two subjects chosen from:

TBS901	Accounting for Managers	6
TBS902	Statistics for Decision Making	6
TBS908	Supply Chain Management	6
TBS925	Inventory Management	6
TBS926	Manufacturing Management	6
TBS928	Transport Logistics Management	6
TBS929	Management of Process Innovation	6
TBS990	Special Topic in Business	6

Employees from BHP who have successfully completed the BHP Professional Development logistics programs conducted by the Graduate School of Business and Professional Development may substitute TBS990 - Special Topic in Business (Logistics) for either TBS901, TBS908, TBS925 or TBS928.

Entry Requirements

As for the Master of Science (Logistics).

COMMERCE SUBJECT DESCRIPTIONS

Notes:

- Where not shown, students should check Assessment and Subject Objectives with the Subject Co-ordinator or on the Web (<http://www.uow.edu.au/student/sols/>).
- Except where shown all subjects are offered on the Wollongong campus.

ACCY901 Accounting for Managers 6cp Spring / Autumn

Contact Hours: 2 hours Seminars per week

Exclusions: ACCY101, ACCY190 or ACCY100 and ACCY102

Assessment: See Subject Outline

Subject Description: The interpretation and utilisation of the major types of reports and analyses prepared by accountants for management decision making.

ACCY903 Theoretical Foundations of Research 6cp

Autumn / Spring

Contact Hours: 2 hours Seminars per week

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.

ACCY904 Financial Accounting 6cp Autumn

Contact Hours: 2 hours Seminars per week

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.

ACCY905 International Accounting 6cp Spring

Contact Hours: 2 hours Seminars per week

Subject Description: Differences in accounting thought and standards between countries. Influence of national outlook and policies and of economic infrastructure 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.

ACCY907 Empirical Research Methods 6cp Autumn

Contact Hours: 2 hours Seminars per week

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.

ACCY908 Applied Financial Accounting 6cp Spring

Contact Hours: 2 hours Seminars per week

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.

ACCY913 Management Accounting 6cp Autumn

Contact Hours: 2 hours Seminars per week

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.

ACCY914 Management Planning and Control Systems 6cp Autumn

Contact Hours: 2 hours Seminars per week

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.

ACCY918 Applied Management Accounting 6cp Spring

Contact Hours: 2 hours Seminars per week

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.

ACCY936 Management and Information Systems 6cp Autumn / Spring

Contact Hours: 1 hour Seminar, 1 hour Computer Lab per week

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.

ACCY944 Issues in Auditing 6cp**Spring****Contact Hours:** 2 hours Lectures, 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.

ACCY961 Professional Practice - Accounting 6cp**Autumn****Contact Hours:** 2 hours Seminars per week

Subject Description: This subject is concerned with statements of Accounting Standards and statements of Accounting Practice and the impact of corporation law on the practice of accountancy.

ACCY962 Professional Practice-Auditing, Risk, Assurance & IS 6cp**Autumn****Contact Hours:** 2 hours Seminars per week

Subject Description: Auditing is integral to modern accounting practice. An examination of modern auditing, together with the legal environment which impacts upon it, is provided in this subject.

ACCY963 Professional Practice - Taxation 6cp**Autumn****Contact Hours:** 2 hours Seminars per week

Subject Description: This subject includes a detailed examination of the relevant legislation relating to taxation, including income tax and the GST. The application of this legislation is discussed.

ACCY968 Insolvencies 6cp**Spring****Contact Hours:** 2 hours Seminars per week

Subject Description: Accounting and legal aspects of corporate and non-corporate insolvencies including liquidations & receivership, and the use of insolvency procedures as a management strategy.

ACCY969 Financial Management For Health Services 6cp**Spring**

Subject Description: This subject investigates the movement away from the management of costs towards the management of value for money. As such, it is concerned with the measuring and monitoring of efficiency. Accounting tools will be used to investigate quality of care, outcome, utility, products, utilisation and resource allocation.

ACCY974 Accounting Regulation 6cp**Spring****Contact Hours:** 2 hours Seminars per week

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.

ACCY985 Special Topic in Accounting-A 6cp**Spring / Autumn****Contact Hours:** 2 hours Seminars per week

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 would be made by the Head of the School, taking into account the expertise of academic staff, including visiting staff, and the interest of students.

ACCY986 Special Topic in Accounting-B 6cp**Spring / Autumn****Contact Hours:** 2 hours Seminars per week

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 would be made by the Head of the School, taking into account the expertise of academic staff, including visiting staff, and the interest of students.

ACCY993 Research Essay 12cp**Autumn / Spring**

Subject Description: An individual program determined in consultation with the Head of School.

ACCY994 Project 12cp**Autumn / Spring**

Subject Description: An individual program determined in consultation with the Head of School.

ACCY995 Research Project 24cp**Autumn / Spring / Annual**

Subject Description: An individual program determined in consultation with the Head of School.

ACCY996 Thesis 48cp**Annual**

Subject Description: An individual program determined in consultation with the Head of School.

BUSS906 Information in Organisations 6cp**Spring****Assessment:** Essays; and case study.

Subject Description: This subject establishes a basis for understanding the role of information systems in organisations and how such systems relate to organisational objectives, structures and procedures.

Using systems theory plus other social theories including activity theory, the topics covered will include: the system concept in an organisation, information flows and decision processes, techniques and skills in representing system structures and integration of information systems into the organisational structure.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate: a critical appreciation of general systems theory and systems thinking and its effects on the development of organisational information systems; an appreciation of organisation theory dealing with the relationship between organisational structure and information technology; an understanding of the complex nature of information systems risks and failure in an organisational context; an ability to construct, analyse and present case studies illustrating the above; and an ability to construct, analyse and present an argument (in essay form) illustrating the above.

BUSS907 Fundamentals of e-Business 6cp
Spring / Autumn / Summer 2003 / 2004

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Assessment: Projects, class participation, final examination.

Subject Description: This subject examines the principles, techniques, methodologies, organisational and human implications of the business approach to electronic commerce, the business approach to using the internet, commercial applications for the information superhighway and the competitive advantage obtainable from electronic commerce.

Subject Objectives: On completion of this subject, students should be able to: gain some basic knowledge on the technologies associated with electronic commerce and the way they are currently used in the organisation; understand what virtual organisation and Internet Marketing are about; appreciate how internet technologies are used intra- and inter-organisationally; know how electronic commerce is arranged intra- and inter-organisationally; appreciate the macro and micro-factors which affect the adoption of electronic commerce in the organisation.

BUSS911 Intelligent Systems 6cp
Autumn

Contact Hours: 3 hours per week

Assessment: Project; assignments and final examination.

Subject Description: This subject considers the theory and practice of intelligent information systems development. It introduces the core principles of knowledge representation and reasoning, as well as techniques involved in knowledge acquisition, machine learning, planning and search. It then examines how these techniques are deployed in practical settings by considering applications such as expert systems, constraint programming, multi-agent systems, data mining and web information retrieval.

Subject Objectives: On successful completion of this subject, students are expected to understand: the principles underlying intelligent information systems development; the nature and range of application domains for such systems, and the techniques required to build useful applications. Students would also gain hands on experience with intelligent systems tools and development environments.

BUSS927 Human Computer Interaction 6cp

Autumn

Contact Hours: 2 hours Lectures, 1 hour Computer Lab per week

Assessment: Assignments and final examination.

Subject Description: The aim of this subject is to make students aware of the multidisciplinary nature of the domain of Human Computer Interaction. It aims to provide students with the knowledge and skills required to make sound judgements about the design of a business computer system in terms of its suitability for achieving the particular goals required by its users, to evaluate how well software systems fulfil the needs of their users and to contribute to the design of user-centred systems in which users and task needs are given major consideration.

Subject Objectives: On successful completion of this subject students are expected to be able to: understand and apply a variety of input, output and communication styles, devices and dialogue used in computer interfaces; understand and apply aspects of Activity Theory, Cognitive Psychology and Ergonomics to interface design; assess critically a number of interface design methodologies and interface design guidelines; demonstrate an ability to apply structured design principles to interface design; understand and apply a variety of currently available technologies supporting concepts such as prototyping, windowing, object-oriented design and user interface management; evaluate aspects of a human-computer interface and understand methods of usability testing; discuss the impact of computer systems on the people and groups that use them and the role of computers as a participant in organised human activity.

BUSS929 Information Systems Research 6cp
Methods

Spring

Contact Hours: 3 hours Lectures per week

Assessment: The subject will have the following assessment components: reviews of research papers; literature review paper for a research topic of your choice; class participation and class presentation on the research topic of your choice.

Subject Description: This subject provides a comprehensive introduction to a range of issues related to the choice and application of appropriate research methods for information systems (IS) research. Given the multidisciplinary nature of the IS field, researchers have employed diverse methods and the students will be exposed to some of the more significant approaches.

Subject Objectives: On successful completion of this subject students are expected to: have developed a good understanding of what constitutes "good" research in general and in the field of information systems in particular; be able to critically read and relate to published research; be able to develop and formulate research problems in such a way as to facilitate thesis research; conversant with a range of methods that can be employed for doing research in information systems and be able to match them with the research problems at hand; develop criteria for assessing the application of appropriate research methods to problems.

BUSS945 Information Systems Project 12cp

Spring 2003 - Autumn 2004 / Annual / Autumn

Assessment: Project report, extended literature review, system design and/or development, Case Study OR Develop and use an instrument OR Experiment

Subject Description: This subject provides students with the opportunity to study a topic of research interest either within an external organisational setting (MBA students), or within a staff research group in the discipline t (MIS or MBA students). The project will be completed under staff supervision and culminates in the production of a substantial written report plus other products such as software, manuals as appropriate to the project.

Subject Objectives: On successful completion of this subject, students are expected to be able to: find information pertinent to the project from a variety of sources; analyse information collected in light of the aims of the project; summarise and critically evaluate the information collected and apply this knowledge to their chosen topic; produce a well structured report describing their project.

BUSS946 Information Systems Project Part 1 6cp

Spring

Assessment: Work completed in this subject together with that completed in BUSS947 will be assessed as described for BUSS945. (Final detailed report plus any other relevant materials related to the project topic.)

Subject Description: This subject is specifically for students commencing in Spring Session the information systems project specified in BUSS945. Together with BUSS947 Information Systems Project Part 2 (Autumn Session), it is equivalent to BUSS945.

Subject Objectives: On successful completion of this subject students are expected to have: developed and demonstrated the application of research skills and methods; investigated in-depth a particular aspect of information systems; demonstrated the ability to analyse, synthesise, evaluate and present research findings on a specific topic.

BUSS947 Information Systems Project Part 2 6cp

Autumn

Assessment: Work completed in BUSS947 together with that completed in BUSS946 will be assessed as specified in the description of BUSS945. (Final detailed report plus any other relevant materials related to the project topic).

Subject Description: This subject is specifically for those who commenced their project in the previous Spring Session in BUSS946.

Subject Objectives: On successful completion of this subject students are expected to have: developed and demonstrated the application of research skills and methods; investigated in-depth a particular aspect of information systems; demonstrated the ability to analyse, synthesise, evaluate and present research findings on a specific topic.

BUSS950 Systems Development Methodologies 6cp

Autumn

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Assessment: Seminar Presentation, Essay and final examination.

Subject Description: This subject examines and compares a range of systems development methodologies, through the study of the underlying philosophical basis and the methods, tools and techniques used in these methodologies.

The application of these methodologies in practice will also be examined.

Subject Objectives: On successful completion of this subject, students are expected to: describe and explain the origins and philosophical bases of a range of approaches to development and refinement of systems development methodologies; use the basic tools and techniques employed across a range of system development methodologies; assess the needs of different systems development methodologies; assess the needs of different systems development projects and select an appropriate systems development methodology for those projects; describe and explain frameworks which may be used to assess and compare different systems development methodologies; describe and explain the similarities and differences between various system development methodologies.

BUSS951 Critical Issues in Information Systems 6cp

Spring

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Assessment: Assignments and final examination.

Subject Description: This subject explores the critical issues of current concern to information systems researchers and practitioners in organisations. It will provide both a broad comparative view of state of the art organisational information systems and a detailed study of the development and application of selected systems currently being researched within the Information Systems Discipline.

Subject Objectives: On successful completion of this subject, students are expected to have a theoretical and practical appreciation of the whole spectrum of information systems as it currently applies in organisations. Exact topics covered will depend on research currently being undertaken within the department but will include Web-based information systems, OLAP/MDDb, organisation-wide DSS, EIS and Internet applications.

BUSS952 Strategic Information Systems Management 6cp

Autumn

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Assessment: Tutorial Questions, Group Assignment and final examination.

Subject Description: This subject examines a number of current strategic management issues pertinent to the effective and efficient use of IS/IT resources throughout an organisation. Issues considered include: electronic commerce and globalisation, strategic planning and the use of IS/IT for gaining competitive advantage; linking business and IS/IT planning; formulating an IS/IT architecture and information management strategy; the structure, organisation and placement of the IS/IT Department within organisations; end-user computing and IS/IT Department support; IS/IT Department functions and operations; organisational change and IS/IT ethics.

Subject Objectives: On successful completion of this subject, students are expected to: identify, describe and analyse strategic IS management issues as they relate to electronic commerce and globalisation and be able to propose plans and strategies, and design policies and procedures that adequately address such issues within an organisational context; describe and analyse relevant IS management issues from the perspective of IS as a corporate entity;

a functional entity, a departmental entity and a user support entity; apply IS management principles to an organisational case study; search, analyse and synthesise relevant literature on a chosen topic and be able to communicate their knowledge and understanding of the topic via a group assignment, tutorial presentation and an individual research report.

BUSS953 Management of Information Systems Development 6cp

Spring

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Assessment: Assignments and final examination.

Subject Description: This subject provides an introduction to, and overview of, the knowledge and skills required to successfully manage computer-based systems development projects within an organisational setting. Topics and issues considered include: IS/IT project management and its organisational context; inter-organisational arrangements for e-business including B2B and B2C frameworks, project management tools and techniques; feasibility study methods; resource estimation techniques; behaviour and management of IS/IT project groups; systems development environments for professionals and end-users; quality assurance; project and system evaluation.

Subject Objectives: On successful completion of this subject, students are expected to be able to: identify and describe the knowledge and skills required to successfully manage information systems development projects particularly as they relate to e-business; use the tools and techniques to conduct feasibility analysis and network analysis (PERT and CPM); use Gantt charts and time estimation techniques; identify and describe issues relating to quality assurance, work group formation, behaviour, motivation, leadership and management.

**BUSS981 Advanced Information Systems- 6cp
Topic A**

Spring / Autumn

Assessment: Reports; assignments

Subject Description: This subject is available to those enrolled in the Honours Master of Information Systems program by coursework and BUSS986 Research Report. The subject provides the opportunity for students to undertake individual supervised study related to their individual program and the topic of their BUSS986 Research Report.

Subject Objectives: At the successful completion of this subject students are expected to demonstrate skills and knowledge which are related to their program of study and their BUSS986 Research Report topic.

**BUSS982 Advanced Information Systems- 6cp
Topic B**

Spring / Autumn / Annual

Assessment: Reports; assignments

Subject Description: This subject is available to those enrolled in the Honours Master of Information Systems program by coursework and BUSS986 Research Report. The subject provides the opportunity for students to undertake individual supervised study related to their individual program and the topic of their BUSS986 Research Report.

Subject Objectives: At the successful completion of this subject students are expected to demonstrate skills and knowledge which are related to their program of study and their BUSS986 Research Report topic.

**BUSS983 Advanced Information Systems- 12cp
Topic C**

Annual

Assessment: Reports; assignments

Subject Description: This subject is available to those enrolled in the Honours Master of Information Systems program by coursework and BUSS986 Research Project. The subject provides the opportunity for students to undertake individual supervised study related to their individual program and the topic of their BUSS986 Research Report.

Subject Objectives: At the successful completion of this subject students are expected to demonstrate skills and knowledge which are related to their program of study and their BUSS986 Research Report topic.

**BUSS984 Advanced Information Systems- 12cp
Topic D**

Spring / Autumn / Annual

Assessment: Reports; assignments.

Subject Description: This subject is available to those enrolled in the Honours Master of Information Systems program by coursework and BUSS986 Research Report. The subject provides the opportunity for students to undertake individual supervised study related to their individual program and the topic of their BUSS986 Research Report.

Subject Objectives: At the successful completion of this subject students are expected to demonstrate skills and knowledge which are related to their program of study and their BUSS986 Research Report topic.

**BUSS986 Research Report 24cp
Spring / Autumn / Annual**

Assessment: Final written report and progress reports.

Subject Description: This subject must be completed by students undertaking the Honours Master of Information Systems by coursework plus project. The project involves completing a significant research report on a specific information systems topic.

Subject Objectives: On successful completion of this subject students are expected to have demonstrated well developed research skills including the ability to locate, analyse, synthesise, evaluate and present research findings related to a specific advanced information systems topic.

**BUSS987 Master Thesis 48cp
Annual / Spring 2003 - Autumn 2004**

Assessment: Research thesis to be examined in accordance with University rules and regulations.

Subject Description: This subject is specifically for students undertaking the Honours Master of Information Systems program by research. The subject requires individual, supervised research on an advanced information systems topic and culminates in the submission of a thesis in the topic.

Subject Objectives: At the successful completion of this subject students are expected to demonstrate extensive knowledge and research skills relating to a specific information systems research topic.

BUSS991 Research Report - Part 1 12cp
Spring

Assessment: Work completed in this subject together with that completed in BUSS992 will be assessed as described for BUSS986.

Subject Description: This subject is specifically for students in the Honours Master of Information Systems by coursework plus project who are commencing work on their project in Spring Session. This subject together with BUSS992 taken in the following Autumn Session is equivalent to BUSS986.

Subject Objectives: On successful completion of this subject students are expected to have demonstrated well developed research skills including the ability to locate, analyse, synthesise, evaluate and present research findings related to a specific advanced information systems topic.

BUSS992 Research Report - Part 2 12cp
Autumn

Assessment: Work completed in BUSS992 together with that completed in BUSS991 will be assessed as described for BUSS986.

Subject Description: This subject is specifically for Honours Master of Information Systems students completing their program by coursework plus project who have commenced their project in BUSS991 in the previous Spring Session.

Subject Objectives: On successful completion of this subject students are expected to have demonstrated well developed research skills including the ability to locate, analyse, synthesise, evaluate and present research findings related to a specific advanced information systems topic.

BUSS999 Doctoral Thesis 48cp
Annual / Autumn / Spring 2003 - Autumn 2004

Assessment: Research thesis to be examined in accordance with University rules and regulations.

Subject Description: This subject is specifically for students undertaking the Doctor of Philosophy program in Information Systems. The subject requires individual, supervised research on an advanced information systems topic and culminates in the submission of a thesis which demonstrates an original contribution to the field of study.

COMM980 Business Research Methods 6cp
Contact Hours: Not on offer in 2003

Subject Description: This subject is designed to familiarise students with the basic tools and techniques of empirical research methods in business.

ECON901 Monetary Economics 6cp
Autumn

Contact Hours: 1 hour Lecture, 1 hour Tutorial per week

Subject Description: The subject is in two sections. The first focuses on a comparison of the monetary transmission mechanism and policy implications arising from the Classical, Keynesian, Monetarist and New Classical theories. The second section analyses the money supply and its control, and conduct of monetary policy, money in the open economy, inflation, the Australian financial system, and financial deregulation in Australia.

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.

ECON902 Advanced International Monetary 6cp
Economics

Spring

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Subject Description: Topics covered will include foreign exchange markets; banking and financial institutions; money supply, price level and international adjustment; international monetary system.

Subject Objectives: On successful completion of this subject students are expected to 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.

ECON903 Public Finance 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject further develops topics encountered in the undergraduate Public Finance course. Particular emphasis will be placed on issues surrounding inter-govern-mental fiscal relations in a federal system. Questions of fiscal transfer mechanism, divisions of powers and responsibilities and the equalisation measures which might be used will be considered.

ECON904 Trade, Growth and Development 6cp
Autumn

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Subject Description: The following topics will be covered: The WTO as an international organisation; capital-skill complementarity new investment and technical progress; concerns about the role of multinational corporations in trade and technology progress; the role of multinational corporations in trade and technology transfers; human development, economic democracy and shared growth; international economic institutions (IBRD,IMF,WTO) and the national economies. Examples will be cited from developing and developed countries but recent Australian and Asian experience will be emphasized.

Subject Objectives: On successful completion of this subject students are expected to be able to: 1. Understand the emerging international trade rules under WTO. 2. Understand interactions between human capital, new investments and technical progress. 3. Appreciate evaluate drivers of productivity growth and its benefit sharing. 4. View economic development strategy is constrained by freedom of choices.

ECON906 History of Economic Thought 6cp**Autumn****Contact Hours:** 3 hours Lectures per week

Subject Description: A subject designed to introduce students to the main developments in economic theory from the 17th to 20th centuries. Internal changes in theories, relationships between successive theories and external influences on this development will be examined. Students will be expected to read widely in both primary and secondary sources.

Subject Objectives: On successful completion of this subject students are expected to have an effective knowledge of the development of Economics and business thought. Student will be able to analysis different schools and contextualise the different schools to contemporary economic and business issues.

ECON907 Cost-Benefit Analysis 6cp**Spring****Contact Hours:** 3 hours Lectures per week

Subject Description: The main objective of the subject is to develop skills in appraising public sector (and other) investment projects. These skills are sought through the study and role of theory underlying cost-benefit analysis. The subject contains a practical component involving the appraisal of specific investment projects. Topics covered include: welfare economics; 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; multiple objective planning; and the incorporation of risk and uncertainty.

Subject Objectives: On successful completion of this subject students are expected to know the relevant theory of cost-benefit analysis and be able to correctly apply the techniques of cost benefit analysis. Specifically, they should know, be able to explain and apply the concepts and methods of cost benefit analysis, including: 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. Students who achieve a high grade in this subject should be able to analyse unfamiliar situations using appropriate cost benefit methods.

ECON908 Advanced Topics in the Economics of Development 6cp**Autumn****Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week

Subject Description: The subject provides an in-depth analysis of development in the light of theory and experience. Topics include: economic growth versus economic development; poverty and inequality; population growth; unemployment and rural-urban migration; technological change; peasant agriculture and agricultural productivity; human capital and development; role of capital; credit and institutions; international dimensions of development and development policy.

Subject Objectives: On successful completion of this subject students are expected to 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.

ECON909 Econometric Theory 6cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject deals with advanced topics in the theory and practice of econometrics and covers contemporary issues of modelling specification, estimation, testing, and forecasting. Much of the subject will be based on journal articles in which the current econometric issues have been discussed.

ECON910 Economics for Accounting Professionals 6cp**Autumn****Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week**Assessment:** Assignments and Final Examinations

Subject Description: This subject provides the student with knowledge about the principles of economics and those parts of the economic system that are particularly relevant to professional accountants. The unit will examine key topics in microeconomics and international economics that are used in business and managerial decision-making, focusing on how they influence accounting outcomes and project evaluations. These will include price theory, cost analysis, profit determination, exchange rate determination. It also introduces students to the economic perspective underlying business issues such as wage rate determination, environmental policy, income distribution and international trade.

Subject Objectives: On successful completion of this subject, students are expected to be able to: explain market-based economic system: apply economic principles in analysing and solving economic problems: analyse both 'reporting' and 'commentary' articles on the economy in newspapers and professional accounting magazines: interpret and use economic analysis in terms of possible implications for the professional business environment.

ECON911 Advanced International Economics 6cp**Spring****Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week

Subject Description: Aspects of some of the following topics are studied in-depth: growth and trade; factor transfers (foreign investment); tariffs; import-substituting industrialisation; foreign exchange market; internal and external balance (the two-gap model).

Subject Objectives: On successful completion of this subject students are expected to be able to address the above questions using a rigorous analytical framework and will be able to demonstrate ability to do so by solving problems, and presenting arguments in written and verbal form. The student should be able to recognise assertions, in the popular press and elsewhere, about international economics that are wrong and, more important, he or she will know why they are wrong. The student should be familiar with seminal articles in international trade theory and policy and will be able to understand articles currently being written in scholarly journals. The student who excels at the subject should be able to use the analytical tools developed in the subject to solve new problems and address issues in international trade theory and policy that are beyond the scope of this subject.

ECON912 Labour Economics 6cp**Autumn****Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week

Subject Description: This subject will provide a comprehensive analysis of labour market issues using a range of economic theories. Special emphasis is placed on analysing the structural change in industries and occupations of the Australian labour market and selected overseas countries.

Subject Objectives: On successful completion of this subject students are expected to 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.

6. Understand 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. Understand the concepts and theories of asymmetrical information, the efficient market hypothesis and adverse selection and to identify the problems and opportunities they generate.

ECON916 Economics of Education, Health and Welfare 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Several areas of microeconomic theory will be selected for advanced treatment. Within each topic contemporary applications will be explored after the development of a theoretical base.

ECON913 Industrial Organisation 6cp**Spring****Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week

Subject Description: A study of industrial organisation and performance, decision-making criteria and constraints affecting output and distribution of revenue, market behaviour, and matters of ownership and control of the unit organisation.

Subject Objectives: On successful completion of this subject students are expected to: understand the nature of firms as they have developed historically in terms of their organisational structure and competitive behaviour. understand how firms' organisational structure is determined through interaction with competitive pressures within product markets. understand the underlying forces causing changes in product markets and their impact on organisational structure and behaviour. be able to apply this analysis to case studies of particular firms and industries. obtain research and report writing skills applicable to applied economic research activities. be able to critically evaluate national industry policies in response to identified market and corporate organisational characteristics prevailing in particular economies at the time.

ECON918 Economics of Health Care 6cp

Autumn	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	On Campus

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

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, social statistics and medical decision making. Government policies influencing all aspects of health care will be analysed and evaluated.

Subject Objectives: On successful completion of this subject, the student 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.

ECON915 Electronic Commerce and the Economics of Information 6cp**Autumn****Contact Hours:** 2 hours Lectures, 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 develops the theory of the economics of information, technology and transaction costs and investigates the role and value of information in decision making.

Subject Objectives: On successful completion of this subject students are expected to 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 decision of firms. 4. Understand the impact of electronic commerce on small and medium sized firms and their ability to penetrate international markets. 5. Appreciate the impact of electronic commerce is having on household decision making, working conditions and industrial relations.

ECON921 Econometric Models 6cp**Autumn****Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week

Subject Description: This is a subject on the foundations of econometric models. Both single-equation and simultaneous equation models will be studied. Emphasis is on suitable model building with economic content, on obtaining estimates with desirable properties, on testing procedures, on model evaluation and selection, and applications. Examples from current Australian econometric models will be critically examined.

ECON924 International Economic Relations 6cp**Spring****Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week**Exclusions:** Not to count with INTR920 and ECON982

Subject Description: The subject will examine policy issues in the international economy, especially as they affect the Asia-Pacific region.

The role of international economic organisations such as the IMF, World Bank, and GATT will be emphasised as well as issues such as free trade, protectionism, exchange rate determination and international capital flows. Options available to individual countries for international economic policy will be explored.

Subject Objectives: On successful completion of this subject students are expected to be able to understand major changes in the international economy and analyse the effects of the policies of multilateral organisations on national policy making.

ECON927 Innovation and Technology in the New Economy 6cp

Spring

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Assessment: Essays, seminar and exam

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 Australian 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.

ECON933 Conflict and Cooperation 6cp

Spring

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Pre-requisites: ECON111 and ECON122

Subject Description: A study of advanced topics in game theory. The objective of this subject is to build on traditional analytical techniques in economics based on assumptions of certainty and competitive markets. Using game theory, the analysis is extended to settings that traditional economic analysis is unable to cope with. These typically involve settings incorporating risk and uncertainty, asymmetric and incomplete information and strategic situations where the assumptions of competitive markets do not apply. The emphasis is on theoretical developments and the application of the central tools of game theory to real world problems of business and economics involving strategic interactions between parties.

ECON935 Advanced Managerial Economics 6cp and Operations Research

Contact Hours: Not on offered in 2003

Subject Description: A study of advanced quantitative techniques applicable to economic and managerial decision-making. This subject covers a wide range of quantitative analyses such as forecasting techniques, Bayesian analysis, Markov process models, PERT, CPM and specialised network algorithms, risk preference analysis, transportation and assignment models and quadratic and nonlinear programming.

Subject Objectives: 1. To provide the students with skills to apply the techniques of quantitative analysis in all kinds of organizational decision-making situations. 2. To train the student to think in terms of models and to understand the relationships among the real-world problems and models. 3. To encourage the student to develop techniques for solving future economic and managerial problems.

ECON936 Graduate Macroeconomics 6cp

Spring

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Subject Description: To analyse the major factors which determine macroeconomic behaviour and associated policy prescriptions. The effects of consumption and investment, international factors, monetary and fiscal policies on aggregate demand are examined. The determination of wages and prices, inflation and unemployment are also considered in terms of aggregate supply.

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.

ECON937 Graduate Microeconomics 6cp

Autumn

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Subject Description: The subject provides the theoretical basis for analysis of a wide range of microeconomic issues and policies. Topics include demand and supply theory; consumer preference theory; theory of the firm; cost functions; market behaviour under perfect competition, monopoly, and imperfect competition; factor markets; general equilibrium theory; externalities and intertemporal choice and risk. The emphasis in these topics is on providing a theoretical foundation that is linked to empirical analysis and interpretation of real world problems.

Subject Objectives: 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.

ECON938 Environmental Economics 6cp
Spring**Contact Hours:** 2 hours Lectures per week

Subject Description: This subject will provide a comprehensive analysis of environmental issues utilising the theory of economic externalities and the theory of ecologically sustainable development. Methods used to convert environmental problems and to measure externalities will be analysed. It will also evaluate environmental policies in Australia, developing countries and in the international economy.

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.

ECON939 Quantitative Economic Analysis 6cp
Spring**Contact Hours:** 1 hour Computer Lab, 2 hours Lectures, 1 hour Tutorial per week

Subject Description: This course deals with the fundamental concepts of econometrics used in applied economic work in the academic, business and government sectors. The course covers the standard and non-standard econometric models, based on time series, cross-section, or qualitative data. Emphasis will be on applications of the econometric methodologies in empirical research.

ECON940 Statistics for Decision Making 6cp
Spring**Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week**Assessment:** Assignments and Final Examination

Subject Description: This subject covers description and inferential statistics, and their applications in the business environment. A foundation of descriptive statistics and probability is first developed, followed by discussion of the concepts and principles of statistical inference. Several topics in statistical inference are then examined including confidence intervals, hypothesis testing, statistical quality control, regression analysis and forecasting. Realistic case studies are used to demonstrate the application of statistical methodology as an aid business decision making.

Subject Objectives: On successful completion of this subject students are expected to be able to: identify appropriate statistical techniques for problem solving and making process improvements in the modern business world: apply the statistical techniques to improve the business decision-making process: write managerial reports that interpret and explain statistical solutions in a non-technical way: interpret and use appropriate output from statistical computer packages, such as EXCEL, MINITAB or SPSS.

ECON941 Advanced Topics in Economics-A 6cp**Autumn / Spring****Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week. Refer to School - Economics Discipline.

Subject Description: Topics for these subjects (A-C) may be drawn from any area of Economics which the Head of the School considers to be suitable preparation for a higher degree and appropriate to the student's special interests.

ECON942 Advanced Topics in Economics-B 6cp**Autumn / Spring****Contact Hours:** Refer to School - Economics Discipline.

Subject Description: Topics for these subjects (A-C) may be drawn from any area of Economics which the Head of the School considers to be suitable preparation for a higher degree and appropriate to the student's special interests.

ECON943 Advanced Topics in Economics-C 8cp**Autumn / Spring****Contact Hours:** Refer to School - Economics Discipline.

Subject Description: Topics for these subjects (A-C) may be drawn from any area of Economics which the Head of the School considers to be suitable preparation for a higher degree and appropriate to the student's special interests.

ECON982 International Economic Relations 6cp
Spring**Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week

Subject Description: The subject will examine policy issues in the international economy, especially as they affect the Asia-Pacific region. The role of international economic organisations such as the IMF, World Bank, and GATT will be emphasised as well as issues such as free trade, protectionism, exchange rate determination and international capital flows. Options available to individual countries for international economic policy will be explored.

Subject Objectives: To examine policy issues in the international economic community, particularly those with special relevance to the Asia-Pacific region and the Gulf States.

The roles of multi-lateral institutions are also examined. On successful completion of this subject students should be able to understand major changes in the international economy and analyse the effects of the policies of multilateral organisations on national policy making.

ECON983 Trade and Industry in East Asia 6cp
Spring**Contact Hours:** 2 hours Lectures, 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.

ECON984 Financial Economics 6cp
Spring
Contact Hours: 2 hours Lectures, 1 hour Tutorial per week
Subject Description: An advanced study of the theory of efficient acquisition, financing and composition of assets and production activities with applications in the fields of economics of the firm, agricultural economics and international economics. Optimal control methods and phase-plane diagrams are used for analysing efficient trajectories of capital investment and borrowing. Investors' portfolio choices and producers' activity sets will be analysed within a mean-variance expected utility maximisation framework.

Subject Objectives: On successful completion of this subject students are expected to be familiar with: 1. The no-arbitrage rules of efficient saving, borrowing and investing in production capital. 2. The no-arbitrage rules for managing renewable and exhaustible natural assets. 3. Theories and applications of efficient selection of asset portfolio and production-activity set. 4. Economic and financial causes of insolvency and bankruptcy and with external-debt problems. 5. Static and inter-temporal optimisation methods and their applications in saving, investment, resource utilisation, and portfolio analysis.

ECON991 Project 12cp
Spring / Autumn

ECON992 Research Report 24cp
Annual

ECON993 Thesis 48cp
Annual

ECON996 Advanced Macroeconomic Theory 6cp
Autumn

Contact Hours: 3 hours Lectures per week

Subject Description: This subject critically reviews advanced contemporary macroeconomic theories and their policy prescriptions. It stresses the need to consider four important concepts; namely the international orientation of macroeconomics, the role of expectations and their formation, the importance of macroeconomic adjustment speeds, dynamics and stability properties, and finally, the difficulty of formulating and implementing consistent, optimum macroeconomic policy in a changing world.

Subject Objectives: To develop detailed knowledge and understanding of advanced macroeconomic concepts and develop skills in critical evaluation, investigation, written communication, using mathematical concepts and techniques and planning and organising.

ECON997 Advanced Microeconomic Theory 6cp
Autumn

Contact Hours: 3 hours Lectures per week

Subject Description: A balanced and comprehensive coverage of the core topics in theoretical microeconomics, with particular attention to welfare economics, the economics of production, and contestable markets.

Subject Objectives: To extend student understanding of the theory of microeconomics, particularly in an analytical direction, so that they will have a better opportunity to review and critically analyse the literature in both micro and macro economics. This course will also provide for students an extremely solid building block for higher educational (including doctoral) pursuits in this area. On successful completion of the course students are expected to have an understanding and appreciation of neoclassical microeconomics and its strengths and weaknesses; to have the foundations to formulate problems on their own, as well as the microeconomic context to follow more structured procedures for solving those problems; to have added a new dimension to their capacity to conduct research by being equipped with contemporary analytical tools of microeconomics, including game theory and social choice.

FIN 921 Managerial Finance 6cp
Autumn / Spring

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY921

Subject Description: An examination of the sources and uses of corporate finance, and the identification of relevant costs for decision making. Specific topics may include financial decision and corporate strategy, valuation, receivables, capital investment, risk and uncertainty, required rates of return, dividend policy, leasing, mergers and acquisitions.

FIN 922 Investment Analysis 6cp
Autumn

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY922

Subject Description: An in-depth study of investments and investment decision analysis. The theoretical bases of asset pricing and net present value. The application of investment selection criteria under diverse conditions and in different market settings. The incorporation of risk into investment decision analysis and a study of the application of capital asset pricing models in investment evaluation.

FIN 923 Investment Management 6cp
Spring

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY923

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.

FIN 924 Corporate Financial Information 6cp
Analysis

Autumn

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY924

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 925 Banking Theory and Practice 6cp
Autumn

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY925

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 926 Studies in Business Finance 6cp
Autumn

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY926

Subject Description: Contemporary business finance theory, including option pricing theory, arbitrage pricing model, bond swapping and bond immunisation.

FIN 927 Small Business Finance 6cp
Spring

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY927

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 928 Multinational Financial Management 6cp

Spring

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY928

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 929 Risk, Development and Venture Capital 6cp

Spring

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY928

Subject Description: This is predominantly a research subject. The material covered includes the foundations and development of the risk capital industry, management structures, investment decision making processes, deal structures and post investment involvement in entrepreneurial companies by venture capitalists. The risk capital industry has been promoted, by numerous governments, as a panacea for economic woes. This tendency, its rationale and the approaches taken for risk capital development internationally will also be discussed.

Subject Objectives: Students who successfully complete this subject are expected to be able to: 1. Apply research and analytical skills to the assessment of social, political, historical and other factors that impact on the development of an entrepreneurial culture within an economy. 2. Evaluate a country they know well in order to recommend an appropriate mix of programs useful in generating an entrepreneurial and risk taking financial sector. 3. Effectively communicate their findings both orally and in written form.

FIN 955 International Banking 6cp
Spring

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY955

Subject Description: The global impact of banking is the focus of this subject. The subject entails comprehensive discussions on issues that are commonly involved within the international banking environment such as the development of the international monetary system, deregulation of banks, methods of payment in international trade, the foreign markets, international lending and developments of new technology and its impact on the international banking sector.

FIN 956 Banking, Lending and Securities 6cp
Spring

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY956

Subject Description: The criteria involved in the bank's lending process and the securities associated with such a process are the focus of this subject.

The subject entails comprehensive discussions on issues of lending within the banking environment such as regulations of security offerings, principles of good lending, documents involved in lending, lending and the consumer credit code, new developments in lending and securities and its impact on the banking sector.

Subject Objectives: See Subject Outline

FIN 987 Special Topic in Finance 6cp
Autumn / Spring

Contact Hours: 2 hours Seminars per week

Exclusions: Not to count with ACCY987

Subject Description: This course 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 993 Research Essay 12cp
Autumn / Spring

Subject Description: An individual program determined in consultation with the Head of School.

FIN 994 Project 12cp
Autumn / Spring

Subject Description: An individual program determined in consultation with the Head of School.

FIN 995 Research Project 24cp
Autumn / Spring

Subject Description: An individual program determined in consultation with the Head of School.

FIN 996 Thesis 48cp
Annual

Subject Description: An individual program determined in consultation with the Head of School.

MARK901 Marketing on the Internet 6cp

Session 2 Singapore On Campus

Spring Wollongong On Campus

Trimester 1 Hong Kong On Campus

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.

Subject Objectives: 1. Understand the Internet, the Web and ways of using this technology for marketing. 2. Understand the different uses of the Internet and what applications are appropriate for which circumstances. 3. Understand that the best strategies for internet application will differ between industries and even between players within an industry.

4. Understand different issues in different types of applications. Specifically: a primary business platform; a support for business process improvement; a means for customer feedback and relationship development; and business tool for advertising and/or research. 5. Appreciate ethical and legal issues relating to internet use. 6. Develop an understanding of the many possibilities of value adding for particular situations. 7. Describe what constitutes a "good" or "bad" website for specified purposes.

MARK917 Business to Business Marketing 6cp

Session 4 Singapore On Campus

Autumn Wollongong On Campus

Subject Description: Business to Business Marketing covers issues particular to the situation where one business markets a product or service to another business (rather than to an individual consumer). This subject is also referred to at times as Industrial Marketing.

Subject Objectives: To educate students regarding the major theoretical concepts and processes involved in "business to business" marketing, the application of these concepts to "real life" situations through the use of case studies and "real life" examples.

MARK922 Marketing Management 6cp

Session 3 Singapore On Campus

Autumn Wollongong On Campus

Exclusions: WBS904

Subject Description: This introductory postgraduate Marketing subject examines the contemporary view of marketing and focuses on the following areas: identification of market opportunities, segmentation and target marketing, marketing mix decisions, service marketing and international marketing.

Subject Objectives: 1. To provide students with the opportunity to investigate the context and nature of marketing management decisions and discover the relevance of basic concepts and theories to decision making in marketing. 2. To emphasise the comprehensive perspective essential to marketing management decision making by examining the relationship between the company and its customers, society at large, and other internal organisational functions. 3. To train graduate students to critically evaluate current perspectives in marketing and to develop their own perspectives. 4. To capture the new trends and development of marketing theory and practice.

MARK935 Marketing Strategy 6cp

Session 2 Singapore On Campus

Spring Wollongong On Campus

Subject Description: With the use of case studies, this subject will examine the development and implementation of marketing plans and strategies at the organisational level. Key issues may include: marketing's strategic role in the organisation, marketing strategy and competitive advantage, including marketing mix strategies, marketing strategy formulation, implementation and control.

Subject Objectives: On successful completion of this subject students are expected to 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.

3. Literacy in the concepts of strategic marketing, acquired through the submission of several case analyses and a marketing plan.

MARK936 Consumer Behaviour **6cp**
Spring

Subject Description: The subject explores the motives of consumers during the purchase of products and services. It will investigate sociological and psychological concepts as they specifically apply to the behaviour of consumers in order to learn how to make more effective marketing decisions. In addition to a required text that will be used to understand the theory, readings and case studies will be assigned for practical application of the concepts.

Subject Objectives: To provide analytic, creative and practical perspectives on consumer behaviour. On successful completion of this subject students are expected to know and be able to thoughtfully apply consumer behaviour concepts.

MARK937 Relationship Marketing **6cp**
Autumn

Subject Description: Marketing has been defined by some as the art of getting and keeping customers. However, most of the emphasis has been placed on attracting customers. Relationship marketing stresses the importance of keeping customers. This subject will provide both a theoretical and practical perspective to relationship marketing.

MARK938 Managing Services Marketing **6cp**

Session 3 Singapore On Campus
Autumn Wollongong On Campus

Subject Description: This subject provides an in-depth analysis of the problems facing services marketing managers. Through lectures, class discussions, readings and case analysis, plus observation of firms in actual service situations, students will develop insights concerning the unique characteristics of marketing in the services sector. Major topics include: problems and strategies in services marketing; understanding the service experience, dimensions of service quality, services marketing mix, growth strategies for service firms and marketing implementation issues.

Subject Objectives: On successful completion of this subject students are expected to be capable of: 1. Determining how services marketing differs from that of goods. 2. Developing and applying a strategic marketing planning process for services. 3. Understanding the potential impediments to services quality and being capable of recommending strategies which improve service quality. 4. Developing strategies for customer and employee loyalty. 5. Communicating in an effective manner both in writing and orally.

MARK939 Contemporary Issues in International Marketing **6cp**

Contact Hours: Not on offer in 2003

Subject Description: This subject examines the role of globalisation and international marketing in economic development. The major focus is on the discourse of globalisation and how this relates to current issues in international marketing.

Topics include: cultural and social effects of international marketing, the role of multinationals in developing countries, ecological effects of globalisation and economic development, consumer issues in developing countries, and the role of government in international marketing.

Subject Objectives: 1. Provide a framework to critically evaluate and analyse current issues in international marketing. 2. Provide a foundation for students to thoroughly review a specific research area, provide a written summary of a number of readings, and lead a discussion group in critically analysing the issues pertaining to this area. 3. Identify and analyse limitations in current research and opportunities for future research areas. 4. Prepare a comprehensive marketing research project through literature review, analysis and synthesis of a selected topic area pertaining to international or global marketing.

MARK940 Advertising and Promotions Strategy **6cp**

Autumn

Subject Description: This subject provides both a theoretical and a practical perspective on Marketing Communications and Promotion Strategy. Students will learn to use communication tools such as advertising, sales promotion, point-of-purchase materials, sponsorship programs and publicity, to optimise intervention on organisational issues.

Subject Objectives: To understand the concepts of advertising and promotion strategy; be able to apply these concepts in practical situations; to be able to create an integrated marketing communications program using the appropriate tools.

MARK954 Special Topic in Marketing A **6cp**
Spring / Autumn

Subject Description: A special topic selected from any area of marketing. The selection would be made by the Head of the School, taking into account the expertise of academic staff, including visiting staff, and the interest of students.

MARK956 New Product Marketing **6cp**
Spring

Subject Description: New products are the "lifeblood" of the modern organisation, with the majority of firms' sales coming from new products or services which they have introduced in the past 3 years. With a combination of theory and practical "hands-on" assignments, this course takes students to that status of "new products executives", i.e. capable of managing the new product process from new products strategy to successful launch.

Subject Objectives: To provide participants with an understanding of product innovation processes and how they fit as part of a company's business strategy. On successful completion of this subject students are expected to be able to: 1. Demonstrate that they understand the product life cycle, and the role that the marketing function plays in this. 2. Demonstrate that they understand the organisation and management of product innovation processes, from conceptualisation to launch. 3. Implement methods to collect and analyse customer inputs throughout the product life cycle. 4. Develop and apply a new product strategy. 5. Develop a new product concept brief. 6. Analyse the critical factors leading to the success or failure of a newly-introduced product.

MARK957 International Marketing Strategy 6cp

Session 4	Singapore	On Campus
Spring	Wollongong	On Campus

Subject Description: The course will encompass the issues involved in international marketing. Primary focus will be on the strategic aspects with particular emphasis on environmental consideration and international marketing decisions in the global context. A managerial perspective will be adopted and decision-making skills will be imparted through the case method of instruction.

Subject Objectives: 1. Utilize cases 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 analyzing 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. 5. Develop a comprehensive course of action for a business firm using formal decision making processes; and, 6. Complete final course project using skills acquired throughout the course.

MARK959 Sales Management 6cp

Contact Hours: Not on offer in 2003

Subject Description: This course involves organising and planning the company's overall personal selling efforts and integrating these efforts with the other elements of the firm's marketing strategy. It also includes the selecting of appropriate sales personnel and designing and implementing policies and procedures that will direct their efforts towards the firm's desired objectives. The final part of the course involves developing procedures for monitoring and evaluating sales force performance so that adjustments can be made to either the sales program or its implementation when performance is unsatisfactory.

Subject Objectives: To provide the student with a thorough and practical understanding of managing the sales function within the organisation and in relation to the larger market environment. Understanding of the conceptual component of the sales management function as well as the practical implementation of these principles is seen as the chief objective of this course.

MARK960 Case Study 6cp

Spring / Autumn

Subject Description: This is an approved program of study to be agreed with the Head of School, where students will conduct an in-depth analysis of a particular marketing problem.

MARK970 Contemporary Issues in Marketing 6cp

Contact Hours: Not on offer in 2003

Subject Description: This course will focus on advanced topics in marketing and strategic issues relating to marketing. Emphasis will be placed on reviewing contemporary readings in the academic and professional literature, together with a focus on practical issues affecting marketing.

MARK977 Research For Marketing Decisions 6cp

Session 1	Singapore	On Campus
Autumn	Wollongong	On Campus

Subject Description: This subject is concerned with examining the techniques and principles for systematically collecting, recording, analysing and interpreting data that can aid decision makers who are involved with marketing products, services or ideas. Topics include: the structure and function of research information, problem definition and research design, the measurement of consumer attitudes and preferences, design of sampling plans, collecting primary and secondary data, analysing and interpreting statistical research results.

Subject Objectives: To provide participants with both an understanding and the experience of market research practice. On successful completion of this subject students are expected to be able to: 1. Demonstrate that they understand: the practice of market research and the role that it can play in informing marketing-related decisions; and the methodology, theory and practice of applied social research. 2. Formulate a proposal for a market research study. 3. Select and apply appropriate market research methods. 4. Collect, analyse and interpret information. 5. Apply appropriate statistical methods to analyse market research data. 6. Design, execute and report on a market research study.

MARK989 Special Topic b 12cp
Spring / Autumn

Subject Description: A program of coursework and reading as prescribed by the Head of School. This subject is normally available only to MCom(Honours) students.

MARK990 Minor Thesis 24cp
Spring / Autumn**MARK991 Major Thesis 48cp**
Annual**MARK997 Retail Marketing Management 6cp**
Spring

Subject Description: This subject will include a background to retailing, the scope of retailing, retailing strategies, merchandise and store management. 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: On successful completion of this subject students are expected to be capable of: 1. Understanding the main concepts and frameworks of retailing. 2. Dealing with specific retail marketing management problems. 3. Developing appropriate retail marketing strategies. 4. Communicating the analysis and recommendations in an effective manner in writing and in oral presentations.

MGMT908 Human Resources Development 6cp
Autumn

Subject Description: This subject provides an advanced perspective on the use of Human Resource Development (HRD) in enhancing the Competitive Advantage of Organisations, by building up the Intellectual and Learning System capacities of the Organisation to cope with a rapid change, customer focused environment.

The concept of the Learning Organisation will be developed through the perspective of the HRD policies and actions required to develop and change organisations through their human capital and capabilities.

Subject Objectives: On successfully completing the course students are expected to be able to: outline the significance of individual learning styles for the HRD practitioner; present training sessions that incorporate the needs of adult learners and different learning styles; participate in a range of training strategies including classroom based and experiential methods; participate in individual, small group and large group learning situations; discuss the characteristics of learning organisations; outline barriers to learning organisations and suggest strategies for overcoming the barriers; identify the needs of individuals in learning organisations.

MGMT910 Strategic Technology Management 6cp

Spring

Subject Description: This subject introduces students to concepts and practical issues concerned with the strategic management of technology at both the firm and national level. Topics examined include technological change and long-term economic change; internal and external sourcing of new technologies; technology viewed as a stock and a flow of knowledge; and private and public-sector technology policies in Australia and overseas.

MGMT911 Leadership and Team Dynamics 6cp

Spring

Subject Description: A study of the behaviour of individuals in organisations, groups and group processes, leadership and communication, organisation design and job design, appraisal of performance, processes of organisational change and development.

Subject Objectives: 1. To impart to the student an overview of the concepts, theories and research findings in the field of leadership and team dynamics. 2. To demonstrate to the student how leadership is applied in practice in relation to individuals, groups and the overall organisation. 3. To enhance skill development of the student by conducting a number of skill-building activities and exercises in various aspects of leadership and team dynamics.

MGMT913 Global and Comparative Human Resource Management 6cp

Contact Hours: Not on offer in 2003

Subject description: This subject focuses on the choices of international HRM policies and practices that multinational firms are faced with. Functional activities such as recruitment and selection, training and development and compensation are examined as applied in a multinational context. HRM policies and practices are also compared between different countries, particularly in the Asia Pacific region.

MGMT915 Leading Organisational Change: Framing the Management of Change 6cp

Spring

Subject Description: This subject examines the process of change within an organisation. Issues under discussion will be: change models; characteristics of innovative organisations; acceptance/resistance of change; factors of change;

reasons for change; intervention strategies; planning and monitoring change; sustaining change.

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 "frame" and "case study" approaches in order to bring alive the context and reality of change within business organisations and as a vehicle for the application of theory.

MGMT916 Management and Employment Relations 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject examines the management of employment relationships using a number of theoretical approaches and utilising the perspectives of individual, unions, employers and government. The subject is based on the premise that the employment relationship is not managed exclusively by 'managers', but that other individuals and groups, including organised labour and the government, share involvement in the management of employment relations.

Subject Objectives: On successful completion of this subject students are expected to: be familiar with employment relations as both a practical activity and an academic field of study; have greater knowledge of the relationships between human resource management and industrial relations; understand the management of employment relationships using human resource management, industrial relations and employment relations perspectives; be aware that 'management', in an employment relations context, is not the sole preserve of managers; understand the influence of different actors, groups and institutions over employment relationships and managerial policy; be able to advance and substantiate reasoned arguments in the area of employment relations through written assignments and examination essays.

MGMT920 Organisational Analysis 6cp

Spring

Subject Description: This subject provides students with an understanding of the main theoretical frameworks and conceptual tools used to analyse organisations. The subject approaches organisational analysis using four perspectives: bureaucratic, contingency, political, and cultural. Emphasis is placed on understanding the basis in theory and metaphorical roots of each perspective, as the foundation for using a multiple perspectives approach to identify the key dynamics of organisations.

Subject Objectives: On successful completion of this subject students are expected to: be conversant with a number of different approaches to understanding organisational life; understand how metaphors and multiple perspectives can be used to analyse organisations; be familiar with the basis in theory of a range of perspectives used in organisational analysis; be able to use four perspectives (bureaucratic, contingency, political, and cultural) to 'read', understand, and analyse organisations; using a small team format, be able to present effectively the findings of an organisational analysis to others in a group situation.

MGMT930 Strategic Human Resource Management 6cp**Autumn**

Subject Description: This subject examines strategic management concepts and frameworks, and explores the links between strategic management and human resource management. A number of models of strategic HRM are considered, in terms of their theoretical foundations and practical utility. The overall focus is on using the conceptual and analytical frameworks of strategic HRM to develop and implement effective human resource strategies.

Subject Objectives: On successful completion of this subject students are expected to be able to:

1. Understand and use the conceptual framework of strategic management.
2. Identify key features of a number of models of strategic human resource management.
3. Identify issues and challenges associated with integrating human resource strategy and business strategy.
4. Explain external and internal environmental factors influencing strategy formulation and implementation for sustainable competitive advantage.
5. Develop strategies to deal with particular human resource issues.
6. Put forward and justify reasoned arguments in the area of strategic human resource management through written assignments, case/seminar presentation, discussion groups and examination essays.
7. Using a small team format, explain, critically evaluate and wherever possible, propose potential solutions to current strategic human resource management problems/issues.

MGMT933 Organisational Design: Tools & Techniques 6cp**Contact Hours:** Not on offer in 2003

Subject Description: A key concern of contemporary technology management is improving the rate and quality of process innovation by adopting new methods to successfully integrate environmental, human, organisational and technological factors. This subject introduces the student to the interdependent human and technological character of work systems and provides principles and methodologies for designing more effective organisations. This subject is focused on the 'design' aspects of process innovation and covers in some detail, socio-technical system design.

Subject Objectives: On successful completion of this subject students are expected to be able to: appreciate the 'change processes' in play in workplaces today; demonstrate that they understand the importance of both social and technical innovation in the workplace; apply analytical tools to the process of managing process innovation within their own workplaces; demonstrate that they can apply re-design principles to their own organisations; possess a basic understanding of the design aspects for effective teamwork.

MGMT940 Innovation and Entrepreneurship 6cp Spring

Subject Description: True Entrepreneurship and Innovation are key to the future economic development in many nations. This subject investigates the Innovation and Entrepreneurial processes, including New Venture Creation and Intrapreneurship. 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: On successful completion of this subject students are expected to be able to: 1. Develop a profile of the 'Entrepreneur' and determine the fit of their personal characteristics with this profile. 2. Identify and source an innovative business opportunity. 3. Develop the skills to write and present a business plan for an enterprise based on the identified opportunity.

MGMT941 Small Business Management I 6cp Autumn

Subject Description: The Small to Medium Enterprise (SME) is becoming increasingly important to the economic well being of many nations. 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. Detailed investigations of realistic SME scenarios as well as the major growth area of Franchising is undertaken by students.

Subject Objectives: On successful completion of this subject students are expected to be able to: 1. Identify and evaluate the options for starting up a new SME. 2. Identify the key success and failure factors for SME. 3. Identify and analyse the important functional areas of a SME.

MGMT946 Personal Learning: The Reflective Manager 6cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject covers a range of theories and skills to assist the manager in developing their capacities as a "reflective practitioner". Topics include, personality types, interpersonal psychology, perceptions of self and other, risk perception and locus of control; issues of ethics, guilt, shame and responsibility. Students will learn to develop a network and "community practice" to support their ongoing learning, and they will employ methods of reflective practice, critical thinking, journaling and storytelling. Students will pursue personal learning contracts in relation to individual development and specific work-based projects.

Subject Objectives: On successful completion of this subject students are expected to be able to demonstrate: 1. Knowledge of theories of personality as they apply in the workplace. 2. Knowledge of self and one's perception by- and impact on others. 3. Development of a 'learning network' of peers to assist in reflection and lifelong learning. 4. Development of reflective and learning capacity. 5. Ability to make more informed choices about self, relationships, work and career.

MGMT948 Employers and Industrial Relations 8cp**Spring****Contact Hours:** Not on offer in 2003**Exclusions:** Not to count with ECON948

Subject Description: This subject develops 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: imperatives of employers in the employment relationship in current and historical contexts; methods used by organisations and managers to meet their objectives; changing links between external goals of the organisation and internal processes and strategies; links between theory and practice 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; enhance their capacity to read and analyse primary documents pertaining to industrial relations; extend their capacity to present and communicate ideas and concepts in both written work and oral presentation.

MGMT949 Performance Management 6cp
Spring

Subject Description: This subject examines the area of performance management, defined as an ongoing communication process that, ideally, involves both the performance manager and employee in identifying and describing essential job functions and relating them to the mission and goals of the organisation; developing realistic and appropriate performance standards; giving and receiving feedback about performance; writing and communicating constructive performance evaluations and planning education and development opportunities to sustain, improve or build on employee work performance.

Subject Objectives: On successful completion of this subject, the student should have developed a coherent and extensive knowledge of the performance management process and should be able to outline the key concepts and techniques of performance management; explain the development of performance management as an area of growing concern for managers and employees; demonstrate a detailed understanding of the major phases involved in performance management.

MGMT950 Gender and Work 8cp
Autumn

Contact Hours: 3 hours Lectures per week

Pre-requisites: Undergraduate Degree

Exclusions: Not to count with ECON950

Subject Description: This subject presents a multi-disciplinary overview of issues arising from the effects of gender on, and within, the workplace. It addresses a range of concepts and methods necessary for understanding the position of men and women at work, both as workers and managers. The influence of gender on both paid and unpaid work will be considered, including its place in the relationship between these areas.

Subject Objectives: To extend students' understanding of the influence of gender on paid and unpaid work in Industrial Relations, Employment Relations and Human Resource Management; in the labour market, the workplace and wider society. To improve students' abilities in research, critical reading, analysis, argument, presentation, and oral and written communication.

MGMT952 Workplace and Enterprise Industrial Relations 8cp

Contact Hours: Not on offer in 2003

Exclusions: Not to count with ECON952

Subject Description: This subject will focus on the employment relationship at the level of the firm and workplace with particular reference to contemporary micro-level reform, in a variety of countries in Asia and Pacific Rim. The nature and effects of the economic environment on managerial styles and trade union organisation will also be examined.

MGMT953 Human Resource Management 6cp

Contact Hours: Not on offer in 2003

Assessment: Not to count with TSB903 Managing People in Organisations

Subject Description: This subject addresses key areas associated with the functional specialisation of human resource management, and expect these to broaden the organisational context. It focuses on major functional policies and programs such as human resource planning, strategic HRM, job analysis, employment law, recruitment and selection, performance management, compensation, human resource development, occupational health and safety and international HRM. Students are encouraged to draw upon their work experiences in classes and assignments to enhance learning.

Subject Objectives: On successful completion of this subject, the student will be able to: identify and understand key concepts associated with the management of human resources in organisations; appreciate how these concepts are variously applied in organisations; put forward and justify reasoned arguments in the area of contemporary human resource management through written assignments, seminar presentation, discussion groups and examination essays; using a small team format, explain, critically evaluate and wherever possible, propose potential solutions to current human resource management problems/issues.

MGMT954 Political Economy of Australian Wage Determination 8cp

Contact Hours: Not on offer in 2003

Exclusions: Not to count with ECON953

Subject Description: An examination of the broad political and economic contexts which have shaped wage-effort bargaining and the major institutions of industrial relations in Australia from 1850 to the present. Some comparative perspectives will also be developed.

Subject Objectives: On successful completion of this subject students are expected to be able to have: 1. A broad historical understanding of the political and economic contexts which have shaped the process of Australian wage determination. 2. A broad historical understanding of the development of the wage/effort bargain in Australian employment relations at a macro level. 3. the ability to analyse the role of the major institutions governing wage determination, and the wage/effort bargain more generally in Australia.

MGMT955 Comparative Studies in Industrial Relations 8cp

Spring

Contact Hours: 2 hours Lectures, 1 hour Tutorial per week

Exclusions: Not to count with ECON955

Subject Description: A comparative examination of the development and organisation of industrial relations systems in a variety of different countries.

Subject Objectives: 1. To further develop analytical skills in industrial relations through comparison of industrial relations systems in a number of countries. 2. To foster a basic understanding of some overseas industrial relations systems.

MGMT956 Negotiation, Advocacy and Bargaining 8cp

Contact Hours: : Not on offer in 2003

Exclusions: Not to count with ECON975

Subject Description: This subject will develop concepts, theories and techniques for the choice and evaluation of strategies and tactics in collective bargaining and advocacy.

Subject Objectives: 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, an understanding of the place of negotiation and advocacy in the conduct of Australian Industrial Relations, knowledge of the current Australian Industrial Relations legislation.

MGMT957 Productivity and Labour 8cp

Contact Hours: Not on offer in 2003

Exclusions: Not to count with ECON957

Subject Description: An examination of the meaning and measurement of labour productivity, and its relationship to wage bargaining at national industry and enterprise levels. The subject also examines the impact of productivity-based wage bargaining of unions, employer organisation and the economy.

MGMT958 Industrial Relations and Management 8cp

Contact Hours: Not on offer in 2003

Exclusions: Not to count with ECON958

Subject Description: An examination of the ideas and strategies which modern management theorists have developed in order to deal effectively with the open-ended nature of the employment relationship. Particular attention is paid to reasons why management has developed and applied these theories and the extent to which they have proven successful.

MGMT963 Management of Occupational Health and Safety 6cp

Spring

Subject Description: This subject examines issues associated with the establishment of programs for the effective management of Occupational Health and Safety and Rehabilitation. Topics include: Technical and motivational programs, the role of the specialist, benefit-cost analysis, emergency and disaster management, networking within and between organisations, design of accident investigation and hazard assessment reporting systems, and the impact of work organisation on occupational health and safety.

Subject Objectives: On successful completion of this subject students 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 through written projects, seminar presentation and discussion groups;

using a small team format, explain, critically evaluate and wherever possible, propose potential solutions to current occupational health and safety management problems/issues.

MGMT969 Job Analysis, Recruitment & Selection 6cp

Autumn

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 personal selection techniques are examined in relation to issues of reliability, validity, fairness, and applicability. Also a range of practical skills in designing personnel selection techniques are developed.

MGMT973 Employers and Industrial Relations - A 6cp

Contact Hours: Not available in 2003

Exclusions: Not to count with ECON973

Subject Description: This subject develops 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 a practical exercises and evaluation of current trends. The influence of product, labour and financial markets on the strategies and choices will be examined.

MGMT975 Negotiation Advocacy and Bargaining 6cp

Contact Hours: Not available in 2003

Exclusions: Not to count with ECON956

Subject Description: The subject develops concepts and techniques for the choice and evaluation of strategies and tactics in collective bargaining and advocacy. Much of the subject will involve case studies and role playing.

Subject Objectives: 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; an understanding of the place of negotiation and advocacy in the conduct of Australian Industrial Relations; their knowledge of the current Australian Industrial Relations legislation.

MGMT976 Advanced Topics in Industrial Relations - A 8cp

Autumn / Spring

Contact Hours: 3 hours Tutorials per week

Subject Description: Topics for this subject may be drawn from any area of Industrial Relations which the Head of School considers to be suitable preparation for a higher degree and appropriate to the student's special interests.

Subject Objectives: To develop an advanced understanding of a specialist area in Industrial Relations, drawing where possible on workplace experience.

MGMT977 Advanced Topics in Industrial Relations - B 8cp**Autumn / Spring****Contact Hours:** 3 hours Tutorials per week

Subject Description: Topics for this subject may be drawn from any area of Industrial Relations which the Head of School considers to be suitable preparation for a higher degree and appropriate to the student's special interests.

Subject Objectives: To develop an advanced understanding of a specialist area in Industrial Relations, drawing where possible on workplace experience.

MGMT978 Cross Cultural Management 6cp**Autumn**

Subject Description: The subject explores management practices, issues and theory across cultures in international business. It seeks to engage students with problems associated with management practices in a context of increasing global contact. Topics include the communication, technology, comparative management practices, managing with multicultural policies and the implications of culture for international/global managers. On successful completion of this course, students will have an appreciation and knowledge of managing across cultural boundaries in international business.

Subject Objectives: To: 1. Explore management practices and organisational experiences in different cultural environments. 2. Introduce various theoretical perspectives and practical approaches to understanding culture, cultural difference, and cultural change and their implications for international business. 3. Explore options for cross cultural management in the context of various domestic policies. 4. Provide students with a deeper understanding of the cultural dimension in managing organisations across cultural boundaries.

MGMT979 Advanced Topics in Industrial Relations - C 6cp**Autumn / Spring****Contact Hours:** 3 hours Tutorials per week

Subject Description: Topics for this subject may be drawn from any area of Industrial Relations which the Head of School considers to be suitable preparation for a higher degree and appropriate to the student's special interests.

Subject Objectives: To develop an advanced understanding of a specialist area in Industrial Relations, drawing where possible on workplace experience.

MGMT983 Leading Organisations: Politics, Power and Change Agency 6cp**Spring**

Subject Description: This subject provides students with the ability to reflect upon and improve their capacity to act effectively as an innovator and change agent. It introduces students to the nature of power and politics in organisations, how this dimension of organisational life impacts upon individual careers and organisational success, commonly recommended approaches and techniques for managing politics, and the personal and ethical issues involved in either participating in or abstaining from politics. The subject reviews current management research on organisational politics and change management, and provides checklists, case studies, guidelines and exercises for improving the students practical knowledge and experience.

MGMT986 Special Topics A 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Approved program of study agreed with the Head of the School of Management, Marketing and Employment Relations.

MGMT987 Special Topics B 12cp**Contact Hours:** Not on offer in 2003

Subject Description: Approved program of study agreed with the Head of the School of Management, Marketing and Employment Relations.

MGMT990 Minor Thesis 24cp**Contact Hours:** Not on offer in 2003

Subject Description: Approved program of study agreed with the Head of the School of Management, Marketing and Employment Relations.

MGMT991 Major Thesis 48cp

Subject Description: Approved program of study agreed with the Head of the School of Management, Marketing and Employment Relations.

TBS 901 Accounting for Managers 6cp

Intake A	Wollongong	Modular
Intake A	Sydney	Modular
Intake B	Sydney	Modular
Intake C	Wollongong	Modular
Intake D	Sydney	Modular

Contact Hours: 36-40 hours**Exclusions:** ACCY 901 & TBS 979

Subject Description: A conceptual introduction to accounting, focusing on accounting from the viewpoint of the manager's specific needs for financial information. Key areas to be covered include: decision making (short and long-term), internal performance evaluation, legal and quasi-legal background to financial reporting, analysis of financial statements, and strategic business accounting.

TBS 902 Statistics for Decision Making 6cp

Intake A	Wollongong	Modular
Intake B	Sydney	Modular

Subject Description: This unit will provide an in-depth introduction to probability, decision theory, and statistical inference with emphasis on solutions to actual business problems. After developing a foundation in probability theory, the subject will extend this foundation to a set of methodologies for the analysis of decision problems. The unit examines structures for managerial decision making under conditions of partial information and uncertainty. The examination of the use of statistical techniques in managerial decision making processes, including, confidence intervals, hypothesis testing, quality control, simple and multiple regression and factor analysis should be applied in realistic case situations.

Subject Objectives: On successful completion of this subject students should be able to: 1. Explain the importance of statistics as an aid to decision-making in any organisation. 2. Understand and identify managerial statistical problems.

3. Select appropriate statistical techniques for solving a particular problem within any organisation.
4. Use and interpret appropriate output from statistical computer packages such as SPSS/Minitab/Excel.
5. Prepare and produce a managerial report.
6. Demonstrate proficiency in Analysis, Interpretation and Application of managerial statistics. This includes Descriptive and Inferential statistics, Quality Control and Multivariate techniques, including multiple regression and factor analysis.

TBS 903 Managing People in Organisations 6cp

Intake A	Wollongong	Modular
Intake C	Sydney	Modular
Intake D	Wollongong	Modular

Exclusions: MGMT906

Subject Description: This subject analyses central organisational challenges for those who manage people in organisations and a variety of the proposed solutions. To do this, it uses discussion of the employment relationship as a platform for examining central areas of organisational behaviour. It thus starts with the employment relationship, its place within the labour market and its implications for managerial decision-making. Subsequent topics analyse organisational types and the role of managers and managing in organisations. These provide a basis for understanding theories of motivation, group behaviour and teams, organisational culture and the local cultural context, leadership in organisations, power and politics in organisations, consent and control in organisations, and decision-making in organisations.

Subject Objectives: On successful completion of this subject students should have a clear understanding of: 1. Different ways of thinking about organisations and the implications of these differences. 2. The relationship of organisations to their environments. 3. Questions of power and politics within organisation. 4. The roles and behaviours of managers. 5. Strategic policy options available to managers in terms of motivation, leadership and culture. 6. Organisational dynamics.

TBS 904 Marketing Management 6cp

Intake B	Sydney	Modular
Intake C	Wollongong	Modular

Exclusions: MARK922

Subject Description: This subject examines the contemporary view of marketing and focuses on the following areas: international marketing, advertising, consumer behaviour, product development and pricing, sales management, services and relationship marketing, distribution/retailing, marketing research, business-to-business, and contemporary issues in marketing, e.g. Internet, ethics, etc.

Subject Objectives: 1. To provide students with the opportunity to investigate the context and nature of marketing management decisions and discover the relevance of basic concepts and theories to decision making in marketing. 2. To emphasise the comprehensive perspective essential to marketing management decision making by examining the relationship between the company and its customers, society at large, and other internal organisational functions. 3. To train graduate students to critically evaluate current perspectives in marketing and to develop their own perspectives. 4. To capture the new trends and development of marketing theory and practice. 5. To help students obtain the skills necessary to make professional presentations.

TBS 905 Economic Analysis of Business 6cp

Intake A	Sydney	Modular
Intake B	Wollongong	Modular
Intake D	Sydney	Modular

Exclusions: ECON932

Subject Description: This subject provides an introduction to the macro and micro economic environment of business and organisations. It provides an analysis of the logic underlying the operation of a market-based economic system. The processes which lead to the internationalisation of business and globalisation of economies are studied, as well as macroeconomic and microeconomic policies which affect the business environment.

Subject Objectives: WBS905 introduces practical basic economic concepts so that students can understand and describe how businesses and an economy works, including the economy's balance of payments, so that 'reporting' and 'commentary' articles on businesses, on the economy, and on economic trends and policy can be understood. The assignment is intended to provide the student with research skills necessary to obtain and interpret economic data.

TBS 906 Information Systems for Managers 6cp

Intake A	Sydney	Modular
Intake B	Wollongong	Modular
Intake C	Sydney	Modular
Intake D	Wollongong	Modular
Intake D	Sydney	Modular

Exclusions: BUSS903

Subject Description: This subject provides an understanding of the use and impact of information technology in organisations; in particular, it provides an analysis of the structures and functions of the range of typical computer-based business information systems. The applications of information systems and issues facing managers will be examined. Other issues considered are the integration of discrete applications into the total information system and organisational implications of such integration and automation.

Subject Objectives: On successful completion of this subject students are expected to be able to: 1. Appreciate the utilisation of information systems and technology in the context of business organisations. 2. Understand organisational implications of systems integration and workplace automation. 3. Appreciate the use of software technology in a business environment.

TBS 907 Financial Strategy 6cp

Intake A	Sydney	Modular
Intake B	Wollongong	Modular

Contact Hours: 36-40 hours

Pre-requisites: TBS901: Accounting for Managers

Exclusions: ACCY921 & TBS 979

Subject Description: The introduction to this unit will start with a review of corporate goals as they relate to financial strategy. This will be followed by an introduction to key financing decisions such as capital structure and re-structure, dividend policy, company valuation, and sourcing finance. The second half of this unit will comprise case-studies that stress key elements of financial strategy.

TBS 908 Supply Chain Management 6cp**Intake A** Sydney Modular**Intake C** Wollongong Modular

Subject Description: Supply Chain Management involves all the functions within the organisation. It brings together the functions of operations, logistics, information systems, purchasing, engineering and marketing. This subject provides insights into the conceptual foundations of Supply Chain Management. It will answer the questions: What is a supply chain? What types of challenges and opportunities are there in efficient supply chain management?

Subject Objectives: 1. To understand the impact of supply chain management on the success and profitability of today's business organisation. 2. To explain the influence of integrated chain management on major functional activities, including purchasing, product design, information systems, manufacturing planning, forecasting, sales, quality management and marketing. 3. To explore the major challenges faced in implementing an integrated supply chain management strategy, as well as approaches for meeting these challenges.

TBS 913 Innovation Topics and Cases 6cp**Intake A** Sydney Modular**Intake B** Wollongong Modular

Subject Description: The subject covers integration issues that must be confronted and managed to create value from technological and business innovation, including: Initiating innovation and incubating novel thinking, technological innovation, the innovation process, theories of innovation, planning innovation, strategy and innovation, R & D management, economic justification and innovation, new products and processes, operations strategy and innovation, process innovation, managing future technologies, public policy and technological innovation, and globalising change.

Subject Objectives: On successful completion of this subject students should be able to: 1. Analytically assess an issue of potential innovative change. 2. Opine/arrive at feasible solutions to address and implement innovative reform. 3. Develop strategies for innovative change.

TBS 920 International Business 6cp**Intake C** Sydney Modular**Intake D** Wollongong Modular**Exclusions:** TBS984 & MGMT961

Subject Description: This subject provides a development of strategic business thinking in an international context. The international competitiveness of any country will be determined by underlying international rivalry that is not within the scope of general strategic management literature. Influencing the variables of international economic systems is usually beyond the scope of managers, hence students are challenged to consider strategic positioning of business organisations in an international context where there are many interacting influences. These include technology, HRM, international finance, marketing and law. Ethical and political issues are given major attention. Predominant teaching methods are case study and project based.

Subject Objectives: On successful completion of this subject students should be able to: Develop views on the role, importance and limitations of international strategic management in multinational enterprise today. Understand and demonstrate some proficiency in analysing the international business environment, including ethical and political considerations.

Develop an ability to create and develop international business scenarios. Understand the importance of gathering information relevant to international strategic initiatives and to fine-tune abilities to seek out and filter this information appropriately. Develop ability to take strategic decisions based on information available and scenarios created.

TBS 921 Strategic Decision Making 6cp**Intake A** Wollongong Modular**Intake A** Sydney Modular**Intake C** Wollongong Modular**Intake C** Sydney Modular**Contact Hours:** 36-40 hours**Exclusions:** MGMT931

Subject Description: This capstone unit brings together much of what students have discussed in other units, including finance, marketing and HRM. An integrated approach is taken to developing the strategic direction of organisations. This occurs in three main areas of Strategic Analysis, Strategic Choice and Strategy Implementation. The competitive forces that emanate from inside and outside the organisation are considered and hence strategic choices are identified. The unit is taught largely by case-analysis and can involve a substantial mini-project based on an analysis of the strategic decisions that may be taken in the participants workplace.

Subject Objectives: 1. Develop views on the role and importance and limitations of strategic decision making in business today. 2. Understand and demonstrate some proficiency in the use of some strategic analysis tools and their application. 3. Develop their ability to think strategically as an aid to business decision making and their own personal career progression. 4. Develop an ability to build scenarios in business and/or personal career planning. 5. Understand the importance of information gathering in strategic decision making and to fine-tune abilities to seek out and filter this information appropriately.

TBS 924 Management Project 12cp**Contact Hours:** Not on offer in 2003

Subject Description: Students are required to present a management report, to agreed guidelines and to a maximum length of 10,000 words. This project must relate to a student's chosen area of specialisation within the MBA.

TBS 925 Inventory Management 6cp**Intake A** Sydney Modular**Intake B** Wollongong Modular**Intake D** Sydney Modular**Pre-requisites:** TBS 930

Co-requisites: TBS930 may be completed simultaneously with TBS 925.

Subject Description: This subject aims to provide the student with state-of-the-art knowledge of inventory management theory and practice. Topics included will be as follows: materials management; management of storage and retrieval facilities; types of inventory problems; measuring inventory performance; inventory management systems for independent demand items; influence of forecasts and uncertainties of demand and lead time; dependent demand inventory systems; multi-echelon inventory management; decision models for inventory management;

simulation models of inventory management systems; and case studies of world-class inventory management.

Subject Objectives: On successfully completing this subject students are expected to be able to: explain the importance of materials management in manufacturing and services; explain the functions of inventory in an organisation; describe the methods of demand forecasting for inventory management; calculate optimum lot sizes; determine optimum order quantities under quantity discounts; describe the methods of managing independent demand inventory; explain how forecast errors and variability in demand and lead time create a need for safety stocks; explain the management decisions required in multi-echelon inventory systems; explain the inventory management decisions involved in material requirements planning, just-in-time production management, and capacity constrained production; explain how computer simulation is used in inventory management; explain how the cost accounting system used in an organisation can influence management decisions; carry out example calculations in the above areas.

TBS 926 Manufacturing Management 6cp

Contact Hours: Not on offer in 2003

Subject Description: Manufacturing industry dynamics and manufacturing strategy, value adding in manufacturing, materials flow, manufacturing planning and control including MRP II, ERP, JIT and OPT. Maintenance management, supply procurement, distribution quality control, assurance and improvement, manufacturing information technology, performance management, concept of lean and agile manufacturing. Students are expected to undertake a substantial mini-project that is usually case-based, preferably on an aspect of the student's work experience.

Subject Objectives: To consider problems relating to Manufacturing Management. Students are particularly encouraged to consider problems related to their own work or other real life situations. Experiential learning is encouraged, whereby students use work carried out as part of their employment, for assessment purposes. Students are also positively encouraged to work in collaborative teams. A relaxed, meaningful and enjoyable approach to the learning experience is envisaged.

TBS 928 Transport Logistics Management 6cp

Intake B	Wollongong	Modular
Intake D	Sydney	Modular

Contact Hours: 36-40 hours

Subject Description: This subject provides the student with state-of-the-art knowledge of management systems relating to the transportation of products within manufacturing plants and their distribution to the market. Topics covered will include: location analysis; location planning; layout planning; transportation systems in manufacturing plants; managing the distribution of finished products; optimum vehicle routing techniques; and achieving high quality delivery performance.

Subject Objectives: 1. Understand the role that marketing and customer service play in effective Strategic Logistics Planning. 2. Identify why information flow is a key to successful transport logistics strategy formulation and implementation. 3. Broaden their perspectives with respect to logistics planning, to comprehend the importance of strategically planning whilst ensuring this is achieved in an integrated manner.

4. Recognise the importance of emerging issues such as environment, global economic opportunities and threats, developments in IT and understand that they must be managed from a strategic perspective to maximise competitive benefits whilst minimising exposure to hostile forces in the business environment.

TBS 929 Management of Process Innovation 6cp

Intake B	Sydney	Modular
Intake C	Wollongong	Modular

Contact Hours: 36-40 hours

Exclusions: MGMT933

Subject Description: A key concern of contemporary technology management is improving the rate and quality of process innovation by adopting new methods to successfully integrate environmental, human, organisational and technological factors. This subject introduces the student to the interdependent human and technological character of work systems and provides principles and methodologies for designing more effective organisations. This subject is focused on the 'design' aspects of process innovation and covers in some detail socio-technical system design.

TBS 930 Operations Management 6cp

Intake A	Wollongong	Modular
Intake C	Sydney	Modular

Contact Hours: 36-40 hours

Exclusions: MGMT952

Subject Description: This subject is a study of the design and operations of activities for the production of goods and services. Topics include: qualitative and quantitative forecasting, production planning, scheduling, management of quality and productivity, project management and flexible manufacturing systems (FMS). Emphasis will be placed on a comparison of Japanese production and quality management methods with traditional Western methods, total quality management (TQM), computer aided manufacturing (CAM), and implications for human resource management.

TBS 932 Service Operations 6cp

Intake B	Sydney	Modular
Intake D	Wollongong	Modular

Subject Description: The service sector is an important and growing part of the economy. As a result, Service Operations Management and its impact is widespread. Services and Service Operations Management have some similarities to manufacturing and Production Management yet numerous differences exist and will be highlighted. The subject will focus on three primary areas of knowledge: understanding the nature of services, designing efficient and competitive services and managing the delivery of services.

Subject Objectives: Describe the nature and characteristics of service operations. Explain the role of the customer in service operations. Determine strategies to successfully position services in the marketplace. Understand the strategies and planning tools available for matching service demand with supply and know when and how to apply them. Understand the strategies and tools available for delivering services to customers and know when and how to apply them.

TBS 933 Procurement Management 6cp

Intake A Sydney Modular

Intake B Wollongong Modular

Subject Description: In most leading firms today, the function that used to be called purchasing, or procurement, has expanded to become Supply Management. This subject looks at the expanded responsibility of procurement and its integration with long-term strategic corporate planning. Procurement now includes participating collaboratively in key material requirements determinations and supplier qualification; and focuses on the management of supplier relations and performance. This subject incorporates all these areas in the development of procurement and supply chain management.

TBS 941 Advanced Business Studies 6cp**Contact Hours:** To be announced

Subject Description: This subject provides students with exposure to current theoretical developments in business and management. There is an emphasis on integrative theory, although discipline based theory advances will also be canvassed. It seeks to develop the skills of critical analysis of theory both on the basis of its own assumptions and structure and by exploration of the related research literature. Students also investigate the skills of lateral thinking as they relate to business practice and innovation.

Subject Objectives: On successful completion of this subject, students are expected to be able to: 1. Demonstrate an understanding of various business theories at a level appropriate to a professional doctorate. 2. Organise, categorise and discuss issues and material in a logical format, to inform the development of the thesis structure. 3. Critically analyse business research literature. 4. Demonstrate high-level information gathering skills at a doctoral level.

TBS 942 Advanced Business Specialisation Studies 6cp**Contact Hours:** To be announced

Subject Description: This subject is designed to enable DBA students to become thoroughly familiar with the subject in which they intend to specialise in their later thesis. Students will be expected to research the area well, using any university facilities available. Industry-based students will also be expected to provide information and knowledge based on their working environment. A substantial knowledge of the relevant literature must be demonstrated. Students will be expected to organise, categorise and discuss the information and issues they identify as part of their specialisation topic. A seminar, report and substantial list of references must be provided.

Subject Objectives: On successful completion of this subject students are expected to be able to: 1. Demonstrate an in-depth knowledge of the topic being studied. 2. Organise, categorise and discuss issues and material in a logical format. 3. Orally present and discuss the material studied to a non-specialist audience. 4. Demonstrate an ability to remain familiar with the latest developments in the topic. 5. Demonstrate high-level information gathering skills.

TBS 943 Advanced Business Research Methods 6cp**Contact Hours:** To be announced

Subject Description: In this subject students will examine epistemology and methodology in social science and business research, and then explore the foundations for choosing methods and techniques in advanced applied business research. Students will develop and extend analytical skills required for successful doctoral research, including statistical techniques, the use of research software, case studies, ethnography, and surveys, as well as ethical issues in business research, and the influence of ethical considerations on research methods and methodology.

Subject Objectives: On successful completion of this subject students are expected to be able to: 1. Demonstrate knowledge of the methodologies that underpin business and social science research. 2. Choose the appropriate research methods taking account of practical and ethical considerations. 3. Have sufficient knowledge of research techniques to be able to apply appropriate research techniques in different circumstances. 4. Demonstrate expertise in the use of statistics and statistical software. 5. Demonstrate expertise in ethnography, case study analysis and other qualitative techniques, and multimethod research.

TBS 944 Advanced Business Specialisation Research 6cp**Contact Hours:** To be announced

Subject Description: In this subject DBA students create a research proposal and develop it into the brief for their DBA research project. Students will be expected to organise the structure of their proposed research project and clearly identify the issues, methodology and sources of reference they will investigate. This will take place in consultation with their DBA supervisor/mentor. There will also be regular class meetings where students will be expected to provide a progress report and receive feedback from colleagues and academic staff.

Subject Objectives: On successful completion of this subject students are expected to be able to: 1. Demonstrate ability to plan in their chosen research area. 2. Communicate a clear vision of where they see their research project going. 3. Orally present and discuss the material studied to a non-specialist audience and react to feedback appropriately. 4. Produce a 4000 word research proposal, clearly outlining the main issues to be investigated, objectives, report structure, research methodology and sources of reference.

TBS 950 Quality in Management 6cp

Intake B Sydney Modular

Exclusions: MGMT947

Subject Description: This subject provides an introduction to Quality Management in organisations undergoing rapid change. It provides frameworks of understanding for the development of the quality movement in post-industrial society and as a coherent field of intellectual study; an overview of quality tools and their purposes; the critical roles of people and change in quality organisations; and an understanding of services marketing with particular focus on service quality and customer satisfaction.

Subject Objectives: On successfully completing this subject students are expected to be able to understand the development of the quality movement and its transformation into achieving business excellence through the use of intellectual systems and corporate knowledge tools: the concepts of competitive advantage in a knowledge based economy; the critical importance of people based change in implementing quality effectively, quality systems and the broad range of quality tools available to organisations in developing and sustaining competitive advantage.

TBS 952 Implementing Quality Systems 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject addresses the systems employed for ongoing quality management, including quality control and quality assurance, as well as improvement of quality. Included is an examination of systems thinking as it applies to quality management; the scope of modern quality systems; ISO quality system certification; continuous improvement methodologies, quality system implementation; various practical high impact methodologies and tools; the financial systems to support quality management endeavours; and case studies.

TBS 953 Management of Service Quality 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: TBS950

Co-requisites: TBS950 may be completed as a co requisite.

Subject Description: This course identifies and examines the framework of understanding from which the Management of Service Quality can be analysed and improved, as a contribution to the long term Competitive Advantage of Organisations in rapid change economies. The course will review the main theories and approaches to Service Management, and will develop case studies and exemplars of best practice service management for a range of industries and organisations. This subject is based on a framework of service issues that allows common principles of both manufacturing and service organisations to be studied. Similarities, contrasts and unique topics in each industry are pointed out so that the widest variety of students will feel comfortable with the subject material. The combination of text, short cases and readings make this subject suitable for an introductory subject in service quality. The assignments allow for in-depth analysis for students with prior service experience.

Subject Objectives: This subject aims to teach students to develop a strategy for providing service that matches the target market with the strengths of the service company. Decisions in support of the service strategy, such as location, layout, capacity, inventory, distribution, and quality assurance will also be studied. The management of Technologies and Human Resources will also be addressed.

TBS 955 Quality Assurance 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: TBS950

Subject Description: This course provides an opportunity for specialised interest study within the Quality management program, by developing the following frameworks of understanding:- The terminologies and propose of Quality Assurance;

studies of selected methodologies of Quality Assurance; a Case Study in Quality Assurance: preparing an organisation for a selected QA award or accreditation.

Subject Objectives: On successfully completing this subject students are expected to be able to: Understand different approaches to QA; have developed a conceptual overview of the different recognised approaches to QA; an understanding of selected, specialised versions of QA eg. in software and environmental contexts; studied selected methodologies of QA - including AS/ISO 9000 and 14000, and the Quality Awards including the Australian Business Excellence Award, and undertaken a significant case study in preparing an organisation for a specific QA outcome.

TBS 979 Accounting in a Global Economy 6cp

Intake A	Wollongong	Modular
Intake A	Sydney	Modular
Intake C	Wollongong	Modular
Intake C	Sydney	Modular

Contact Hours: 36-40 hours

Exclusions: TBS901 and TBS907

Assessment: Refer to Subject Outline.

Subject Description: This subject provides an introduction to the role that accounting and financial management plays in a global economy. Key competencies covered in this subject are: the interpretation of final reports, using accounting information to make short and long term decisions; using accounting information for control purposes; an introduction to risk management; the cost of various sources of finance; the capital structure debate; dividend policy etc.

Subject Objectives: On successful completion of this subject students are expected to be able to: 1. Appreciate the role that accounting plays in the global economy. 2. Use financial accounting data to make informed investment decisions. 3. Use management accounting data for both decision making and control purposes. 4. Have a framework for understanding how to manage for financial risk. 5. Understand the costs and sources of investment capital. 6. Appreciate the dynamics of capital structure and dividend decisions.

TBS 980 International Financial Analysis and Decision Making 6cp

Intake A	Sydney	Modular
Intake B	Wollongong	Modular
Intake B	Sydney	Modular
Intake D	Wollongong	Modular
Intake D	Sydney	Modular

Contact Hours: 36-40 hours

Pre-requisites: TBS979: Accounting in a Global Economy

Exclusions: ACCY928 & ACCY905

Subject Description: This subject introduces students to financial management in an international context. In any one intake, the topics will be selected from the following: Financial environment of international corporate activity; foreign exchange and derivatives markets; methods of foreign exchange risk measurement and management; overview of international financial markets and instruments; financing of foreign trade and foreign direct investments; international working capital management; investment decision making in an international context, including country risk analysis;

Subject Descriptions

international aspects of controlling, reporting and performance analysis; effects of government regulation on management decision making

Subject Objectives: On successful completion of this subject students are expected to have demonstrated an understanding of the financial challenges faced by organisations operating in an international environment, as well as their financial decision making processes to evaluate and manage these challenges.

TBS 981 Employment Relations in an International Context. 6cp

Intake A	Wollongong	Modular
Intake B	Sydney	Modular
Intake C	Wollongong	Modular
Intake D	Sydney	Modular

Contact Hours: 36-40 hours

Subject Description: This subject, while useful for all students, is particularly relevant for those working or seeking work in multinational corporations. It combines the literature on comparative international industrial relations and human resource management in multinational corporations. It begins by examining the major structural and regulatory factors facing human resource managers of multinational corporations: labour markets, national and international regulatory frameworks, union movements and employer organisations. The rest of the subjects examines important areas of human resource management with a particular emphasis on cross-national and cross-cultural aspects.

Subject Objectives: On completion of this subject, the student should be able to: 1. Explain different patterns of union and employer association representation. 2. Identify different national and international labour market regulatory frameworks. 3. Identify, describe and explain key concepts and applications in selected topics of human resource management as they affect multinational organisations - recruitment and selection, performance appraisal, training and development and remuneration systems 4. Identify, describe and explain industrial relations factors facing multinational firms and their strategic responses 5. Analyse and critically evaluate human resource management strategies using an international comparative perspective 6. Locate and critically use data on international employment relations from a range of sources including the worldwide web

TBS 982 Advertising and Marketing in a Global Economy 6cp

Intake A	Sydney	Modular
Intake B	Wollongong	Modular
Intake C	Sydney	Modular
Intake D	Wollongong	Modular

Subject Description: This subject will include the following: introduction to global marketing; the global economic environment; international organisations/regional groupings; social, cultural, political, legal and regulatory environments; the impact of the global financial environment and foreign exchange decisions on marketing; global marketing information systems and research; market entry mode strategies; exporting, licensing, joint ventures, strategic alliances and wholly-owned subsidiaries; global segmentation, targeting, product and pricing decisions; international logistics planning; global marketing communications decisions and the global marketing plan.

Subject Objectives: To: 1. Utilise cases and international business reports and readings to evaluate advertising problems/opportunities in an international environment. 2. Identify and analyse opportunities within international marketing environments using various strategic marketing techniques. 3. Enhance problem-solving skills by analysing global marketing strategies. 4. Evaluate international advertising campaigns and/or marketing strategies. 5. Develop an international advertising/promotional campaign for a business firm using strategic decision making processes. 6. Present final subject project through a written report.

TBS 983 International Economic Environment for Business 6cp

Intake A	Sydney	Modular
Intake B	Wollongong	Modular
Intake C	Sydney	Modular
Intake D	Wollongong	Modular

Contact Hours: 36-40 hours

Subject Description: This subject examines the national and international factors which shape the business environment. The inter-play between macro and microeconomic is examined as well as the impact of national economic policies on business. The role of international trade and foreign investment is discussed along with protectionism, foreign direct investment, payments between the nations, exchange rates and globalisation. A framework for evaluating the costs and benefits of government policies will be developed.

Subject Objectives: Students are expected to develop knowledge and understanding of: economic concepts and their application to international business issues; how the market system allocates resources; the operations of national economics in a global environment structures and institutions in the global economy; the role of trade and financial flows in international business. Students will develop skills in investigating, communicating, using mathematical ideas and techniques and planning and organising.

TBS 984 International Business 6cp

Intake A	Wollongong	Modular
Intake B	Sydney	Modular
Intake C	Wollongong	Modular
Intake D	Sydney	Modular

Contact Hours: 36-40 hours

Exclusions: TBS920 & MGMT961

Subject Description: This is the one of the compulsory subjects for the Master of International Business which brings together and develops in more detail specific subject material covered in the other compulsory subjects for the program. Integrative key topic areas are drawn from: strategic operations, finance, marketing, macro-economics, competitive advantage and corporate and global strategies.

Subject Objectives: On successful completion of this subject the student should be able to: Develop views on the role, importance and limitations of international strategic management in multinational enterprise today. Understand and demonstrate some proficiency in analysing the international business environment, including ethical and political considerations. Develop an ability to create and develop international business scenarios.

Understand the importance of gathering information relevant to international strategic initiatives and to fine-tune abilities to seek out and filter this information appropriately. Develop ability to take strategic decisions based on information available and scenarios created.

TBS 990 Special Topic in Business 6cp

Contact Hours: Not on offer in 2003

Subject Description: Topic to be approved by the Director of the Business School.

TBS 995 Doctoral Thesis 96cp

Contact Hours: To be announced

Subject Description: This is the thesis subject for candidates enrolled in the Doctorate of Business Administration. Candidates are required to submit a research thesis in line with the relevant University Rules. All candidates are required to be familiar with the current University of Wollongong Code of Practice-Supervision. Candidates are required to present a review of their proposed research topic within the first session (full-time students) or two sessions (part-time students) of their candidature. The nature of this review should be discussed with the Director of the Graduate School of Business and the Supervisor(s) in the first session of the candidature. Continuation of candidature will be conditional on the satisfactory presentation of the review.

Subject Objectives: On successful completion of this subject, students are expected to be able to: 1. Demonstrate a distinctive and original contribution to the improvement of professional practice, policy or strategy in a particular business discipline. 2. Defend a research work making the contribution referred to in Outcome (1).

Faculty of Creative Arts

Courses Offered

The following postgraduate courses are available in Creative Writing, Music, Theatre, Visual Arts, and Graphic Design and New Media.

Doctor of Philosophy
Doctor of Creative Arts
Master of Arts – Research
Master of Creative Arts – Research
Master of Creative Arts

The Graduate School of Journalism, a member unit of the Faculty of Creative Arts, offers the following postgraduate programs:

Doctor of Philosophy
Master of Arts - Research (Journalism)
Master of Journalism
Graduate Certificate in Multicultural Journalism

Current Areas of Study and Research

The Faculty of Creative Arts has a limited number of places available each year for suitably qualified candidates to undertake postgraduate degrees in the following areas:

Creative Writing

Poetry
Prose Fiction
Script Writing

Graphic Design and New Media

Graphic Design
Web Design
Interactive Multimedia
Digital Imaging
Graphic Design and New Media Theory

Journalism

Journalism and New Communication Technologies
Comparative Media Systems
Community Journalism
Documentary Journalism
Journalism in Multicultural Contexts
Journalism Training and Education
Media in Developing Countries
Broadcast and Cinema Documentary Film
Interactive Digital Media

Music

Composition
Musicology and Analysis
Performance

Theatre

Performance
Production
Dramaturgy and Theatre Studies

Visual Arts

2D and 3D Studio Practice [Printmaking, Textiles, Painting and Sculpture]
Contemporary Visual Arts Theory
Curatorial Theory and Practise

It may be possible for individuals with appropriate expertise to undertake studies which involve more than one discipline area. Interested applicants should contact the Professional Officer in the Faculty of Creative Arts.

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.

Doctor of Philosophy

The Doctor of Philosophy (PhD) is based on submission of a thesis in a scholarly field or a combination of scholarly thesis and creative work. Assessment is by two external assessors.

Length of Course

Minimum of 2 to 3 years full-time or 4 to 6 years part-time.

Requirements for Admission

Applicants for the PhD should have an appropriate Bachelor degree with Honours Class II, Division 1, or higher (or its equivalent). For applicants wishing to submit by a combination of thesis and creative work the applicant needs to demonstrate that both their academic and artistic background equates with the above minimum standard. In certain circumstances students may be required to commence their enrolment in the MA-R and seek transfer to the PhD when and if they achieve a suitable standard.

Candidates for the PhD enrol in CREA940 Doctoral Thesis Creative Arts.

Doctor of Creative Arts

The Doctor of Creative Arts (DCA) is based on presentation of creative work and supporting written documentation pertaining to the work. Assessment is by two external assessors.

Length of Course

Minimum of 2 to 3 years full-time or 4 to 6 years part-time.

Requirements for Admission

Applicants for the DCA should have an appropriate Bachelor degree with Honours Class II, Division 1, or higher (or its equivalent) and be able to demonstrate evidence of high artistic attainment. Examples of high artistic attainment include publication or professional dissemination of work; grants, fellowships and prizes; critical acclaim; a track record of sustained high level professional activity; and various indicators relevant to the specific discipline.

As a guide, students completing the MCA will need to achieve at or near a High Distinction average to be considered for entry to the DCA. Likewise, students who have completed coursework masters degrees at other universities should be aware that such qualifications may not be regarded as adequate preparation for immediate entry to the DCA program.

In certain circumstances students may be required to commence their enrolment in the Master of Creative Arts - Research and seek transfer to the DCA when and if they achieve a suitable standard.

Outstanding arts practitioners without the required formal qualifications may be permitted to enrol in the DCA provided they can demonstrate a sustained period of artistic activity at the highest level.

It is important that applicants submit adequate material to demonstrate the quality and standing of their work.

Candidates for the DCA enrol in CREA930 Doctoral Presentation Creative Arts.

Master of Arts - Research

The Master of Arts - Research (MA-R) is based on submission of a thesis in a scholarly field or a combination of scholarly thesis and creative work. In some cases it may be possible to transfer to a doctoral program (DCA or PhD) after a suitable period of study (normally at least the equivalent of nine months of full-time enrolment). Assessment for the MA-R is by two external assessors.

Length of Course

Minimum of 1.5 to 2 years full-time or 3 to 5 years part-time.

Requirements for Admission

Applicants for the MA-R with an honours bachelor degree in an appropriate discipline at Class II, Division I or higher, or its equivalent, may be granted advanced standing for CREA921 Research Topics in Creative Arts and be admitted directly into CREA920 Masters Thesis for Creative Arts.

Applicants without appropriate qualifications may be admitted to the course by undertaking CREA921 Research Topics in Creative Arts or ARTS901 Master of Arts Research Methods and, on successful completion at Credit level or better, be permitted to proceed to CREA920.

Master of Creative Arts - Research

The Master of Creative Arts - Research (MCA-R) is a course for high level creative arts practitioners whose work is at a standard beyond that required for the pass masters but who do not possess the requirements for entry to the doctoral program. In some cases, it may be possible to transfer to the DCA after a suitable period of study (normally at least the equivalent of nine months of full-time enrolment). Assessment for the MCA-R is by two external assessors.

Length of Course

Minimum of 1.5 years full-time or 3 years part-time.

Requirements for Admission

Applicants for the MCA-R should hold an appropriate Bachelor degree with Honours Class II, Division 1, or higher (or its equivalent) and be able to demonstrate evidence of strong artistic potential. Examples of artistic attainment and potential include publication or professional dissemination of work; grants, fellowships and prizes; high level professional activity; and various indicators relevant to the specific discipline.

Candidates for the MCA-R enrol in CREA925 Masters Presentation and two 12 credit point coursework subjects. Applicants who have completed other relevant qualifications deemed to be equivalent may be granted advanced standing for one or both of the 12 credit point coursework subjects.

Master of Creative Arts

The Master of Creative Arts (MCA) is an intensive course focusing on the attainment of high level practical skills. It normally consists of two units of coursework plus a major presentation.

Assessment for the major presentation is by one external and one internal assessor.

Each student is allocated a supervisor(s) who is responsible for the supervision of the student's work, and for ensuring that the administration of work is effective and sensitive to the student's needs.

Students and supervisors should establish a regular schedule of meetings.

To be eligible for the award of MCA students must submit all work on, or before, agreed dates unless permission for late submission has been obtained from the supervisor(s).

Length of Course

Minimum of 1 year full-time or 1.5 to 2 years part-time.

Requirements for Admission

Applicants for admission to the MCA program should hold a first degree in an appropriate area. Students without adequate formal qualifications may be required to complete up to 48 credit points additional study incorporating relevant subjects; 48 credit points is the maximum number that can be completed in an academic year. Applicants should also have professional experience in their chosen area of study.

Program of Study

Subjects leading to the Master of Creative Arts are listed below:

Postgraduate Program in Creative Writing

WRIT913	Major Presentation - Writing	24
WRIT910	Analysis of Texts	12
WRIT911	Literary Composition	12

Postgraduate Program in Music Performance

MUS913	Major Presentation - Music Performance	24
MUS910	Music Analysis	12
MUS912	Studies in Performance Technique	12

Postgraduate Program in Music Composition

MUS914	Major Presentation - Music Composition	24
MUS910	Music Analysis	12
MUS915	Studies in Composition Technique	12

Postgraduate Program in Theatre

THEA913	Major Presentation - Theatre	24
THEA910	Theatre Analysis	12
THEA911	Advanced Techniques in Theatre	12

Postgraduate Program in Visual Arts

VIS913	Major Presentation - Visual Arts	24
VIS910	Visual Arts Theory	12
VIS911	Studies in Process and Analysis: Visual Arts	12

Postgraduate Program in Graphic Design and New Media

DES913	Major Presentation - Graphic Design and New Media	24
DES910	Graphic Design and New Media Theory	12
DES911	Studies in Process and Analysis: Graphic Design and New Media	12

Graduate School of Journalism

Current Research Areas

Journalism and New Communication Technologies
Comparative Media Studies
Community Journalism
Documentary Journalism
Journalism in Multicultural Contexts
Journalism Training and Education
Media in Developing Countries
Broadcast and Cinema Documentary Film
Interactive Digital Media

Aims of The Graduate School of Journalism

To provide critical education and training in journalism for graduates who want to develop professional skills with a view to working in the news media industry. To give journalists with professional experience an opportunity to acquire a postgraduate qualification and develop a specialist area of interest. To enhance research in the areas listed above.

Flexible Delivery and Distance Education

Some subjects in the Master of Journalism and the Graduate Certificate in Multicultural Journalism are offered by flexible delivery which may take the form of printed hardcopy materials, CD Rom and/or OnLine (WebCT). Distance education students studying off campus will receive printed hardcopy materials for all subjects (on offer) and for some subjects video materials will also be provided.

Both on and off campus students will be required to use email.

Other Off Campus Courses

The Graduate School of Journalism, through a flexible delivery approach, offers the Master of Journalism (MJ) to students in overseas countries. The School currently offers the MJ through the Open University of Hong Kong.

To obtain an information package please contact:

The Open University of Hong Kong
LiPACE Li Ka Shing Institute of Professional and
Continuing Education
4/F Shun Tak Centre
168 Connaught Road Central
Hong Kong
Telephone: 852 3120 9809
Facsimile: 852 23818456
Email: cce@oliv1.ouhk.hk

For information about courses in other countries please
contact the Head of the Graduate School of Journalism on
02 42213190.

Doctor of Philosophy

The Doctor of Philosophy (PhD) is based on submission of
a scholarly thesis of between 80,000 to 100,000 words.

Length of Course

This degree is normally completed in not less than two
years (four consecutive sessions excluding the Summer
session) with a maximum period of four years of full-time
research (or eight consecutive sessions) from the date of
registration.

Part-time candidates shall normally complete the research
dissertation in not less than three years (six consecutive
sessions excluding the Summer session) and a maximum
period of six years (or twelve consecutive sessions).

Requirements for Admission

Applicants should have a relevant first degree with
Honours Class II, Division 1, or higher, or a Master degree
either in journalism or in a related area, or possess
equivalent qualifications. Graduates in other disciplines at
Master level may also be considered if they can provide
evidence of research interest in specialist areas relevant
to journalism theory and practice.

Admission to the degree shall be subject to the approval of
the Head of School. Applicants must submit a statement
detailing their research history, together with a
comprehensive research proposal of between 3,000 to
5,000 words. Applicants will be assessed on the relevance
of the proposal to the research interests of the Graduate
School of Journalism. Other topics will be considered
against the research expertise available in the Faculty.
Research Proposal guidelines are available.

Candidates for this degree enrol in JOUR999 Thesis.

Master of Arts - Research (Journalism)

The Master of Arts - Research (Journalism) is a degree
that prepares students for entry to a doctoral program and
is suitable for journalists wishing to research aspects of
their media organisation. The course requires completion
of JOUR992 - Research Topics in Journalism (24 credit
points) and the submission of a scholarly thesis of
approximately 50,000 words.

Length of Course

Minimum time to complete the degree is one and a half
years full-time (or three consecutive sessions). Part time
students will normally complete in not less than three
years (or six consecutive sessions) with a maximum of five
years from the date of registration.

Requirements for Admission

Applicants with an honours bachelor degree in an
appropriate discipline at Class II, Division 1 or higher, or
equivalent qualifications, may be granted advanced
standing and admitted directly into JOUR999 Thesis.

Applicants without appropriate qualifications may be
admitted to the course by undertaking JOUR992 Research
Topics in Journalism or ART901 Master of Arts Research
Methods and, on successful completion at Credit level or
better, be permitted to proceed to JOUR999.

Applicants must submit a written statement detailing their
research history together with a research proposal of
2,500 words. Applicants will be assessed on the relevance
of the proposal to the research interests of the Graduate
School of Journalism. Other topics will be considered
against the research expertise available in the Faculty.
Applicants are also required to present a formal Research
Proposal for review by the Graduate School of Journalism.

Course Structure

JOUR992	Research Topics in Journalism	24
or		
ARTS901	Master of Arts Research Methods	24
JOUR999	Thesis	48

The subject, JOUR992 Research Topics in Journalism,
will provide students with training in the theories and
research methodologies current in journalism and involves
three modules of study:

1. a specific theory and methods module of 5,000 -
7,000 words;
2. an advanced content-based module in the student's
discipline area requiring the completion of the content
of an existing subject; and
3. a module in which the student writes and presents a
detailed research proposal for the subsequent Master
of Arts - Research (Journalism) thesis.

Master of Journalism

The purposes of the Master of Journalism by coursework are:

- to provide critical education and vocational training in journalism;
- to assist students in adapting to structural, cultural and technological change in journalism;
- to promote critical evaluation of journalism processes through teaching and research.

Length of course and requirements for admission

Students shall be admitted under the rules covering the University's Master of Arts degree offerings, with the additional provisions below:

- Admission to candidates shall be on the recommendation of the Head of School. Applicants should have a relevant first degree. Qualified journalists are eligible for consideration to be admitted on the basis of documented evidence. All applicants unless otherwise stated, must submit a 800 word essay on a topic determined by the Head.
- Pass students are required to successfully complete a program of studies approved by the Head which must total 48 credit points, except where advanced standing is given for completion of equivalent subjects in a comparable course. The Head, on the basis of documented professional experience, may grant exemption from core subjects.
- All students must complete the core subjects, except where advanced standing is awarded or exemption is given, and such other compulsory subjects as the Head may prescribe. Both JOUR901 and JOUR933 must be completed successfully before commencing any electives unless the Head determines otherwise.
- With the approval of the Head, and the relevant Faculties and Departments, students may also take a maximum of three subjects from other postgraduate and undergraduate courses where it can be shown that this will assist in the development of specialist skills in journalism. Approved vocational electives in the undergraduate level are offered by the Faculty of Creative Arts.
- Students may also complete a major project approved by the Head, or an internship in a professional media organisation, or such field work as the Head may prescribe.
- Students shall discuss their proposed program with an academic adviser from the Graduate School of Journalism prior to enrolment.
- The Master of Journalism shall be available both as a full-time and part-time program. Full-time pass students are expected to complete the degree in two academic sessions, and part-time pass students in four sessions.

- Overseas students with no previous experience in academic presentation in English have the option of taking as part of their approved course the subject ELS151 Introduction to English for Academic Purposes offered by Modern Languages in the Faculty of Arts.

Program of Study

Subjects leading to the Master of Journalism:

Compulsory Core Subjects:

JOUR901	News and Feature Writing*	6
JOUR902	Journalistic Method and Practice*	6
JOUR903	Ethics, Law and Standards*	6
JOUR933	On-Line and Research Journalism*	6

Elective Subjects:

JOUR905	Specialist Journalism 1	6
JOUR906	Specialist Journalism 2	6
JOUR931	Broadcasting Journalism*	6
JOUR932	Television Journalism*	6
JOUR934	Print Production and Publication*	6
JOUR936	International Journalism*	6
JOUR942	Current Affairs Journalism	6
JOUR943	Directed Readings in Journalism*	6
JOUR945	Advanced Journalism Project*	6
JOUR949	Multicultural Journalism*	6
JOUR991	Major Journalism Project*	12

Not all subjects are offered each session.

* These subjects are also available off campus or by flexible delivery.

Graduate Certificate in Multicultural Journalism

The purposes of the Graduate Certificate in Multicultural Journalism are:

- To provide a path for journalists to attain higher academic qualifications;
- To educate members of community organisations wanting to contribute to multicultural news services;
- To provide a cross-cultural context in news definition, production and presentation;
- To provide a grounding in journalism for students who are not professional journalists but plan to work in, or contribute to, multicultural news media.

Length of Course and Requirements for Admission

Candidates for the course should normally hold a degree or be able to show evidence of at least two years of relevant work experience. In special circumstances, representatives of multicultural communities wanting to contribute to multicultural news media services may be admitted as candidates on the basis of other academic qualifications or relevant professional experience. Students are required to successfully complete a program of studies which must total 24 credit points.

Students shall discuss their proposed program with an academic adviser from the Graduate School of Journalism prior to enrolment.

Advanced standing will be given only on the basis of documented professional experience in either print, radio or television journalism. The course normally takes two sessions to complete part-time.

The course is best suited for part-time study. Generally JOUR949 cannot be commenced before completion of the other core subjects. Full-time study may be permitted only by approval of the Head of School.

Program of Study

**Subjects leading to the Graduate Certificate in
Multicultural Journalism**

JOUR903	Ethics, Law and Standards*	6
JOUR933	On-Line and Research Journalism*	6
JOUR949	Multicultural Journalism*	6

and, except where advanced standing has been given, one of the following four subjects:

JOUR901	News and Feature Writing*	6
JOUR931	Broadcasting Journalism*	6
JOUR932	Television Journalism*	6
JOUR936	International Journalism*	6

* These subjects are also available off campus or by flexible delivery.

CREATIVE ARTS SUBJECT DESCRIPTIONS

Note: Except where shown, all subjects are offered on the Wollongong Campus.

CREA920 Masters Thesis Creative Arts 48cp

Annual / Spring 2003 - Autumn 2004

Assessment: Assessment will be by two external assessors. Submission will be in the form of a scholarly thesis (100%) or scholarly thesis (50%) combined with creative work (50%).

Subject Description: As a guide, submission by thesis only will be in the range of 40,000 to 50,000 words with an equivalent workload where submission is by thesis and creative work. Examples of creative work submission include a folio of compositions or writing, exhibition of artwork and musical or dramatic performances. As a guide, the submission of creative work would normally not constitute less than the expectations in the subjects DES913, MUS913, MUS914, THEA913, VIS913 or WRIT913 as applicable. The exact nature of each submission will vary subject to the student's educational and professional background and will be negotiated in consultation with the supervisor(s) and Head of Postgraduate Studies. A brief explanatory annotation may be submitted as a support to the creative work submission.

CREA921 Research Topics in Creative Arts 24cp

Annual / Spring 2003 - Autumn 2004

Assessment: Assessment will be by two internal assessors.

Subject Description: This subject provides students enrolled in the Master of Arts - Research degree with training in the theories and research methodologies current in their chosen discipline areas. This training involves three modules of study: 1. a specific theory and methods module; 2. an advanced content-based module in the student's discipline area; and 3. a module in which the student writes a detailed research proposal for the Master of Arts thesis. The precise content of these modules will be determined on a case-by-case basis, with the student and the supervisor. It will be approved by the Head of Postgraduate Studies.

CREA925 Masters Presentation Creative Arts 48cp

Annual / Spring 2003 - Autumn 2004

Assessment: Assessment will be by two external assessors.

Subject Description: The submission of creative work (research) will normally be by exhibition, performance or publication in the area of specialisation, supported by written documentation (approximately 5,000 words) focusing on aspects such as origins of the work, structures and techniques used, and artistic theories underpinning the work. Please refer to the Faculty for a guide as to the scale and style of the creative work required.

CREA930 Doctoral Presentation Creative Arts 48cp

Annual / Spring 2003 - Autumn 2004

Assessment: Assessment will be by two external assessors.

Subject Description: The submission of the DCA will normally be by exhibition, performance or publication of creative work in the area of specialisation, supported by written documentation (approximately 20,000 to 30,000 words) focusing on such aspects as origins of the work, structures and techniques used, and artistic theories underpinning the work. It may be appropriate to support written material with documentation in other forms, for example, photographs or sound and video recordings. In all cases, the dissertation is intended to be an integrated part of the full submission and, wherever possible, to argue the case for the merit and originality of the creative work. The Faculty is keen that the dissertation should be a vital and engaging document and therefore permits some flexibility in the style of its submission. Nonetheless, the dissertation should be presented in a well-researched form that demonstrates an understanding of scholarly method.

CREA940 Doctoral Thesis Creative Arts 48cp

Annual / Spring 2003 - Autumn 2004

Assessment: Assessment will be by two external examiners. Submission will be in the form of a scholarly thesis (100%) or scholarly thesis (50%) combined with creative work (50%).

Subject Description: As a guide, submission by thesis only will be in the range of 60,000 to 90,000 words with an equivalent workload where submission is by thesis and creative work. The exact nature of each submission will vary subject to the student's educational and professional background and will be negotiated in consultation with the supervisor(s) and the Head of Postgraduate Studies. Examples of creative work submission include a folio of compositions or writing, exhibitions of artwork and musical or dramatic performances. As a guide, the scale of the submission of creative work would normally not constitute significantly less than for the Doctor of Creative Arts.

DESN910 Graphic Design and New Media Theory 12cp

Autumn / Spring / Annual / Spring 2003 - Autumn 2004

Assessment: Two 4,000 word essays based on the seminar series of lectures. Assessment will be by two internal assessors.

Subject Description: Students are required to present two 4,000 word essays based on the seminar series of lectures. They are expected to carry out further research into the topic issues raised in class and referred to in references. The subject explores historical and contemporary theoretical issues concerning graphic design and new media arts. Guest designers will discuss current ideas and latest production techniques at work within the industry.

DESN911 Studies in Process and Analysis 12cp - Graphic Design and New Media

Autumn / Spring / Annual / Spring 2003 - Autumn 2004

Assessment: Assessment will be by two internal assessors.

Subject Description: Students will keep a journal recording the development of their creative work in CD Rom, website, graphic or photographic images. Also, in consultation with the supervisor/s, students will prepare a 2,000 word documentation of their major presentation which may take the form of an exhibition catalogue.

This will show evidence of research, theoretical back-up and critical analysis of the issues related to the major presentation for DESN913. Students will present a seminar on graphic design and new media processes in the context of their field. They will be expected to work independently at an advanced level while consulting with their supervisor/s on a regular basis.

DESN913 Major Presentation - Graphic Design and New Media 24cp

Annual / Spring 2003 - Autumn 2004

Pre-requisites: Pre or Co-requisite: (DESN910) and (DESN911)

Co-requisites: Pre or Co-requisite: (DESN910) and (DESN911)

Assessment: Assessment will be by one internal and one external assessor.

Subject Description: Students will present a substantial exhibition of work that reflects technical skill, knowledge and use of hardware and software to develop, sustain and execute original ideas and researched materials in a cohesive and thematic way. As an example of content, designers should submit 10 graphic design works. Web designers would submit a major interactive web site or 3 smaller sites on the net. Multimedia designers would submit an interactive CDROM that demonstrates an innovative design approach. All students must submit design roughs and supporting material for exhibition. Students must submit a detailed outline of their proposed work (research/production schedule) for the major presentation to the supervisor(s) by the fourth week of enrolment. A cross disciplinary approach may be possible.

DESN921 Creative Industries Design for Interactive Multimedia 6cp

Spring

Contact Hours: 3hrs/week.

Restrictions: Available only to students enrolled in the Master of Multimedia Technologies course, Faculty of Informatics.

Exclusions: Not to count with DESN129.

Assessment: Case study 30%; Collaborative interactive presentation 30%; Major design project 40%.

Subject Description: Through a survey of historical and contemporary case studies this subject examines the partnership between creative innovation and commercial application. Within a framework of weekly lectures students will be required to undertake case study research into interactive multimedia and Internet design.

Subject Objectives: At the conclusion of this subject students will 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.

MUS 910 Music Analysis 12cp

Autumn / Spring / Annual / Spring 2003 - Autumn 2004

Assessment: Assessment will be by two internal assessors. Students will submit two (2) analytical essays of approximately 4,000 words each on topics related to the area of the student's specialisation and determined in consultation with the supervisor/s.

Subject Description: Students will undertake research-based analysis that addresses specific aspects of their musical practice in performance and/or composition. The study may draw on such material as historical survey, critical commentary, verbal history, archival and other material as relevant to the particular areas of theoretical and creative interest.

MUS 912 Studies in Performance Technique 12cp

Autumn / Spring / Annual / Spring 2003 - Autumn 2004

Assessment: Assessment will be by two internal assessors. Students will normally be required to give a presentation of a two hour lecture-recital or equivalent work on a topic related to technique and performance in the student's area of specialisation.

Subject Description: Students will attend and participate in a performance seminar and will participate, where requested, in Faculty ensembles.

MUS 913 Major Presentation – Music Performance 24cp

Annual / Spring 2003 - Autumn 2004

Pre-requisites: Pre or Co-requisite: (MUS910) and (MUS912)

Co-requisites: Pre or Co-requisite: (MUS910) and (MUS912)

Assessment: Assessment will be by one internal and one external assessor.

Subject Description: A 50 minute recital of major works from the instrumental or vocal repertoire, given in the final session of a student's full-time enrolment (or equivalent), is required. The recital program should be approved well in advance by the supervisor(s) and cover a stylistic gamut of music. A presentation of a concerto or equivalent work of approximately 20 to 30 minutes duration is also required. The work (which may, in the case of longer works, be a movement or movements of a concerto) should be chosen in consultation with the supervisor(s) and may be presented with piano reduction as accompaniment. Detailed annotations for both the concerto and recital presentation, of approximately 2,000 words, should be provided. Students are required to attend Performance classes as planned with the supervisor(s) and subject coordinator. Students must submit a detailed outline of their proposed work for the major presentation to the supervisor(s) four weeks in advance of the recital dates. A cross-disciplinary approach may be possible.

MUS 914 Major Presentation – Music Composition 24cp

Annual / Spring 2003 - Autumn 2004

Pre-requisites: Pre or Co-Requisite: (MUS910) and (MUS915)

Co-requisites: Pre or Co-Requisite: (MUS910) and (MUS915)

Assessment: Assessment will be by one internal and one external assessor.

Subject Description: Submission of the following is required: 1. A portfolio of at least four compositions, including one major work for large resources or performance media. 2. Sketches, recordings and other supporting material. 3. Analytical commentaries on the works submitted of approximately 2,000 words. Students must submit a detailed outline of their proposed work for the major presentation to the supervisor(s) by the fourth week of enrolment. A cross-disciplinary approach may be possible.

MUS 915 Studies in Composition Technique 12cp**Autumn / Spring / Annual / Spring 2003 - Autumn 2004**

Assessment: Assessment will be by two internal assessors and will be based on the completion of a project in one of the following areas (following consultation with the supervisor/s): orchestration; studies in counterpoint or imitative/compositional style; preparation of a new performance edition; studies in computer music; or multi-media collaborative project.

Subject Description: Students will participate in composition seminars and workshops, and in Faculty ensembles as requested.

THEA910 Theatre Analysis 12cp**Autumn / Spring / Annual / Spring 2003 - Autumn 2004**

Assessment: Assessment will be by two internal assessors and will consist of an essay of up to 8,000 words.

Subject Description: The student will undertake research based analysis (the scope of which may include the survey of historical and archival material, verbal history, critical commentary or the specific detailing of contemporary performance/production methodologies). This analysis should address a particular aspect of the dramaturgy.

THEA911 Advanced Techniques in Theatre 12cp**Autumn / Spring / Annual / Spring 2003 - Autumn 2004**

Assessment: Assessment will be by two internal assessors and will consist of an essay of up to 8,000 words.

Subject Description: Using the resource obtained through THEA910, the student will evolve an essay that directly relates the historical analysis and the development of experimental or new technologies and methodologies with the intention and process of the proposed major presentation. All work must be submitted by the last teaching week of session.

THEA913 Major Presentation - Theatre 24cp**Annual / Spring 2003 - Autumn 2004**

Pre-requisites: Pre or Co-Requisite: (THEA910) and (THEA911)

Co-requisites: Pre or Co-Requisite: (THEA910) and (THEA911)

Assessment: Assessment will be by one internal and one external assessor. Students will give a public presentation accompanied by a 2,000 word analysis of the performance process.

Subject Description: The major presentation is the planning and implementation of a practical demonstration of the research and thesis development associated with THEA910 and THEA911. The parameters of the Presentation must be negotiated with the supervisor(s) following the completion of THEA910 and before advancing to THEA911. Students must submit a detailed outline of their proposed work for the major presentation to the supervisor(s) by the fourth week of enrolment. A cross disciplinary approach may be possible.

VISA910 Visual Arts Theory 12cp**Autumn / Spring / Annual / Spring 2003 - Autumn 2004**

Assessment: Assessment will be by two internal assessors. Students will submit two essays of approximately 4,000 words each on topics related to the seminar series and after consultation with the lecturer.

Subject Description: This subject aims to explore contemporary arts practice and theory in order that students may place their own work within the broader contexts of arts practices, and the debates and developments in the visual arts and cultural theory.

VISA911 Studies in Process and Analysis 12cp - Visual Arts**Autumn / Spring / Annual / Spring 2003 - Autumn 2004**

Assessment: Assessment will be by two internal assessors.

Subject Description: In consultation with their supervisor(s) students will prepare a visual journal of their creative work, both preparatory work and the final work selected for the major presentation. This will show an analysis of the processes, experimentation, materiality and content of the work. This journal documentation, together with an essay of 2,000 words, may take the form of an exhibition catalogue. Students will also present a seminar on visual process in the context of their field. Students will be expected to work at an advanced level and with a high degree of independence in their chosen studio discipline. They will consult with their supervisor(s) on a regular basis.

VISA913 Major Presentation - Visual Arts 24cp**Annual / Spring 2003 - Autumn 2004**

Pre-requisites: Pre or Co-Requisite: (VISA910) and (VISA911)

Co-requisites: Pre or Co-Requisite: (VISA910) and (VISA911)

Assessment: Assessment will be by one internal and one external assessor.

Subject Description: Students will present a substantial exhibition of work that reflects technical skill, knowledge and use of materials, and an ability to develop, sustain and execute original ideas in a cohesive and thematic way. Preparation of the major presentation should occupy students for at least four hours per day for the period of enrolment. As an example of content, painters should submit at least eight major pieces plus drawings and supporting material of exhibition standard. Equivalent workloads will be expected of students working in other areas of the visual arts. Students must submit a detailed outline of their proposed work for the major presentation to the supervisor(s) by the fourth week of enrolment. A cross disciplinary approach may be possible.

WRIT910 Analysis of Texts 12cp**Autumn**

Assessment: Students will present three seminars on topics decided upon in consultation with the Subject Co-ordinator. After the seminar, each presentation will be written up in the form of an essay of approximately 2,500 words. Assessment will be by the subject co-ordinator.

Subject Description: In fortnightly seminars students will undertake a detailed study of relevant texts in their area of specialisation, which may be in poetry, prose fiction or script writing. The subject aims to develop and refine the ability to trace in detail the relationship between the effects gained by a text and the techniques of writing used to achieve them.

WRIT911 Literary Composition 12cp**Spring**

Assessment: Assessment will be based on 5,000 words of experimental writing and self-evaluation of the effectiveness of the techniques used. Assessment will be by the subject co-ordinator.

Subject Description: In fortnightly seminars students will be required to develop and refine their awareness of the techniques and processes of literary composition and to demonstrate their control of these through the composition of a major piece of writing in a mode outside of their usual practice. Students will be required to outline the effects they are seeking in their writing and to describe and evaluate the techniques they have employed to achieve those effects.

WRIT913 Major Presentation – Creative Writing 24cp**Annual / Spring 2003 -Autumn 2004**

Pre-requisites: Pre or Co-Requisite: (WRIT910) and (WRIT911)

Co-requisites: Pre or Co-Requisite: (WRIT910) and (WRIT911)

Assessment: Students will present either a work of prose fiction (minimum 25,000 words); or a collection of poetry (48 pages); or a 60 minute theatre/film/television script. Assessment will be by one internal and one external examiner.

Subject Description: Students must submit a detailed outline of their proposed work for the major presentation to the supervisor(s) by the fourth week of enrolment. A cross disciplinary approach may be possible.

JOUR901 News and Feature Writing 6cp

Autumn	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Autumn	Open University of Hong Kong	Flexible

Contact Hours: Three hours one day per week for on campus students.

Assessment: Written assignments and practical work.

Subject Description: This foundation subject develops basic skills in straight news reporting to extended feature writing for newspapers and magazines. Attention will be given to subjective aspects of news and feature writing, including the use of comment and opinion; colour stories; the contribution of 'new journalism' to writing human interest stories; interviewing and information gathering techniques; and the application of conventional news values to reporting.

JOUR902 Journalistic Method & Practice 6cp

Autumn	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Autumn	Open University of Hong Kong	Flexible

Contact Hours: Three hours one day per week for on campus students.

Assessment: Written assignments, practical exercises and an essay.

Subject Description: This subject considers the basic attributes of news, the nature of news construction, theories of news making and the structure of news narratives. It takes students through the process of initiating to the completion of a news assignment. Practical areas of discussion are: the structure and conventions of a news round, use of recording devices, interview techniques, working with photographers and camera teams, packaging of news copy, news construction, follow-ups and news management.

JOUR903 Ethics, Law and Standards 6cp

Autumn	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Spring	Open University of Hong Kong	Flexible

Contact Hours: Three hours one day per week for on campus students.

Assessment: Written assignments, essays, hypotheticals.

Subject Description: This subject examines the legal and ethical framework which governs the work of journalists. It considers the nature, efficacy and administration of ethical codes relevant to journalism, particularly the Media Entertainment and Arts Alliance (MEAA) Code of Ethics and the Australian Press Council's Statement of Principles. Other aspects of professional conduct and professional standards considered include guarding against defamation actions; libel laws; breach of privacy; confidentiality; protection of sources; standards of accuracy, fairness and subjectivity in journalism.

JOUR905 Specialist Journalism 1 6cp**Autumn**

Contact Hours: Three hours one day per week for on campus students.

Assessment: Practical assignments and project.

Subject Description: This subject is designed to complement and amplify preliminary courses which cover broader aspects of news gathering and presentation. Specialist areas dealt with shall include one of the following areas: environment; science and technology ; public affairs; arts, lifestyle and leisure; economics and business; and sports. Selected topics will cover conceptual approaches and skills in print journalism. NOTE: Usually, only one specialist area will be dealt with in this subject. A further option for study in specialist journalism will be available in JOUR906 Specialist Journalism.

JOUR906 Specialist Journalism 2 6cp

Spring	Wollongong	On Campus
Spring	Wollongong	Distance

Contact Hours: Three hours one day per week for on campus students.

Assessment: Practical assignments and project.

Subject Description: This subject provides an additional option of specialist study in a major area of contemporary journalism. Specialist areas are set out under JOUR905 Specialist Journalism 1. However, the concepts and skills taught will mainly focus on the electronic journalistic genre.

JOUR931 Broadcasting Journalism 6cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Spring	Open University of Hong Kong	Flexible

Contact Hours: Three hours one day per week for on campus students.

Assessment: Assignments and studio work.

Subject Description: This subject provides advanced skills in script writing, editing, producing and presenting radio news and current affairs programs. The course has a strong practical component. NOTE: This subject provides the foundation for Current Affairs Journalism JOUR942.

JOUR932 Television Journalism 6cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Spring	Open University of Hong Kong	Flexible

Contact Hours: Three hours one day per week for on campus students.

Assessment: Script, proposal, and production assessment with integrated theory.

Subject Description: This subject provides advanced skills in script writing, editing, producing and presenting television news and current affairs programs. A primary emphasis will be placed on techniques for gathering television news or documentary materials in the field. NOTE: This subject provides the foundation for Current Affairs Journalism JOUR942.

JOUR933 On-Line and Research Journalism 6cp

Autumn	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Autumn	Open University of Hong Kong	Flexible

Contact Hours: Three hours one day per week for on campus students.

Assessment: Written and field assignments.

Subject Description: This subject is designed to develop a range of research and journalism investigative methods. It will include the use of online data bases, the Internet, library and archive work and other sources of public information. The use of survey material in journalism will be studied, particularly the presentation of this data in a news format. The organisation of news investigation teams, the techniques that they use, and what they produce will be analysed. Part of the subject will be devoted to news design and presentation on the World Wide Web.

JOUR934 Print Production and Publication 6cp

Spring	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Autumn	Open University of Hong Kong	Flexible

Contact Hours: Three hours one day per week for on campus students.

Assessment: Written assignments and workshop assessment.

Subject Description: This subject focuses on the production of inhouse newsletters and magazines by a combination of conventional techniques and desktop publishing. Topics include copy preparation and editing, principles of typography, news layout, news illustration, production planning and desktop publishing applications.

JOUR936 International Journalism 6cp

Spring	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Spring	Open University of Hong Kong	Flexible

Contact Hours: Three hours one day per week for on campus students.

Assessment: Assignments and one hour examination in class.

Subject Description: This seminar-based subject focuses on international news flow in the context of the New World Information Order debates in the early 70s and news flow in the context of Internet communication; culture, values and ideology in international news production (discussions derived mainly from Australian reporting of Asia); media systems in selected Asia-Pacific countries; and renewed interest in community development oriented journalism.

JOUR942 Current Affairs Journalism 6cp

Autumn / Spring

Contact Hours: Three hours one day per week for on campus students.

Assessment: Script, proposal and production assessment with integrated theory.

Subject Description: This subject provides practical instruction in the preparation of current affairs programs in radio, television and multi-media. A simulated producer journalist environment will provide opportunities for specialisation in one of the three media areas. Unless a student has prior experience, Current Affairs Journalism is to be elected at the same time as either Television Journalism or Broadcast (Radio) Journalism. Students will be able to develop a current affairs project that is informed and designed from within Television Journalism or Broadcast (Radio) Journalism and then developed within the Current Affairs subject. This provides the opportunity for a 12 credit point context, thus adequate time to develop a current affairs piece that involves time consuming production, writing and editing.

JOUR943 Directed Readings in Journalism 6cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Summer 2003/2004	Wollongong	On Campus

Contact Hours: Directed readings/tutorials.

Assessment: Major written evaluation of about 8,000 words of the selected reading program.

Subject Description: This subject enables students to extend their knowledge of the theory and practice of journalism by directed reading courses in selected topics. Topics available include: structure of the Australian news media; news media management in the cyberspace; comparative media systems and practices; qualitative studies of individual journalists and their work; and textual analysis. On the advice of an academic adviser, students have the option of nominating their own topic.

JOUR945 Advanced Journalism Project 6cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Summer 2003/2004	Wollongong	On Campus

Contact Hours: Directed research/consultation.

Assessment: Written evaluations of progress; final research report of 8,000 words which may include electronic media and print production material.

Subject Description: This subject provides a shorter alternative project for final session students not wanting to undertake the major project, or electing to do additional course work, or wanting to develop vocational skills acquired in previous subjects. Project areas available include: news design and presentation on the World Wide Web; print media production; electronic news gathering and production; multimedia production.

JOUR949 Multicultural Journalism 6cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance

Contact Hours: Three hours one day per week for on campus students.

Assessment: Assignments and publications.

Subject Description: This subject provides an historical, cultural and social background for students wanting to work in Australia's growing multicultural media. It will give practical instruction in multicultural print, electronic and multi-media news applications. Particular emphasis is placed on differences between news production and presentation in multicultural media and traditional media.

JOUR991 Major Journalism Project 12cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Summer 2003/2004	Wollongong	On Campus

Autumn	Wollongong	Distance
Spring	Wollongong	Distance

Contact Hours: Directed research/consultation.

Assessment: Two interim reports and major research or fieldwork report.

Subject Description: This subject is designed to give students the opportunity to undertake either a major research project or substantial supervised practical work. In particular, it allows students to complete an internship with a media organisation. Such placement should generally have a minimum duration of six weeks. Students on internship are required to submit detailed records of their work experience, supported by verification from the media organisation, and an internship report of 3,000 words. Research projects should be linked directly to subject areas represented in the journalism schedule, and may include an essay of 10,000 words, visual, sound or multi-media components.

JOUR992 Research Topics in Journalism 24cp

Autumn / Spring / Summer 2003 - /2004

Contact Hours: As arranged with supervisor.

Assessment: See subject description.

Subject Description: This subject will provide students enrolled in the Master of Arts - Research (Journalism) degree with training in the theories and research methodologies current in their chosen discipline areas. This training involves three modules of study: 1. a specific theory and methods module. 5,000 - 7,000 words, possibly one short and one long essay. Seminar participation if determined will be assessed 2.an advanced content-based module in the student's discipline area requiring the completion of the contents of an existing subject and 3. a module in which the student writes a detailed research proposal for the thesis covering: - an annotated bibliography 40% - the development of thesis question and rationale for chapter divisions, involving exposition of thesis argument 40% and - an oral presentation of the thesis proposal 20% The precise content of these modules will be determined on a case by case basis, with the student and the supervisor. It will be approved by the Head, Graduate School of Journalism.

Subject Objectives: Students will be able to: 1. Grasp (at an advanced level orally and in writing), and be able to analyse the theoretical debates and methodological principles in their chosen discipline or interdisciplinary areas; 2. Understand the intellectual debates, key participants, major texts, and essential forums in a key area pertinent to their field of study; 3. Plan a detailed thesis proposal, which will lay the basis for the subsequent Master of Arts - Research (Journalism) thesis. It will include a thesis question, chapter divisions and the sources to be consulted.

JOUR999 Thesis 48cp

Annual / Autumn / Spring / Spring 2003 - Autumn 2004

Assessment: By two external examiners.

Subject Description: The Doctor of Philosophy (PhD) is based on submission of a scholarly thesis of a maximum of 100,000 words. The submission for the Honours Master of Arts (Journalism) is a thesis of approximately 50,000 words.

Faculty of Education

Courses Offered

Subjects offered in the postgraduate program of the Faculty of Education are structured to offer a series of articulated courses progressing from Graduate Diploma to Doctoral level. Candidates without the teacher training background of many of our traditional graduate students can enter postgraduate study in the Faculty at either Graduate Certificate or Graduate Diploma level, and then proceed through the higher degree structure in their area of interest.

Doctor of Philosophy	Graduate Certificate in Adult Career Development
Doctor of Education	Graduate Certificate in Computer- Based Learning
Master of Education – Research	Graduate Certificate in Educational Leadership
Master of Arts – Research	Graduate Certificate in Gifted Education
Master of Education	Graduate Certificate in Higher Education
Master of Arts (Information Technology in Education and Training)	Graduate Certificate in Literacy
Graduate Diploma in Adult Education and Training	Graduate Certificate in Outdoor Education
Graduate Diploma in Education	Graduate Certificate in Special Education
Graduate Diploma in TESOL	Graduate Certificate in TESOL

Current Areas of Study and Research

Postgraduate work is grouped into Programs which provide specialisations in areas in which staff have particular expertise. In 2003 the major Programs will be as follows:

Adult Education and Training	Physical and Health Education
Educational Leadership	Special Education (including Gifted Education)
Information Technology in Education and Training	Teaching English to Speakers of Other Languages (TESOL, including TEFL)
Literacy Education	

There are two Research Groups associated with the Faculty of Education: Centre for Research into Interactive Learning Environments (RILE) and the Centre for Equity Research in Education (CERE). Postgraduate research students are encouraged to undertake postgraduate study associated with the research agendas of these Centres (see listed in this Chapter). In addition, supervision is also available in a number of areas of strength, including:

Educational Leadership
Curriculum Change and Evaluation
Physical and Health Education
Outdoor Education
Early Childhood Education
Special Education and Talented and Gifted Education;
Teacher Professional Development
Literacy and TESOL

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 Faculty.

Doctor of Philosophy

Entry to this degree is available to candidates who meet the University entry requirements for Doctor of Philosophy (PhD) candidature. In the first instance this requires the completion of a Bachelors degree with Honours Class II or higher in an appropriate area, or an equivalent qualification with an appropriate research component.

Pattern of Study

Candidates for this degree enrol in a Doctoral Thesis, subject number EDGZ909. Interested candidates should contact the Associate Dean (Research) to discuss their area of research and supervision. All new students enrolling in a research degree are expected to prepare and defend a research proposal early in their candidature and to become involved in activities such as student colloquia. See subject descriptions for further information.

Time Limits

Normally, the degree will be completed in not less than four, and not more than eight, academic sessions of full-time study, or six to 16 sessions of part-time study. A full-time student load is 24 credit points per session, a part-time student load will be 6-18 credit points per session.

Doctor of Education

The Doctorate of Education (EdD) is a program to prepare professional leaders in Education. It is a doctoral level program completed by a combination of coursework and thesis, offered in 2003 in the areas of:

- Adult Education and Training
- Educational Leadership
- Information Technology in Education and Training
- Literacy Education
- Physical and Health Education
- Special Education (including Gifted Education)
- Teaching English to Speakers of Other Languages (TESOL, including TEFL)

Entry Requirements for the EdD Program

Entry to this degree is available to candidates who:

1. Meet the University entry requirements for Doctoral candidature. Normally this would be an appropriate Masters degree, completed at credit (65%) level or better or the completion of a Bachelors degree with Honours Class II or higher in an appropriate area, or an equivalent qualification, and
2. Candidates must have completed a minimum of three years relevant professional experience.

Time Limits

Normally, the degree will be completed in not less than four, and not more than eight, academic sessions of full-time study, or six to 16 sessions of part-time study.

A full-time student load is 24 credit points per session (three subjects); a part-time student load will be 6-18 credit points per session.

Advanced Standing

Advanced standing of up to 12 credit points may be granted for previous graduate study at MEd level. Candidates who have pursued study beyond a pass Master degree should discuss their request for Advanced Standing with the Associate Dean (Research).

Patterns of Study

1. The program for the degree will require successful completion of:
 - i) at least 48 credit points of subjects including:
 - a) at least 24 credit points selected from subjects which will provide specific preparation for the thesis component of the degree.
 - b) EDGZ922 Conducting Research and Inquiry and a selection of 2 credit point research modules prior to commencement of the thesis component of the program. If there is satisfactory evidence that any of these subjects or its equivalent has already been completed in previous study, the student will undertake another subject of his/her choice from the Faculty of Education subjects or other approved 900-level Graduate subjects to complete his/her Doctoral program.
 - c) EDGZ924 Research Proposal must be successfully completed before commencement of the thesis component. See subject description of EDGZ909 for further information.
 - d) The balance of credit points may be chosen from any of the Faculty of Education subjects or from any 900-level Graduate subjects in the University, provided that prior approval has been obtained from the Associate Dean (Research) and the Head of the relevant School or Department. All subject choices must be discussed with the Associate Dean (Research) and/or the supervisor(s) appointed for the duration of the coursework component of the degree.
 - ii) a supervised thesis (EDGZ909), to be examined externally. This thesis will contribute to two thirds of the total assessment for this award.
2. Each candidate will be required to select a program of study in consultation with their Supervisors and the Associate Dean (Research) to ensure that subjects chosen do not duplicate previous graduate work.
3. Candidates will be required to pass all coursework subjects at the first attempt. The coursework component of the program must be completed with an average grade at not less than Credit (65%) level.

Students who do not meet this requirement will have their doctoral candidature terminated, and may enrol in an appropriate Masters program.

4. a full-time student load is 24 credit points per session, a part-time student load will be 6-18 credit points per session (one or two subjects).

1) Adult Education & Training

The specialisation component of a Doctorate of Education in the Program of Adult Education and Training consists of at least twenty four credit points chosen from the Adult Education and Training program in line with the requirements listed in "Patterns of Study". These subjects are listed below:

EDGH911	Instructional Design for Adult Learning*	6
EDGH912	Project in Instructional Design for Adult Learning	2
EDGH921	Evaluation and Assessment for Adult Learning	6
EDGH922	Project in Evaluation and Assessment for Adult Learning	2
EDGH923	Adult Learning Strategies and Communication	6
EDGH924	Project in Adult Learning Strategies and Communication	2
EDGH931	Psychology of Adult Learning	6
EDGH932	Project for Psychology of Adult Learning	2
EDGH933	Management and Organisational Context of Learning	6
EDGH934	Project in Management and Organisational Context of Learning	2
EDGH935	Issues in Adult Education	6
EDGH936	Project in Issues in Adult Education	2
EDGH940	Adult Career Development	6
EDGH942	Adult Career Development and the Organisation	6
EDGH944	Adult Career Development with Clients	6
EDGH946	Practicum or Project in Adult Career Development	6

*Compulsory subject for students wishing to complete an Adult Education and Training major study

2) Educational Leadership

The specialisation component of a Doctorate of Education in the Program of Educational Leadership consists of at least twenty four credit points chosen from the Educational Leadership Program in line with the requirements listed in "Patterns of Study". These subjects are listed below:

EDGL901	Foundations of Educational Leadership*	6
EDGL902	Project in Foundations of Educational Leadership	2
EDGL903	Introduction to Educational Management*	6
EDGL904	Project in Introduction to Educational Management	2
EDGL905	Policy Studies: Global Change and Educational Leadership	6
EDGL906	Project in Policy Studies: Global Change and Educational Leadership	2
EDGL907	Leading Professional Service Organisations	6
EDGL908	Project in Leading Professional Service Organisations	2
EDGL909	Leadership of Effective Change	6
EDGL910	Project in Leadership of Effective Change	2

EDGL911	Leadership of Curriculum and Instruction*	6
EDGL912	Project in Leadership of Curriculum and Instruction	2
EDGL915	Information Systems and Educational Leadership	6
EDGL916	Project in Information Systems and Educational Leadership	2
EDGL917	Quality Learning and Teaching	6
EDGL918	Project in Quality Learning and Teaching	2
EDGL920	Developing & Managing People*	6
EDGL922	Leadership of Community Organisations	6

* Compulsory subject for students wishing to complete a major study in Educational Leadership.

3) Information Technology in Education & Training

The specialisation component of a Doctorate of Education in the Program of Information Technology in Education consists of at least twenty four credit points chosen from the Information Technology Program in line with the requirements listed in "Patterns of Study". These subjects are listed below:

EDGI911	Information Technology in education and training*	6
EDGI912	Project for EDGI911	2
EDGI913	Instructional strategies and authoring*	6
EDGI914	Project for EDGI913	2
EDGI915	Network-Based Learning	6
EDGI916	Project for EDGI915	2
EDGI931	Interactive Multimedia Design	6
EDGI932	Project for EDGI931	2
EDGI933	Implementation and evaluation of technology-based learning	6
EDGI934	Project for EDGI933	2
EDGI951	Cognition and Interface Design	6
EDGI952	Project for EDGI951	2
EDGI957	Digital Learning Systems Design	6
EDGI958	Project for EDGI957	2

*Compulsory subjects for students wishing to complete a major in Information Technology in Education and Training.

ii) Recommended elective subjects include:

EDGH911	Instructional Design for Adult Learning	6
EDGH931	Psychology of Adult Learning	6

4) Literacy

The specialisation component of a Doctorate of Education in the Literacy Program consists of at least twenty four credit points chosen from the Language and Literacy Program in line with the requirements listed in "Patterns of Study". These subjects are listed below:

EDGA959	Adult Literacy	8
EDGA971	Assessment and evaluation of language and literacy	8
EDGA987	Children's literature	8
EDGR911	Teaching Reading*	8
EDGR912	Teaching Writing*	8

*Compulsory subjects for students wishing to complete a major in Literacy

ii) Recommended elective subjects include:

EDGS918	Approaches to Reading Difficulties: Theories and Strategies	6
EDGL901	Foundations of Educational Leadership	6
EDGA976	Text and Context	8

5) Physical & Health Education

The specialisation component of a Doctorate of Education in the Physical and Health Education Program consists of at least twenty four credit points chosen from the Physical and Health Education Program in line with the requirements listed in "Patterns of Study". These subjects are listed below:

EDGA920	Curriculum Problems and Issues in Physical and Health Education	8
EDGA924	Adolescent Health Status and Behaviour	8
EDGP910	Theory and Practice of Outdoor Education	6
EDGP911	Project for EDGP910	2
EDGP912	Facilitation Techniques in Outdoor Education	6
EDGP913	Project for EDGP912	2
EDGP930	Theoretical and Practical Bases of Coach Education	6
EDGP931	Project for EDGP930	2
EDGP934	Cultural politics of sport, leisure and physical education	6
EDGP935	Leadership and Management in Physical Education, Sport and Recreation	6
EDGP990	Practicum in a Learning Environment	6
EDGP991	Project for EDGP990	2

6) Special Education

The coursework component of a Doctorate of Education in the Program of Special Education consists of at least twenty four credit points chosen from the Special Education Program in line with the requirements listed in "Patterns of Study". These subjects are listed below:

EDGS910	Learning Theories and Exceptionality*	6
EDGS911	Project in Exceptional Education Practices	2
EDGS912	Contemporary Perspectives in the Education of Children with Diverse Needs	6
EDGS913	Project in Contemporary Perspectives	2
EDGS914	Assessment and Instruction of Students with Learning Difficulties	6
EDGS915	Programs for Students with Learning Difficulties	2
EDGS916	Models of Behaviour Management	6
EDGS917	Programming for Behaviour Management	2
EDGS918	Approaches to Reading Difficulties: Theories and Strategies	6
EDGS919	Reading Difficulties: Program Design and Implementation	2
EDGS920	Language and Communication Difficulties: Theory and Practice	6
EDGS921	Language-Related Learning Difficulties: A Case Study	2
EDGS922	Teaching Gifted Children	6
EDGS923	Project in Gifted Education	2
EDGS924	Giftedness in Special Populations	6
EDGS925	Project in Dual Exceptionality	2

*Compulsory subject for major in Special Education

ii) Recommended elective subjects include:

EDGL909	Leadership of Effective Change	8
EDGA917	International and Intercultural Perspectives	8
EDGL901	Foundations of Educational leadership	6

7) Teaching English to Speakers of other Languages (TESOL)

The specialisation component of a Doctorate of Education in the Program of TESOL consists of at least twenty four credit points chosen from the TESOL Program in line with the requirements listed in "Patterns of Study". These subjects are listed below:

EDGA917	International and Intercultural Communication	8
EDGA976	Text and context*	8
EDGA981	Second language literacy	8
EDGA983	Assessment in TESOL	8
EDGA984	Language and Learning in TESOL*	8
EDGA985	English in specific contexts	8

* Compulsory subject for major in TESOL

8) Research Methodology & Project Subjects

EDGZ903	Minor Project in Education	8
EDGZ912	Special Research Topic	8
EDGZ925	Advanced Seminar	8
EDGZ926	Professional Project	12
EDGZ922	Conducting Research and Inquiry	6
EDGZ924	Research Proposal	6
EDGZ951	Poststructuralist/Postmodernist Research	2
EDGZ952	Interviews As Research Method	2
EDGZ953	Correlation Research	2
EDGZ954	Evaluation Research	2
EDGZ955	Developing Grounded Theory In Qualitative Research	2
EDGZ956	Research Methods In Language Education	2
EDGZ957	Feminist Research	2
EDGZ958	Discourse Analysis	2

Subjects in this group do not constitute a separate area of major study, but provide the various methodology and project subjects which are required for completion of the course work component of the EdD as explained above in the section "Patterns of Study".

Master of Education - Research

The Master of Education - Research is a specialised research degree for students who either wish to pursue research careers in education or whose future career will require them to interpret and apply the findings of educational research. This degree is intended for students who are professionally qualified educators.

Entry requirements

Entry is available to candidates with a Bachelors Honours degree with a major in Education; a Masters degree by coursework in Education; a Bachelors degree by coursework majoring in Education (or equivalent) where a Distinction average has been maintained; a Bachelors (degree) by coursework majoring in Education including additional research experience deemed appropriate by the Faculty of Education.

Patterns of Study

The program for the degree will require successful completion of up to 72 credit points, chosen from ;

EDGZ921	Introduction to Research and Inquiry	6
EDGZ922	Conducting Research and Inquiry	6

EDGZ924	Research Proposal	6
EDGZ905	Research Thesis	48

Plus 6 credit points chosen from the following Research Methodology subjects ;

EDGZ951	Poststructuralist/Postmodernist Research	2
EDGZ952	Interviews As Research Method	2
EDGZ953	Correlation Research	2
EDGZ954	Evaluation Research	2
EDGZ955	Developing Grounded Theory In Qualitative Research	2
EDGZ956	Research Methods In Language Education	2
EDGZ957	Feminist Research	2
EDGZ958	Discourse Analysis	2

Requirements for the Degree Program

1. The degree program will normally be completed in two -three sessions of full-time study or four - six sessions of part-time study.
2. The degree program shall involve:
 - a) research methods subjects as required;
 - b) a research proposal (EDGZ924) ; and
 - c) a thesis embodying the results of an investigation to the value of 48 credit points (EDGZ905)
3. A candidate may not include in this degree program any subject which the candidate has previously taken and had credited towards a qualification accepted for admission under Section 1 of these requirements.
4. The Faculty Education Research Committee shall appoint supervisors for each candidate.

Master of Arts - Research

Entry requirements

Entry is available to candidates with a Bachelors Honours degree; a Masters degree by coursework; a Bachelors degree by coursework (or equivalent) where a Distinction average has been maintained; a Bachelors degree by coursework including additional research experience deemed appropriate by the Faculty of Education.

Patterns of Study

EDGZ921	Introduction to Research and Inquiry*	6
EDGZ922	Conducting Research and Inquiry*	6
EDGZ924	Research Proposal	6
EDGZ905	Research Thesis	48

*As required depending on prior research training and experience.

Plus 6 credit points chosen from the following Research Methodology subjects ;

EDGZ951	Poststructuralist/Postmodernist Research	2
EDGZ952	Interviews As Research Method	2
EDGZ953	Correlation Research	2
EDGZ954	Evaluation Research	2
EDGZ955	Developing Grounded Theory In Qualitative Research	2
EDGZ956	Research Methods In Language Education	2
EDGZ957	Feminist Research	2
EDGZ958	Discourse Analysis	2

Requirements for the Degree Program.

The degree program for the Master of Arts – Research will comprise up to 72 credit points of study, chosen as follows;

- a) Research methodology subjects as required
- b) A research proposal (EDGZ924)
- c) A thesis embodying the results of an investigation to the value of 48 credit points (EDGZ905)

Master of Education

The Master of Education is an introductory higher degree for teachers and educators wishing to pursue advanced studies in their area of interest.

Entry Requirements

The degree of Master of Education (MEd) in the Faculty of Education shall be subject to the University's rules for the award of the degree of Master together with the following guidelines:

1. To qualify for admission as a candidate for the Master of Education, a student shall have qualified for a Bachelors degree of the University, or an equivalent qualification from an approved institution, with a major study in Education, provided that the degree or equivalent qualification has a minimum study duration of four years. Other qualifications or substantial professional experience may be considered as meeting these requirements and should be discussed with the Director – Graduate Teaching. Candidates with a three-year qualification in Education completed at Distinction level may be considered for admission to the MEd program.
2. Candidates who do not meet this requirement may be considered for admission to an extended (72 credit point) MEd program.
3. A candidate may not include in this degree program any subject which the candidate has previously taken and had credited towards a qualification accepted for admission under Section 1 of these requirements.

Requirements for the Degree Program

The MEd program will normally comprise 48cp of study, chosen as follows.

- a) EDGZ921 Introduction to Research and Inquiry (6 credit points); and
- b) at least 24 credit points from a single Program (major study). The core of subjects to be covered to complete a major study will vary from Program to Program, and up to
- d) up to 18 credit points of electives chosen from any Program. The amount of choice available will vary from Program to Program. Students wishing to proceed directly to MEd (Research) or Doctoral programs should include Advanced Research Methodolgy and project subjects in their Program, chosen in consultation with their Teaching Program coordinator.

Majors on Testamur

A candidate may be eligible to include a major study area on the final degree testamur. (eg MEd majoring in Information Technology or MEd majoring in Special Education). In order to qualify for a major to be recorded on the degree testamur, a candidate must complete at least thirty credit points from the chosen Program area. Joint majors will not be recorded.

Progression to Higher Degrees

Entry to Doctoral degrees (EdD or PhD) may be available to candidates who meet the University entry requirements for Doctoral candidature. Normally this would be an appropriate Masters degree, completed at credit (65%) level or better.

Suggested progression patterns

The Master of Education degree will normally be completed in two sessions of full-time study, or in four to six sessions of part-time study. Maximum length of candidature is eight sessions of part-time study.

A part-time student will complete up to two subjects each session. The sequence of study in the major will be determined by the subjects on offer in each year and by the pattern of pre- and co-requisites in each Program. Any alternative patterns of study must be discussed with both the Program Co-ordinator and the Director – Graduate Teaching. Note: EDGZ921 Introduction to Research and Inquiry is a single session subject which is repeated in Autumn and Spring session. It is also available as a self-study on-line program in Autumn session and in face to face mode in Spring session. Students have the choice of session in which to complete it, but should consider the advice of the Program Co-ordinator for their major. It is a compulsory component of the Master of Education program and must be completed as one of the first four subjects studied.

Course of study

It should be noted that not all the following subjects will necessarily be offered in 2003. Final arrangements will depend upon student numbers and staff resources. Prospective students are strongly recommended to discuss their program of study with the Co-ordinator responsible for the Program in which they are interested or the Director, Graduate Teaching. All MEd students are required to include EDGZ921 Introduction to Research and Inquiry in their program. Additional specific requirements for program majors are listed below.

Suggested Progression

Note this is a suggestion only, and individual student requirements should be discussed with the academic adviser for the major study. Actual subject choice will depend on timetable constraints.

Session One

Part time: 6 or 8 credit points in major study area

(optional) 6 or 8 credit points in major study area

Full-time: all above plus EDGZ921 Introduction to Research Methods and Inquiry (6cp)

Session Two

Part time: 6 or 8 credit points in major study area

(optional) EDGZ921 Introduction to Research and Inquiry (6cp)

Full-time: 6 or 8 credit points in major study area + 12/16 credit points electives to complete program.

Session Three

Part time: 6 or 8 credit points in major study area

(optional) 6/8cp elective subject

Session Four

Part time: EDGZ921 Introduction to Research and Inquiry (6cp), if not done earlier, or remaining 6/8 credit point subject

Session Five/Six

Part time: Remaining coursework requirements

Major studies are available in the areas of:

Program: Adult Education & Training

EDGH911	Instructional Design for Adult Learning*	6
EDGH912	Project in Instructional Design for Adult Learning	2
EDGH921	Evaluation and Assessment for Adult Learning*	6
EDGH922	Project in Evaluation and Assessment for Adult Learning	2
EDGH923	Adult Learning Strategies and Communication	6
EDGH924	Project in Adult Learning Strategies and Communication	2
EDGH931	Psychology of Adult Learning	6
EDGH932	Project for Psychology of Adult Learning	2
EDGH933	Management and Organisational Context of Learning	6
EDGH934	Project in Management and Organisational Context of Learning	2
EDGH935	Issues in Adult Education	6
EDGH936	Project in Issues in Adult Education	2

*Compulsory subjects for students wishing to complete a major in Adult Education and Training. Students should discuss their proposed course of study with the Program Co-ordinator. Subjects in Adult Education and Training are delivered using online technologies.

Program: Educational Leadership

EDGL901	Foundations of Educational Leadership*	6
EDGL902	Project in Foundations of Educational Leadership	2
EDGL903	Introduction to Educational Management*	6
EDGL904	Project in Introduction to Educational Management	2
EDGL905	Policy Studies: Global Change and Educational Leadership	6
EDGL906	Project in Policy Studies: Global Change and Educational Leadership	2
EDGL907	Leading Professional Service Organisations	6
EDGL908	Project in Leading Professional Service Organisations	2
EDGL909	Leadership of Effective Change	6
EDGL910	Project in Leadership of Effective Change	2
EDGL911	Leadership of Curriculum and Instruction*	6
EDGL912	Project in Leadership of Curriculum and Instruction	2

EDGL915	Information Systems and Educational Leadership	6
EDGL916	Project in Information Systems and Educational Leadership	2
EDGL917	Quality Learning and Teaching	6
EDGL918	Project in Quality Learning and Teaching	2
EDGL920	Developing & Managing People*	6
EDGL922	Leadership of Community Organisations	6

Students should discuss their proposed course of study with the Program Co-ordinator Professor Terry Burke. Subjects in Educational Leadership are delivered using on line technologies.

*Core subjects in Educational Leadership

Program: Information Technology in Education and Training

EDGI911	Information Technology in education and training*	6
EDGI912	Project for EDGI911	2
EDGI913	Instructional strategies and authoring*	6
EDGI914	Project for EDGI913	2
EDGI915	Network-Based Learning	6
EDGI916	Project for EDGI915	2
EDGI931	Interactive Multimedia Design	6
EDGI932	Project for EDGI931	2
EDGI933	Implementation and evaluation of technology-based learning	6
EDGI934	Project for EDGI933	2
EDGI951	Cognition and Interface Design	6
EDGI952	Project for EDGI951	2
EDGI957	Digital Learning Systems Design	6
EDGI958	Project for EDGI957	2

*Compulsory subjects for students wishing to complete a major in Information Technology in Education and Training.

Subjects in Information Technology in Education and Training are delivered using on-line technologies. The choice of additional subjects will depend on the background of the students. Specialist subjects are available for students who already have a background in the area, and professional subjects available for students with an interest, but little background, in the area. Students should discuss their proposed course of study with the Program Co-ordinator, Dr Sue Bennett.

Program: Literacy Education

EDGA971	Assessment and evaluation of language and literacy	8
EDGA987	Children's literature	8
EDGR911	Teaching Reading*	8
EDGR912	Teaching Writing*	8
EDGA959	Adult Literacy	8

*Compulsory subjects for students wishing to complete a major in Literacy

Students should discuss their proposed course of study with the Program Co-ordinator, Dr Jan Turbill.

Program: Special Education

EDGS910	Learning Theories and Exceptionality*	6
EDGS911	Project in Exceptional Education Practices	2
EDGS912	Contemporary Perspectives in the Education of Children with Diverse Needs	6
EDGS913	Project in Contemporary Perspectives	2
EDGS914	Assessment and Instruction of Students with Learning Difficulties	6
EDGS915	Programs for Students with Learning Difficulties	2
EDGS916	Models of Behaviour Management	6
EDGS917	Programming for Behaviour Management	2
EDGS918	Approaches to Reading Difficulties: Theories and Strategies	6
EDGS919	Reading Difficulties: Program Design and Implementation	2
EDGS920	Language and Communication Difficulties: Theory and Practice	6
EDGS921	Language-Related Learning Difficulties: A Case Study	2
EDGS922	Teaching Gifted Children	6
EDGS923	Project in Gifted Education	2
EDGS924	Giftedness in Special Populations	6
EDGS925	Project in Dual Exceptionality	2

*Compulsory subject for major in Special Education

Students should discuss their proposed course of study with the Program Co-ordinator, Dr Deslea Konza, as teaching accreditation requirements in the Special Education and Gifted and Talented Education areas will depend on subject choice. Subjects in Special Education and Gifted and Talented Education are available in on campus programs only. They are delivered using face to face workshops and seminars.

Program: Teaching English to Speakers of Other Languages (TESOL)

EDGA917	International and Intercultural Communication	8
EDGA976	Text and context*	8
EDGA981	Second language literacy	8
EDGA983	Assessment in TESOL	8
EDGA984	Language and Learning in TESOL*	8
EDGA985	English in specific contexts	8

* Compulsory subject for students wishing to complete a major in TESOL.

The recommended sequence is

EDGA976	Text and Context	-
EDGA984	Language and Learning in TESOL	

followed by subjects chosen from the remainder of the TESOL program.

Students should discuss their proposed course of study with the Program Co-ordinator, Associate Professor Bev Derewianka as teaching accreditation requirements in the TESOL area will depend on subject choice.

The Master of Education majoring in TESOL is also available as a fee-paying, distance education course using print based subject packages . Contact the Program Co-ordinator for more details.

Elective Subjects

These subjects do not form a major study, but may be available to students from any major area of study as elective subjects to complement the major area of study.

EDGA918	Environmental and Curriculum Perspectives	8
EDGA917	International and Intercultural Perspectives	8

Research Methodology & Project Subjects

EDGZ903	Minor Project in Education	8
EDGZ912	Special Research Topic	8
EDGZ921	Introduction to Research and Inquiry	6
EDGZ922	Conducting Research and Inquiry	6
EDGZ924	Research Proposal	6
EDGZ925	Advanced seminar	8

Plus 6 credit points chosen from the following**Research Methodology subjects ;**

EDGZ951	Poststructuralist/Postmodernist Research	2
EDGZ952	Interviews As Research Method	2
EDGZ953	Correlation Research	2
EDGZ954	Evaluation Research	2
EDGZ955	Developing Grounded Theory In Qualitative Research	2
EDGZ956	Research Methods In Language Education	2
EDGZ957	Feminist Research	2
EDGZ958	Discourse Analysis	2

Subjects in this group do not constitute a separate area of major study, but provide the various methodology and project subjects which are required for completion of the MEd and higher degrees as explained above in the section Patterns of Study.

Program: Physical & Health Education

The MEd (Physical & Health Education) is offered in conjunction with Charles Sturt University. The degree consists of six core subjects (3 offered by the University of Wollongong and 3 offered by Charles Sturt University) plus two electives chosen from those offered in the specialisations of Educational Leadership, Physical and Health Education, Special Education, Information Technology or those offered by Charles Sturt University in Exercise Science, Journalism, Events Management and Tourism. This program is a fee paying program offered by distance. Students should discuss their proposed program of study with the Program Coordinator – Dr Tonia Gray.

Core Subjects**Offered by University of Wollongong**

EDGZ921	Introduction to Research and Inquiry	6
EDGP934	Culture politics of sport, literature and physical education*	6
EDGP935	Leadership and Management in Physical Education Sport and Recreation*	6

Offered by Charles Stuart University

EHR501	Contemporary Issues in Sport Science	6
EHR500	Modern Health and Health Promotion	6
EHR502	Modern Living, Leisure and the Life Cycle	6

Elective Subjects**Offered by University of Wollongong**

EDGA924	Adolescent Health Status and Behaviour	8
EDGP910	Theory and Practice of Outdoor Education	6

EDGP911	Project for EDGP910	2
EDGP912	Facilitation Techniques in Outdoor Education	6
EDGP913	Project for EDGP912	2
EDGP930	Theoretical and Practical Bases of Coach Education	6
EDGP931	Project for EDGP930	2
EDGP990	Practicum in a Learning Environment*	6
EDGP991	Project for EDGP990	2

Advanced Standing

The Faculty of Education has approved up to 8 credit points of Advanced Standing in the Master of Education to currently enrolled candidates who have completed any of the following Department of School Education, AMES and other accredited professional development courses:

Adult Literacy Teaching: A Professional Development course, or

Cambridge/RSA Certificate in English Language Teaching, or

Certificate in Religious Education, or

Certificate in School Leadership and Management, or

Certificate of Special Education (Integration)*, or

Certificate of Faculty Administration*, or

Collaborative Learning and Reflective Practice*, or

Computing Studies Intensive Methodology course (CSIM), or

Design and Technology Training Agents (Completion of this course with the Tertiary Extension Lobe will allow candidates 8 credit points of Advanced Standing in the Curriculum major plus 8 credit points Advanced Standing for an elective subject), or

Diploma in TESOL (UNSW/WELC), or

Educative Leadership, or

ESL Basic Training K-12, or

Faculty Leadership for Effective change (FLEC), or

Frameworks: A Literacy and Learning course*, or

Frameworks: Assessment and Evaluation Module *, or

Interactive Multimedia Workshop (Univ. Wollongong)*, or

Introduction to Functional Grammar (NSW AMES), or

Learning Assistance Support Team (LAST), or

LOTE Intensive Methodology (LIM), or

Supervision for Effective Teaching (SET), or

Team Leadership course (TLC)* formerly FLEC.

*Accreditation of these courses requires completion of an extended assessment lobe. See relevant Program Coordinator for details.

Major study requirements must still be met by the candidate, ie, normally this credit cannot be substituted for a compulsory subject within a program, or form part of a major study within a program. Candidates may claim a maximum of eight credit points of Advanced Standing on this basis in one program of study.

Master of Arts (Information Technology in Education and Training)

The Master of Arts (Information Technology and Training) is aimed at those who wish to develop information and communication technology application for training and educational contexts. It is a professional development program which introduces the design process for multimedia and discusses issues such as how the Internet and other computer mediated learning can support learning. Other topics covered in the program include: the design of CD-Rom products, digital media projects, cognition and interface design, using websites and networks for learning and the evaluation of technology based learning systems. It differs from the MEd program in that no formal educational background is required for entry. Subjects are chosen from those listed in the Information Technology specialisation. Students should hold a recognised Bachelors degree and have access to a training or educational context in which to undertake course projects. For further information contact Dr Sue Bennett.

Graduate Diploma in Adult Education & Training

The Graduate Diploma in Adult Education and Training is a coursework postgraduate Diploma designed to meet the specific educational development needs of a broad range of adult education practitioners. The course is designed to cover the generic professional skills for all those who work in the training and education of adults in a variety of settings - business, industry, community education, government and private organisations. Candidates will pursue studies in five major subject areas and demonstrate their skills and knowledge in a special project/practicum. The course is designed on the assumption that students undertaking the course will have already obtained their first professional qualification and that their current employment requires that they obtain professional qualifications in the training and development of adults. It may also serve as an alternative form of entry into the Master of Education, which requires a formal background in the discipline of Education.

Advanced Standing

Candidates enrolled in the Graduate Diploma in Adult Education and Training who have completed the BHP in-house program in Curriculum and Instructional Design are eligible for 8 credit points of Advanced Standing specified as EDGA991 Instructional Design.

Advanced standing for other professional development courses such as the Certificate IV in Workplace Training may also be available.

Pattern of study

The course will consist of a core of four subjects:

EDGH911	Instructional Design for Adult Learning	6
EDGH921	Evaluation and Assessment for Adult Learning	6
EDGH923	Adult Learning strategies and communication	6
EDGA806	Practicum or Project	8

plus subjects chosen from the following to complete forty-eight credit points:

EDGH912	Project for Instructional design	2
EDGH922	Project for Evaluation and assessment	2
EDGH924	Project for Learning strategies and communication	2
EDGH931	Psychology of adult learning	6
EDGH932	Project for Psychology of adult learning	2
EDGH933	Management and organisational context of learning	6
EDGH934	Project for Management and organisational context of learning	2
EDGH935	Issues in Adult Education	6
EDGH936	Project for Issues in Adult Education	2

or other subjects selected in consultation with the Program Co-ordinator.

Graduate Diploma in Education

The Graduate Diploma in Education (GDipEd) is a professional pre-service course in education for graduates of this or another approved university who seek teacher qualifications. It also serves as an introduction to the study of education for those who will later pursue further studies in the field, for example at the Masters level.

Intending applicants for the Graduate Diploma course are advised that it may be necessary to restrict enrolments. If this is necessary, selection to the course will be made on the basis of academic merit and suitability of the first degree to teaching requirements. Preference will be given to graduates of the University of Wollongong. A statement of interests and experience in Education will also be requested from applicants and will be considered as part of the selection process.

The main aim of the course is to provide a professional course of pre-service education for intending primary and secondary school teachers. The structure of the program seeks to combine the practical and theoretical elements of teaching by engaging students in professional aspects, including Methods work and classroom practice, from the beginning of the course. Underpinning and integrated with the professional aspects are curriculum studies and the "foundation" disciplines of education.

Each component is intended to contribute to the development of concepts and skills relating to an understanding of, and competence in, teaching.

It is expected that prospective teachers will develop as autonomous professionals who will be competent, innovative, capable of contributing to the formulation of

curriculum in schools and, most important, committed to their own continuous professional growth.

The course is for one year full-time, over an extended academic year of 36 teaching weeks from late February to late November and it is not possible to commence the course in the middle of the year. The GDipEd program involves lectures, seminars, tutorials, individual assignments, group exercises and nine weeks of full-time work in local schools. Methods work and practice teaching are provided in co-operation with local schools.

Students are advised that the structure of the course makes it preferable that it be undertaken full-time.

Assessment

Students must satisfactorily complete every subject and major component in their program of study before the Graduate Diploma will be awarded. Assessment for each subject in the GDipEd program will be determined by individual lecturers. More specific details of assessment will be given in individual subject outlines.

Attendance

Each session is divided into a number of blocks, each of which is either school or University based. As a result the course timetable changes several times during the year. Details of lecture contact hours, and other time commitments expected of students, are outlined in the Graduate Diploma of Education Handbook distributed to students at the beginning of the academic year.

Course Outline

Students are required to complete subjects as set out below, with a total of 54 credit points:

For those students pursuing secondary school methods:

EDGC800	Practicum	6
EDGC811	Understanding Learning A	6
EDGC812	Professional Skills A	6
EDGC813	Learning and Teaching Contexts A	6
EDGC821	Understanding Learning B	6
EDGC822	Professional Skills B	6
EDGC823	Learning and Teaching Contexts B	6

Plus 12 credit points of Secondary Methods

For those students pursuing primary school methods:

EDGC800	Practicum	6
EDGC811	Understanding Learning A	6
EDGC812	Professional Skills A	6
EDGC813	Learning and Teaching Contexts A	6
EDGC821	Understanding Learning B	6
EDGC822	Professional Skills B	6
EDGC823	Learning and Teaching Contexts B	6

Plus 12 credit points of Primary Methods

Methods Subjects

Students are required to complete successfully one Primary or two Secondary methods subjects. Methods subjects are central to the program and are offered throughout the year.

The Method areas which are available may differ from year to year. Methods currently offered are: Social Science (HSIE), English, History, Drama, ESL, French, Italian, Japanese, Mathematics, Science, Art, Music.

Students are advised to check with the Faculty regarding the availability of specific Methods subjects.

Students are also advised to check with the Faculty through the Faculty's Student Service Centre (Building 23, Room G21) regarding the combinations of methods which will satisfy the requirements of the NSW Department of Education. A letter from the NSW Department of Education and Training stating that the student's undergraduate program is acceptable to the Department for recognition as a teacher of the chosen methods area(s) is required of each student by the beginning of the course.

Graduate Diploma in TESOL

The Graduate Diploma in TESOL is a coursework postgraduate Diploma designed to meet the specific educational development needs of a broad range of English language teachers and educators. The course is designed to cover the generic professional skills for all those who work in the TESOL area in a variety of settings - business, industry, community education, government and private organisations. Candidates will pursue theoretical studies and demonstrate their skills and knowledge in a special project/practicum.

The Graduate Diploma in TESOL may also serve as an alternative form of entry into the Master of Education, which requires a formal background in the discipline of Education.

Course Costs

The Graduate Diploma in TESOL is a fee-paying program. The GDipTESOL is also available by distance education as a fee-paying program. Fee information is available from Uniadvice or in the University postgraduate prospectus.

Entry

Candidates must meet the normal University requirements for Graduate Diploma entry, ie a three year Bachelor degree or equivalent.

Pattern of study

Candidates will be required to complete

1. 24 credit points of 200-300 level subjects ie
- | | | |
|---------|---|---|
| EDUE317 | English Language: Examining Learners' Problems | 6 |
| EDUL240 | Materials and Technology in Second Language Teaching | 6 |
| EDUE319 | Programming and Methodology in Second Language Teaching | 6 |
| EDUL330 | Practicum or Project in Language Teaching | 6 |
- plus
2. The following two subjects:
- | | | |
|---------|--------------------------------|---|
| EDGA976 | Text and Context | 8 |
| EDGA984 | Language and Learning in TESOL | 8 |
- plus
3. A choice of one of the following electives
- | | | |
|---------|--------------------------|---|
| EDGA981 | Second Language Literacy | 8 |
| EDGA983 | Assessment in TESOL | 8 |

Enquiries regarding this program should be directed to the TESOL Program Co-ordinator, A/Prof Bev Derewianka.

Graduate Certificates

Entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (i.e. a three year degree or equivalent). All Graduate Certificates are fee-paying programs.

Fee information is available from UniAdvice or in the University postgraduate prospectus. Graduate Certificates are available in the areas of:

Adult Career Development	Self-study, CD-ROM based course. Distance delivery only.
Educational Leadership	Flexible Delivery using Web-based material
Computer-Based Learning	On-campus, distance education and Flexible delivery using web-based material
Literacy	On-campus, distance education Flexible delivery using web-based material
Outdoor Education	On-campus, workshops
Special Education	On-campus only
Gifted Education	On-campus only
TESOL	On-campus, or distance education using print based material
Higher Education	On-campus , or Flexible delivery using web- based material

Advanced Standing

Students who wish to continue onto the MEd program will receive 24 credit points of advanced standing for subjects completed in a Graduate Certificate program, provided the candidate has not formally graduated with the Graduate Certificate award. If the candidate has formally received the Graduate Certificate, up to 16 credit points of advanced standing will be granted towards the MEd.

Graduate Certificate in Adult Career Development

The Graduate Certificate in Adult Career Development is a specialised course aimed at those working with the development of adult careers. The course is offered on a full-fee basis in a self-study open-learning format, using materials available on Macintosh or Windows CD-ROM disk. A Web-based format is also being developed. The Grad Cert Adult Career Development consists of 4 x 6 credit point subjects). The course is only offered by distance mode and, with the exception of the Practicum, is delivered on CD ROM.

The subjects are:

EDGH940	Adult Career Development	6
EDGH942	Career Development and the Organisation	6
EDGH944	Career Development with Clients	6
EDGH946	Practicum or Project in Adult Career Development	6

Further information on course cost and application material is available from UniAdvice.

Graduate Certificate in Educational Leadership

The Graduate Certificate in Educational Leadership is designed to provide an opportunity for mid-career professionals with backgrounds in schools, tertiary education and adult education and training to undertake an intensive professional development program to address the changing nature of their work.

The Graduate Certificate consists of twenty four credit points usually completed over one year of study, chosen as follows:

EDGL901	Foundations of Educational Leadership	6
EDGL903	Introduction to Educational Management	6

plus

other subjects (including Project subjects) chosen from the subjects listed in the Educational Leadership Program chosen in consultation with the course co-ordinator to complete a 24 credit point program.

Graduate Certificate in Computer-Based Learning

The Graduate Certificate in Computer-Based Learning is designed to enable graduates to extend their knowledge of the use of computer technology in teaching. Entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (ie a three year degree or equivalent). The Graduate Certificate in Computer-Based Learning comprises 24 credit points chosen as follows:

Two core subjects:

EDGI911	Information technology and training	6
EDGI913	Instructional strategies and authoring	6

plus other subjects (including Project subjects) chosen from the subjects listed in the Program Information Technology in Education and Training in the Graduate School schedule chosen in consultation with the course Co-ordinator to complete a 24 credit point program.

Graduate Certificate in Literacy

The Graduate Certificate in Literacy is designed to provide a specialist qualification in the area of Literacy Education for teachers interested in qualifying in this area. This is offered as an on-campus coursework program and is also available as a full-fee, self-study program through a combination of video material and on-line instruction. Contact the Literacy program co-ordinator for more details. The course consists of 24 credit points generally completed over twelve months. Three subjects are chosen from the following:

EDGR911	Teaching Reading	8
EDGR912	Teaching Writing	8

Plus one of the following:

EDGA959	Adult Literacy	8
EDGA971	Assessment and evaluation of language and literacy	8
EDGA987	Children's Literature	8

Graduate Certificate in Outdoor Education

The Graduate Certificate in Outdoor Education is designed for educators interested in attaining the necessary skills and competencies to effectively teach Outdoor Education in a school or training setting. Outdoor Education draws on the disciplines of experiential education, adventure education, environmental education, social science and the humanities.

The course consists of 24 credit points generally completed over twelve months by undertaking:

1. Four compulsory subjects (totalling 16 credit points) in the major study area
- | | | |
|---------|--|---|
| EDGP910 | Theory and practice of outdoor education | 6 |
| EDGP911 | Project for EDGP910 | 2 |
| EDGP912 | Facilitation techniques in outdoor education | 6 |
| EDGP913 | Project for EDGP912 | 2 |
2. The remaining 8 credit points are chosen from the following areas of the Graduate School schedule: Educational Leadership, Adult Education, Environmental Education or related Project subjects.

Graduate Certificate in Special Education

The Graduate Certificate in Special Education is designed to provide a specialist qualification in the area of Special Education for graduates interested in qualifying in this area. Contact the Special Education program co-ordinator for more details.

The course consists of 24 credit points completed over twelve months, chosen as follows:

EDGS910	Learning theories and exceptionality	6
plus subjects chosen from the following to complete twenty four credit points:		
EDGS911	Project in Exceptional Education Practices	2
EDGS912	Contemporary Perspectives in the Education of Children with Diverse Needs	6
EDGS913	Project in Contemporary Perspectives	2
EDGS914	Assessment and Instruction of Students with Learning Difficulties	6
EDGS915	Programs for Students with Learning Difficulties	2
EDGS916	Models of Behaviour Management	6
EDGS917	Programming for Behaviour Management	2
EDGS918	Approaches to Reading Difficulties: Theories and Strategies	6
EDGS919	Reading Difficulties: Program Design and Implementation	2
EDGS920	Language and Communication Difficulties: Theory and Practice	6
EDGS921	Language-Related Learning Difficulties: A Case Study	2

Graduate Certificate in Gifted Education

The Graduate Certificate in Gifted Education is designed to provide a specialist qualification in the area of Gifted Education for graduates interested in qualifying in this area.

The course consists of 24 credit points generally completed over twelve months, as follows:

EDGS910	Learning theories and exceptionality	6
plus subjects chosen from the following to complete twenty four credit points:		
EDGS911	Project in Exceptional Education Practices	2
EDGS922	Teaching gifted students	6
EDGS923	Project in gifted education	2
EDGS924	Giftedness in special populations	6
EDGS925	Project in dual exceptionality	2
EDGS912	Contemporary perspectives in the education of students with diverse needs	6
EDGS913	Project in contemporary perspectives	2

Graduate Certificate in TESOL

The Graduate Certificate in TESOL (Teaching English to Speakers of Other Languages) is designed to provide a specialist qualification in the area of TESOL Education for graduates interested in qualifying in this area.

The course consists of 24 credit points completed over twelve months, as follows:

There are two compulsory subjects:

EDGA976	Text and context	8
EDGA984	Language and Learning in TESOL	8

Plus one subject from the following:

EDGA981	Second Language Literacy	8
EDGA983	Assessment in TESOL	8

Graduate Certificate in Higher Education

This program is available to all existing and newly appointed academic staff of the University. The course will allow staff to develop their teaching capabilities and obtain a formal award as evidence of appropriate teaching skills.

The Graduate Certificate in Higher Education will comprise:

EDGA997	Introduction to Tertiary Teaching	8
EDGA911	Instructional Design	6
EDGA912	Project for Instructional Design	2
EDGA921	Evaluation and Assessment for Adult Learning	6
EDGA922	Project for Evaluation and Assessment for Adult Learning	2

Staff who successfully complete the Graduate Certificate in Higher Education would be eligible to enrol in the Graduate Diploma in Adult Education and Training with Advanced Standing for three subjects on condition that the applicant surrender the Graduate Certificate.

EDUCATION SUBJECT DESCRIPTIONS

Note: Except where shown otherwise, all subjects are offered on the Wollongong campus.

EDGA806 Practicum in Adult Education 8cp **Autumn / Spring**

Co-requisites: EDGH993 and EDGH994

Subject Description: The practicum in the GDipAdEd allows students to demonstrate their knowledge and performance skills in their work environment. They must demonstrate such basic professional competencies as needs assessment, course design, development, implementation, evaluation, and change management. The practicum is based on an individually defined and negotiated learning contract. Initial meetings will focus on refining ideas and developing a proposal after which students undertake their project with help from a nominated supervisor.

EDGA917 International & Intercultural Perspectives 8cp **Spring**

EDGA920 Curriculum Problems and Issues 8cp **in Physical and Health Education**

Contact Hours: Not on offer in 2003

Subject Description: This subject will examine the development of the curriculum in Physical and Health Education from an historical and social perspective. Particular issues will be taken as case studies. This subject is also intended to assist teachers in clarifying their position in relation to the PDHPE curriculum so that they may take a greater part in the curriculum change process itself and make considered judgements in its implementation.

EDGA921 Scientific Bases of Health Education 8cp

Contact Hours: Not on offer in 2003

EDGA924 Adolescent Health Status and Behaviour 8cp

Contact Hours: Not on offer in 2003

Subject Description: Adolescence provides a crucial access point for the improvement of health, not only now but in adult life and in the next generation. This subject will explore the nature of adolescence and those factors influencing adolescent health. It will examine various strategies implemented in schools and the community to improve adolescent health. It will also examine the assumptions underpinning the adoption of particular approaches rather than others.

EDGA959 Adult Literacy 8cp

Autumn	Wollongong	Flexible
Spring	Wollongong	Flexible

Subject Description: Adult literacy education involves assistance for those who have basic literacy problems as well as those who need to extend their language abilities in workplace. This subject will examine how to identify the language demands of various contexts in which adults need to employ various literacy skills, to diagnose the literacy needs of adult clients, and to develop programs to assist clients to extend their literacy proficiency.

EDGA970 Early Language and Literacy Development 8cp

Contact Hours: Not on offer in 2003

Subject Description: This subject focuses on language development in early childhood. It highlights theories of language learning, models of language, milestones in development, socio-cultural variation, and the implications for teaching and assessment strategies.

EDGA971 Assessment and Evaluation of Language and Literacy 8cp

Autumn	Hamline, Minnesota	On Campus
Spring	Hamline, Minnesota	On Campus
Autumn	Wollongong	Flexible
Spring	Wollongong	Flexible
Autumn	Wollongong	Distance
Spring	Wollongong	Distance

Subject Description: This subject examines both past and current issues and theoretical underpinnings of evaluating student learning. It will critically examine these issues in terms of contemporary theories of language and literacy learning. It will draw on recent research and theory related to the areas of psychometrics, qualitative evaluation, and linguistics. Students will also be required to trial and evaluate a range of assessment and evaluation instruments and procedures. The current move to standards and benchmarks will be addressed.

EDGA976 Text and Context 8cp

Autumn	Wollongong	Distance
Autumn	Wollongong	On Campus

Subject Description: This subject explores the relationship between texts and their contexts, focusing on the nature of language at both the level of text and grammar. It draws on a functional model of language in order to examine the way in which language is used for various purposes, both in the community and in education. Through an analysis of texts students will explore how language functions to represent our experience of the world, to enable our participation in the world, and to shape up texts which are coherent and cohesive.

EDGA977 Communication and Learning 8cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject examines the relationships which exist between communication, comprehension and learning. Research into the characteristics of effective communication and instruction, and the nature of classroom discourse will be critically analysed and its significance for teaching practice considered. The role of collaborative talk in learning to be literate will be of special interest.

EDGA978 Literacy Practices For Diverse Needs 8cp**Contact Hours:** Not on offer in 2003

Subject Description: The subject will introduce students to mainstream classroom practices with regard to the literacy development of students from various 'minority' backgrounds (NESB students, students with reading difficulties, gifted and talented).

It will examine ways in which mainstream programs can be adapted to meet particular literacy needs, the ways in which mainstream teachers can work with specialist teachers, the diagnosis and assessment of students' literacy proficiency, and evaluation of literacy programs.

EDGA981 Second Language Literacy 8cp Spring

Subject Description: The cultural and ideological nature of literacy is examined within a range of social, educational and vocational contexts including: a critical analysis of theories and second language literacy development; an analysis of literacy and TESOL teaching; the relationship between spoken and written language; implications for developing literacy programs for TESOL; principles for developing effective literacy programs; strategies for supporting the learning of literacy for ESL/EFL learners at beginner through to advanced levels.

EDGA983 Assessment in Tesol 8cp**Autumn** Wollongong Distance**Spring** Wollongong Distance**Spring** Wollongong On Campus

Subject Description: This subject will examine various approaches to language assessment, from informal observation and self-assessment through to formal testing. In order to develop appropriate programs, TESOL teachers must be able to identify the needs of their students. This requires a solid grounding in the assessment of learners' oral language, reading and writing. In addition, they need to be able to critically analyse and evaluate formal assessment procedures and if necessary, learn how to design assessment tasks and prepare their students to sit for external tests.

EDGA984 Language and Learning in Tesol 8cp**Autumn** Wollongong Distance**Autumn** Wollongong On Campus

Subject Description: This subject aims to familiarise students with the TESOL field, including current issues and areas of research.

In particular, it will introduce students to various theoretical discourses in the field, comparing and contrasting relevant models of language and examining research and theory in the area of second language learning. Links will be made to classroom practice and materials as appropriate.

EDGA985 English in Specific Contexts 8cp**Spring****Pre-requisites:** EDGA976

Subject Description: This subject prepares students to design and teach English projects and programs which address the needs of a specific clientele (e.g. English for Business, in the Workplace, for new arrivals).

It examines how language varies across cultural contexts (nationally or internationally) and deals with methods for exploring the contexts and relevant language (academic, vocational, social, personal), using these analyses in the study of projects, teaching programs and materials.

EDGA987 Children's Literature 8cp**Spring** Wollongong Flexible**Autumn** Wollongong Flexible

Subject Description: Students will be guided towards an appreciation, enjoyment, evaluation and critique of a broad range of children's literature in the light of various theories of literary criticism. In addition, participants will become familiar with a number of strategies relating to children's literacy for use in the classroom. Students will be asked to consider the apparent assumptions about children as readers in the texts examined and the relationship between new technologies and children's literature.

EDGA988 Aspects of Linguistics for TESOL 8cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject provides an introduction to a range of issues in linguistics, sociolinguistics and psycholinguistics which provide the foundations for theory, research and practice in second language development. Subject content will be selected from areas such as first language acquisition, language variation and change, language typology, syntax, phonology, and semantics.

EDGC800 Practicum 6cp**Annual**

Subject Description: This subject is compulsory practicum component of the degree. It focuses on field experience in schools and on practice teaching in schools. Emphasis is placed on lesson planning and classroom management, and catering for a diversity of learners in the classroom. Students will also be required to reflect on the role of the teacher in child protection and welfare.

EDUC804 Perspectives B 4cp**Annual**

Subject Description: Secondary GDE students will undertake studies in two elected areas. The elected areas offered may include Aboriginal Education, Computers in the Classroom, Children's Literature, Reading Instruction and Remediation, Philosophy of Alternative Education, Global Education, Intercultural Education and others.

EDUC804 Perspectives B 4cp**Annual**

Subject Description: Secondary GDE students will undertake studies in two elected areas. The elected areas offered may include Aboriginal Education, Computers in the Classroom, Childrens' Literature, Reading Instruction and Remediation, Philosophy of Alternative Education, Global Education, Intercultural Education and others.

EDGC811 Understanding Learning A 6cp**Autumn**

Subject Description: This subject explores the nature of the learner and the role of the teacher. It will include a focus on the psychology and pedagogy of learners with an emphasis on their diverse needs. Issues of classroom management will be explored through the lens of the diversity of learners and their environments. Issues relating to personal development and health will be explored, including child protection and welfare.

EDGC812 Professional Skills A 6cp**Autumn**

Subject Description: This subject covers the skills required of teachers as professionals. Emphasis on the development of language and literacy skills, encompassing communication, listening, interviewing, library researching, reporting and personal use of information and communication technology. Focus on developing awareness of school culture and the wider community, developing skills in intercultural communication, class management and protocol to support student welfare. Tertiary literacy development is expressed through the organization and presentation of assessment tasks in a developing portfolio.

EDGC813 Learning and Teaching Contexts A 6cp**Autumn**

Subject Description: This subject is a critical study of the educational policies, historical, social and cultural contexts and philosophical underpinnings of education as they apply to the experiences of learners in schools, in particular NSW schools. This subject focuses on the diversity of school contexts and learners, and the welfare of students. Teachers values, perceptions and judgements and the way these impact on assessment and evaluation of student learning are systematically explored in conjunction with processes of curriculum development, implementation and evaluation. Emphasis is placed on the ways in which gender, aboriginality, ethnicity, class, sexuality, and difference are constructed. Language use, teaching strategies, student welfare, assessment and information technology in the curriculum are critically examined.

EDGC821 Understanding Learning B 6cp**Spring**

Subject Description: This subject continues to develop understandings related to the nature of the learner and the role of the teacher. The key focus in this subject is on the particular needs of learners with special needs, including those who are gifted. The place of physical activity in school contexts will be examined.

EDGC822 Professional Skills B 6cp**Spring**

Subject Description: This subject covers the skills required of teachers as professionals operating within the school context. Emphasis is placed on school management organization and leadership; ESL skills; skills for teaching language across the curriculum and contemporary knowledge and language of the curriculum. This subject focuses on further development of information and communication technology skills, class management, group work and assessment of Learners with Special Needs. Tertiary literacies are expressed through the completion of a professional portfolio encompassing assessment tasks drawn from all subjects.

EDGC823 Learning and Teaching Concepts B 6cp**Spring**

Subject Description: This subject is a critical study of the influence of social, historical and theoretical contexts for teaching and learning and the curriculum. By critically examining the theoretical trends in sociology and changes in philosophical ideals, students can make sense of our current teaching and learning milieu: local, national and global. This subject focuses on the use of reflection to understand the impact of teacher values, perceptions and judgements in assessment practices in these diverse contexts. A focus is on the principles of leadership and teamwork and practical approaches to responding to changing needs. It deepens the students' understanding of time, place and identity in relation to educational change.

EDGC851 Science Method A 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 7-10 syllabuses in Science. Included will be the teaching and assessment methods applicable to the NSW Years 7 to 10 syllabuses in Science. There will be critical examination of mandatory policies that affect teachers of Science (including child protection and occupational health and safety). This subject also covers the classroom management practices for teachers of Science. There will be critical examination of syllabuses in Science from other states and countries.

EDGC852 Science Method B 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 11-12 syllabuses in Science. Included will be the teaching and assessment methods applicable to the NSW Higher School Certificate in Science. There will be critical examination of mandatory policies that affect teachers of senior high school Science (including child protection and occupational health and safety). This subject also covers the classroom management practices for teachers of senior high school Science. There will be critical examination of syllabuses in senior high school Science from other states and countries.

EDGC853 Mathematics Method A**6cp****Annual****Contact Hours:** Annual

Subject Description: This subject will cover the content of the NSW Year 7-10 syllabuses in Mathematics. Included will be the teaching and assessment methods applicable to the NSW Years 7 to 10 syllabuses in Mathematics. There will be critical examination of mandatory policies that affect teachers of Mathematics (including child protection and occupational health and safety). Programming and planning methods for teaching Mathematics. This subject also covers the classroom management practices for teachers of Mathematics. There will be critical examination of syllabuses in Mathematics from other states and countries.

EDGC854 Mathematics Method B**6cp****Annual**

Subject Description: This subject will cover the content of the NSW Year 11-12 syllabuses in Mathematics. Included will be the teaching and assessment methods applicable to the NSW Higher School Certificate in Mathematics. There will be critical examination of mandatory policies that affect teachers of senior high school Mathematics (including child protection and occupational health and safety). Programming and planning methods for teaching senior high school mathematics. This subject also covers the classroom management practices for teachers of senior high school Mathematics. There will be critical examination of syllabuses in senior high school Mathematics from other states and countries.

EDGC855 English Method**6cp****Annual**

Subject Description: This subject will cover the content of the NSW Year 7-12 syllabuses in English. Included will be the teaching and assessment methods applicable to the NSW syllabuses in English. There will be critical examination of mandatory policies that affect teachers of English (including child protection and occupational health and safety). Programming and planning methods for teaching English. This subject also covers the classroom management practices for teachers of English. There will be critical examination of syllabuses in English from other states and countries.

EDGC856 History Method**6cp****Annual**

Subject Description: This subject will cover the content of the NSW Year 7-12 syllabuses in History. Included will be the teaching and assessment methods applicable to the NSW syllabuses in History. There will be critical examination of mandatory policies that affect teachers of History (including child protection and occupational health and safety). Programming and planning methods for teaching History. This subject also covers the classroom management practices for teachers of History. There will be critical examination of syllabuses in History from other states and countries.

EDGC857 Social Science Method - (Geography) A**6cp****Annual**

Subject Description: This subject will cover the content of the NSW Year 7-12 syllabuses in Geography. Included will be the teaching and assessment methods applicable to the NSW syllabuses in Geography. There will be critical examination of mandatory policies that affect teachers of Geography (including child protection and occupational health and safety). Programming and planning methods for teaching Geography. This subject also covers the classroom management practices for teachers of Geography. There will be critical examination of syllabuses in Geography from other states and countries.

EDGC858 Social Science Method - (Economics) B**6cp****Annual**

Subject Description: This subject will cover the content of the NSW Year 7-12 syllabuses in Economics. Included will be the teaching and assessment methods applicable to the NSW syllabuses in Economics. There will be critical examination of mandatory policies that affect teachers of Economics (including child protection and occupational health and safety). Programming and planning methods for teaching Economics. This subject also covers the classroom management practices for teachers of Economics. There will be critical examination of syllabuses in Economics from other states and countries.

EDGC859 English As A Second Language Method**6cp****Annual**

Subject Description: Included will be the teaching and assessment methods applicable to ESL students. There will be critical examination of mandatory policies that affect ESL teachers (including child protection and occupational health and safety). Programming and planning methods for teaching ESL. This subject also covers the classroom management practices for ESL teachers. There will be critical examination of policies from other states and countries that relate to ESL teaching.

EDGC861 Method for Primary Teachers A (K-2)**6cp****Annual**

Subject Description: Included will be the teaching and assessment methods applicable to Early Stage 1 / Stage 1 students (K-2). There will be critical examination of mandatory policies that affect Primary Stage 1 teachers (including child protection and occupational health and safety). Programming and planning methods for teaching Primary Stage 1. This subject also covers the classroom management practices for Primary Stage 1 teachers. There will be critical examination of curriculum and relevant policies from other states and countries that relate to the first three years of learning.

EDGC862 Method for Primary Teachers B (3-6) 6cp**Annual**

Subject Description: Included will be the teaching and assessment methods applicable to Stage 2 / Stage 3 (years 3-6). There will be critical examination of mandatory policies that affect Stage 2 / Stage 3 (3-6) teachers (including child protection and occupational health and safety). Programming and planning methods for teaching Stage 2 / Stage 3 (3-6). This subject also covers the classroom management practices for Primary (3-6) teachers. There will be critical examination of policies from other states and countries that relate to the next four years of learning.

EDGC871 Music Method A 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 7-10 syllabuses in Music. Included will be the teaching and assessment methods applicable to the NSW Years 7 to 10 syllabuses in Music. There will be critical examination of mandatory policies that affect teachers of Music (including child protection and occupational health and safety). Programming and planning methods for teaching Music. There will be critical examination of syllabuses in Music from other states and countries.

EDGC872 Music Method B 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 11-12 syllabuses in Music. Included will be the teaching and assessment methods applicable to the NSW Years 11 and 12 syllabuses in Music.

There will be critical examination of mandatory policies that affect teachers of Music (including child protection and occupational health and safety). Programming and planning methods for teaching Music to Years 11 and 12. This subject also covers the classroom management practices for teachers of Music. There will be critical examination of Year 11 and 12 syllabuses in Music from other states and countries.

EDGC873 Visual Arts Method A 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 7-10 syllabuses in Visual Arts. Included will be the teaching and assessment methods applicable to the NSW Years 7 to 10 syllabuses in Visual Arts. There will be critical examination of mandatory policies that affect teachers of Visual Arts (including child protection and occupational health and safety). Programming and planning methods for teaching Visual Arts. This subject also covers the classroom management practices for teachers of Visual Arts t. There will be critical examination of syllabuses in Art from other states and countries.

EDGC874 Visual Arts Method B 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 11-12 syllabuses in Visual Arts. Included will be the teaching and assessment methods applicable to the NSW Years 11 and 12 syllabuses in Visual Arts.

There will be critical examination of mandatory policies that affect teachers of Visual Arts (including child protection and occupational health and safety). Programming and planning methods for teaching Art to Years 11 and 12. This subject also covers the classroom management practices for teachers of Visual Arts. There will be critical examination of Year 11 and 12 syllabuses in Visual Arts from other states and countries.

EDGC875 Drama Method 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 7-12 syllabuses in Drama. Included will be the teaching and assessment methods applicable to the NSW syllabuses in Drama. There will be critical examination of mandatory policies that affect teachers of Drama (including child protection and occupational health and safety). Programming and planning methods for teaching Drama. This subject also covers the classroom management practices for teachers of Drama. There will be critical examination of syllabuses in Drama from other states and countries.

EDGC876 French Method 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 7-12 syllabuses in French. Included will be the teaching and assessment methods applicable to the NSW syllabuses in French. There will be critical examination of mandatory policies that affect teachers of French (including child protection and occupational health and safety). Programming and planning methods for teaching French. This subject also covers the classroom management practices for teachers of French. There will be critical examination of syllabuses in French from other states and countries.

EDGC877 Italian Method 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 7-12 syllabuses in Italian. Included will be the teaching and assessment methods applicable to the NSW syllabuses in Italian. There will be critical examination of mandatory policies that affect teachers of Italian (including child protection and occupational health and safety). Programming and planning methods for teaching Italian. There will be critical examination of syllabuses in Italian from other states and countries.

EDGC878 Japanese Method 6cp**Annual**

Subject Description: This subject will cover the content of the NSW Year 7-12 syllabuses in Japanese, specifically Italian or French. Included will be the teaching and assessment methods applicable to the NSW syllabuses in Japanese. There will be critical examination of mandatory policies that affect teachers of Japanese (including child protection and occupational health and safety). Programming and planning methods for teaching Japanese. This subject also covers the classroom management practices for teachers of Japanese. There will be critical examination of syllabuses in Japanese from other states and countries.

EDGC881 Computer Studies Method A 6cp
Annual

Subject Description: This subject will cover the content of the NSW Year 7-10 syllabuses in Computer Studies. Included will be the teaching and assessment methods applicable to the NSW School Certificate in Computer Studies. There will be critical examination of mandatory policies that affect teachers of Computer Studies (including child protection and occupational health and safety). Programming and planning methods for teaching Computer Studies for Years 7-10. This subject also covers the classroom management practices for teachers of Computer Studies for Years 7-10. There will be critical examination of syllabuses for Years 7-10 Computer Studies from other states and countries.

EDGC882 Computer Studies Method B 6cp
Annual

Subject Description: This subject will cover the content of the NSW Year 11-12 syllabuses in Computer Studies. Included will be the teaching and assessment methods applicable to the NSW Higher School Certificate in Computer Studies. There will be critical examination of mandatory policies that affect teachers of senior high school Computer Studies (including child protection and occupational health and safety). Programming and planning methods for teaching senior high school Computer Studies. This subject also covers the classroom management practices for teachers of senior high school Computer Studies. There will be critical examination of syllabuses in senior high school Computer Studies from other states and countries.

EDGC909 Teaching Internship 8cp

Contact Hours: Not on offer in 2003

Subject Description: Students will design, implement and evaluate one or more integrated sequences of quality learning experiences extending over a period of about 10 weeks which display diversity of teaching strategies and techniques and encompass a wide range of learning styles. There will be a major emphasis on an ongoing reflective evaluation involving the student, peers, professional mentor and University staff culminating in a comprehensive critical analysis of the activities of the subject.

EDGC911 Advanced Perspectives 8cp

Contact Hours: Not on offer in 2003

Subject Description: Students will work in small groups on aspects of Curriculum, Philosophy, Psychology and Sociology relevant to classrooms. Students will identify an investigation to be followed up on an individual basis through the literature and investigated in a professional context. The work will draw on skills from EDGZ900 Intro. to Research Methods, and make use of professional and institutional contacts developed in EDGC909 Internship. The report will be presented for critical analysis to the group and institutional stakeholders before being submitted for assessment.

EDGC912 Advanced Studies in the Key Learning Areas 8cp

Contact Hours: Not on offer in 2003

Subject Description: This subject will require students to identify and examine the factors which are driving current curriculum changes.

An analysis of these change processes will be undertaken within the context of contemporary curriculum theory and through a critical review of the current literature. Students will negotiate, plan, conduct and report an investigation of an educational issue in a KLA.

EDGE910 Early Childhood Curriculum Theory and Practice 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: CSCI101 or NSW HSC 3 unit computing studies or equivalent

EDGE911 Child Development 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: CSCI101 or NSW HSC 3 unit computing studies or equivalent

EDGE913 Music Education in Early Childhood 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: CSCI101 or NSW HSC 3 unit computing studies or equivalent

EDGH911 Instructional Design 6cp
Autumn

Subject Description: This subject is presented through a combination of the www and four class meetings, each of 3 hours duration. Syndicate groups formed early in the process will meet independently as required to complete the design tasks, and chat spaces and E-mail will be used for progress reports and the sharing of design strategies and ideas.

This subject is designed to provide the student with information, modelling and practice in applying Instructional Design (ID) principles to the design of a simple training program. Given a specific scenario, students are expected to prepare a design statement, complete a needs assessment, write a problem statement, perform task and instructional analyses, develop a curriculum map, and outline planning decisions related to assessment, instructional strategies, media selection, and program evaluation.

EDGH912 Project for Instructional Design 2cp
Autumn

Co-requisites: EDGH911

Subject Description: There is no attendance requirement for this project, but students may arrange consultation times to suit their own requirements. Class or group meetings may be negotiated and the original www program (EDGH911) is available for reference as required by the individual. This subject involves an application of the understandings and skills developed through the study of EDGH911. It allows students to replicate the design process and generate a design statement relevant to a problem from their own workplace or some other appropriate environment

EDGH921 Evaluation and Assessment for Adult Learning 6cp**Spring****Pre-requisites:** EDGH911

Subject Description: This subject is presented through a combination of the www and class meetings. Chat spaces, DISCUS and E-mail will be used for progress reports and the sharing of decisions, strategies and ideas. This subject is designed for students to develop the essential knowledge, skills, understandings and attitudes which will ensure a sound approach to the assessment of learner performance in training and other educational situations. Students will be required to develop instruments for the assessment of trainee/student learning and the evaluation of instructional interventions. They will be required to justify their approach within the framework of an appropriate evaluation methodology.

Subject Description: Through involvement in this project students will be able to implement planned activities for student learning and reflect on both personal performance and student learning. The subject builds upon prior studies in psychology, instructional design and communication, and contributes

EDGH931 Psychology of Adult Learning 6cp**Autumn**

Subject Description: As professionals engaged in the education and training of adults, students will be expected to develop an understanding of the dynamics, theories, principles and styles commonly identified in adult learning environments. They will consider the context of adult learning, the learner and the learning process. They will be expected to generate a theoretical base for adult learning and to link theory and practice.

EDGH922 Project for Evaluation and Assessment for Adult Learning 2cp**Spring****Pre-requisites:** EDGH921

Subject Description: This subject is presented through independent study and research. However, chat spaces, DISCUS and E-mail will be used for progress reports, the sharing of decisions, strategies and ideas, and the provision of feedback. Through involvement in this project students will understand the nature, role and principles of student assessment and course evaluation. They will exhibit skills in a range of tasks involved in assessment and evaluation, apply these understandings and skills to workplace context, and develop assessment and evaluation strategies based upon a selected evaluation model.

EDGH932 Project for Psychology of Adult Learning 2cp**Autumn****Co-requisites:** EDGH931

Subject Description: As a result of their involvement in this project students will be able to relate theoretical perspectives to the characteristics of adult learners through critical analysis and synthesis of literature related to a particular aspect of adult learning.

EDGH923 Adult Learning Strategies and Communication 6cp**Spring****Pre-requisites:** EDGH911

Subject Description: This subject is presented through a series of interactive workshops designed to provide students with experience of a range of instructional strategies for adult learning: on-line instruction, interactive multimedia, case study, gaming and simulation, role play, discussion methods, etc. This subject is designed to develop the capabilities of students to (a) select appropriate training/instructional strategies for stated training objectives and (b) design and produce high quality support materials for effective learning in a range of educational contexts. The subject builds upon prior studies in psychology and instructional design and contributes to student insight into the implementation stage of the design process. It comprises practical workshops in the development of instructional plans and strategies for learning. It considers the development of a climate conducive to learning and the design of appropriate learning sequences

EDGH933 Management and Organisational Context of Learning 6cp**Autumn**

Subject Description: This subject focuses on the organisational and management aspects of adult education and training. The contextual focus includes the political context in which the adult educator or trainer must operate.

It explores particular management/organisational issues related to the development of professional competency in the workplace.

EDGH934 Project for Management and Organisational Context of Learning 2cp**Autumn****Co-requisites:** EDGH933

Subject Description: This subject builds on the professional and theoretical perspectives gained from EDGH933 Management and Organisational Context of Learning. It provides the opportunity for students to explore more deeply a particular management/organisational issue related to the development of professional competency in preparing proposals for enhancing learning in the workplace. The project may take the form of a case study, or a proposal which must include an extensive rationale.

EDGH924 Project for Adult Learning Strategies and Communication 2cp**Spring****Pre-requisites:** EDGH911**Co-requisites:** EDGH923**Contact hours:** 3 hours per week.

EDGH935 Issues in Adult in Education 6cp**Spring****Pre-requisites:** At least 16cp of subjects from Adult Ed. specialisation

Subject Description: This subject requires students to examine current issues facing professionals in the field: international issues such as problem-based learning, access to technology, distance education of adults, implementation of government policies, working with third age learners, equity, renewal of the workforce, and workplace literacy. Students will consider psychological bases for adult learning and teaching, learning contexts and the management of adult teaching and learning.

EDGH936 Project for Issues in Adult Education 2cp**Spring****Pre-requisites:** EDGH935: Issues in Adult Education

Subject Description: Successful completion of this subject entails the evaluation of a significant issue in adult learning and teaching, with specific reference to workplace or other contextual applications.

EDGH940 Adult Career Development 6cp**Autumn** Wollongong Distance**Spring** Wollongong Distance**Exclusions:** EDGA990 or EDGA998

Subject Description: This subject introduces the area of adult career development and how the professional supports the process. It introduces the core theories of career development and reviews the selection of a range of career development resources that might be used to help clients. This core subject also examines the personal goals of the career development worker so that the areas for development are related to their own career progression.

Subject Objectives: On successful completion of this subject students should be able to: 1. Understand the nature of adult career development, current areas of focus and opportunities adult career development workers. 2. Compare the content and scope of a number of career development theories and relate them to patterns in their own careers. 3. Explain career paths of individuals. 4. Select career development resources and be able to use them with clients. 5. Identify career resource implementation issues for the organisation.

EDGH942 Adult Career Development and the Organisation 6cp**Autumn** Wollongong Distance**Spring** Wollongong Distance**Pre-requisites:** EDGH940**Exclusions:** EDGA990 or EDGA998

Subject Description: This subject will review the elements of career development within the organisation, it will examine appropriate systems, strategies and how they can be linked to organisational goals. Examples discussed are mentoring systems, workshops, outplacement, redeployment and career coaching. The final module in the subject will examine the role new technologies can play within the process of developing careers. New methods will include the informal, such as email and more formal methods, such as organisational databases for shared learning and tracking progress.

Subject Objectives: On successful completion of this subject students should be able to: 1. Identify modern career development approaches within the organisation, whether they are an internal or external consultant. 2. Identify organisational career development strategies and plan for several possibilities for their implementation. 3. Describe the importance of technologies in creating effective management strategies within highly volatile organisations. 4. Use a computer-based system for career analysis.

EDGH944 Adult Career Development with Clients 6cp**Autumn** Wollongong Distance**Spring** Wollongong Distance**Pre-requisites:** EDGH940**Exclusions:** EDGA990 or EDGA998

Subject Description: This subject will focus upon the understanding and skills required of a person providing career development support services. It will identify the differences between this role and other counselling roles and will examine styles of helping and identify methods of conflict resolution. The subject will develop specific career support skills including, problem exploration and clarification, client agreements, dynamics of the helping relationship and client occupational decision making. The effective career outcomes will be examined by reference to roadblocks, constraints, mapping and implementing options, action planning, resources and the problems of transition.

Subject Objectives: On successful completion of this subject students should be able to: 1. Determine appropriate steps, procedures and checks in developing career action plans and schedules. 2. Identify the critical elements of an effective career support relationship. 3. Identify the roles, and their limitations, that career counsellors and their clients can engage in. 4. Assist clients to identify their strengths and focus on solutions in seeking career change. 5. Facilitate the skills of option generation in career decision making.

EDGH946 Practicum or Project in Adult Career Development 6cp**Autumn** Wollongong Distance**Spring** Wollongong Distance**Pre-requisites:** EDGH940 and one of EDGH942 or EDGH944**Exclusions:** EDGA836

Subject Description: This subject provides an opportunity to demonstrate the ability to integrate the essential knowledge, skills, understandings, attitudes and values developed throughout the course. Through the project, students will demonstrate that they have the basic professional competencies to which the preceding subjects have been directed. Students will have the opportunity to synthesise their learnings in the areas of designing adult career development options, implementing and evaluating their effectiveness.

Subject Objectives: On successful completion of this subject students should be able to: 1. Demonstrate their understanding the nature of adult career development, and current areas of focus. 2. Demonstrate their ability to translate these understandings into a practical project. 3. Devise a career development intervention and implement it within an appropriate setting.

EDGI911 Information Technology in Education and Training 6cp

Autumn	Hong Kong	On Campus
Autumn	Wollongong	On Campus

Subject Description: This subject provides a basic introduction to information technology in education and training. As such, it is an overview of the range of issues and topics that will be further elaborated upon in subsequent subjects. The subject explores the concept of information technology and the ways in which the educational enterprise is affected by it. Topics include: The Technology: Hardware, software, media; Learning Theory; Formal Learning Environments; Instructional Design Process; Teaching and Learning Strategies; and Informal Learning Environments.

EDGI912 Project for EDGI911 2cp

Autumn

Co-requisites: EDGI911

Subject Description: This is an optional project component to be taken in conjunction with EDGI 911. The 2 cp Project extends the opportunity to study the issues of EDGL911 Instructional Design.

EDGI913 Instructional Strategies and Authoring 6cp

Autumn	Wollongong	On Campus
Autumn	Hong Kong	On Campus

Subject Description: This subject examines instructional strategies employed in a range of technology-supported learning environments, focusing particularly on CD-based multimedia applications. Learners develop their understanding of a variety of strategies through the design and development of small multimedia prototypes, using written documentation and authoring tools to explore and present their ideas.

EDGI914 Project for EDGI913 2cp

Autumn

Co-requisites: EDGI913

Subject Description: This is an optional project component to be taken in conjunction with EDGI 913. The 2 cp Project extends the opportunity to study the issues of EDGI913 Instructional Strategies and Authoring.

EDGI915 Network-Based Learning 6cp

Spring	Hong Kong	Flexible
Spring	Wollongong	Flexible

Subject Description: This subject examines the design and research that surrounds the development of flexible learning systems and the application of computer mediated communications using the Web and other networked environments. Topics include: The design of information structures for use with hypertext; the design and development of graphical and textual interfaces; and the communication models which can be implemented for Web-based learning.

EDGI916 Project for EDGI915 2cp

Spring	Wollongong	Flexible
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Subject Description: This is an optional project component to be taken in conjunction with EDGI 915. The 2 cp Project extends the opportunity to study the issues of EDGI915 Network-Based Learning

EDGI931 Interactive Multimedia Design 6cp

Autumn	Hong Kong	On Campus
Autumn	Wollongong	On Campus

Pre-requisites: EDGI911 and EDGI913

Subject Description: This subject explores the instructional issues important in the design of media resources for Web and CD-based multimedia educational materials. Students will have an opportunity to design their own multimedia treatments for concepts of their choice, and using the software tools available, develop these into small on-screen presentations.

EDGI932 Project for EDGI931 2cp

Autumn

Co-requisites: EDGI932

Subject Description: This is an optional project component to be taken in conjunction with EDGI 915. The 2 cp Project extends the opportunity to study the issues of EDGI916 Network-Based Learning

EDGI933 Implementation and Evaluation of Technology-Based Learning 6cp

Autumn	Hong Kong	On Campus
Spring	Wollongong	On Campus

Subject Description: This subject is designed to investigate the links between educational evaluation and implementation, particularly where learning is being supported by information technologies. It seeks to define the basic issues facing the practitioner when they are trying to manage technology-based learning projects and to answer such questions as: Is the project effective? Is there a problem with the design or the way it is implemented? How might it be changed or modified? Students will use on-line tools and work collaboratively over the Web.

EDGI934 Project for EDGI933 2cp

Spring

Co-requisites: EDGI933

Subject Description: This is an optional project component to be taken in conjunction with EDGI933.

The 2 cp Project extends the opportunity to study the issues of EDGI933 Implementation and Evaluation of Technology-Based Learning

EDGI951 Cognition and Interface Design 6cp

Contact Hours: Not on offer in 2003

Subject Description: In the design of interactive learning systems, the development of an effective interface requires not only an understanding of the structure of the knowledge domain but also the most effective way to represent this structure to users and allow it to be manipulated in the pursuit of the desired outcome.

This subject discusses the role of effective visualization and screen design and the ways it can facilitate understanding by learners/users of software. Topics focus on how visual design and metaphor support reduction in cognitive load, how effective electronic performance support systems support work through complex tasks, and how usability can be investigated.

EDGI952 Project for EDGI951 2cp

Contact Hours: Not on offer in 2003

EDGI953 Current Issues in Information Technology in Education and Training 6cp

Autumn

Subject Description: This subject involves an investigation of current key and topical research and design issues in information technology in education and training. It incorporates a review of the most recent technical and educational developments in this area, and offers students an opportunity to investigate a specific issue of interest in detail. It is expected that students will critically review the topic and develop a view on its implications for learning.

EDGI954 Project For EDGI954 2cp

Autumn

Subject Description: This is the project for EDGI954

EDGI955 Research In Learning Environments 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: CSCI101

Subject Description: This subject builds on the research work of the Educational Multimedia Laboratory research program. Students will work with a mentor to develop a research proposal that can be presented for Faculty approval as a future Masters (Research) or Doctoral study.

EDGI956 Project For EDGI955 - Research In Learning Environments 2cp

Contact Hours: Not on offer in 2003

Pre-requisites: CSCI101

EDGI957 Digital Learning Systems Design 6cp

Spring

Pre-requisites: EDGI913 and/or EDGI911

Subject Description: This subject focuses on design, development and management issues associated with creating technology-supported learning environments. The detailed issues of design will be examined through the use of instructional design models based on theoretical views of learning and through the analysis of real-life cases. Teams of students will work together to develop a project that addresses a specific educational or training problem through to an advanced prototype.

EDGI958 Project for EDGI957 2cp

Spring

Co-requisites: EDGI957

Subject Description: This is an optional project component to be taken in conjunction with EDGI 957. The 2 cp Project extends the opportunity to study the issues of EDGI 957 (Un) Intelligent Computer Mediated Learning Systems

EDGL901 Foundations of Educational Leadership 6cp

Autumn

Subject Description: This core subject provides students with the range of foundational understandings essential for understanding the leadership function in education and training organisations. The content covers the main areas of intellectual understanding which underpin 'futures oriented' effective leadership by developing conceptual understandings of: policy context and planning; sociological pressures; futurism; economic realities and education; curriculum leadership and planning; and change strategies.

EDGL902 Project in Foundations of Educational Leadership 2cp

Autumn

Pre-requisites: EDGL901

Subject Description: The 2 cp Project extends the opportunity to study the issues of EDGL901 Foundations of Educational Leadership. In general a major project or case study will form the basis of the additional work for the extra 2 cp undertaken.

EDGL903 Introduction to Educational Management 6cp

Spring

Subject Description: This core subject provides students with the range of foundational understandings essential for understanding the management function in education and training organisations. The content topics are selected to introduce the main areas of intellectual understanding which underpin present oriented effective management by developing conceptual understandings of: adult education and training; staff development; information systems; financial management; personal management skills- as they contribute to the management function of educational organisations.

EDGL904 Project in Introduction to Educational Management 2cp

Spring

Pre-requisites: EDGL903

Subject Description: The 2 cp Project extends the opportunity to study the issues of EDGL903 Introduction to Educational Management. In general a major project or case study will form the basis of the additional work for the extra 2 cp undertaken

EDGL905 Policy Studies: Global Change and Educational Leadership 6cp

Spring

Contact hours: 3 hours per week or equivalent

Pre-requisites: EDGL901 or EDGL903

Subject Description: This core subject provides a futures oriented context and understanding to the development and implementation of education and training policies in a rapid change, globalising economy. Selected content areas include: internationalisation of economies and social systems; policy and planning implications of weakened nation states, and the emergence of global social, economic, and legal systems; international perspectives on education and training; approaches to policy and planning in comparative social systems; the limitations of central policy and planning systems in rapid change customer focussed contexts; emerging methodologies for effective policy and planning in education and training systems and organisations.

EDGL906 Project in Policy Studies: Global Change and Educational Leadership 2cp

Spring

Co-requisites: EDGL905

Subject Description: The 2 cp Project extends the opportunity to study the issues of EDGL905 Policy Studies: Global Change and Educational Leadership. In general a major project or case study will form the basis of the additional work for the extra 2 cp undertaken

EDGL907 Leading Professional Service Organisations 6cp

Spring

Pre-requisites: Permission of subject co-ordinator

EDGL908 Project in Leading Professional Service Organisations 2cp

Spring

Pre-requisites: Permission of subject co-ordinator

EDGL909 Leadership of Effective Change 6cp

Autumn

Pre-requisites: 18 credit points of EDGL subjects or equivalent

Subject Description: The topics, case studies, and projects of this subject are selected to develop effective leadership strategies for implementing effective change in education and training organisations. They include: characteristics of effective change; environmental scans; the critical role and importance of staff in implementing effective change; working through HR strategies to achieve effective change strategies for planning, implementing and monitoring effective change in professional service organisations, with a particular focus on project management techniques for effective change

EDGL910 Project in Leadership of Effective Change 2cp

Autumn

Co-requisites: EDGL909

Subject Description: The 2 cp Project extends the opportunity to study the issues of EDGL909 Leadership of Effective Change. In general a major project or case study will form the basis of the additional work for the extra 2 cp undertaken.

EDGL911 Leadership of Curriculum and Instruction 6cp

Autumn

Pre-requisites: EDGL901 or EDGL903

Subject Description: This core subject deals with the special leadership and management tasks of the education and training organisation. The particular features of professional service organisations dealing with education and training processes and outcomes will be highlighted. The leadership/management roles and tasks which both oversight and complement the professional roles of the curriculum and instructional specialist(s) will be particularly emphasised. The subject will take a practical, case study approach to the range of issues and concerns generated by the special leadership requirements of the educational organisation.

EDGL912 Project in Leadership of Curriculum and Instruction 2cp

Autumn

Co-requisites: EDGL911

Subject Description: The 2 cp Project extends the opportunity to study the issues of EDGL911 Leadership of Curriculum and Instruction. In general a major project or case study will form the basis of the additional work for the extra 2 cp undertaken.

EDGL913 Program Evaluation 6cp

Contact Hours: Not on offer in 2003

Subject Description: A range of evaluation approaches, their assumptions and major methodologies which may be applicable in formal educational, non-formal and business and industry environments are discussed and critiqued. Students have the opportunity to participate in evaluation simulations and undertake and share their own evaluation as part of the subject. Issues addressed include: ethical priorities; program planning and budgeting; QA, accreditation; skill transfer and site based action research.

EDGL914 Project in Program Evaluation 2cp

Contact Hours: Not on offer in 2003

Pre-requisites: EDGL913

Subject Description: The 2 cp Project extends the opportunity to study the issues of EDGL913 Program Evaluation. In general a major project or case study will form the basis of the additional work for the extra 2 cp undertaken.

EDGL915 Information Systems for Educational Leadership 6cp

Autumn

Pre-requisites: EDGL901 or EDGL903

Subject Description: This core subject deals with the developing understandings and skills required of educational leaders in the transformational influence(s) of information systems and information technology on the education and training function. Topics will include: information systems and their impact on educational management; development of information analysis techniques; writing specifications for systems; linking information systems with management processes and organisational structures; issues for educational management; course delivery; logistics; records management; databases; and curriculum organisation.

EDGL916 Project in Information Systems for Educational Leadership 2cp**Autumn****Pre-requisites:** EDGL915

Subject Description: cp Project extends the opportunity to study the issues of EDGL915 Information Systems and Educational Leadership. In general a major project or case study will form the basis of the additional work for the extra 2 cp undertaken.

EDGL917 Quality Learning and Teaching 6cp**Spring**

Subject Description: Students will examine the impact on learning communities of changing instructional and learning needs in relation to concepts of quality, effectiveness, improvement and accountability. Critical influences of learning contexts on learning outcomes will be considered. Students will explore recent developments in learning and teaching theory in terms of the enhancement of reflective and self-directed learning, the encouragement of student voice, mentoring, and interactive multimedia teaching and learning strategies.

EDGL918 Project in Quality Learning and Teaching 2cp**Spring****Pre-requisites:** Pre/Co-Requisite: EDGL917

Subject Description: The 2 cp Project extends the opportunity to study the issues of EDGL917 Quality Learning and Teaching. In general a major project or case study will form the basis of the additional work for the extra 2 cp undertaken.

EDGL919 Mentoring Beginning Teachers 6cp**Autumn**

Subject Description: Theoretical framework: analysis and critique of relevant literature. Professional needs of beginning teachers. Context in terms of relevant policy documents. Mentoring as a model of promoting teachers development. Assessing teacher performance. Designing, implementing and evaluating a mentoring program.

EDGL920 Developing and Managing People 6cp**Spring****EDGP910 Introduction to Outdoor Education 6cp****Autumn****EDGP911 Project for EDGP910 2cp****Autumn**

Pre-requisites: BMS101 and permission of subject co-ordinator

EDGP912 Facilitation Techniques in Outdoor Education 6cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject is a complementary blend of theory and practice to highlight the various leadership, and management styles evident in outdoor education.

Facilitation and processing techniques incorporated into outdoor education programs in a variety of pedagogical contexts will be examined. Specific content will explore various philosophies and methodologies used in adventure-based outdoor education programs and enable students to delineate common elements of individual facilitation techniques. Practical fieldwork will be used as a vehicle to integrate theory and practice. A variety of learning experiences will be presented which will enable students to gain an insight into how Outdoor Education is used as a catalyst for social and personal development.

EDGP913 Project for EDGP912 2cp**Contact Hours:** Not on offer in 2003**Co-requisites:** EDGP912

Subject Description: This is an optional project component subject taken in conjunction with EDGP912 and not available separately. The 2 cp Project extends the opportunity to study the issues of EDGP912.

EDGP930 Theoretical and Practical Bases of Coach Education 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Contact hrs: 3hrs per week. This subject analyses current coaching theory related to pedagogical issues, time management and overseas developments in coaching. Students undertake an indepth analysis of the discipline areas applied to coaching. A conceptual framework of coaching both in Australia and overseas will be used with practical implications related to practice sessions in a variety of sport environments.

EDGP931 Project for EDGP930 2cp**Contact Hours:** Not on offer in 2003**Co-requisites:** EDGP930

Subject Description: This is an optional project component subject taken in conjunction with EDGP930 and not available separately. The 2 cp Project extends the opportunity to study the issues of EDGP930.

EDGP932 Issues In Coach Education and Sport Management 6cp**Spring****EDGP933 Project For EDGP932 - Issues In Coach Education and Sport Management 2cp****Spring****EDGP934 Culture Politics of Sport, Leisure and Physical Education 6cp****Autumn**

Subject Description: This subject will examine contemporary debates and issues in the areas of sport, leisure and physical education from a critical perspective. It will examine how the knowledge, values and practices associated with these areas are constituted in the context of specific social, economic, political and cultural relations and how the practices associated with these areas in turn shape social knowledge and values.

The subject will draw on a range of methodologies and resources including media and document analysis, the interrogation of statistical reports and contemporary mythologies about sport and physical activity; current feminist and masculinity research on sport, leisure and physical education; contemporary theories of leisure as consumption; youth studies and leisure and physical activity;

EDGP935 Leadership and Management in Physical Education, Sport and Recreation 6cp

Spring

Subject Description: This subject is designed to provide students with an examination of current issues in the management of physical education, sport and recreation programs. Attention will be given to current international issues such as administrative structures and leadership, communication and motivation, personnel management, public relations, financial management, sport and the law, evaluation, government policy, and research in sport administration.

EDGP990 Practicum in a Learning Environment 6cp

Autumn Wollongong Flexible

Spring Wollongong Flexible

Pre-requisites: At least 12cp of EDGP subjects

Subject Description: Students will design, implement and evaluate a program of work in a practical environment. This will extend over 30 hours of contact during the session at a worksite of choice. Reflective evaluation will take place on all of the practicum resulting in a critical analysis. All students will meet on a regular basis to discuss issues related to the practicum.

EDGP991 Project for EDGP990 2cp

Contact Hours: Not on offer in 2003

Pre-requisites: EDGP990

Subject Description: This is an optional project component subject taken in conjunction with EDGP932 and not available separately. The 2 cp Project extends the opportunity to study the issues of EDGP932.

EDGR911 Teaching Reading 8cp

Autumn Hamline, Minnesota On Campus

Spring Hamline, Minnesota On Campus

Autumn Wollongong Flexible

Spring Wollongong Flexible

Autumn Wollongong Distance

Spring Wollongong Distance

Subject Description: This subject will examine the nexus between reading theories and practices. Topics to be studied will include: reading and its relationship to language and learning; models of reading instruction and practices; history of reading policies and methods; learning to read and learning through reading; sociocultural relationships between the reader and the written texts; reading for different purposes; evaluation of reading; the reading-writing connections and current debates around reading instruction.

EDGR912 Teaching Writing 8cp

Autumn Wollongong Distance

Spring Wollongong Distance

Autumn Hamline, Minnesota On Campus

Spring Hamline, Minnesota On Campus

Spring Wollongong Flexible

Autumn Wollongong Flexible

Subject Description: This subject will examine the nexus between writing theories and practices. Topics to be studied will include: the writing process and its relationship to language and learning; models of writing instruction; learning to write and learning through writing; the role of context, purpose and audience in shaping written genres; the writing/reading connection - specifically spelling, grammar and the role of editing and proofreading, and the evaluation of written texts.

EDGS910 Learning Theories and Exceptionality 6cp

Autumn

Subject Description: This subject explores a range of learning theories and their application to children with special needs. Topics include: behaviourism; Piaget and critiques of his theory; socio-cultural accounts of learning; information processing perspectives including the development of metacognition and self-regulation; the relationships among language, learning and thought; and issues in the assessment of intelligence.

EDGS911 Project in Exceptional Education 2cp Practices

Autumn

Pre-requisites: EDGS910 Learning Theories & Exceptionality

Subject Description: This subject builds on the theoretical perspectives gained from the subject, Learning Theories and Exceptionality. It provides the opportunity for students to explore more deeply a particular learning theory and its application to children with special needs. Students will select one theoretical perspective and then complete a project related to the practical application of that theory. The project may take the form of a case study, a curriculum plan or an evaluation study. Projects will be determined in consultation with the lecturer.

EDGS912 Contemporary Perspectives Education of Students with Diverse Needs 6cp

Spring

Subject Description: This subject will critically examine current philosophical and policy issues related to the education of students with special needs, including gifted children. The link between theoretical frameworks and practical applications will be explored with a particular focus on the impact of current theories on change processes in special education.

EDGS913 Project in Contemporary Perspectives 2cp**Spring****Co-requisites:** EDGS912

Subject Description: This subject builds on the theoretical perspectives gained from the subject, Contemporary Perspectives in the Education of Students with Diverse Needs. It provides the opportunity for students to explore more deeply a particular issue related to policy or programming for students with special needs. Students completing the project will select a topic in consultation with the lecturer. The project may take the form of a case study, a curriculum plan or an evaluation study.

EDGS914 Assessment and Instruction of Students with Learning Difficulties 6cp**Spring**

Subject Description: This subject aims to develop basic skills in assessment, program planning, program implementation and evaluation in relation to students with special educational needs. The principles of effective teaching and curriculum modification will be addressed. While a range of teaching approaches will be reviewed, the emphasis will be on those which have strong empirical support for their effectiveness.

EDGS915 Programs for Students with Learning Difficulties 2cp**Spring****Co-requisites:** EDGS914

Subject Description: This subject will provide students with the opportunity to investigate the educational needs of one particular group of students, and to evaluate the efficacy of current responses to their educational needs. Students will draw upon understandings and skills developed in EDGS914 which is a pre- or co-requisite for this subject.

EDGS916 Models of Behaviour Management 6cp**Autumn**

Subject Description: This subject examines a range of approaches to behaviour management and the theoretical principles upon which they are based. Problems associated with non school attendance, oppositional disorders, attention deficit disorders and other commonly occurring behaviour disorders are critically examined within the context of increasing academic engaged time and developing social and conflict resolution skills.

EDGS917 Programming for Behaviour Management 2cp**Autumn****Co-requisites:** EDGS916

Subject Description: This subject will build on the conceptual understandings and skills developed in EDGS916 and involve the development of a schoolwide behaviour management plan for a nominated educational setting. It will incorporate an analysis of the function of schools, the causes of inappropriate behaviour and the role of the teacher in guiding student behaviour.

EDGS918 Approaches to Reading Difficulties: Theories and Strategies 6cp**Autumn**

Subject Description: This subject will engage students in a critical review of current empirical research in the area of reading difficulties. Theoretical and methodological aspects will be considered.

EDGS919 Reading Difficulties: Program Design and Implementation 2cp**Autumn****Co-requisites:** EDGS918

Subject Description: This subject will engage students in the practical implementation of current theories regarding the identification and remediation of reading difficulties. Students will be required to work with a student with reading difficulties for a period of 6-8 weeks. This will involve pre- and post-assessment tasks and designing and implementing an appropriate instructional program.

EDGS920 Language and Communication Difficulties: Theory and Practice 6cp**Spring**

Subject Description: This subject examines the major causes of language and communication difficulties. An overview of the topic will include an historical perspective which indicates shifts in issues such as identification, classification and categorization. Specific language difficulties associated with autism, cerebral palsy hearing impairment, intellectual impairment and learning disabilities will be examined. Assessment of communication difficulties and evaluation of a range of educational strategies will conclude the subject.

EDGS921 Language-Related Learning Difficulties: A Case Study 2cp**Spring****Co-requisites:** EDGS920

Subject Description: This subject examines the impact of language-related learning difficulties on academic performance. Students will analyse the needs of a child with such difficulties and make recommendations for compensatory teaching practices to enhance classroom success.

EDGS922 Teaching Gifted Students 6cp**Autumn**

Subject Description: This subject will identify and critically examine the current issues related to the education of gifted students. It will also prepare teachers to meet effectively the needs of such students through curriculum modification and application of special educational strategies. Topics will include: definition and identification issues; instructional models; educational strategies; creativity and thinking skills; counselling needs; special populations; and the implications of policy on educational practice.

EDGS923 Project in Gifted Education 2cp**Autumn****Co-requisites:** EDGS922

Subject Description: This subject builds on the theoretical perspectives gained from the subject, Teaching Gifted Students. It provides the opportunity for students to explore more deeply a particular issue related to policy or programming for gifted students. Students completing the project will select a topic in consultation with the lecturer. The project may take the form of a case study, a curriculum plan or an evaluation study.

EDGS924 Giftedness in Special Populations 6cp**Spring****Contact hours:** 3 hours per week

Subject Description: This subject will critically examine the needs of special populations of students who are generally under-represented in programs for gifted children. Students will engage in analysing and evaluating alternative forms of assessment and developing appropriate strategies for curriculum design and delivery. Possible focus groups will include: Aboriginal children, ethnic minority children, low SES, girls, underachievers, preschoolers, prodigies, and students with emotional difficulties, physical or learning disabilities.

EDGS925 Project in Dual Exceptionality 2cp**Spring**

Subject Description: This subject builds on the theoretical perspectives gained from the subject, Giftedness in Special Populations. It provides the opportunity for students to explore more deeply a particular issue related to policy or programming for gifted students with other special needs related to their gender, ethnicity, or disability. Students completing the project will select a topic in consultation with the lecturer. The project may take the form of a case study, a curriculum plan or an evaluation study.

EDGZ900 Introduction to Research Methods in Education 8cp

Autumn	Wollongong	On Campus
Autumn	Wollongong	Distance
Spring	Wollongong	Distance
Spring	Wollongong	On Campus

Exclusions: EDGA900

Subject Description: Topics to be studied will include principles and epistemology of educational research; descriptive and inferential techniques; case study and action research; problem identification; design and analysis; interpretation of findings; information and computer based technology in research; overview of research paradigms; ethics in education research. A self-study module is also available for students who have difficulty attending the Wollongong campus.

EDGZ901 Advanced Qualitative Research Methods 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** EDGA900 or EDGZ900 or equivalent**Exclusions:** EDGA901

Subject Description: The purpose of the subject is extend understandings of the qualitative research paradigm and provide opportunities for the systematic discussion and application of inquiry approaches relevant to individual participant needs and interests. An examination of the rationale and epistemological foundations for qualitative inquiry will precede discussion of the ethics and practice of data gathering and analysis, the role of the ethnographer and the communication of inquiry findings.

EDGZ902 Advanced Quantitative Research Methods 8cp**Contact Hours:** Not on offer in 2003**Exclusions:** EDGA902

Subject Description: The objective of the subject is to provide some of the practical statistical tools that can be used to carry out educational research. There is heavy emphasis on practical use of software to solve statistical problems, but this is done only after formal derivation of particular techniques

EDGZ903 Minor Project in Education 8cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Autumn	Hong Kong	Flexible
Autumn	Wollongong	Distance
Spring	Wollongong	Distance

Pre-requisites: At least 16 cp in specialisation**Exclusions:** EDGA903

Subject Description: This subject is part of the research orientation in the MEd program. It enables a student to explore a research issue in a sustained piece of writing, as preparation for higher degree studies. No project work should be commenced without approval from the Program Co-ordinator or the Head of the Graduate School.

EDGZ905 Major Honours Thesis 48cp
Annual / Spring

Subject Description: This is the thesis subject for candidates enrolling in a Major Thesis in the MEd(Hons) course in the Faculty of Education. Candidates are required to submit a research thesis in line with the relevant University Rules. No thesis work should be commenced without approval from an appropriate academic supervisor and the Head of the Graduate School of Education.

EDGZ909 Doctoral Thesis 48cp

Annual	Wollongong	On Campus
Annual	Wollongong	Flexible
Spring 2003 / Autumn 2004	Wollongong	On Campus
Autumn	Wollongong	On Campus

Prerequisite: Completion of required coursework at appropriate level.

Subject Description: This is the thesis subject for candidates enrolled in the Doctorate of Education, or a Ph.D supervised in the Faculty of Education. Candidates are required to submit a research thesis in line with the relevant University Rules. No thesis work should be commenced without the approval of the appropriate academic supervisor and the Head of the Graduate School of Education.

Intending candidates should consult the information on admission and course requirements contained in the current Graduate School of Education Handbook and refer to the information provided for EDGZ904. Candidates in EDGZ904, EDGZ905 and EDGZ909 will be required as part of their candidature to participate in and present reports of their research to seminars and other appropriate forums at least once a year. Continuation of candidature will be subject to the satisfactory progress of the research, and to regular participation in such events as monitored through the Annual Progress Report. All candidates are required to be familiar with the current University of Wollongong Code of Practice-Supervision. Candidates enrolling with effect from Autumn Session, 1995 are required to present a review of their proposed research topic within the first session (full-time students) or two sessions (part-time students) of their candidature. The nature of this review should be discussed with the Head of the Graduate School and the Supervisor(s) in the first session of the candidature. Continuation of candidature will be conditional on the satisfactory presentation of the review and acceptance of the proposal by the appropriate Committee of the Graduate School of Education.

EDGZ912 Special Research Topic 8cp
Autumn / Spring

Pre-requisites: EDGA900 or EDGZ900 or equivalent

Subject Description: The subject will allow students following a specific specialisation to appraise, extend and apply understanding and skills in their area of professional or academic concern. Students will be required to undertake a critical reading, review and reporting program. Some students may extend their investigation via a small field based inquiry project which will explore the related theory and program issues in a professional setting.

EDGZ921 Introduction To Research & Inquiry 6cp
Autumn / Spring

Subject Description: This subject examines the nature of inquiry in Education and related areas. The subject will assist students in critically appraising reported research in academic contexts, in public contexts such as government reports, and popular contexts such as the media. It will also provide the tools to conduct small project and site-based research and evaluation studies. Specifically the subject will address questions such as: why conduct research? what constitutes good research? how are methodologies and theoretical frameworks for research determined? What are the ethical implications of conducting and reporting on research? These questions will be explored through tasks and inquiries suited to the backgrounds and interests of students undertaking the subject.

EDGZ922 Conducting Research & Inquiry 6cp
Autumn Wollongong Flexible
Spring Wollongong Flexible

Subject Description: This subject is designed to provide students with the knowledge and skills to conduct research in the context of Education and related areas. It will examine the process of problem-setting, of generating questions and hypotheses.

The underlying assumptions of a range of research designs and related methodologies and their practical applications as research technologies will be explored. Students will have opportunities to develop skills in statistical and qualitative data gathering techniques in the context of their particular backgrounds and research interests. A modular approach will allow students to follow areas of interest in greater depth.

EDGZ923 Advanced Research & Methodologies 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject will consist of a number of two credit point modules, each focusing on a particular methodology, site of practice or advanced development in particular research techniques. Modules will include: postmodern research; correlational design and analysis; experimental design and analysis; narrative research; evaluation in the work place; action research; survey and questionnaire design and analysis; biography and life history; textual analysis. Students will need to complete any three modules of their choice in consultation with subject coordinator to successfully complete the subject

EDGZ924 Research Proposal 6cp
Spring Wollongong Flexible
Autumn Wollongong Flexible

Subject Description: Students will complete a draft introduction, literature review and an outline of their research design for their proposed thesis topic. Opportunity will be given for peer and lecturer critique through draft writing, seminars and web-based discussion. All students will be encouraged to design and trial key data gathering and analysis methodologies that they envisage will be central to their thesis inquiry.

EDGZ925 Advanced Seminar 8cp
Autumn / Spring

Pre-requisites: EDGA900 or EDGZ900 or equivalent

Exclusions: EDGA925

Subject Description: The Advanced Seminar will allow students to evaluate and extend knowledge in a specific area of education. Students will be required to undertake a critical reading program in this area and extend their work by applying their understanding in a school or community based project which integrates the theory and application. Regular seminars will be presented detailing issues, understandings, progress and final outcome.

EDGZ926 Professional Project 12cp
Annual

Subject Description: This subject takes the form of a professional project which involves students identifying issues, researching the literature for recent information and presenting on current issues in their professional area; and the development and implementation of a project which would make a contribution to their local community of practice.

EDGZ951 Poststructuralist/Postmodernist Research 2cp**Autumn / Spring**

Subject Description: This module will examine the potentials of postmodern and poststructuralist research in the context of educational research. It will assist students in exploring the theoretical resources on which such research draws and provide opportunities to discuss issues, clarify concepts and apply understandings to research problems.

EDGZ952 Interviews As Research Method 2cp**Autumn / Spring**

Subject Description: This module will examine the ways in which interviews with one or more people can be used as a research tool to understand the way in which people construct meanings about themselves, their world and other people in it. The subject will examine the ethical and pragmatic issues associated with all stages of the process: that is in choosing participants, designing questions, conducting interviews, and interpreting them and representing these interpretations in research writing.

EDGZ953 Correlation Research 2cp**Autumn / Spring**

Subject Description: This module will assist students in developing skills in the answering of questions about data which are essentially correlational in nature. Questions suggesting correlational analysis are typically phrased as "Is there a relationship between self esteem and performance?" or "Can we predict (model) performance based on gender, self esteem and school type?". The primary techniques used for such analysis and covered in this module include correlation, regression, multiple regression and multi-level modelling. Students will be introduced to the process of fitting models including interaction terms, checking assumptions, selecting between models, interpretation of output and writing up results for publication.

EDGZ954 Evaluation Research 2cp**Autumn / Spring**

Subject Description: This module will examine the range of approaches in the broad area of evaluation research. The overview will examine what can be evaluated and the forms of evaluation available to undertaking evaluation activities in their own professional life, programs, in organisation they work or are contracted to investigate. The activities in the unit will include readings from the text, discussions on the web and a small hands-on project. The project could be located in a community, professional setting or related to your own professional practice.

EDGZ955 Developing Grounded Theory In Qualitative Research 2cp**Autumn / Spring**

Subject Description: This module will explore what the research literature claims grounded theory development is and the methodology used in order to develop it. It will examine the relationship between grounded theory development, reviewing of the literature in the field of study and the qualitative research methods used in the data collection and analysis. Finally it will examine when and why one might use grounded theory methodology.

EDGZ956 Research Methods In Language Education 2cp**Autumn / Spring**

Subject Description: This module will familiarise students with a range of research methodologies employed in the field of language education (in particular, TESOL and literacy studies). Students will be provided with a collection of readings dealing with research agendas for language education, current issues, the role of theory, and approaches to data collection and analysis (case study, observation, experiments, introspection, action research, statistical analysis, and so on). Students will also critically examine journal articles reporting on the results of different types of studies.

EDGZ957 Feminist Research 2cp**Autumn / Spring**

Subject Description: This module is designed to provide students with an introduction to feminism and feminist scholarship. A variety of readings that focus on issues associated with feminist theory, research and methodology are provided as a basis for discussion and written assessment. The challenge for students is to develop an informed perspective in this area so that they can construct their own frameworks for defining the nature of feminist research.

EDGZ958 Discourse Analysis 2cp**Autumn / Spring**

Subject Description: This module will introduce discourse analysis and its application in educational research. The module will consider the range of approaches to discourse analysis and examine the influence of contemporary philosophical perspectives on interpretations of discourse. Students will be encouraged to apply their understandings of these perspectives to the conceptualisation of their research problem and the application of discourse analysis.

EDGZ959 Questionnaire Construction 2cp**Autumn / Spring**

Subject Description: This module will examine the ways in which the questionnaire can be used as a research tool to understand the way in which people construct meanings about themselves, their world and other people in it. The subject will examine the ethical and pragmatic issues associated with all stages of the process: that is, in choosing participants, designing questions, administering the questionnaire, setting up the data for analysis and representing the analysis in research writing.

EDGZ960 Case Study Research 2cp**Autumn / Spring**

Subject Description: This module will examine the rationale for selecting a case study approach to research, the various purposes for which a case study is appropriate, and the basic types of case studies. The latter includes, but is not limited to, historical case studies, ethnographic case studies, oral histories, and clinical cases. Multiple case study approach will also be considered. Finally, the module will explore the design of case studies and the associated data collection and analysis tools.

EDUT432 Inquiry Project in Education 6cp

Autumn / Spring

Subject Description: This subject will require students to plan, conduct and report upon an inquiry focused upon educational aspects of a Key Learning Area or educational problem. Skills in library research, critical analysis of selected educational literature, and critical review of journal material relevant to the inquiry project. The project will consist of a collaborative or individually defined topic that is negotiated with the supervisor.

EDUT493 Thesis 24cp

Annual

Pre-requisites: EDUF303

Subject Description: The student will be required to complete a thesis, approximately 20,000 words, in length, based upon a course of supervised study on a topic chosen by the student and approved by the supervisor.

EDUT495 Selected Topics in Early Childhood Education 18cp

Spring / Autumn / Annual

Pre-requisites: EDUF303

Subject Description: The student will be required to undertake Advanced Research methods as a component of this subject. The remainder of the subject will deal with advanced theory and currently emerging issues in Early Childhood practice.

EDUT496 Honours Thesis in Early Childhood 24cp

Annual

Pre-requisites: EDUF303

Subject Description: The student will be required to complete a thesis, approximately 20,000 words based upon a course of supervised study on a topic chosen by the student and approved by the supervisor.

EDUZ401 Education Honours 24cp

Annual

Pre-requisites: 24 cp of 300-level Education at credit level or better.

Subject Description: Emphasis within this course is on both quantitative and qualitative approaches to research. The main emphasis in the taught components will be upon the nature of evidence, types of evidence, analysis and integration of evidence. Thesis topics will normally be selected from the areas of: Cognitive studies and learning; Curriculum studies; Language development and curriculum; Measurement and evaluation; Cross-cultural psychology; History of education; Gender studies; Literacy studies; Sociology of Education.

Faculty of Engineering

Courses Offered

The Faculty of Engineering offers the following postgraduate qualifications in the seven major areas of Civil Engineering, Engineering Management, Engineering Physics, Environmental Engineering, Materials Engineering, Mechanical Engineering, Mining Engineering:

Civil Engineering

Doctor of Philosophy
Master of Engineering – Research
Master of Engineering
Master of Engineering Practice (Civil Engineering)
Graduate Diploma in Engineering

Engineering Management

Master of Engineering (Maintenance Management)
Master of Engineering Practice (Engineering Management)
Master of Engineering Practice (Maintenance Management)
Graduate Diploma in Maintenance Management
Graduate Certificate in Engineering
Graduate Certificate in Maintenance Management

Engineering Physics

Doctor of Philosophy
Master of Science – Research
Master of Science (Medical Radiation Physics)
Graduate Diploma in Science

Environmental Engineering

Doctor of Philosophy
Master of Engineering - Research
Master of Engineering
Master of Engineering Practice (Environmental Engineering)
Graduate Diploma in Engineering

Materials Engineering

Doctor of Philosophy
Master of Engineering – Research
Master of Engineering
Master of Engineering Practice (Materials Engineering)
Master of Engineering Practice (Materials Welding and Joining)
Master of Engineering Practice (Steel Processing and Products)
Graduate Diploma in Engineering
Graduate Diploma in Materials Welding and Joining

Mechanical Engineering

Doctor of Philosophy
Master of Engineering - Research
Master of Engineering
Master of Engineering Practice (Bulk Solids and Particulate Technologies)
Master of Engineering Practice (Mechanical Engineering)
Master of Engineering Practice (Mechatronics)
Graduate Diploma in Engineering

Mining Engineering

Doctor of Philosophy
Master of Engineering - Research
Master of Engineering
Graduate Diploma in Engineering

Current Areas of Study and Research

Programs may be taken in: Advanced Engineering Materials, Advanced Manufacturing, Applied Mechanics, Bulk Solids and Particulate Technologies, Civil Engineering, Engineering Management, Environmental Engineering, Maintenance Management, Material Engineering, Materials Handling, Materials Processing, Materials Welding and Joining, Mechatronics, Metallurgy, Mechanical Engineering, Mining Engineering, Physics, Steel Processing and Products.

Research Areas

See under each area in this chapter.

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.

Civil Engineering

Courses Offered

- Doctor of Philosophy
- Master of Engineering – Research
- Master of Engineering
- Master of Engineering Practice (Civil Engineering)
- Graduate Diploma in Engineering

Current Research Areas

- The following areas of research are available to candidates undertaking the Master of Engineering - Research degree and the Doctor of Philosophy degree:
- Steel and concrete structures
 - Bridge engineering
 - Solid and rock mechanics
 - Foundation engineering, including railways
 - Slope stability and reliability analysis
 - Soft ground improvement technology
 - Reinforced earth
 - Dam and embankment engineering
 - Finite element and other numerical methods
 - Structural dynamics
 - Cementitious materials for construction
 - Flood studies, hydraulics and hydrology
 - Water quality engineering
 - Geo-environmental studies

Doctor of Philosophy

Candidates for the degree enrol in the subject CIVL957 PhD Major Thesis – 48cp.

Master of Engineering - Research

The Master of Engineering degree by research is intended for engineers qualified and interested in specific engineering problems. It is expected that candidates will have Honours Class II or above. The degree comprises a 48 credit point research thesis and 24 credit points of coursework. Advanced standing for some or all of the coursework component may be granted on demonstrated research skills. Evidence of these skills would normally be a Bachelor of Engineering (Honours Class II Division 2 or better) and/or an appropriate Masters Coursework degree.

Program of Study

CIVL955	ME Major Thesis	48
ENGG951	Engineering Project Management	6
Plus 18cp of elective subjects chosen from the Master of Engineering Civil Engineering subjects below:		

Master of Engineering

The Master of Engineering degree comprises a 24 credit point dissertation (ENGG945) and at least 24 credit points of coursework - refer list below. Entry is a Bachelor of Engineering with honours at Class III or higher from this University, or an approved equivalent qualification. The programs of study allow the student to combine specialist postgraduate subjects, according to his or her undergraduate background, with project work.

Core Subject

ENGG945	Dissertation	24
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Elective Subjects

CIVL901	Project	6
CIVL902	Reliability in Geotechnical Engineering	6
CIVL903	Concrete Technology	6
CIVL904	Highway Materials	6
CIVL905	Transportation Engineering	6
CIVL907	Civil Engineering Computations	6
CIVL908	Advanced Soil Mechanics	6
CIVL909	Advanced Foundation Engineering	6
CIVL910	Vibrations of Structures	6
CIVL911	Finite Element Methods	6
CIVL912	Engineering Hydrology	6
CIVL914	Analysis and Design of Bridge Structures	6
CIVL916	Research Topics in Civil Engineering	6
CIVL918	Steel Structures	6
CIVL919	Earth Structures	6
CIVL923	Advanced Reinforced Concrete	6
CIVL924	Advanced Studies in Computer Aided Design and Drafting	6
ENVE920	Principles of Environmental Engineering	6
ENGG955	Engineering Research Methods	6

Note: Not all subjects available in any one year.

Master of Engineering Practice (Civil Engineering)

A candidate who has a Bachelor of Civil Engineering or Environmental Engineering degree from this university, or an approved equivalent qualification, would normally be accepted. A student enrolled in a full-time program is expected to take one year to complete this course.

Candidates enrol in ENGG940 (12 cp) plus three core and three elective subjects from the subject list below.

Core Subjects

ENGG940	Dissertation	12
ENGG950	Innovation and Design	6
ENGG951	Engineering Project Management	6
ENGG952	Engineering Computing	6

or

TBS901	Accounting for Managers	6
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Elective Subjects

CIVL903	Concrete Technology	6
CIVL908	Advanced Soil Mechanics	6
CIVL909	Advanced Foundation Engineering	6
CIVL912	Engineering Hydrology	6
CIVL918	Steel Structures	6
CIVL923	Advanced Reinforced Concrete	6

CIVL924	Advanced Studies in Computer Aided Design and Drafting	6
CIVL981	Special Topic A	6
CIVL982	Special Topic B	6

Note: Not all subjects available in any one year.

Graduate Diploma in Engineering

A candidate who has completed a degree of Bachelor of Engineering and wishes to qualify for the Graduate Diploma in Engineering will enrol in the 48 credit point subject CIVL899 Advanced Topics in Engineering.

Upon satisfactory completion of the subject CIVL899, the candidate is eligible for award of the Graduate Diploma in Engineering.

Engineering Management

Courses Offered

Master of Engineering (Maintenance Management)
 Master of Engineering Practice (Engineering Management)
 Master of Engineering Practice (Maintenance Management)
 Graduate Diploma in Maintenance Management
 Graduate Certificate in Engineering
 Graduate Certificate in Maintenance Management

Master of Engineering (Maintenance Management)

Direct entry to the Master of Engineering (Maintenance Management) course will require a tertiary degree of approved standard from a recognised institute, eg a BE (Hons) degree or equivalent.

Maintenance engineers having completed their Graduate Diploma in Maintenance Management will be given appropriate credits for the course they already have completed. Credits may also be approved for other qualifications or experience for suitable applicants. In order to then obtain a Masters of Engineering (Maintenance Management), the candidate must have a Graduate Diploma in Maintenance Management or equivalent and have completed successfully a further 48 cp. These must consist of 2 core and 2 elective subjects and a 24 cp research project leading to a dissertation.

The research project will run in parallel with the formal coursework throughout the anticipated last year of a candidate's study. Students will be able to choose a suitable investigation from the current research activities at any of the disciplines involved.

Core Subjects

ENGG945	Dissertation	24
MECH971	Systems Analysis for Maintenance	6
MECH973	Systems Engineering and Life Cycle Management	6
MECH976	Maintenance System Design and Management	6
TBS903	Managing People in Organisations	6

Elective Subjects

ACCY901	Accounting for Managers	6
TBS906	Information Systems for Managers	6
MECH972	Condition Based Maintenance	6
MECH977	Advanced Topics in Maintenance 1	6

Plus other postgraduate subjects from the Business School or Engineering, subject to approval from the course coordinator.

Master of Engineering Practice (Engineering Management)

A candidate who has a Bachelor of Engineering degree in any discipline from this university, or an approved equivalent qualification, would normally be accepted. A student enrolled in a full-time program is expected to take one year to complete this course.

Core Subjects

ENGG950	Innovation and Design	6
ENGG951	Engineering Project Management	6
ENGG952	Engineering Computing	6
ENGG940	Engineering Dissertation	12

Elective Subjects

Option 1: Human and Financial Resource Management stream

TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
TBS908	Supply Chain Management	6

or

Option 2: Maintenance Management stream

MECH971	Systems Analysis for Maintenance	6
MECH973	Systems Engineering and Life Cycle Management	6
MECH976	Maintenance System Design and Management	6

Note: Students may be able to substitute other subjects from the Graduate School of Business (Faculty of Commerce) or Maintenance Management (Faculty of Engineering) depending on background and experience.

Master of Engineering Practice (Maintenance Management)

The normal entry requirement is a Bachelor of Engineering or equivalent qualification. Students who complete other Maintenance Management courses with a credit average may apply for entry to the Master of Engineering Practice course.

Appropriate advanced standing will be determined by the Course Coordinator.

Core Subjects

STAT942	Design and Analysis for Quality Control	6
MECH971	Systems Analysis for Maintenance	6
MECH973	Systems Engineering and Life Cycle Management	6
MECH976	Maintenance System Design and Management	6
TBS903	Managing People in Organisations	6
ENGG940	Dissertation	12

Plus 1 elective to be selected from the list below.

Elective Subjects

TBS901	Accounting for Managers	6
TBS906	Information Systems for Managers	6
MECH972	Condition Based Maintenance	6
MECH977	Advanced Topics in Maintenance 1	6

Plus other postgraduate subjects from the Graduate School of Business or Faculty of Engineering, subject to approval from the course coordinator.

Graduate Diploma in Maintenance Management

Entry to this Diploma normally will require an approved Bachelor degree from this University or an approved equivalent qualification. However, maintenance managers/engineers without tertiary qualifications in engineering but with significant industrial experience, will also be considered for admission to a limited number of places.

Students completing the Graduate Diploma in Maintenance Management at the University of Wollongong will have the option to enter into the Master of Engineering Practice (Maintenance Management), with the appropriate credit.

To qualify for the Graduate Diploma in Maintenance Management students must complete the following:

TBS902	Statistics for Decision Making	6
MECH970	Maintenance Management	6
MECH972	Condition Based Maintenance	6
MECH973	Systems Engineering and Life Cycle Management	6
TBS903	Managing People in Organisations	6
MECH971	Systems Analysis for Maintenance	6
MECH976	Maintenance System Design and Management	6

Plus 1 elective to be selected from the list below.

Electives

TBS901	Accounting for Managers	6
TBS906	Information Systems for Managers	6

Plus other postgraduate subjects from the Business School or Engineering, subject to approval from the course coordinator.

Graduate Certificate in Engineering

A candidate who has a Bachelor of Engineering degree in any discipline from this university, or an approved equivalent qualification, would normally be accepted.

Students may be admitted with a TAFE Advanced Diploma and relevant industrial experience.

Core Subjects

ENGG950	Innovation and Design	6
ENGG951	Engineering Project Management	6
ENGG952	Engineering Computing	6

Elective Subject

Plus one elective from one of the Master of Engineering Practice Programs, to be approved by the Director of Studies.

Graduate Certificate in Maintenance Management

Usual entry requirement is a Bachelor of Engineering or relevant degree. Other qualifications together with significant relevant experience in the area will also be considered. Applicants are required to submit a CV with their application and where relevant a supporting letter from their employer.

Core Subjects

ENGG921	Engineering Data Reduction and Error Analysis	6
MECH470	Maintenance Management	6
MECH972	Condition Based Maintenance	6
or		
MECH973	Systems Engineering and Life Cycle Management	6
TBS903	Managing People in Organisations	6

Engineering Physics

Courses Offered

- Doctor of Philosophy
- Master of Science – Research
- Master of Science (Medical Radiation Physics)
- Graduate Diploma in Science

Current Research Areas

- The following areas of research are available to candidates undertaking the Master of Science - Research degree and the Doctor of Philosophy degree:
- Astronomy - visible and infrared, planetary surfaces
 - Experimental nuclear physics
 - Laser spectroscopy
 - Medical Radiation Physics
 - Scattering of light by solids
 - Solid state spectroscopy of impurities in semi-conductors
 - Studies of electronic wave functions in solids
 - Theoretical astrophysics - galaxy formation, gas dynamics

Doctor of Philosophy

Candidates for this degree enrol in PHYS999 – 48cp.

PHYS954	Radiobiology and Radiation Protection	8
GHMB927	An Introduction to Human Anatomy and Physiology	6

Master of Science - Research (Physics)

The course will be made up of subjects selected from those described below, in accordance with the Masters by Research Degree Rules together with the following conditions:

- 1) entry to the degree program will normally be from an Honours degree in Physics or the Graduate Diploma in Science (Physics) or from a pass degree with an appropriate three year sequence in Physics;
- 2) students entering with a degree below Honours Class II, Division 2 will complete the 48 credit point PHYS999 and 24 credit point combination of subjects chosen from the remaining Graduate Subjects below and the list of undergraduate Physics subjects. These subjects will be chosen in consultation with and approved by the Director of Studies.

Advanced standing will be given for some or all of the coursework component based on demonstrated research skills.

Graduate Subjects

PHYS401	Theoretical Mechanics and Electromagnetism	8
PHYS441	Astro- and Nuclear Physics	8
PHYS444	Quantum Mechanics	8
PHYS446	Solid State Physics	8
PHYS910	Advanced Project in Physics A	6
PHYS946	Advanced Solid State Physics	6
PHYS947	Special Topics in Physics A	6
PHYS948	The Physics of Imaging	6
PHYS960	Advanced Project in Physics B	6
PHYS997	Special Topic in Physics B	6
PHYS999	Major Thesis	48

Master of Science (Medical Radiation Physics)

This is a one year full-time or two year part-time course. The normal entry to this degree requires the completion of an Honours BSc or equivalent with Physics as a major study. Candidates who have completed a bachelors degree which does not include a relevant major study will be required to complete additional subjects in Physics as outlined in the Masters Degree regulations. Students who have completed the Bachelor of Medical Radiation Physics from the University of Wollongong, or equivalent specialist course, would be advised to enrol in a Medical Radiation Physics research program.

The course consists of a research project and four subjects:

PHYS951	Medical Physics Research Project	18
PHYS952	Radiation and Radiotherapy Physics	8
PHYS953	Medical Imaging and Nuclear Medicine	8

Graduate Diploma in Science (Physics)

Introduction and Objectives

This one year full-time or two year part-time course is designed to provide:

- 1) a Masters qualifying course for students who have inadequate preparation for direct entry into the Masters by Research program;
- 2) an opportunity for Science teachers who have a degree but have taken Physics to first or second year level only, to improve their understanding and horizons in Physics;
- 3) an opportunity for International students and students without a full major in Physics to update their knowledge of Physics.

Entry to the Course

Students must consult the Director of Studies for admission to the course. Forty eight (48) credit points to be chosen from the following list in consultation with the Director of Studies.

PHYS205	Advanced Modern Physics	6
PHYS230	Intermediate Physics	6
PHYS233	Introduction to Environmental Physics	6
PHYS255	Radiation Physics	6
PHYS295	Astronomy - Concepts of the Universe	6
PHYS235	Mechanics and Thermodynamics	6
MATH201	Multivariate and Vector Calculus*	6
MATH202	Applied Differential Equations*	6
MATH283	Mathematics 2E for Engineers Part 1	6
PHYS305	Quantum Mechanics*	6
PHYS325	Electromagnetism*	6
PHYS335	Classic Mechanics*	6
PHYS365	Detection of Radiation: Neutrons, Electrons and X-Rays	6
PHYS375	Nuclear Physics	6
PHYS385	Statistical Mechanics*	6
PHYS390	Astrophysics	6
PHYS401	Theoretical Mechanics and Electromagnetism	8
PHYS441	Astro- and Nuclear Physics	8
PHYS444	Quantum Mechanics	8
PHYS446	Solid State Physics	8
PHYS452	Medical Imaging	8
PHYS453	Radiobiology and Radiation Protection	8
PHYS454	Physics of Diagnostic Radiology	8
PHYS455	Basic and Applied Pathology	8
PHYS456	Imaging Physics	8
PHYS910	Advanced Project in Physics A	6
PHYS947	Special Topics in Physics A	6
PHYS948	The Physics of Imaging	6
PHYS960	Advanced Project in Physics B	6
PHYS990	Applied Physics Project	24
PHYS997	Special Topics in Physics B	6

* These subjects are pre and co-requisites of some of the physics subjects.

Environmental Engineering

Courses Offered

Doctor of Philosophy
 Master of Engineering - Research
 Master of Engineering
 Master of Engineering Practice (Environmental Engineering)
 Graduate Diploma in Engineering

Current Research Areas

The following areas of research are available to candidates undertaking the Master of Engineering - Research degree and the Doctor of Philosophy degree:

Water quality engineering
 Environmental hydraulics and unit processes
 Pollution control engineering
 Water quality and quantity modelling of catchments, rivers and lakes
 Soil erosion and sediment transport
 Environmental pollution modelling
 Recycling and waste management
 Environmental geotechnology
 Solid-liquid separation processes
 Transport and the environment

Doctor of Philosophy

Candidates for the degree enrol in the subject ENVE957 PhD Major Thesis – 48cp.

Master of Engineering - Research

The Master of Engineering degree by research is intended for engineers qualified and interested in specific engineering problems. It is expected that candidates will have Honours Class II or above. The degree comprises a 48 credit point research thesis and 24 credit points of coursework. Advanced standing for some or all of the coursework component may be granted on demonstrated research skills. Evidence of these skills would normally be a Bachelor of Engineering (Honours Class II Division 2 or better) and/or an appropriate Masters Coursework degree.

Program of Study

ENVE955	ME Major Thesis	48
ENGG951	Engineering Project Management	6

Plus 18 credit points of elective subjects chosen from the following subjects Master of Engineering - Environmental Engineering Subjects below.

Master of Engineering

The Master of Engineering degree comprises a 24 credit point dissertation (ENGG945) and at least 24 credit points of coursework - refer to list below. Entry is a Bachelor of Engineering with honours at Class III or higher from this University, or an approved equivalent qualification.

The programs of study allow the student to combine specialist postgraduate subjects, according to his or her undergraduate background, with project work.

Core Subject

ENGG945	Dissertation	24
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Elective Subjects

ENGG955	Engineering Research Methods	6
ENVE901	Project	6
ENVE916	Research Topics in Environmental Engineering	6
ENVE920	Principles of Environmental Engineering	6
ENVE921	Wastewater Engineering	6
ENVE922	Water Supply Engineering	6
ENVI920	The Scientific Basis of Environmental Management	6
ENVI921	Environmental Planning	6
CIVL908	Advanced Soil Mechanics	6
CIVL912	Engineering Hydrology	6

Note 1: The coursework program will not be offered if enrolment is less than 6 students.

Note 2: Not all subjects available in any one year.

Master of Engineering Practice in Environmental Engineering

Candidates enrol in ENGG940 (12 cp) plus three core and three elective subjects from the Environmental elective subject list below. Candidates would normally be expected to have a Bachelor degree in Environmental Engineering or Civil Engineering, but a Bachelor degree in any engineering discipline or science together with appropriate professional experience may also be accepted.

Core Subjects

ENGG940	Dissertation	12
ENGG950	Innovation and Design	6
ENGG951	Engineering Project Management	6
ENGG952	Engineering Computing	6

or

TBS901	Accounting for Managers	6
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Elective Subjects

ENVE920	Principles of Environmental Engineering	6
ENVE921	Wastewater Engineering	6
ENVE922	Water Supply Engineering	6
ENVE981	Special Topic A	6
ENVE982	Special Topic B	6
CIVL904	Highway Materials	6
CIVL912	Engineering Hydrology	6
CIVL924	Advanced Studies in Computer Aided Design	6

Graduate Diploma in Engineering

A candidate who has completed a degree of Bachelor of Engineering and wishes to qualify for the Graduate Diploma in Engineering will enrol in the 48 credit point subject ENVE899. Advanced Topics in Environmental Engineering. Upon satisfactory completion of the subject ENVE899, the candidate is eligible for the award of the Graduate Diploma in Engineering.

Materials Engineering

Courses Offered

Doctor of Philosophy
 Master of Engineering – Research
 Master of Engineering
 Master of Engineering Practice (Materials Engineering)
 Master of Engineering Practice (Materials Welding and Joining)
 Master of Engineering Practice (Steel Processing and Products)
 Graduate Diploma in Engineering
 Graduate Diploma in Materials Welding and Joining

Postgraduate Programs

Advanced Engineering Materials
 Materials Processing
 Materials Engineering
 Materials Welding and Joining
 Metallurgy
 Steel Processing and Products

Current Research Areas

The following areas of research are available to candidates undertaking the Master of Engineering - Research degree and the Doctor of Philosophy degree:

Hot deformation of high strength low alloy steels
 High temperature behaviour of engineering materials
 Development of structural steels
 Electron metallography of precipitates in ferrous alloys
 Electron microscopy of intermetallics
 Development of structures in metals by recrystallization
 Shape memory alloys
 Development of galvanising alloys
 Structures and properties of welded metals
 Adhesive bonding
 Brazing and diffusion bonding
 Fusion welding of coated steels
 Surface engineering of materials
 Wear and surface property testing
 Ceramic coatings
 Physical vapour deposition processing of metals
 Ion implantation
 Microwave processing of materials
 Solidification
 Magnetic properties of rapidly solidified materials
 Structures and properties of metallic glasses
 Structures and properties of ceramic materials
 Structures and properties of composite materials
 Structures and properties of nanocrystalline materials
 High temperature superconductors
 Battery and fuel cell materials
 Molecular structure and properties of polymeric and polymer-metal interphases
 Bath smelting technology
 Slag cleaning
 Treatment of steelworks dust
 Erosion/corrosion of smelter refractories
 Characterisation of welding fumes

Texture analysis of materials
 High energy ball milling

Doctor of Philosophy

Candidates for this degree enrol in MATL957 PhD Major Thesis – 48cp.

Master of Engineering - Research

The Master of Engineering degree by research is intended for engineers qualified and interested in specific engineering problems. It is expected that candidates will have Honours Class II or above. The degree comprises a 48 credit point research thesis and 24 credit points of coursework. Advanced standing for some or all of the coursework component may be granted on demonstrated research skills. Evidence of these skills would normally be a Bachelor of Engineering (Honours Class II Division 2 or better) and/or an appropriate Masters Coursework degree.

Program of Study

MATL955	ME Major Thesis	48
ENGG951	Engineering Project Management	6

Plus 18 credit points of elective subjects chosen from the Master of Engineering - Materials Engineering subjects below.

Master of Engineering

The Master of Engineering degree comprises a 24 credit point dissertation (ENGG945) and at least 24 credit points of coursework - refer to list below. Entry is a Bachelor of Engineering with honours at Class III or higher from this University, or an approved equivalent qualification. The programs of study allow the student to combine specialist postgraduate subjects, according to his or her undergraduate background, with project work.

Core Subject

ENGG945	Dissertation	24
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Elective Subjects

Advanced Engineering Materials program

MATL901	Special Topic in Materials A	6
MATL903	Recent Developments in Materials	6
MATL905	Metallic Materials	6
MATL906	Ceramics, Glasses and Refractories	6
MATL907	Polymeric Materials	6
MATL972	Selection and Design of Materials	6

Materials Processing program

MATL901	Special Topic in Materials A	6
MATL902	Special Topic in Materials B	6
MATL903	Recent Developments in Materials	6
MATL921	Formability of Sheet Material	6
MATL932	Surface Engineering of Materials	6
MATL937	Process Metallurgy	6

Metallurgy program

MATL901	Special Topic in Materials A	6
MATL903	Recent Developments in Materials	6
MATL905	Metallic Materials	6

Course Structures

MATL911	Mechanical Behaviour of Materials	6
MATL951	Performance of Materials A	6
MATL952	Performance of Materials B	6
MATL972	Selection and Design of Materials	6

Note:

ENGG955	Engineering Research Methods	6
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is also available.

Master of Engineering Practice (Materials Engineering)

A candidate who has completed a relevant major study, or approved equivalent work, either as part of, or in addition to, a bachelor degree will enrol in approved subjects having a value of not less than 48 cp.

Core Subjects

ENGG940	Dissertation	12
ENGG950	Innovation and Design	6
ENGG951	Engineering Project Management	6
ENGG952	Engineering Computing	6

or

TBS901	Accounting for Managers	6
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Elective Subjects

Plus 3 elective subjects from the following

MATL901	Special Topics in Materials A	6
MATL902	Special Topics in Materials B	6
MATL903	Recent Developments in Materials	6
MATL951	Performance of Materials A	6
MATL952	Performance of Materials B	6

Note: Not all elective subjects will be available in any one year.

Master of Engineering Practice (Materials Welding and Joining)

This course is offered on a flexible delivery, with the normal entry requirement being a Bachelor of Engineering or Bachelor of Science degree.

The course consists of a set of 16 modules with a total of 48 cp, together with a 12cp Dissertation (ENGG 919). The 3 credit point modules are presented in the form of 12 text based distance delivery subjects and intensive one week subjects which:

- are offered over two sessions;
- are assessed by quizzes, assignments, reports on practical work and examination, as relevant to the particular module.

In addition to the self study texts a web based tutor is used.

Approval of the Professor of Materials Welding and Joining will be required for the subject matter of ENGG 919 - Dissertation.

ENGG901	Introduction to Welding and Joining Processes	3
ENGG902	Fusion Welding Processes Part 1	3
ENGG903	Other Joining Processes	3

ENGG904	Fusion Welding Processes Part 2	3
ENGG905	Behaviour of Metals during Welding - Part 1	3
ENGG906	Behaviour of Metals during Welding - Part 2	3
ENGG907	Welding of Non-Ferrous Metals and Non-Metals	3
ENGG908	Construction and Design - Part 1	3
ENGG909	Construction and Design - Part 2	3
ENGG910	Fabrication/Applications Engineering - Part 1	3
ENGG911	Fabrication/Applications Engineering - Part 2	3
ENGG914	Fabrication/Applications Engineering Part 3	3
ENGG915	Design on Structures	3
ENGG916	Fabrication Case Studies	3
ENGG917	Processes, Equipment, Automation	3
ENGG918	Weldability and Wear	3
ENGG919	Dissertation	12

Master Of Engineering Practice (Steel Processing and Products)

Candidates would normally be expected to have a Bachelor Degree in Materials or Mechanical Engineering, but a bachelor degree in another appropriate field of engineering or science together with appropriate professional experience would also be accepted.

Core Subjects

ENGG930	Preliminary Topics in Steel Processing and Products	6
TBS950	Quality in Management	6
ENGG931	Steel Products and their Production	6
MGMT933	Management of Process Innovation 1	6
MECH970	Maintenance Management	6

plus three electives from the following list:

ENGG932	Rolling Technology	6
ENGG933	Coating Technology	6
ENGG934	Steelmaking	6
ENGG935	Casting	6
MATL906	Ceramic Materials	6
ENGG936	Control of Steel Processing	6
MGMT915	Management of Change	6
MGMT934	Management of Process Innovation 2	6

Graduate Diploma in Engineering

A candidate who has completed a degree of Bachelor of Engineering and

- who has not qualified for any class of Honours, or
- who wishes to qualify for the Graduate Diploma in Engineering, will enrol in the 48 credit point subject MATL899Advanced Topics in Materials.

Upon satisfactory completion of the subject MATL899 the candidate is eligible for award of the Graduate Diploma in Engineering.

Graduate Diploma in Materials Welding and Joining

This course is one year full-time in duration, or may be taken part-time on a module by module basis. The normal entry requirement is a Bachelor of Engineering degree or a Bachelor of Science or an Associate Diploma plus appropriate industrial experience.

There are 16 modules. Refer to Master of Engineering Practice in Materials Welding and Joining.

Expert/knowledge system in automated machining
Intelligent manufacturing systems
Monitoring/diagnosis of manufacturing processes and machinery conditions
Integrated CAD/CAM
Maintenance management

Materials Handling

Bulk solids handling and prediction of bin wall loads and flow rates
Energy technology
Pneumatic and hydraulic conveying

Doctor of Philosophy

Candidates for this degree enrol in MECH957 PhD Major Thesis – 48cp.

Mechanical Engineering

Courses Offered

Doctor of Philosophy
Master of Engineering - Research
Master of Engineering
Master of Engineering Practice (Bulk Solids and Particulate Technologies)
Master of Engineering Practice (Mechanical Engineering)
Master of Engineering Practice (Mechatronics)
Graduate Diploma in Engineering

Postgraduate Programs

Advanced Manufacturing
Applied Mechanics
Bulk Solids and Particulate Technologies
Maintenance Management
Materials Handling

Current Research Areas

The following research areas are available to candidates undertaking the Master of Engineering - Research degree and the Doctor of Philosophy degree.

Applied Mechanics and Heat Transfer

Bio-mechanics
Cavitation and bubble dynamics
Computational fluid mechanics
Finite element analysis
Thermal modelling of buildings
Heat transfer
Mechanical engineering design
New algorithms in robotics
Microwave applications
Rolling mill technology
Solar thermal system analysis and design
Solid mechanics of elastic and magneto-elastic bodies
System identification and control
Tribology - bearings, friction and wear

Manufacturing Technology and Management

Automated QC and reliability engineering
Automated welding and joining
Chip control in automated manufacture
Disassembly technology

Master of Engineering - Research

The Master of Engineering degree by research is intended for engineers qualified and interested in specific engineering problems. It is expected that candidates will have Honours Class II or above. The degree comprises a 48 credit point research thesis and 24 credit points of coursework. Advanced standing for some or all of the coursework component may be granted on demonstrated research skills. Evidence of these skills would normally be a Bachelor of Engineering (Honours Class II Division 2 or better) and/or an appropriate Masters Coursework degree.

Mechanical Engineering

MECH955	ME Major Thesis	48
ENGG951	Engineering Project Management	6

Plus 18 credit points of elective subjects chosen from the Master of Engineering - Mechanical Engineering subjects below.

Mechatronics

MECH955	ME Major Thesis	48
ENGG951	Engineering Project Management	6

Plus 18 credit points from the Mechanical Engineering subjects below or from the Electrical Engineering subjects offered by the Faculty of Informatics.

Master of Engineering

The Master of Engineering degree comprises a 24 credit point dissertation (ENGG945) and at least 24 credit points of coursework - refer to list below. Entry is a Bachelor of Engineering with honours at Class III or higher from this University, or an approved equivalent qualification. The programs of study allow the student to combine specialist postgraduate subjects, according to his or her undergraduate background, with project work.

Core Subject

ENGG945	Dissertation	24
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Elective Subjects

ENGG955	Engineering Research Methods	6
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Advanced Manufacturing program

MECH919	Advanced Topics in Mechanical Engineering 1	6
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MECH929	Advanced Topics in Mechanical Engineering 2	6
MECH934	Advanced Manufacturing Processes	6
MECH935	Integrated Manufacturing Systems	6
MECH939	Advanced Topics in Mechanical Engineering 3	6
MECH949	Advanced Computer Control of Machines and Processes	6
MECH950	Advanced Robotics	6

Applied Mechanics program

MECH903	Biomechanical Engineering	6
MECH918	Sustainable Energy in Buildings	6
MECH919	Advanced Topics in Mechanical Engineering 1	6
MECH920	Numerical Methods in Mechanical Engineering	6
MECH925	Advanced Fluid Power	6
MECH926	Applied Fluid Mechanics	6
MECH928	Finite Element Techniques in Mechanical Engineering	6
MECH929	Advanced Topics in Mechanical Engineering 2	6
MECH930	Mechanical Vibration and Condition Monitoring	6
MECH931	Friction Lubrication and Wear	6
MECH933	Solar Energy	6
MECH939	Advanced Topics in Mechanical Engineering 3	6
MECH979	Sustainable Transport and Engine Technologies	6

Materials Handling Systems program**Core Subjects**

MECH913	Pneumatic Transport of Bulk Solids	6
MECH983	Bulk Solids Handling (Storage and Flow)	6

Elective Subjects

MECH919	Advanced Topics in Mechanical Engineering 1	6
MECH927	Physical Processing of Bulk Solids	6
MECH929	Advanced Topics in Mechanical Engineering 2	6
MECH931	Friction, Lubrication and Wear	6
MECH939	Advanced Topics in Mechanical Engineering 3	6

Mechatronics program**Core Subjects**

ECTE955	Advanced Laboratory (Replaces ENGG955)	6
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Plus three electives – at least one should be chosen from the Control Engineering subjects and one from the Mechanical Engineering subjects:

Control Engineering subjects:

ECTE945	Advanced Intelligent Control	6
ECTE946	Advanced Computer Controlled Systems	6
MECH949	Advanced Computer Control of Machines and Processes	6

Mechanical Engineering subjects:

MECH925	Advanced Fluid Power	6
MECH934	Advanced Manufacturing Processes	6
MECH935	Integrated Manufacturing Systems	6
MECH939	Advanced Topics in Mechatronics	6

Robotic subjects:

ECTE973	Advanced Robotics Manipulators	6
ECTE974	Advanced Robotics Sensory Control	6
MECH950	Advanced Robotics	6

NOTE: Not all subjects available in any one year. Please check with the Director of Studies.

Master of Engineering Practice (Bulk Solids and Particulate Technologies)

The normal entry requirement is a Bachelor of Engineering degree, or a Bachelor of Science degree, or an Associate Diploma in a relevant field, plus appropriate industrial experience. The program is offered on a modular basis over 2 years (ie. part-time) and is a joint degree with the University of Newcastle. This is a full fee paying course.

A candidate will be awarded a Master of Engineering Practice (Bulk Solids and Particulate Technologies) on successful completion of 48 cp comprising:

Core Subjects

MECH983	Bulk Solids Handling (Storage and Flow)	6
MECH995	Bulk Solids Handling (Systems and Design)	6
MECH990	Project in Bulk Solids and Particulate Technologies	6

plus four subjects from the following list:

MECH913	Pneumatic Transport of Bulk Solids	6
MECH927	Physical Processing of Bulk Solids	6
MECH982	Bulk Solids Characterisation and Particulate Mechanics	6
MECH984	Belt Conveying	6
MECH985	Dust and Fume Systems	6
MECH986	Instrumentation and Control Systems for Bulk Solids	6
MECH987	Advanced Topics in Bulk Solids and Particulate Technologies 1	6
MECH988	Advanced Topics in Bulk Solids and Particulate Technologies 2	6
MECH989	Advanced Topics in Bulk Solids and Particulate Technologies 3	6
MECH993	Maintenance Management of Bulk Handling Systems	6
MECH994	Mechanical Handling Systems	6

Apart from MECH990, each subject is run on a modular basis comprising 5 days of lectures, laboratory demonstrations, case studies and problem solving, followed by assessable tasks.

Master of Engineering Practice (Mechanical Engineering)

This course will be offered to graduates who have obtained a level equivalent to the BE at the University of Wollongong. The minimum duration of the full-time course will be one year, ie. 48 cp.

Core Subjects

ENGG940	Dissertation	12
ENGG950	Innovation and Design	6
ENGG951	Engineering Project Management	6
ENGG952	Engineering Computing	6

or

TBS901	Accounting for Managers	6
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Stream 1: Thermofluid Mechanics

MECH926	Applied Fluid Mechanics	6
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Stream 2: Engineering Dynamics and Mechanics of Solids

MECH930	Mechanical Vibration and Condition Monitoring	6
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Elective Subjects

MECH918	Sustainable Energy in Buildings	6
MECH931	Friction, Lubrication and Wear	6
MECH949	Advanced Computer Control of Machines and Processes	6
MECH950	Advanced Robotics	6
MECH979	Sustainable Transport and Engine Technologies	6

Note:

- subject to approval, electives may be selected from any available 900 level subjects in the Faculty; and
- not all of these electives will be offered in any one year.

Master of Engineering Practice (Mechatronics)

This course is offered jointly by the Department of Mechanical Engineering and the School of Electrical, Computer and Telecommunications Engineering, and is available to graduates with four year bachelor of engineering degrees, or the equivalent, in any engineering discipline, including civil, mining, mechanical, production, industrial, materials etc. This course can be completed in one year of full-time study (48 credit points) or equivalent part-time study.

Core Subjects

ENGG940	Dissertation	12
or		
ECTE953	Report	12
ENGG950	Innovation and Design	6
ENGG951	Engineering Project Management	6
ENGG952	Engineering Computing or	6
TBS901	Accounting for Managers	6

Elective Subjects

ECTE971	Robotics Manipulators	6
ECTE972	Robotics Sensory Control	6
ECTE941	Intelligent Control	6
ECTE942	Computer Controlled Systems	6
ECTE955	Advanced Laboratory	6
MECH950	Advanced Robotics	6

Note: not all of these electives will be offered in any one year.

Graduate Diploma in Engineering

A candidate who has completed a degree of Bachelor of Engineering; and

- who has not qualified for any class of Honours;
- or

- who wishes to qualify for the Graduate Diploma in Engineering; will enrol in the 48 cp subject MECH899. Advanced Topics in Engineering.

Upon satisfactory completion of the subject MECH899, the candidate is eligible for award of the Graduate Diploma in Engineering.

Mining Engineering

Courses Offered

Doctor of Philosophy
Master of Engineering - Research
Master of Engineering
Graduate Diploma in Engineering

Current Research Areas

The following areas of research are available to candidates undertaking the Master of Engineering - Research degree and the Doctor of Philosophy degree:

Rock mechanics
Surface mining
Mine simulation, planning and design
Mine safety and mine ventilation
Geostatistics
Computer applications in mining engineering
Mine water
Environmental impact of mining

Doctor of Philosophy

Candidates for this degree enrol in MINE957 PhD Major Thesis – 48cp.

Master of Engineering - Research

The Master of Engineering degree by research is intended for engineers qualified and interested in specific engineering problems. It is expected that candidates will have Honours Class II or above. The degree comprises a 48 credit point research thesis and 24 credit points of coursework. Advanced standing for some or all of the coursework component may be granted on demonstrated research skills. Evidence of these skills would normally be a Bachelor of Engineering (Honours Class II Division 2 or better) and/or an appropriate Masters Coursework degree.

Program of Study

MINE955	ME Major Thesis	48
ENGG951	Engineering Project Management	6

Plus 18 credit points of elective subjects chosen from the Master of Engineering - Mining Engineering subjects below:

Master of Engineering

The Master of Engineering degree comprises a 24 credit point dissertation (ENGG945) and at least 24 credit points of coursework - refer to list below. Entry is a Bachelor of Engineering with honours at Class III or higher from this University, or an approved equivalent qualification. The programs of study allow the student to combine specialist postgraduate subjects, according to his or her undergraduate background, with project work.

Core Subject

ENGG945	Dissertation	24
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Elective Subjects

ENGG955	Engineering Research Methods	6
MINE901	Transportation of Mineral and Personnel	6
MINE902	Advanced Studies in Mining Engineering	6
MINE903	Simulation of Underground Mining Operations and Problems	6
MINE904	Rock Mechanics and Ground Control	6
MINE905	Environmental Control in Mines	6
MINE906	Mining Engineering Techniques	6
MINE908	Fires, Explosions and Mine Gases	6
MINE909	Mine Subsidence	6
MINE953	Mine Water - Origin, Inflow Predictions and Control	6

Graduate Diploma in Engineering

A candidate who has completed a degree of Bachelor of Engineering and

- (i) who has not qualified for any class of Honours, or
- ii) who wishes to qualify for the Graduate Diploma in Engineering will enrol in the 48 credit point subject MINE899 Advanced Topics in Engineering.

Upon satisfactory completion of the subject MINE899 the candidate is eligible for award of the Graduate Diploma in Engineering (Mining).

ENGINEERING SUBJECT DESCRIPTIONS

Note: Except where shown otherwise all subjects are offered on the Wollongong Campus

CIVL899 Advanced Topics in Engineering 48cp

Annual

Subject Description: Students will normally take a selection of topics at advanced level from the following: computer aided analysis and design; computer methods; concrete design; civil engineering materials; finite element techniques; hydrology; hydraulics; numerical techniques; reliability; rock mechanics, soil mechanics; simulation; structural analysis and design; structural topology; town planning; traffic planning; traffic engineering; transportation; highway engineering; urban investigations; structural dynamics; continuum mechanics.

CIVL901 Project 6cp

Contact Hours: Not on offer in 2003

Subject Description: First stage of a comprehensive study concerning a specific topic; formulation of problem and literature study, critical examination of current work; planning of solution methods; presentation of results.

CIVL902 Reliability in Geotechnical Engineering 6cp

Contact Hours: Not on offer in 2003

Subject Description: Conventional safety factor and its limitations in representing safety or reliability; geotechnical predictions and associated degree of confidence; variability of soil and rock deposits; uncertainties in material parameters, geotechnical models and failure mechanisms; statistical data and probabilistic approaches; failure probabilistic approaches compared; reliability of geotechnical systems; recent developments in probability of failure propagation and initiation, most probable extent of embankment or slope failure.

CIVL903 Concrete Technology 6cp

Contact Hours: Not on offer in 2003

Subject Description: Mix design theories; design of high performance and lightweight concrete, elastic behaviour; strength, creep, shrinkage; concreting operations; durability; significance of tests and properties of constituent materials; analysis of results; non-destructive tests; special concrete applications.

CIVL904 Highway Materials 6cp

Autumn

Subject Description: Soil and roadmaking aggregate surveys; compaction of soil; road construction with soil and low-grade aggregates; mechanical, cement, bituminous, and resinous stabilisation; constructional methods in soil stabilisation. The origin, preparation, constitution and rheology of bituminous binders; mechanical and physical properties of bituminous materials. Close and open textured materials. Surface dressing. Plant. Sampling and testing. Maintenance. Concrete construction. Materials; mixing; laying; sampling and testing. Maintenance. Pavement design and evaluation - a review of current Australian, European and North American Practice.

CIVL905 Transportation Engineering 6cp

Contact Hours: Not on offer in 2003

Subject Description: Transport problems; urban travel demands; the transport planning process; travel-demand forecasting; trip generation analysis; model split analysis; trip distribution analysis; route assignment analysis; economic analysis; employment and population forecasts; evaluation of transport plans; airport engineering; classification, design standards, layout and development, terminal facilities, city-airport transport systems; urban transportation; railroad engineering; light rail rapid transit; pipeline transportation; belt conveyors - freight and passengers.

CIVL907 Civil Engineering Computations 6cp

Autumn

Subject Description: This subject will concentrate on software packages which are designed for application to a wide range of structural types, both two and three dimensional, including trusses, frames, plates and shells. Any combination of these components may be used with a variety of analysis and design procedures including linear elastic analysis, non-linear optimisation, steel frame member design, and design and checking of reinforced concrete building frames including beams, columns, slabs, steel quantity and location, material take-off etc.

CIVL908 Advanced Soil Mechanics 6cp

Contact Hours: Not on offer in 2003

Subject Description: The principle of effective stress and its implications; stress paths in soil mechanics; problems of shear strength and failure; peak, residual and softened shear strengths for soil; pore pressure parameters A and B; the use of pore pressure parameters in practice; selected problems of stability and settlement; the analysis and performance of slopes; the factor of safety concept; stress analysis approaches; introduction to soil dynamics.

CIVL909 Advanced Foundation Engineering 6cp

Spring

Subject Description: General principles concerning selection of foundation type on different types of soil; Bearing capacity theoris, shallow and deep footings, difficult ground conditions including collapsing and swelling soils; performance observations in geotechnical engineering; preventative and remedial measures against ground movement and slope failure; buoyancy rafts and basements; selected problems of foundation analysis and design; dam foundations; stress distribution and stress analysis; soil sampling and exploration; soil stabilisation including drainage.

CIVL910 Vibration of Structures 6cp

Contact Hours: Not on offer in 2003

Subject Description: Static and dynamic stabilities of continuous systems. Analyses of lumped mass systems with various degrees of freedom. Vibration of beams and other continuous structures. Modal analysis of discrete and continuous systems. Vibrations of buildings and bridges. Earthquake, blast and wind loadings.

CIVL911 Finite Elements Methods 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Variational principles; element shape functions, "displacement" and "stress" formulations, curved and isoparametric elements; computer programming techniques; analysis of plates, shells and axisymmetric structures; analysis of slab- and box-type bridge superstructures.

CIVL912 Engineering Hydrology 6cp**Spring**

Subject Description: Storm models, storm maximisation, extreme precipitation estimates, intensity-frequency duration analysis, design storms; rainfall losses, infiltration models, design losses; advanced unit - hydrograph theory, synthetic unit hydrographs; hydrograph synthesis by runoff - routing; design floods for rural and urban catchments.

CIVL914 Analysis and Design of Bridge Structures 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Types of bridges; similarities between bridges and some plate- and shell-type building structures; loadings; analytical methods: load distribution technique, orthotropic plate theory, grillage and space frame methods, finite element method; computer program suites; design codes; design of super-structures; design of foundations.

CIVL916 Research Topics in Civil Engineering 6cp**Autumn / Spring**

Subject Description: Topics will be selected from those areas of Civil Engineering in which staff members or visiting staff members to the Faculty, are engaged in active research.

CIVL918 Steel Structures 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Steel behaviour. Hot rolled and cold-formed sections. Behaviour of hollow sections. Plastic design. Local and lateral buckling. Elastic and inelastic buckling of elements and frames.

CIVL919 Earth Structures 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Location of earth structures such as embankments and earth dams; basic design considerations; analytical procedures including limit equilibrium methods and stress analysis; soft ground tunnelling; problems associated with earth structures including settlement cracking and subsidence; prevention and control of sub-surface erosion and piping; risk studies; maintenance and improvement of earth structures.

CIVL920 Civil Engineering Hydraulics 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Uniform flow in rivers and flood plains; open channel roughness and flow resistance; non-uniform open channel flow; backwater curve computation; unsteady open channel flow. Flood wave routing; hydraulics of spillways; hydraulics of bridges and culverts; retarding basin hydraulics; urban stormwater drainage design; sediment transport in open channel flow.

CIVL923 Advanced Reinforced Concrete 6cp**Autumn**

Subject Description: Strength and behaviour of reinforced concrete members in flexure, shear, torsion and compression; bond and anchorage; non-rectangular sections; numerical and semi-graphical methods. Short and long-term deflections of beams; effect of repeated loading and impact. Analysis and design of deep beams. Yield line method for slabs. Design code provisions.

CIVL924 Advanced Studies in Computer Aided Design and Drafting 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Fundamentals of CADD; the workstation; hardware and software for CADD configurations; operation and facilities of CADD systems; AutoCAD, MeggaCAD, Prodesign II and other Micro-CAD systems; LISP language; programming with AutoLISP; customising AutoCAD, creating new commands, screen menus and tablet menus; CADD data-base, bill of materials; structural detailing; CADD management.

CIVL955 Me Major Thesis 48cp**Annual****CIVL957 PhD Major Thesis 48cp****Annual / Spring 2003 - Autumn 2004****CIVL980 Advanced Computer Applications 6cp****Spring**

Assessment: Compulsory assignments (reports) Mid-session Exam (Parts A and B) Final Project (including Oral presentation)

Subject Description: The subject content will comprise a selection from the following topics: Finite element modelling and simulation, system analysis, optimal design of civil and environmental engineering systems, advanced statistical techniques, advanced spreadsheet applications, case studies selected from civil and environmental engineering practice, use of MATLAB, EXCEL and similar computer packages.

Subject Objectives: By participating in and understanding all facets of this subject a student should be able to: i) develop a thorough understanding of the proper usage of existing finite element modelling techniques and guidelines; ii) be able to grasp the basic theory needed to carry out a complete 2D/3D static and dynamic analysis of a building structure and its components; and iii) develop practical skills to perform analysis of engineering structures using commercial finite element analysis packages.

CIVL981 Special Topic A 6cp**Autumn / Spring**

Subject Description: Specialist topic in civil engineering offered by members of staff, professional engineers or visitors to the Faculty.

CIVL982 Special Topic B 6cp**Spring / Autumn**

Subject Description: Specialist topic in civil engineering offered by members of staff, professional engineers or visitors to the Department.

ENGG901 Introduction to Welding and Joining Processes 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer 2003/2004	Wollongong	Flexible

Assessment: Assignments and examination.

Subject Description: Classification of welding processes, applications; typical problems, health and safety issues. Introduction to fusion and pressure welding processes; adhesive bonding, soldering and brazing; joining process physics. Review of basic electrics and electronics; arc characteristics and control. Introduction to behaviour of metals during welding, mechanical testing and NDT. Basic joint design and testing. Quality assurance of joining techniques. Introduction to reclamation repair by welding, advanced welding technology and fracture mechanics.

Subject Objectives: Recognise the importance of joining processes; understand the operating principles, advantages and limitations of common joining processes; develop a basic understanding of the response of materials to joining; understand the principles of joint design and economics; describe the common techniques of quality control applied to joining; understand the procedure for welding repair; and appreciate recent developments in joining technology.

ENGG902 Fusion Welding Processes Part 1 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer 2003/2004	Wollongong	Flexible

Pre-requisites: ENGG901

Assessment: Assignments and Examination

Subject Description: Introduction to gas shielded welding; process principles of GTAW welding; shielding gases; effect of gases on arc characteristics; filler metals; standards; typical problems; health and safety issues. Tungsten inert gas (TIG) welding; power sources; process factors; joint design; specifications; applications and typical problems; health and safety factors. Plasma, electron beam, laser welding and cutting. Advanced TIG welding.

Subject Objectives: Understand the operating principles of GTAW, Plasma, ESW and Laser Process; know how to control the process; be able to diagnose faults; be able to select the appropriate process and technique for a given application; and know the safety issues associated with each process.

ENGG903 Other Joining Processes 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer 2003/2004	Wollongong	Flexible

Pre-requisites: ENGG901, ENGG902

Assessment: Assignments and Examinations

Subject Description: Cold pressure, ultrasonic and explosive welding and diffusion bonding; stud welding and mechanical fasteners; resistance welding, weld-bonding, ERW and flash butt welding; oxy-fuel welding; cutting and other edge preparation processes; friction welding and friction stir welding; MIAB welding; brazing; soldering; and pre-heating, fuel gas, electric equipment and techniques.

Subject Objectives: Understand the operating principles of 'other' joining processes not covered in ENGG902 and ENGG904; know how to control the process; be able to diagnose faults; be able to select the appropriate process and technique for a given application; and know the safety issues associated with each process.

ENGG904 Fusion Welding Processes Part 2 3cp

Spring	Wollongong	Flexible
Summer 2003/2004	Wollongong	Flexible
Autumn	Wollongong	Flexible

Pre-requisites: ENGG901, ENGG902

Assessment: Assignments and Examination.

Subject Description: Gas metal arc welding (GMAW); metal inert gas (MIG) welding; metal active gas (MAG) welding; power sources; process factors; special techniques; joint design; specifications; applications; typical problems; health and safety issues. Metal transfer. Manual metal arc (MMA) welding; (SMAW, MMAW); power sources; process factors; electrode coatings; joint design; specifications; applications and typical problems; health and safety factors. Submerged arc welding (SAW); power sources; process factors; joint design; specifications; applications; typical problems; health and safety issues. Advanced GMAW, FCAW. Electroslag welding; process factors; applications and limitations.

Subject Objectives: Understand the operating principles of MMAW, SAW, GMAW, FCAW, ESW and EGW; know how to control the process; able to diagnose faults; able to select the appropriate process and technique for a given application; and know the safety issues associated with each process.

ENGG905 Behaviour of Metals During Welding - Part 1 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer 2003/2004	Wollongong	Flexible

Pre-requisites: ENGG901

Assessment: Assignments and Examination.

Subject Description: Structures and properties of metals; alloys and phase diagrams; iron-carbon alloys; heat-treatment of steels; microstructures of welded joints; embrittlement and cracking in steels. Structural steels; fine grained steels; thermomechanically processed steels.

Subject Objectives: Understand the atomic bonding difference between a metal and a non-metal, and the relationship between a metals properties and its crystallographic structure; utilise binary phase equilibrium diagrams to understand the structure and melting points of metallic alloys and simple heat treatment processes; to analyse heat flow and utilise cooling diagrams to predict the structure of the weld and heat affected zone after welding; discuss the origins of typical welding defects and the risks associated with them; gain a basic knowledge of steel manufacture, and the commercial steels utilised in welded structures.

ENGG906 Behaviour of Metals During Welding - Part 2 3cp

Autumn	Wollongong	Flexible
Spring	Wollongong	Flexible
Summer	Wollongong	Flexible

2003/2004

Pre-requisites: ENGG905**Assessment:** Assignments and Examination

Subject Description: High temperature creep resistant steels; high alloy stainless steels; cryogenic steels; low temperature steels; stainless steels; H/R steels; creep resistant steels; nickel-based alloys; other metals and alloys; welding of ferrous and non-ferrous castings; introduction to corrosion and wear; welding of castings.

ENGG907 Welding of Non Ferrous Metals and Non Metals 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer	Wollongong	Flexible

2003/2004

Pre-requisites: ENGG906**Assessment:** Assignments and Examination

Subject Description: Copper and copper-based alloys; aluminium and aluminium-based alloys; joining dissimilar alloys; structures and properties of non-metallic materials and composites; joining of polymers; joining of polymers to metals; joining of ceramics; ceramic-metal joints; methods used for joining of composites and composites to other materials.

ENGG908 Construction and Design - Part 1 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer	Wollongong	Flexible

2003/2004

Pre-requisites: ENGG907**Assessment:** Assignments and Examination

Subject Description: Fundamentals of the strength of materials; basics of weld design; design principles of welded structures; joint design; fracture mechanics.

ENGG909 Construction and Design - Part 2 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer	Wollongong	Flexible

2003/2004

Pre-requisites: ENGG908**Assessment:** Assignments and Examination

Subject Description: Behaviour of welded structures under load; design of welded structures for static loading; effects of dynamic loading; thermodynamically loaded welded structures; reinforced steel welded joints; design of welded aluminium alloy structures.

ENGG910 Fabrication/Applications Engineering - Part 1 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer	Wollongong	Flexible

2003/2004

Assessment: Assignments and Examination

Subject Description: Cutting and other edge preparation processes. Quality assurance in welded structures; quality control during manufacture; total quality management. Plant facilities; welding jigs and fixtures. Fume and radiation hazards from welding; health and safety issues.

ENGG911 Fabrication/Applications Engineering - Part 2 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer	Wollongong	Flexible

2003/2004

Pre-requisites: ENGG910**Assessment:** Assignments and Examination

Subject Description: Welding stresses and distortion; control of welding restraint; stress relieving of weldments. Repair welding; fitness for purpose considerations; economic aspects of weld fabrication; economic considerations of high productivity welding; automatic and robotic welding.

ENGG914 Fabrication/Applications Engineering - Part 3 3cp

Spring	Wollongong	Flexible
Autumn	Wollongong	Flexible
Summer	Wollongong	Flexible

2003/2004

Pre-requisites: ENGG905, ENGG906, ENGG907**Assessment:** Assignments and Examination

Subject Description: Practical exercises in weld defect testing using ultrasonics and radiography. Metallographic examination of commercially important metals and alloys, and the microstructures of steel and aluminium weldments. Measurement control and recording.

ENGG915 Design of Structures 3cp

Summer 2003/2004

Pre-requisites: ENGG908, ENGG909**Subject Description:** Design case studies.**ENGG916 Fabrication Case Studies 3cp**

Summer 2003/2004

Pre-requisites: ENGG910, ENGG911, ENGG914

Subject Description: NDT, practical, welding procedures, tutorials.

ENGG917 Processes, Equipment, Automation 3cp

Summer 2003/2004

Pre-requisites: ENGG901, ENGG902, ENGG903, ENGG904

Subject Description: Mechanisation and robotics, case studies and tutorials.

ENGG918 Weldability and Wear 3cp**Summer 2003/2004****Pre-requisites:** ENGG905, ENGG906, ENGG907**Subject Description:** Wear, hardfacing, metallography, surfacing, mechanical testing.**ENGG919 Dissertation 12cp****Autumn** Wollongong On Campus**Annual** Wollongong Flexible**Spring 2003 /** Wollongong On Campus**Autumn 2004****Spring** Wollongong On Campus**Annual** Singapore On Campus**Assessment:** Thesis**Subject Description:** A thesis is required based on project work and/or an interpretative literature review on a topic.**ENGG940 Dissertation 12cp****Annual / Autumn / Spring / Spring 2003 - Autumn 2004****Assessment:** Written dissertation report assessed against objectives 1-5

Subject Description: The dissertation is a project allowing you to pursue a particular area in depth and solve a specific practical engineering problem. Students complete a dissertation in their area of interest. The dissertation develops skills in information retrieval, project planning and organisation, analysis, problem solving and effective communication of results. Involves the undertaking of an individual supervised project focused on solving a problem relevant to the discipline area of the degree. The student would normally be required to do a literature survey, analysis, and develop suitable solutions to the selected problem. This will allow the students to apply the knowledge and skills acquired in the structured coursework and thus gain valuable confidence in their ability to practice engineering at a high professional standard. Two bound copies of the final report must be submitted for assessment, together with an electronic version.

Subject Objectives: Through successful completion of this subject candidates should develop the skills and demonstrate ability to: 1. analyse a specific engineering problem, or, organisational situation or problem, and utilise sound analytical processes to analyse it; 2. seek out relevant existing knowledge pertinent to the problem studied; 3. design and undertake experimental work as appropriate; 4. develop and communicate logical argument to recommend and defend a course of action 5. structure and prepare a major professional report

ENGG945 Dissertation 24cp**Annual / Autumn / Spring / Spring 2003 - Autumn 2004****Assessment:** Written dissertation report assessed against objectives 1-4

Subject Description: The dissertation typically requires rigorous research in a limited area - normally in the area of coursework components undertaken. It comprises a research project based on a problem in the discipline of the degree. The student would normally be required to do a detailed literature survey, analysis, modelling and develop suitable solutions to a selected problem. Students will be able to choose a suitable investigation within the current and relevant research activities associated with the Faculty of Engineering. The dissertation is individually supervised. Two bound copies of the final report must be submitted.

Subject Objectives: 1. Develop basic research skills. 2. Understanding of the available and emerging knowledge related to a specific problem. 3. Capability to analyse the research a specific problem in the discipline area and to apply current knowledge appropriately. 4. Demonstrated capability to structure a major report in the discipline of the degree.

ENGG950 Innovation and Design 6cp**Autumn** Wollongong On Campus**Session 3** Singapore On Campus**Assessment:** Major design project, including individual and teamwork Other assignments Final Examination

Subject Description: Topics will be selected from: The creative and innovative process, aesthetics in design, life cycle design and planning. Design for economy, maintenance, disassembly, recycling, repair and rehabilitation. Designing with materials. Durability of materials, components, systems and structures. Intellectual property, patents and technology transfer. The international marketplace. Constraints on design: standards, specifications and codes of practice. Feasibility studies and costing Teamwork in design. Case studies.

Subject Objectives: 1. To provide experience and understanding of the innovation and design processes for engineering structures, components and systems 2. To understand the relationships between design and the life time of the product 3. To experience membership of a design team and to understand the importance of teamwork in successful design realisation 4. To understand financial, regulatory and human issues impacting on engineering design

ENGG951 Engineering Project Management 6cp

Assessment: Assignment 1 (Individual Assignment) 15% Assignment 2 (Group Assignment) 35%(Including 10% for presentation) Final Examination (2 hours) 50%

Subject Description: Topics will cover: Scope Management, Time Management, Human Resource Management, Risk Management, Financial Management, Project Plans, Project Quality Management and Procurement & Contract Management.

Subject Objectives: On successful completion of this subject, students will be able to: 1. Explain the process of project management and the techniques employed 2. Explain the role of project management within the context of broader strategic plans 3. Select and use effective project management techniques 4. Conduct a project feasibility study 5. Write a project plan including the risk management sub-plan 6. Choose appropriate scheduling and cost control methodologies 7. Establish appropriate project management information systems and track results 8. Deal with changes to plan and apply corrective action 9. Display competency in undertaking basic project management tasks

ENGG952 Engineering Computing 6cp**Spring** Wollongong On Campus**Session 4** Singapore On Campus**Assessment:** Computation exercises (six tasks) 60% of final mark Final Examination 40% of final mark

Subject Description: Software applications, programming development environments, application areas, mathematical techniques, and approaches to problem solving are explored from a wide variety of possible areas.

Topics will be selected from the following list: Windows-based compilers and software libraries such as C/C++, fortran, and visual basic; Numerical and mathematical libraries such as Matlab, Mathematica, and Mathcad; Advanced spreadsheet programming; Data acquisition techniques and software libraries such as NiDaq, LabTek, and LabView; 3D Graphics programming using OpenGL; Advanced engineering graphics using Autocad; Database principles and techniques; Principles of internetworking systems; Mesh Generation for finite element and finite difference modelling; Numerical solution of the equations of physical and engineering systems; Operations research, project management, and reliability simulation; Artificial neural networks.

Subject Objectives: On satisfactory completion of this subject, students will: 1) Understand the principles of computing, mathematics, and programming. 2) Be able to utilise software and computing techniques for engineering applications through skilled application of software relevant to engineering problem-solving in industry and research.

ENGG955 Engineering Research Methods 6cp

Autumn / Spring

Assessment: Presentation of a research report (orally and in a written research proposal). Undertaking of an experiment in a laboratory, after initial design.

Subject Description: The overall objective is to develop a structured approach to research in engineering. The focus is on the development of skills in framing a research problem, developing a research design, design of data collection analysis and interpretation frameworks. Literature research skills will be developed. An understanding of the selection and use of measurement sensors and engineering data collection and analysis tools will also be developed. Hands on experience in an engineering laboratory will be a feature. Ethical issues in research will be reviewed. Students will work on a selected project to develop a properly structured research proposal, including a research plan. The plan is to be presented orally and in written form.

Subject Objectives: 1. Understand the importance of defining the research problem. 2. Develop a research proposal, supported by initial review of existing knowledge. 3. Know of available databases for literature review in engineering areas. 4. Be able to construct a literature search on appropriate search engines. 5. Be able to design an experiment to examine an engineering research problem. 6. Be able to structure a research report. 7. Be able to select and specify appropriate measurement sensors and data-collection systems.

ENVE899 Advanced Topics in Environmental Engineering 48cp

Annual

Subject Description: One or more advanced topics taken from the following: computer aided analysis and design; computer methods; environmental hydraulics; pollution control; erosion and land rehabilitation; waste management; environmental impact assessment; environmental modelling processes; environmental geotechnology; transport and the environment; ground and mine-water.

ENVE901 Project 6cp

Contact Hours: Not on offer in 2003

Subject Description: First stage of a study on a selected topic, including formulation of the problem, literature study, development of study plan, and presentation of results.

ENVE916 Research Topics in Environmental Engineering 6cp

Contact Hours: Not on offer in 2003

Subject Description: Topics will be selected from the areas of environmental engineering in which staff members are engaged in research.

ENVE920 Principles of Environmental Engineering 6cp

Autumn / Spring

Subject Description: Collection and treatment of waste water; physical, chemical and biological treatment processes; measurement of pollutants; industrial and solid waste disposal; air pollution; noise pollution; environmental impact statements.

ENVE921 Wastewater Engineering 6cp

Spring / Autumn

Subject Description: Wastewater collection; sewer and storm drainage design; chemistry and microbiology of wastewater; effect on environment; physical, chemical and biological treatment processes and design facilities; sludge treatment and disposal; wastewater reuse; advanced wastewater treatment; treatment plant design.

ENVE922 Water Supply Engineering 6cp

Autumn

Subject Description: Water quality; water supply sources and demand; chemistry and microbiology of water; aeration and oxygen transfer; theory of coagulation, flocculation, sedimentation and filtration; disinfection; water softening, desalination; design of mains and service pipes; distribution of water.

ENVE923 Industrial Waste Engineering and Cleaner Production 6cp

Autumn

Subject Description: Issues covered include industrial waste minimisation and treatment, industrial processes and control techniques. Waste auditing of an industry will be illustrated using a case study.

ENVE924 Solid and Hazardous Waste Management 6cp

Spring

Subject Description: Two areas are covered: Generation, characterisation, collection and minimisation of solid waste; and classification, treatment and final disposal of hazardous waste.

ENVE955 ME Major Thesis 48cp

Annual / Spring 2003 / Autumn 2004

ENVE957 PhD Major Thesis 48cp

Annual / Spring 2003 / Autumn 2004

Pre-requisites: 24 cp

ENVE981 Special Topic A 6cp
Autumn / Spring
Subject Description: Specialist topic in environmental engineering offered by members of staff, professional engineers or visitors to the department.

ENVE982 Special Topic B 6cp
Autumn / Spring
Subject Description: Specialist topic in environmental engineering offered by members of staff, professional engineers or visitors to the department.

ENVE985 Environmental Engineering 8cp
Autumn
Assessment: Laboratory Reports and Examinations.
Subject Description: This subject takes an engineering approach to solving problems in air, noise and water pollution. It considers the sources, effects and methods of control of the pollutants, as well as legislative requirements. The lecture and tutorial components of this subject are complemented by extensive field and laboratory sampling, measuring and analysis.
Subject Objectives: After successfully completing this subject, students should be able to: (i) understand the basic mechanisms controlling the origin and effects of pollutants on the environment; (ii) use critical judgement in identifying the significant factors affecting air, noise and water pollution; (iii) be competent in sampling and analysing air, noise and water pollutants in the field and laboratory; and (iv) perform engineering calculation to predict and control air, noise and water pollution.

MATL899 Advanced Topics in Materials Engineering 48cp
Annual
Subject Description: A program approved by the Discipline Leader of project work and studies of advanced topics in materials selected from the fields of processing, physical and mechanical behaviour, microstructure and observational methods.

MATL901 Special Topic in Materials 1 6cp
Autumn / Spring
Subject Description: There are no set syllabi for these subjects. It is intended that they will be offered on a specialised materials engineering topic.

MATL902 Special Topic B 6cp
Autumn / Spring
Subject Description: There are no set syllabi for these subjects. It is intended that they will be offered on a specialised materials engineering topic by members of the Department, or visitors to the Department.

MATL903 Recent Developments in Materials 6cp
Contact Hours: Not on offer in 2003
Subject Description: Considerations of the structures, properties, technology and applications of advanced materials with emphasis on materials important to the Australian economy.

MATL905 Metallic Materials 6cp
Contact Hours: Not on offer in 2003
Subject Description: Commercial metals and alloys. Relationships between structure and industrially significant properties. Control of structure by processing. Thermal and mechanical treatment. Recovery and recrystallization. Metal-matrix composites.

MATL906 Ceramic Materials 6cp
Contact Hours: Not on offer in 2003
Subject Description: Ceramics - traditional and advanced. Microstructure-property relationships. Processing, solid state and liquid phase sintering. Applications. Ceramic matrix composites.

MATL907 Polymeric Materials 6cp
Contact Hours: Not on offer in 2003
Subject Description: Polymers, formation and classification. Effects of structure and additives on properties. Composite materials with polymeric matrices.

MATL908 Phase Transformations 6cp
Contact Hours: Not on offer in 2003
Subject Description: Analysis and theories of solid state phase transformations, nucleation phenomena, diffusional and diffusionless growth; application to precipitation, eutectoid, proeutectoid, martensitic and other processes.

MATL911 Mechanical Behaviour of Materials 6cp
Contact Hours: Not on offer in 2003
Subject Description: Behaviour of ceramics, metals and polymers under stress, stress-strain relationships, time and temperature dependent phenomena.

MATL921 Formability of Sheet Materials 6cp
Contact Hours: Not on offer in 2003
Subject Description: Flow behaviour of sheet materials under uniaxial and biaxial stress; analyses of industrial forming processes.

MATL932 Surface Engineering of Materials 6cp
Contact Hours: Not on offer in 2003
Subject Description: Surface coating processes, coating of materials with ceramics, metals and polymers; quality and performance of the product; surface heat treatment processes.

MATL936 Chemical Reaction Engineering 6cp
Contact Hours: Not on offer in 2003
Co-requisites: MATH188

MATL937 Process Metallurgy 6cp
Contact Hours: Not on offer in 2003
Subject Description: Ironmaking. Sintering and pelletising; time-temperature effects; phase composition; strength-reducibility relationships; mix selection; cokemaking; fundamental relations; coke strength and reactivity;

blast furnace process; Rist and Reichert diagrams; burden design and distribution; stack, bosh and hearth processes; DRI.

MATL951 Performance of Materials A 6cp

Contact Hours: Not on offer in 2003

Subject Description: Mechanical behaviour. Elastic, plastic, anelastic and viscoelastic responses. Fracture-brittle and ductile. Fracture toughness and crack growth. Effects of temperature, strain rate and geometry. Griffith equation and fracture mechanics. Creep and stress relaxation. Fatigue.

MATL952 Performance of Materials B 6cp

Contact Hours: Not on offer in 2003

Subject Description: Environmental behaviour. Thermodynamic aspects. Oxidation, processes and kinetics. Oxidation resistance. Aqueous corrosion, types of reaction, avoidance and restraint. Degradation of polymers and ceramics. Wear and abrasion. Stress corrosion and corrosion fatigue.

MATL955 ME Major Thesis 48cp
Annual

MATL957 Phd Major Thesis 48cp
Annual / Spring 2003 - Autumn 2004

MATL961 Materials Analysis A 6cp

Contact Hours: Not on offer in 2003

Subject Description: Advanced techniques. Theory and practice of X-ray, neutron and electron diffraction. Compositional analysis by X-ray fluorescence at macro and micro levels. Image contrast in electron microscopy. Field ion microscopy. Auger and Mossbauer spectroscopy.

MATL972 Selection and Design of Materials 6cp

Contact Hours: Not on offer in 2003

Subject Description: General classifications and properties of materials. Standards, codes and specifications. Property requirements for specific applications. Bases for choice of materials, testing and evaluation. Constraints imposed by environmental, manufacturing and economic considerations. Use of computers and data banks. Case studies.

MATL974 Engineering Materials 1 6cp

Contact Hours: Not on offer in 2003

MATL975 Engineering Materials 2 6cp

Contact Hours: Not on offer in 2003

MATL987 Metallurgical Processing 1 6cp

Contact Hours: Not on offer in 2003

MATL988 Metallurgical Processing 2 6cp

Contact Hours: Not on offer in 2003

MATL999 Advanced Topics in Materials 48cp

Contact Hours: Not on offer in 2003

MECH899 Advanced Topics in Engineering 48cp
Annual

Subject Description: Students will normally take a selection of topics at advanced level. The selection of the topics will be subject to the approval of the Head of the Department in which the student wishes to enrol and subsequently specialise.

MECH903 Biomechanical Engineering 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject introduces a selection of advanced quantitative methods used in biomechanical assessment of human movements. Topics include three-dimensional dynamics, modelling techniques (including finite element, simulation and optimisation).

MECH913 Pneumatic Transport of Bulk Solids 6cp

Autumn

Subject Description: Classification and selection of transport systems; flow patterns; pressure drop, minimum transport velocities; design parameters and examples; feeding and disengaging methods.

MECH918 Sustainable Energy in Buildings 6cp
Autumn

Subject Description: Advanced topics in: performance of buildings with particular regard to thermal comfort and ventilation; analysis and design of conventional air conditioning systems to appropriate ADS; passive solar design of buildings; energy conservation in buildings; embodied energy in buildings; natural ventilation systems; and refrigeration systems.

MECH919 Advanced Topics in Mechanical Engineering 1 6cp

Autumn / Spring

Subject Description: There is no set syllabus for this subject. It is intended that it normally be offered on a specialised mechanical engineering topic given by members of the Department, visiting academic staff or engineering consultants.

MECH920 Numerical Methods in Mechanical Engineering 6cp

Autumn

Assessment: Final examination and assignments.

Subject Description: The subject consists of two main areas: a. Computational fluid dynamics which includes a selection of computer techniques applied to aerodynamics and hydrodynamics; and b. A study of industrial fluid mechanics which includes a selection of the following topics; principles of turbo machinery; pipe networks; control and suppression of pressure surges in pipelines; causes and avoidance of flow induced vibration in engineering systems.

Subject Objectives: On satisfactory completion of this subject students will 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. conduct analysis of problems and design of turbomachinery elements; iv. conduct analysis of problems and design of pipe flow systems; v. analyse, control and suppress pressure surges in pipelines; and vi. analyse, control and suppress vibration induced by flows of fluid.

MECH925 Advanced Fluid Power 6cp**Contact Hours:** Not on offer in 2003**Subject Description:** Fluid power components; circuit design: analysis of transmission, valve-controlled and feedback systems; electronic controls; vibration and transient response.**MECH926 Applied Fluid Mechanics 6cp****Contact Hours:** Not on offer in 2003**Subject Description:** A study of applied fluid mechanics which will include the analysis, design and control of a selection of fluid flow systems in industry.**MECH927 Physical Processing of Bulk Solids 6cp****Contact Hours:** Not on offer in 2003**Subject Description:** Bulk solids description and characterisation; crushing, grinding, thickening, separation, precipitation, filtration, blending, tableting, briquetting and agglomeration, sizing and classification; introduction to beneficiation; drying; intermediate processing and handling; control and instrumentation; dust generation and abatement.**MECH928 Finite Element Techniques in Mechanical Engineering 6cp****Autumn****Subject Description:** Introduction to finite element method. Application of finite element technique to stress analysis, fluid mechanics, heat transfer, vibration. Computer packages.**MECH929 Advanced Topics in Mechanical Engineering 2 6cp****Contact Hours:** Not on offer in 2003**Subject Description:** As for MECH919.**MECH930 Mechanical Vibration and Condition Monitoring 6cp****Contact Hours:** Not on offer in 2003**Subject Description:** Balancing of machinery. Vibrations, Energy Method and Rayleigh Principle. Two degrees of freedom system, free vibration, transient response, steady state response, damping. Multimass system, free vibration, forced vibration, damping. Vibration of beams. Torsional vibration in rotating machinery. Conditions monitoring of machinery: vibration measurement and analysis.**MECH931 Friction Lubrication and Wear 6cp****Contact Hours:** Not on offer in 2003**Subject Description:** Navier-Stokes and Energy equation of viscous fluid flow and their application to hydrodynamic journal and thrust bearings. Characteristics of hydrodynamic and hydrostatic bearings. Bearings selection and design. Rolling bearings and Elasto-hydrodynamic lubrication. Friction and wear processes. Boundary lubrication. Properties of lubricants and bearing materials and their interaction. Application in industry.**MECH933 Solar Energy 6cp****Contact Hours:** Not on offer in 2003**Subject Description:** Principles and techniques applicable to the analysis and design of solar thermal energy systems. Solar radiation; transmission and absorption by collectors; analysis and design of collectors; energy storage; system thermal calculations; solar process economics.**MECH934 Advanced Manufacturing Processes 6cp Autumn****Subject Description:** Modelling of advanced manufacturing processes; manufacturing cost analysis; productivity and quality methods and measurements in manufacture; computer-assisted process planning; manufacturing optimisation; trends in advanced manufacturing processes, recycling aspects.**MECH935 Integrated Manufacturing Systems 6cp Spring****Assessment:** Assignments and final examination.**Subject Description:** Concurrent engineering, its application and benefits; computer integrated manufacturing concepts and applications; CAD/CAM, CNC programming, FMC, FMS; computer-process interfacing; process and tool condition monitoring; computer-aided quality control; assembly systems, assembly lines, assembly line balancing; design for manufacture - casting, forming, machining and selected examples; human interface in manufacturing systems; future trends.**Subject Objectives:** On satisfactory completion of this subject students will 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 producibility. iii. Analyse and select a suitable manufacturing method with a view to producing the component in the most economical manner. iv. Analyse the product and select suitable assembly method with a view to assembling the product in the most economical manner.**MECH939 Advanced Topics in Mechatronic Engineering 6cp****Spring / Autumn****Subject Description:** There is no set syllabus for this subject. It is intended that it normally be offered on a specialised mechatronic engineering topic given by members of the Faculty, visiting academic staff or engineering consultants.**MECH948 Sustainable Energy Technologies 6cp Spring****Assessment:** Case study or laboratory work Analytical/descriptive written assignment Oral presentation Final exam**Subject Description:** This subject 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. The environmental and social impact of these technologies as compared to conventional energy sources will be considered. Students will undertake a laboratory/field experiment or project, and/or carry out a case study.

Subject Objectives: 1. Describe various types of sustainable energy technologies and their advantages and disadvantages. 2. Demonstrate an understanding of solar radiation and its impact on energy systems including solar thermal applications and photovoltaics. 3. Demonstrate an understanding of the thermofluid principles that underpin wind, wave and hydroelectric technologies. 4. Demonstrate an appreciation of the social and environmental benefits or disadvantages of sustainable energy technologies. 5. Measure and/or analyse the performance of a practical sustainable energy power supply system.

MECH949 Advanced Computer Control of Machines and Processes 6cp

Contact Hours: Not on offer in 2003

Subject Description: Advanced modelling and control of multivariable systems: performance of multivariable control systems; optimal control theory; robust control systems; design, implementation and evaluation of digital control systems.

MECH950 Advanced Robotics 6cp Spring

Assessment: Project report 1 20% Mid Session Examination 30% Project report 2 10% Laboratory Report 10% Final Examination 30%

Subject Description: The subject provides the knowledge and skills required to design appropriate robotic systems. Topics covered include: 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, design and selection of drives and motors, industrial vision systems, position sensors, force sensors, ultrasonic sensors and other sensors

Subject Objectives: 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; e) investigate the economic social viability of robotic systems; f) design, select or employ appropriate components for a robotic system, including motors, drives and sensors; g) demonstrate appropriate practical and problem solving skills

MECH955 ME Major Thesis 48cp Annual / Spring 2003 - Autumn 2004

MECH957 Major Phd Thesis 48cp Annual / Spring 2003 / Autumn 2004

MECH970 Maintenance Management 6cp

Contact Hours: Not on offer in 2003

Subject Description: 1. Approaches to maintenance, 2. The Systems Approach, Life cycle considerations for systems, 3. Define maintenance-A maintenance model, 4. Analysing Maintenance Requirements: The Process, 5. The Business Environment, 6. Safety and Quality Standards, 7. System Analysis, 8. Failure Behaviour, Condition Monitoring, 9. Maintenance Planning & Control, 10. Inventory selection and control, 11. Human factors and organisational aspects for maintenance, 12. The information flows, documentation & computer control in maintenance

Subject Objectives: On successful completion of this subject the participant should be able to: 1. Identify the critical success factors for effective maintenance management of capital assets and the factors that affect the level of success attained 2. Identify the relationships between the various functions of maintenance. The will understand the interrelationships between maintenance activities, other business functions and the environment 3. Judge their own knowledge in these areas and where knowledge exists in other disciplines. The applicability of this knowledge to the area of maintenance management will be understood 4. Understand and be able to critique the language used and the concepts espoused by practitioners theoreticians in the area 5. Undertake basic analysis of the maintenance activity within an organisation to determine a suitable direction for improvement.

MECH971 Systems Analysis For Maintenance 6cp

Intake B

Subject Description: Maintenance Concept Design Methodology, Reliability Theory, Data Recordings and Analysis, Identification and Analysis of Failure Modes, Maintenance Rule Selection, Preventative Replacement Policies, Optimisation of Inspection Frequencies, Clustering of Tasks, Opportunity Maintenance, Specification of Resource Requirements.

Subject Objectives: On completion of this subject the participant will be able to: 1. Demonstrate and understanding of the available theory in the area of maintenance requirements analysis 2. Apply appropriate theory to the problem of maintenance requirements analysis 3. Demonstrate and understanding of basic reliability theory and terminology 4. Explain the uses, and the limitations of use, of simple reliability modeling techniques in making decisions on maintenance intervals 5. Design appropriate methods for performing maintenance requirements analysis on specific equipment given a specific situation 6. Audit the analysis of other to determine the adequacy of the analysis

MECH972 Condition Based Maintenance 6cp

Intake A / Intake B / Intake C / Intake D

Assessment: Assignments and final examination assessing all of the objectives

Subject Description: Overview of fault diagnosis techniques (electrical-mechanical-computer); Identification of critical plant, failure types-modes. Diagnosis documentation; Maintenance strategies; Target areas for successful applications; Sensor technology overview; Condition monitoring strategy, techniques and organisation; Automation aspects in condition monitoring; Expert-AI systems; Costs and problems; Decisions on the periodicity of condition monitoring; Case studies.

Subject Objectives: On successful completion of this subject, students should: a) have developed knowledge of a range of important condition monitoring techniques; b) have gained an overview of condition monitoring techniques that can be used for common equipment; c) be able to select possible worthwhile monitoring techniques for equipment; d) be able to select condition monitoring frequencies; e) be able to determine the practical problems in implementation of monitoring systems; and f) be able to seek out practical condition monitoring solutions to your particular equipment reliability problems

MECH973 Systems Engineering and Life Cycle Management**6cp****Intake D**

Subject Description: Phases of the Life Cycle of Products and Industrial Equipment, Life Cycle Costing, Economics and Models, Cost Estimation, Analysis on Design, Logistic Support, Maintainability, Availability, Interface Control, System Integration. Testing and Performance Evaluation, Installation Procedures, Asset Management, Disposal, Asset Purchase/Replacement Policies and Decision-making.

Subject Objectives: On completion of this subject, participants should be able to: 1. Explain the principles of systems engineering 2. Explain the systems concept in the context of the systems life cycle 3. Explain the systems design process 4. Explain significant design concepts affecting operation feasibility and how these concepts can be applied to different situations 5. Explain the technique of life cycle costing and how it could be applied at all stages of the system life cycle 6. Identify and explain mathematical tools and techniques commonly used in systems analysis and how they can be applied to different situations 7. Explain how mathematical and physical modelling and simulation can be applied in the systems engineering process 8. Explain the systems engineering approach by reference to case studies 9. Develop a Systems Engineering Management Plan for practical application

MECH976 Maintenance System Design and Management**6cp****Intake C**

Subject Description: This subject introduces participants to typical problems encountered in designing and in managing what may be termed the 'maintenance system'; in doing so participants will have the opportunity to explore some of the following areas of knowledge: Human aspects of maintenance and reliability; ergonomics; work measurement, methods engineering and activity sampling applied to maintenance activities; estimation of maintenance times; maintenance facilities layout. Planning for shutdowns and overhauls; inventory control for maintenance, inventory control systems, configuration management, warehouse control, evaluation of maintenance performance, improving maintenance performance, TPM.

Subject Objectives: On successful completion of this subject, participants should be able to: 1. Describe the generic activities and their relationships, for a maintenance management system. 2. Describe what determines the nature of the components (organisation structure, equipment type, best practice) 3. Describe and existing maintenance organisation in terms of both the influences on, and nature of, the organisation and the performance determinants. 4. Evaluate the suitability of a given organisation to its requirements 5. Design a maintenance organisation (or improvement plan) that satisfies the constraints of its environment and the tasks required of it. Provide logic for that design.

MECH977 Advanced Topics in Maintenance 1**6cp****Contact Hours:** Not on offer in 2003

Subject Description: There is no set syllabus for this subject. It is intended that it normally be offered on a specialised maintenance topic given by members of the Department, visiting academic staff or engineering consultants.

MECH979 Sustainable Transport and Engine Technology**6cp****Autumn****Contact Hours:** 4 hours per week**Assessment:** Assignment 1 Assignment 2 Seminar/Report Engine Lab Final Examination

Subject Description: Advanced topics in: human powered transport, conventional and novel engine technology and design; strategies for reducing emissions; alternative fuels; solar vehicles; fuel cells and hybrid vehicles.

Subject Objectives: On satisfactory completion of this subject students should be able to: i) describe conventional engine systems, and estimate energy requirements and pollution outcomes; ii) evaluate conventional engine systems, and determine appropriate engine configurations to meet prescribed needs; iii) analyse alternative engine systems, identify their key features, and compare these with the characteristics of conventional engine systems; iv) evaluate and assess the potential of alternative engine technologies and fuels to enhance the sustainability of energy use in this field; and v) advise on the selection of technology for transport needs.

MECH980 Functional Analysis and Risk Management**6cp****Contact Hours:** Not on offer in 2003

Subject Description: Requirement analysis of systems and components: functional requirements and constraints analysis. Functional analysis and allocation. Parametric analysis and decision trees. Sensitivity analysis and control. Risk trade-offs.

MECH981 Concurrent Design Management**6cp****Contact Hours:** Not on offer in 2003

Subject Description: System integration from the functional to the physical stage. Project planning. Risk management. Management of configuration, interface. Human engineering: task, operational sequencing, personnel requirements, error and safety analysis.

MECH982 Bulk Solids Characterisation and Particulate Mechanics**6cp****Contact Hours:** Not on offer in 2003

Subject Description: Concepts of particle mechanics (failure criteria, models to represent such criteria as particle size and distributions, particle shape, compressibility, permeability, internal friction, cohesion, adhesion, wall friction); concepts of flow properties of bulk solids for equipment design; flow property measurement techniques; use of computer software to analyse and present experimental data for use in design.

MECH983 Bulk Solids Handling (Storage and Flow)**6cp****Contact Hours:** Not on offer in 2003

Subject Description: Basic concepts of storage; flow and feeding of bulk solids; use of flow properties to determine hopper geometrics; bin wall loads; feeding and discharge systems, feeder loads; chute design; flowrate prediction; segregation and blending; dust suppression systems; stock pile systems; case studies.

MECH984 Belt Conveying 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Belt conveying systems; properties of conveyor belting; tension analyses (static and dynamic); drive systems; loading and unloading belts; trajectory prediction; transfer chute design novel belt systems; economic analyses.

MECH985 Dust and Fume Systems 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Basic concepts; terminology and problems; health and safety regulations; dust characterisation; fan performance characteristics; capture velocities and minimum transport velocities; hood and enclosure design; duct design; dust generation and its minimisation; filtration systems; design of dust handling and disposal systems; occupational health and safety; dust explosion; case studies.

MECH986 Instrumentation and Control Systems For Bulk Solids 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Transducer types and their specification and applications; dynamic response of systems; speed measurement and control; mass flow rate measurement; belt weighing; weigh belt feeders; continuous and batch weighing systems; bin weighing systems and structural implications; system accuracy; interfacing with PLC's and computers; case studies.

MECH987 Advanced Topics in Bulk Solids and Particulate Technologies 1 6cp**Contact Hours:** Not on offer in 2003

Subject Description: There is no set syllabus for this subject. It is intended that it normally be offered on a specialised topic relating to some aspect of modern technologies relating to bulk solids and/or particulate technologies by staff members/visiting specialists and/or engineering practitioners.

MECH988 Advanced Topics in Bulk Solids and Particulate Technologies 2 6cp**Contact Hours:** Not on offer in 2003

Subject Description: There is no set syllabus for this subject. It is intended that it normally be offered on a specialised topic relating to some aspect of modern technologies relating to bulk solids and/or particulate technologies by staff members/visiting specialists and/or engineering practitioners.

MECH989 Advanced Topics in Bulk Solids and Particulate Technologies 3 6cp**Contact Hours:** Not on offer in 2003

Subject Description: There is no set syllabus for this subject. It is intended that it normally be offered on a specialised topic relating to some aspect of modern technologies relating to bulk solids and/or particulate technologies by staff members/visiting specialists and/or engineering practitioners.

MECH990 Bulk Solids and Particulate Technologies Project 12cp**Contact Hours:** Not on offer in 2003

Subject Description: Prepare a thesis on an approved topic related to bulk solids and/or particulate technologies. Normally the thesis will cover work performed in the workplace and additional supervision by an industry representative.

MECH993 Maintenance Management of Bulk Handling Systems 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Maintenance function principles and objectives; reliability and maintainability; maintenance planning; maintenance strategy for plant - a systems approach; maintenance and information support; failure analysis; maintenance organisation; maintenance control and documentation; human resource management; total production maintenance; auditing industrial maintenance systems.

MECH994 Mechanical Handling Systems Spring 6cp

Subject Description: Loss factor of transport; economic analysis of conveying and transportation systems; aspects of particulate mechanics in relation to mechanical handling systems; design concepts and performance criteria of mechanical conveying and feeding equipment employed in process plants. Performance analysis and evaluation of mechanical loading and unloading systems such as used in ship transport.

MECH995 Bulk Solids Handling (Systems and Design) 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Bin wall loads for symmetric and eccentric discharge; analysis of dynamic effects, the 'silo quaking' problem; wall roughness, friction and wear; feeder design principles; performance analysis of a range of feeders for bulk solids; flow promotion; blending and mixing; flow of fine powders; transfer chutes; vibration of bulk solids.

MINE899 Advanced Topics in Mining Engineering 48cp**Annual**

Subject Description: Computer aided analysis and design; computer methods; ore reserve estimation finite element techniques; hydrology; hydraulics; numerical techniques; reliability; rock mechanics; simulation; structural analysis and design; structural topology; mine planning.

MINE901 Transportation of Minerals and Personnel 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Transport of minerals from initial winning to stockpile and to distribution points; safety problems, hygiene, the environment; transport of personnel, equipment, safety, regulations; cost involved; current research.

MINE902 Advanced Studies in Mining Engineering 6cp

Contact Hours: Not on offer in 2003

Subject Description: Topics will be selected from those areas of Mining Engineering in which staff members or visiting staff members to the Department are engaged in active research.

MINE903 Simulation of Mining Operations and Problems 6cp

Contact Hours: Not on offer in 2003

Subject Description: Including coal reserves, mining dimensions, surface effects, cost benefit effects of operation and management and economic evaluation and feasibility of a mining enterprise.

MINE904 Rock Mechanics 6cp

Contact Hours: Not on offer in 2003

Subject Description: Fundamentals of strata mechanics together with advanced topics including engineering technology and rock mechanics aspects of coal mining strata control. Design aspects of mine structures, such as mine pillars, gate roads and longwall mining. Instrumentation in providing for the safe design of the mine opening. Rock and cable bolting techniques and powered support design.

MINE905 Environmental Control in Mines 6cp

Contact Hours: Not on offer in 2003

Subject Description: Mine climate and its control, ventilation planning, ventilation network analysis and simulation; fan selection, booster fans; ventilation of long headings, recirculation; exhaust from diesel engines and their control; methane and its control in underground coal mines, dust in mine air and its control.

MINE906 Mining Engineering Techniques 6cp

Contact Hours: Not on offer in 2003

Subject Description: A selection of advanced laboratory and field exercises in mine support, temporary and long term; in situ testing, laboratory testing, rock properties and parameters; mine design and plant related to extraction areas.

MINE908 Fires, Explosions & Mine Gases 6cp

Contact Hours: Not on offer in 2003

Subject Description: Formation of coal dust; explosibility of coal dust; initiation of explosions; methane accumulation; development and propagation of explosion wave front; pressure pulse and flame front; prevention and control of coal dust formation; barriers, active and passive; experimental galleries; rescue and recovery of both mine and personnel; resultant fires; computer modelling of resulting crisis situations in ventilation; current research; relevant legislation.

MINE909 Mine Subsidence 6cp

Contact Hours: Not on offer in 2003

Subject Description: Causes of mine subsidence; continuum mechanics theories; determination of trough subsidence; subsidence calculations and prediction; measurement techniques; design of structures in mine subsidence active area; methods of reducing subsidence damage; application of computers for subsidence modelling; relevant legislation.

MINE953 Mine Water-Origin, Inflow Predictions and Control 6cp

Contact Hours: Not on offer in 2003

Subject Description: Water problems in surface and underground mining; hydro geological factors affecting mine water inflow; hydrological considerations in origin of mine water; hydro geological characterisation of rock mass and pumping tests; pumping test calculations; effects of ground water on surface mining stability; ground water control in surface mining; calculation of mine water inflow to surface mining; water problems in underground mining; underground mine dewatering techniques; pumps and pumping systems; underground pumping stations and pump design; mine inundation; working under the body of water; inflow prediction by chemical analysis method; mine water pollution control; treatment of mine water pollution; biotechnical approach; constructed wetlands and lagoons.

MINE955 Major Thesis (48 Credit Points) 48cp Annual

MINE957 Phd Major Thesis (48 Credit Points) 48cp Annual

PHYS910 Advanced Project in Physics A 6cp Autumn

Assessment: Satisfactory operation and written descriptions of completed experiments.

Subject Description: The student will be required to design and construct several self-contained experiments at the level of those encountered in Advanced Experimental Physics.

PHYS921 Applied Physics Report 18cp

Contact Hours: Not on offer in 2003

Assessment: Satisfactory completion of report.

PHYS946 Advanced Solid State Physics 6cp Spring / Autumn

Assessment: Assignment problems, tests and sessional examinations

Subject Description: Crystal Symmetries; Groups of Linear Transformation; Abstract Groups; Theory of Group Representations; Group of the Schrödinger Equation; Selection Rule Theorem; Groups of Physical Interest; Rotation Operations; Double-Valued Representations; Direct Products; Crystal Fields; Adiabatic Approximations; Bloch's Theorem; The Effective Mass Expansion; Spin-Orbit Interaction; Time-reversal Symmetry; Symmetry Properties of Wave Vectors; Band Theory; Impurities in Semiconductors.

PHYS947 Special Topic in Physics A 6cp Autumn

Assessment: Project Work and Seminar

Subject Description: A special topic to be selected from any area of Physics. The selection to be made by the Director of Studies.

PHYS948 Physics of Imaging 6cp**Autumn**

Subject Description: Photographic processes and interpretation; Optical and infrared arrays; Image digitising systems; Radio synthesis imaging and fourier optics; Image analysis; Applications in industry, medicine and astrophysics.

PHYS951 Medical Physics Research Project 18cp**Annual / Spring 2003 - Autumn 2004****Assessment:** Substantial report 90%, Seminar 10%.

Subject Description: The student will be required to undertake an applied research project on a topics of medical radiation physics under the supervision of one of the staff members working in the area of medical radiation physics. The area of research will be selected from the following fields: Nuclear Medicine, Medical Imaging, Radiobiology, Radiation Protection, Diagnostic Radiology, Radiotherapy, Instrumentation and Imaging Physics. All the above research topics may not be available every year.

PHYS952 Radiation and Radiotherapy Physics 8cp**Autumn**

Assessment: Written examinations 40%, assignments 20% and practical 40%

Subject Description: This subject is intended to lead to an understanding of the instrumentation and techniques involved in diagnostic and therapeutic uses of radiation in medicine. Topics covered will include Interactions of Radiation with Matter, Sources of Radiation, Detecting Radiation, Nuclear Electronics and data acquisition system, Nuclear Reactions and Production of Radioisotopes, Neutron Physics, Dosimetry of photons, electrons and neutrons, Solid State Dosimetry, TLD and film dosimetry, Introduction to Radiation Therapy, Medical Linear Accelerators, X-ray Modeling Methods, Brachytherapy and Radiosurgery, Clinical Radiotherapy, Linear Accelerators X-ray and Electron Beam Properties.

PHYS953 Medical Imaging and Nuclear Medicine 8cp**Annual / Spring 2003 - Autumn 2004**

Assessment: Written examinations 40%, assignments 40% presentation 20% and practical pass/fail. Students are required to pass the practical

Subject Description: This subject is intended to lead to an understanding of the instrumentation and techniques involved in medical imaging and an appreciation of the part played by image analysis in medical physics specifically. Topics covered will include - the photographic process, solids state detectors and CCDs, the hardware of image processing; film digitisers and plate scanners, software techniques, histograms, enhancements, convolution, edge enhancement, fourier techniques and operation synthesis, nuclear magnetic resonances, Larmor frequency, basic imaging, slice selection, 3D data acquisition, chemical shift imaging, contrast agents, image artefacts and distortion. The evolution and basic physics of radionuclide imaging, the tracer principle in Nuclear Medicine. the ideal properties for radioactive agents for diagnostic studies, the ideal properties for therapeutic radioactive agents, basic physiology of body organs pertinent of Nuclear Medicine,

PHYS954 Radiobiology and Radiation Protection 8cp**Spring**

Assessment: Written examinations 40%, assignments 20% and practical 40%

Subject Description: Topics covers in this subject include - Interaction of radiation with living cells and tissue; clinical fractionation; clinical radiation syndromes; radiobiological modelling; experimental radiation oncology; local control vs system control; radionuclide therapy; binary therapy; new radiotherapy modalities and their radiobiology; dosimetry; natural background radiation; principles of radiation protection; instrumentation for radiation protection; Radiation protection in radiation therapy and diagnostic.

PHYS960 Advanced Project in Physics B 6cp**Spring****Contact Hours:** 42 hours laboratory

Assessment: Satisfactory operation and written descriptions of completed experiments.

Subject Description: descriptions of completed experiments.

PHYS990 Applied Physics Project 24cp**Spring / Autumn / Annual****Assessment:** Minor Thesis

Subject Description: The student will undertake a research project and present a minor thesis and seminar on an applied physics topic selected after discussion with the Department Head.

PHYS997 Special Topic in Physics B 6cp**Spring****Contact Hours:** 28 hours**Assessment:** Project work and Seminar

Subject Description: A special topic to be selected from any area of physics. The selection to be made by the Director of Studies.

PHYS999 Major Thesis 48cp**Annual / Spring 2003 - Autumn 2004**

Subject Description: The major thesis takes the form of a supervised research project on an approved topic.

Faculty of Health & Behavioural Sciences

Courses Offered

The Faculty of Health and Behavioural Science has five member units offering the following courses:

Biomedical Science

Doctor of Philosophy
Master of Science – Research
Graduate Diploma in Science (Biomedical Science)
Graduate Diploma in Science (Exercise Rehabilitation)
Master of Science (Exercise Rehabilitation)
Master of Science (Nutrition)
Master of Science (Nutrition and Dietetics)
Master of Science (Nutrition/Dietetics and Exercise Rehabilitation)
Graduate Certificate in Occupational Health and Safety
Graduate Diploma in Science (Occupational Health and Safety)
Master of Science (Occupational Health and Safety)

Nursing

Doctor of Philosophy
Master of Nursing – Research
Graduate Certificate in Nursing
Graduate Diploma in Nursing
Master of Nursing
Graduate Certificate in Indigenous Health
Graduate Diploma in Indigenous Health
Master of Indigenous Health
Graduate Certificate in Mental Health Nursing
Master of Nursing (Mental Health)
Graduate Diploma in Science (Developmental Disability)
Master of Science (Development Disability)
Master of Science (Midwifery)
Master of Midwifery – Research

Psychology

Doctor of Philosophy
Doctor of Philosophy (Clinical Psychology)
Master of Science (Research)
Postgraduate Diploma in Psychology
Master of Science
Master of Psychology (Clinical)
Doctor of Psychology (Clinical)

Graduate School of Public Health

Doctor of Philosophy
Doctor of Public Health
Master of Science – Research
Graduate Certificate in Public Health
Graduate Diploma in Public Health
Master of Public Health
Graduate Certificate in Mental Health
Graduate Diploma in Science (Mental Health)
Master of Science (Mental Health)
Graduate Certificate in Health Management
Master of Health Management
Master of Science (Health Policy and Management)
Graduate Diploma in Science (Environmental Health)
Master of Science (Environmental Health)

Smart Foods Centre (ARC Key Centre of Teaching and Research)

Doctor of Philosophy
Graduate Certificate in Nutrition Management
Master of Nutrition Management
Master of Science (Nutrition Management)
Master of Business Administration

Current Areas of Study and Research

Please see under relevant Member Unit in this chapter.

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.

Department of Biomedical Science

Courses Offered

Doctor of Philosophy
 Master of Science – Research
 Graduate Diploma in Science (Biomedical Science)
 Graduate Diploma in Science (Exercise Rehabilitation)
 Master of Science (Exercise Rehabilitation)
 Master of Science (Nutrition)
 Master of Science (Nutrition and Dietetics)
 Master of Science (Nutrition/Dietetics and Exercise Rehabilitation)
 Graduate Certificate in Occupational Health and Safety
 Graduate Diploma in Science (Occupational Health and Safety)
 Master of Science (Occupational Health and Safety)

Current Research Areas

The Department's research activities are in the general areas of ageing physiology, biomechanics, cardiorespiratory and exercise physiology, cardiovascular pathophysiology, exercise science and rehabilitation, functional anatomy, metabolic disorders, neuroscience, nutrition and dietetics, physical activity behaviour, "smart" polymers and stress physiology.

Doctor of Philosophy

Study at the Doctoral level, usually for a minimum of 3 years full-time, is by advanced research thesis. Candidates are expected to develop a research thesis that leads to an original and significant contribution to the knowledge in their particular field.

To be eligible for admission to the program, candidates must have achieved Honours Class II Division 2 or higher in their undergraduate degree, or have completed a Master of Science - Research. In addition, a primary supervisor from the Department of Biomedical Science must be identified prior to commencing the program.

Rules and procedures for Doctoral degrees by Thesis are listed in the Course Rules. Doctoral candidates are urged to be familiar with the Code of Practice - Supervision and General Course Rule 10 - Thesis and Research Degree Rules containing the regulations regarding preparation and submission of the thesis.

Years 1-3

GHMA999 Major Thesis

Master of Science - Research

The primary aim of the Master of Science - Research degree is to provide research opportunities and training at the postgraduate level. Those students with a degree of at least Honours Class II, Division 2 level will be required to complete a 48cp thesis.

GHMA999 Major Thesis

Students with a degree of less than Honours Class II, Division 2 level will be required to complete 24cp of research methodology coursework:

GHMA906	Research Project	8
GHMA909	Practicum	8
GHMA913	Special Topics	8

plus at least two sessions of full-time (or equivalent part-time) enrolment in:

GHMA999	Major Thesis	48
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Graduate Diploma in Science (Biomedical Science)

This is a 1-year, 48cp program of course work within the discipline areas of Biomedical Science. The Head of Department must approve the selection of subjects. The Grad Dip Sc (Biomedical Science) is a full fee course.

Graduate Diploma in Science (Exercise Rehabilitation)

This 1-year, (48cp) course work Graduate Diploma of Science is designed for graduates of an approved 3-year Bachelor of Science (Exercise Science) degree program to gain professional accreditation as an Exercise Physiologist from the Australian Association for Exercise and Sports Science (AAESS). The Grad Dip Sc (Exercise Rehabilitation) is a full fee course.

BEXS402	Exercise in Special Populations	8
BEXS411	Practicum in Exercise Science A	8
BEXS412	Practicum in Exercise Science B	8
BEXS451	Exercise Rehabilitation 1: Musculoskeletal	8
BEXS452	Exercise Rehabilitation 2: Cardiorespiratory and Neurological	8
BMS303	Research Topics in Exercise Science	8

Master of Science (Exercise Rehabilitation)

For graduates with a 3, year Exercise Science / Human Movement Science degree, the 1.5 year (72cp) Master of Science (Exercise Rehabilitation) degree provides a postgraduate program which includes research training and professional studies leading to professional accreditation as an Exercise Physiologist by the AAESS. The MSc (Exercise Rehabilitation) is a full fee course.

Year 1

BEXS402	Exercise in Special Populations	8
BEXS411	Practicum in Exercise Science A	8

BEXS412	Practicum in Exercise Science B	8
BEXS451	Exercise Rehabilitation 1: Musculoskeletal	8
BEXS452	Exercise Rehabilitation 2: Cardiorespiratory and Neurological	8
BMS303	Research Topics in Exercise Science	8

Year 2

GHMA997	Major Project	24
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Master of Science (Nutrition)

The 1.5-year, (72cp) Master of Science (Nutrition) program provides access to the academic and research experiences of the MSc (Nutrition and Dietetics) but excludes the placement program and so is not accredited by the Dietitians Association of Australia (DAA). The MSc (Nutrition) is a full-fee course.

Year 1

GHMA930	Community and Public Health Nutrition	8
GHMA931	Nutrients and Metabolism	8
GHMA932	Research in Human Nutrition	8
GHMA997	Major Project *	24

* or 24cps of course work approved by the Head of Department

Year 2

GHMA933	Communication in Health Care Practice	8
GHMA934	Dietetics	8
GHMA935	Food Service and Dietetics Management	8

Master of Science (Nutrition & Dietetics)

Graduates of the 2-year (96cp) Master of Science (Nutrition and Dietetics) program may apply to become members of the DAA and practice as professional Dietitians /Nutritionists. Graduates of an approved Bachelor of Science (Nutrition) degree program may receive up to 24cps of advanced standing allowing the degree to be completed in 1.5 years. The MSc (Nutrition and Dietetics) is a full fee course.

Year 1

GHMA930	Community and Public Health Nutrition *	8
GHMA931	Nutrients and Metabolism *	8
GHMA932	Research in Human Nutrition *	8
GHMA997	Major Project	24

Year 2

GHMA933	Communication in Health Care Practice	8
GHMA934	Dietetics	8
GHMA935	Food Service and Dietetics Management	8
GHMA937	Practical Studies in Nutrition and Dietetics	24

* Graduates of the BSc(Nutrition) degree may apply for advanced standing in these subjects

Master of Science (Nutrition/Dietetics & Exercise Rehabilitation)

This 2-year program allows graduates of an approved Bachelor of Science (Exercise Science and Nutrition) degree to obtain professional accreditation as both a Dietician/Nutritionist from the DAA, and an Exercise Science practitioner from AAESS. The MSc (Nutrition/Dietetics and Exercise Rehabilitation) is a full fee course.

Year 1

GHMA929	Exercise Psychology and Dietary Counselling	8
GHMA934	Dietetics	8
BEXS402	Exercise in Special Populations	8
BEXS451	Exercise Rehabilitation 1: Musculoskeletal	8
GHMA937	Practical Studies in Nutrition and Dietetics	24

Year 2

GHMA935	Food Service and Dietetics Management	8
BEXS452	Exercise Rehabilitation 2: Cardiorespiratory and Neurological	8
BEXS411	Practicum in Exercise Science A	8
BEXS412	Practicum in Exercise Science B	8
BMS304	Research Topics in Nutrition and Dietetics	16

GHMA930 Community and Public Health Nutrition must also be completed if not passed in an undergraduate program (BMS310).

Graduate Certificate in Occupational Health & Safety

This one session full-time or part-time equivalent (24 credit point) course provides an entry point for students with relevant work experience, but limited formal qualifications in OH&S. The course is designed to permit students to transfer to either the Graduate Diploma in Science (Occupational Health & Safety) or the Master of Science (Occupational Health & Safety) after completion of its academic requirements.

GHMA921	Workplace Injury Management	6
LAW969	OH&S Law	6
GHMA922	Occupational Hygiene and Toxicology	6
MGMT963	OH&S Management	6

Graduate Diploma in Science (Occupational Health & Safety)

The Graduate Diploma of Science (OH&S) is a one year full time or part-time equivalent, 48 credit point program which covers a broad base of core knowledge and practical skills with options to specialise in OH&S Management and/or Occupational Environmental Health.

GHMA921	Workplace Injury Management	6
LAW969	OH&S Law	6
GHMA920	Behavioural Change: Human Factors in OH&S	6
GHMA923	OH&S Risk Management	6
GHMA922	Occupational Hygiene and Toxicology	6
MGMT963	OH&S Management	6

Plus 12 cp of electives from either Group A and/or Group B (for a total of 48 cp)

A: Occupational & Environmental Health & Safety Stream

GHMD904	Epidemiology	6
GHMD912	Health Promotion	6
GHMD983	Statistics in Health Research	6
GHMD984	Health Research Methodology	6

B: OH&S Management stream*

MGMT907	Managerial Skill Workshop	6
MGMT908	Human Resource Development and the Learning Organization	6
MGMT911	Organisational Behaviour	6
MGMT915	Management of Change	6
MGMT920	Organisational Analysis	6
MGMT933	Management of Process Innovation	6
MGMT947	Quality Management	6
MGMT953	Human Resource Management	6

*NOTE: Electives are available from the Graduate School of Business (Faculty of Commerce) subject to approval of the OHS course coordinator. The Graduate School of Business has four enrolment cycles per year (A,B, C, D). Check the Calendar for enrolment dates and contact Associate Professor Michael Zanko for information related to subjects on offer.

Master of Science (Occupational Health & Safety)

The Master of Science (OH&S) is a one and half year full time, or part time equivalent, 72 credit point program which covers a broad base of core knowledge and skills with options to specialise in OH&S Management and/or Occupational and Environmental Health. The degree also offers an opportunity to undertake a research project within the area of OH&S.

GHMA921	Workplace Injury Management	6
LAW969	OH&S Law	6
GHMA920	Behavioural Change: Human Factors in OH&S	6
GHMD983	Statistics in Health Research	6
GHMA914	Ergonomics	8
GHMA923	OH&S Risk Management	6
GHMA922	Occupational Hygiene and Toxicology	6
MGMT963	OH&S Management	6

Plus 24 cp of electives from either Group A and/or Group B (for a total of at least 72 cp)

A: Occupational & Environmental Health & Safety Stream

BMS302	Research Topics	8
GHMD909	Comparative Health Systems	6
GHMD985	Applied Epidemiology	6
GHMD986	Environmental Health	6
GHMD903	Public Health Communication and Data Skills	6
GHMD904	Epidemiology	6
GHMD912	Health Promotion	6
GHMD984	Health Research Methodology	6

B: OH&S Management Stream*

MGMT907	Managerial Skills workshop	6
MGMT908	Human Resource Development and Learning Organisation	6
MGMT911	Organisational Behaviour	6
MGMT915	Management of Change	6
MGMT920	Organisational Analysis	6
MGMT933	Management of Process Innovation	6
MGMT947	Quality Management	6
MGMT953	Human Resource Management	6

*NOTE: Electives are available from the Graduate School of Business (Faculty of Commerce) subject to approval of the OHS course coordinator. The Graduate School of Business has four enrolment cycles per year (A,B, C, D). Check the Calendar for enrolment dates and contact Associate Professor Michael Zanko for information related to subjects on offer.

Department of Nursing

Courses Offered

Doctor of Philosophy
Master of Nursing – Research
Graduate Certificate in Nursing
Graduate Diploma in Nursing
Master of Nursing
Graduate Certificate in Indigenous Health
Graduate Diploma in Indigenous Health
Master of Indigenous Health
Graduate Certificate in Mental Health Nursing
Master of Nursing (Mental Health)
Graduate Diploma in Science (Developmental Disability)
Master of Science (Development Disability)
Master of Science (Midwifery)
Master of Midwifery – Research

Current Research Areas

The major current areas of nursing research use educational, demographic, and ethnographic techniques. Studies using a variety of approaches associated with disciplines such as Psychology, History, Economics, Philosophy and Sociology will be considered.

The following areas of research are available to candidates undertaking the Masters by research degrees and the Doctor of Philosophy degree:

Maternal and child care
Physiology/Pathophysiology
Medical/surgical nursing
Special care nursing
Mental health
Developmental disability
Psychiatric nursing
Health promotion
Cardiovascular disease prevention
Health services evaluation

Migrant health
Indigenous Health Studies
and other areas relevant to nursing.

Please note: assessment requirements will be listed in the subject outlines provided to students at the beginning of each session.

Doctor of Philosophy

The Doctor of Philosophy is offered through the Department of Nursing for research into a selection of topics. These are determined by the availability of supervisors and their areas of expertise. The degree normally requires 3 years full-time study. A requisite for the award of Doctor of Philosophy is that the candidate contributes new knowledge to their discipline.

Each year students enrol in:

GHMB999 Major Thesis

Master of Nursing - Research

The Master of Nursing - Research is intended to provide candidate with the opportunity to pursue a research program in a specialised field of nursing.

Entry requirements

Applicants must hold a qualification in Nursing which will enable them to gain authority to practice as a Registered Nurse as well as a Bachelor degree in Nursing, the Graduate Certificate in Nursing outlined below, a Bachelor of Nursing (Honours) or a Master of Nursing degree or equivalent. It is expected that all candidates will undertake the coursework preparation programme outlined below, unless they can demonstrate that they possess the relevant skills and knowledge.

Applicants who do not possess a Bachelor degree in Nursing may gain entry to the Master of Nursing – Research programme by successfully completing a Graduate Certificate in Nursing constituted of NURS331 (Research For Registered Nurses) and NURS328 (Nursing Management) plus two electives from the schedule.

Course structure

Core subjects

GHMB950	Reflective Practice 1	6
GHMD984	Health Research Methodology	6
GHMB953	Special Topic in Nursing	6

Elective – choose one elective from:

GHMD983	Statistics in Health Research	6
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or

GHMB951	Reflective Practice 2	6
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plus

GHMB999	Major Thesis	48
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Graduate Certificate in Nursing

The Graduate Certificate in Nursing is a short, focused, clinically based course having both academic and industry relevance. It is designed to give students the flexibility to choose subjects that allow professional development to occur in tandem with academic rigour. Candidates may exit following completion of the required subjects having acquired advanced knowledge in their chosen fields and having been prepared for advanced practice. On completion of the Graduate Certificate in Nursing candidates may elect to progress to the Graduate Diploma in Nursing.

24 cp from the subjects listed below:

Nursing

GHMB902	Nursing Management	6
GHMB903	Scientific and Quantitative Development in Acute Care Nursing	6
GHMB906	Acute Care Nursing: Reflections on Practice	6
GHMB907	Fundamental Concepts in Developmental Disability Practice	6
GHMB908	Applied Behavioural Science for Developmental Disability Practice	6
GHMB910	Contemporary Issues in Developmental Disability	6
GHMB923	Legal and Professional Issues	6
GHMB950	Reflective Practice 1	6
GHMB951	Reflective Practice 2	6

Public health

GHMD903	Public Health Communication and Data Skills	6
GHMD904	Epidemiology	6
GHMD905	Social Foundations of Public Health	6
GHMD906	Quality Management for Health Services	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems	6
GHMD912	Health Promotion	6
GHMD913	Drug Problems and Issues	6
GHMD924	Health Information Systems	6
GHMD936	Public Health Nutrition	6

Graduate Diploma in Nursing*

- The Graduate Diploma in Nursing is a professional course in nursing that will provide preparation for the nurse who seeks an expanded role in the health system.
- The Graduate Diploma in Nursing provides nurses with the opportunity to develop skills and knowledge in a major area of nursing. Major areas of study include clinical education, critical care nursing, nursing management and research.

Applicants must hold a qualification to practise as a Registered Nurse or an equivalent authority to practise.

Normal entry requirements are as stated in the Course Rules.

48 credit points from the subjects listed below:

Core subjects

GHMB950	Reflective Practice 1	6
GHMB951	Reflective Practice 2	6
GHMB923	Legal and Professional Issues	6

PLUS: 30 credit points of subjects approved by the Head of Department.

Elective Subjects**Nursing**

GHMB902	Nursing Management	6
GHMB903	Scientific and Quantitative Development in Acute Care Nursing	6
GHMB906	Acute Care Nursing: Reflections on Practice	6
GHMB907	Fundamental Concepts in Developmental Disability Practice	6
GHMB908	Applied Behavioural Science for Developmental Disability Practice	6
GHMB910	Contemporary Issues in Developmental Disability	6

Public Health

GHMD904	Epidemiology	6
GHMD905	Social Foundations of Public Health	6
GHMD906	Quality Management for Health Services	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems	6
GHMD912	Health Promotion	6
GHMD913	Drug Problems and Issues	6
GHMD924	Health Information Systems	6
GHMD925	Aboriginal Health Issues	6
GHMD936	Public Health Nutrition	6
GHMD984	Health Research Methodology	6

*Note: This program is currently under review and subject to approval

Master of Nursing

The coursework Masters degree is designed to prepare nurses for leadership roles in nursing and the health care system.

48 credit points from the subjects listed below

Core subjects

GHMB950	Reflective Practice 1	6
GHMB951	Reflective Practice 2	6
GHMS923	Legal and Professional Issues	6
GHMD984	Health Research Methodology	6

PLUS: either GHMB997 Major Project (24 cps) or GHMB998 Minor Thesis (24 cps) as recommended by the Head of Department

or

24 Credit points of elective subjects.

Recommended Subjects**Nursing**

GHMB902	Nursing Management	6
GHMB903	Scientific and Quantitative Development in Acute Care Nursing	6
GHMB906	Acute Care Nursing: Reflections on Practice	6
GHMB907	Fundamental Concepts in Developmental Disability Practice	6

GHMB908	Applied Behavioural Science for Development Disability Practice	6
GHMB910	Contemporary Issues in Developmental Disability	6

Public Health

GHMD904	Epidemiology	6
GHMD905	Social Foundations of Public Health	6
GHMD906	Quality Management for Health Services	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems	6
GHMD912	Health Promotion	6
GHMD924	Health Information Systems	6
GHMD925	Aboriginal Health Issues	6
GHMD936	Public Health Nutrition	6
GHMD984	Health Research Methodology	6

Graduate Certificate in Indigenous Health*

The Graduate Certificate in Indigenous Health Studies prepares graduates to work as autonomous health providers in urban and rural Indigenous communities.

The following subjects must be completed.

GHMB904	Modalities of Care: Mental Health	6
GHMB940	Indigenous Family Studies	6
GHMD936	Public Health Nutrition	6
GHMD983	Statistics in Health Research	6

*Note: This program is currently under review

Graduate Diploma in Indigenous Health*

The Graduate Diploma in Indigenous Health Studies prepares graduates to work as autonomous health providers in urban and rural Indigenous communities.

The following subjects must be completed:

GHMB904	Modalities of Care: Mental Health	6
GHMB940	Indigenous Family Studies	6
GHMB941	Indigenous Health Patterns	6
GHMD893	Statistics in Health Research	6
GHMD904	Epidemiology	6
GHMD913	Drug Problems and Issues	6
GHMD936	Public Health Nutrition	6
Elective Subject		6

*Note: This program is currently under review

Master of Indigenous Health*

The Master of Indigenous Health Studies prepares graduates to work as autonomous health providers in urban and rural Indigenous communities.

Option A**Core Subjects**

The following subjects must be completed:

GHMB904	Modalities of Care: Mental Health	6
GHMB940	Indigenous Family Studies	6
GHMB941	Indigenous Health Patterns	6
GHMD983	Statistics in Health Research	6
GHMD904	Epidemiology	6

GHMD913	Drug Problems and Issues	6
GHMD936	Public Health Nutrition	6

Elective Subject

GHMB998	Minor Thesis	24
	OR	
	Electives to the value of at least 24 credit points chosen in consultation with the Course Coordinator	

Option B**Core Subjects**

The following subjects must be completed:

GHMB904	Modalities of Care: Mental Health	6
GHMB940	Indigenous Family Studies	6
GHMB941	Indigenous Health Patterns	6
GHMD983	Statistics in Health Research	6
GHMD904	Epidemiology	6
GHMD913	Drug Problems and Issues	6
GHMD936	Public Health Nutrition	6
GHMD908	Health Services Planning and Evaluation	6
GHMD912	Health Promotion	6

Elective Subject

GHMD942	Special Topic	6
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*Note: This program is currently under review

Graduate Certificate in Mental Health Nursing

This course is available on campus or by distance.

Core Subjects

The following subjects must be completed:

GHMB989	Mental Health Nursing: Clinical Principles and Practice	12
GHMD971	Assessment and Diagnosis in Mental Health	6
GHMB950	Reflective Practice 1	6

Master of Nursing – Mental Health

The Master of Nursing – Mental Health is designed for a practitioner commencing the specialty of mental health nursing. The program combines theoretical aspects of mental health with a supervised clinical practice to develop and refine clinical skills and interventions for people seriously affected by mental illness.

Core Subjects

GHMB989	Mental Health Nursing: Clinical Principles and Practice	12
GHMD971	Assessment and Diagnosis in Mental Health	6
GHMB950	Reflective Practice 1	6
GHMD913	Drug Problems and Issues	6
GHMD965	Principles and Practices of Psychosocial Rehabilitation	6
GHMD973	Case Management in Mental Health	6
GHMD902	Nursing Management	6

Graduate Diploma in Science (Developmental Disability)

The Graduate Diploma in Science (Developmental Disability) is a multi-disciplinary course designed for health and education professionals providing direct care to people with developmental disabilities. It aims to provide an appropriate theoretical and conceptual framework for practice and access to contemporary information relating to developmental disability. The course consists of specialist developmental disability subjects and electives. Emphasis is on applying theoretical, research-based knowledge to practice in the developmental disability field.

Core Subjects

GHMB950	Reflective Practice 1	6
GHMB907	Fundamental concepts in Developmental Disability	6
GHMB908	Applied Behavioural Science for Developmental Disability Practice	6
GHMB910	Contemporary Issues in Developmental Disability	6
GHMD983	Statistics in Health Research	6
GHMD984	Health Research Methodology	6

Elective Subjects

PLUS: electives (12 cps), normally chosen from the following subjects:

SOC103	Aspects of Australian Society	6
SOC205	Sociology of the Family	6
EDUF101	Child Growth and Development*	6

*Not on offer in 2003. Please consult the course coordinator.

Master of Science (Developmental Disability)

Students enrolled in the Master of Science (Developmental Disability) will have already completed the Graduate Diploma in Science (Developmental Disability). They will undertake a minor thesis on an aspect of developmental disability that consolidates earlier studies in developmental disability and research methodology.

72 credit points from the subjects listed below

Core Subjects

GHMB950	Reflective Practice 1	6
GHMB907	Fundamental concepts in Developmental Disability	6
GHMB908	Applied Behavioural Science for Developmental Disability Practice	6
GHMB910	Contemporary Issues in Developmental Disability	6
GHMD983	Statistics in Health Research	6
GHMD984	Health Research Methodology	6

Elective Subjects

plus: electives (12 cps), normally chosen from the following subjects:

SOC103	Aspects of Australian Society	6
SOC205	Sociology of the Family	6
EDUF101	Child Growth and Development*	6

Plus:

GHMB998 Minor Thesis 24

* Not on offer in 2003. Please consult the course coordinator

Master of Science (Midwifery)

The Master of Science (Midwifery) aims to prepare graduates to function as autonomous practitioners in the professional practice of midwifery. On successful completion of the Master of Science (Midwifery), students who do not hold an authority to practice midwifery and have a current authority to practise as a Registered Nurse, are eligible to apply to the NSW Nurses Registration Board for an authority to practise.

Core Subjects

The following must be completed:

GHMB920	Applied Midwifery Studies	12
GHMB921	Reproductive Bioscience	8
GHMB922	Psychosocial Development of the Family	8
GHMB923	Legal and Professional Issues	6
GHMB924	Midwifery Studies	8
GHMB950	Reflective Practice 1	6

Master of Midwifery - Research

The Master of Midwifery - Research is intended to provide candidates with the opportunity to pursue a research program in a specialised field of midwifery. Interdisciplinary supervision will be encouraged so that a student may have (for instance) a supervisor who is a midwife/nurse academic and another with expertise in an appropriate associated discipline.

Entry requirements

Applicants must hold a qualification in Nursing that will enable them to gain authority to practice as a Registered Nurse, as well as a qualification in Midwifery or a Master of Science (Midwifery) degree (or equivalent). It is expected that all candidates will undertake the coursework preparation program outlined below, unless they can demonstrate that they possess the relevant skills and knowledge.

Core Subjects

GHMB950	Reflective Practice 1	6
GHMD984	Health Research Methodology	6
GHMB953	Special Topic in Nursing	6

Elective Subjects

Choose one elective from:

GHMD983	Statistics in Health Research	6
or		
GHMB951	Reflective Practice 2	6
Plus		
GHMB999	Major Thesis	48

Department of Psychology

Courses Offered

Doctor of Philosophy
 Doctor of Philosophy (Clinical Psychology)
 Master of Science (Research)
 Postgraduate Diploma in Psychology
 Master of Science
 Master of Psychology (Clinical)
 Doctor of Psychology (Clinical)

Current Research Areas

The following areas of research are available to candidates undertaking the Master of Science degree (Honours) and the Doctor of Philosophy degree by research:

Clinical and community psychology: including clinical psychopathology and cognitive behaviour therapy, the psychology of drug dependence, constructivist and psychodynamic approaches, forensic psychology, ADHD, schizophrenia, depression, psychotherapy research and professional psychological help seeking.

Cognitive processes: in particular, attention, memory, reading, imagery, the human/computer interface, and applied decision-making and problem solving.

Conditioning in humans, Comparative learning and cognition.

Emotions: including moods, and emotional intelligence.

Health Psychology: including psychology of diet, exercise and the metabolic syndrome, population and behavioural studies of physical activity and health.

Lifespan development: including development of deductive and inductive reasoning, and children's conceptual development.

Metatheoretical issues in psychology

Psychometrics and quantitative psychology

Psychophysiology: including the orienting reaction, and psychophysiological indices of cognitive processes; applications in clinical populations.

Social psychology: in particular, social cognition and belief systems; social psychology of adolescent behaviour; dependency.

Theoretical approaches to psychology: Personal construct psychology; Jungian and transpersonal psychology.

Visual perception

Doctor of Philosophy

(3 years full-time or equivalent part-time)

To qualify for entry to the Doctor of Philosophy research degree, candidates must have an Honours degree in a relevant discipline of at least Class II, Division 1 standard. Only a limited number of places are available, so the required standard may well be higher than this. This degree is a three-year full-time degree, the usual minimum period of study. For part-time study the duration will be approximately twice as long.

Doctor of Philosophy (Clinical Psychology)

To qualify for entry to the Doctor of Philosophy professional degrees, candidates must have an Honours Bachelor Degree of at least Class II, Division 1 standard. The program will normally involve eight academic sessions of full-time or equivalent part-time study. Each year students enrol in:

GHMC999	Doctor of Philosophy Thesis	48
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The program for the professional PhD candidates will require successful completion of:

i) 56 credit points of coursework subjects:		
GHMC908	Professional Issues in Psychology	4
GHMC910	Child and Family Psychology	4
GHMC919	Clinical Applications of Health Psychology	4
GHMC926	Counselling Skills	4
GHMC931	Clinical Neuropsychology	4
GHMC932	Sociocultural Aspects of Applied Psychology	4
GHMC933	Professional Workshop Series A (or GHMC 934 Professional Workshop Series B)	4
GHMC939	Introduction to Cognitive Behavioural Therapy	4
GHMC969	Advanced Cognitive Behavioural Therapy	8
GHMC970	Assessment and Psychopathology A	8
GHMC971	Assessment and Psychopathology B	8
ii) 16 credit points of supervised clinical practical		
GHMC938	Practicum 1A	4
GHMC942	Practicum 1B	4
GHMC943	Practicum 2A	4
GHMC944	Practicum 2B	4
iii) a supervised research program on a topic which is in the field of Clinical Psychology. The research program, to be written up as a thesis, constitutes two-thirds of the course program, and includes 144 credit points as below:		
GHMC946	Research Project A (Summer Session)	8
GHMC981	Research Project C (Summer Session)	16
GHMC918	Thesis (enrolled for 2.5 years)	48

Master of Science (Research)

(2 years full-time or equivalent part-time)

To qualify for entry to the Honours Master of Science degree candidates must have an Honours degree of at least Class II, Division 2 or equivalent. The usual minimum period of study is two years full-time. For part-time study the duration will be approximately twice as long.

Each year students enrol in:		
GHMC998	Major Thesis	48
Candidates may be required to enrol in:		
GHMC946	Research Project A	8
GHMC947	Research Project C	16

Postgraduate Diploma in Psychology

This degree offers a fourth year of Psychology, accredited by the Australian Psychological Society, to graduates with a three-year major in Psychology. It is aimed at those interested in studying Psychology at an advanced level, as an alternative to the fourth year Honours degree. The course is designed to extend and enrich undergraduate studies in Psychology. The course can be completed in one year of full-time study or part-time equivalent.

Entry requirements

- Bachelor degree from the University of Wollongong with a major in Psychology; or
- an equivalent qualification from another tertiary institution approved by the Council of the University of Wollongong and accredited by the Australian Psychological Society.

It is possible to admit only a limited number of students each year. If the number of applicants exceeds the quota, admission will be based on academic qualifications.

Core Subjects

Students complete the following subjects:		
GHMC988	Contemporary Issues for Professional and Research Psychologists	6
GHMC984	Social Psychology and Health	6
GHMC985	Principles and Practices of Psychological Assessment	6
GHMC989	Advanced Abnormal Psychology	6
GHMC978	Child and Adolescent Psychology	6
GHMC979	Major Research Project	18

Master of Science

This degree is available to applicants with a major study in Psychology. It is not an APS accredited fourth year of Psychology, and therefore is not suitable for Australian students who intend to become practicing psychologists. The course structure allows international students to tailor their studies to suit the requirements of the profession in their own countries. This course is available as a one-year full-time or two-year part-time course.

Entry requirements

Bachelor degree or equivalent qualification with a major in Psychology.

Core Subjects

Students complete the following subjects:

GHMC988	Contemporary Issues for Professional and Research Psychologists	6
GHMC985	Principles and Practices of Psychological Assessment	6
GHMC989	Advanced Abnormal Psychology	6
GHMC979	Major Research Project	18

Elective Subjects

Plus two electives chosen from the following:

GHMC984	Social Psychology and Health	6
GHMC978	Child and Adolescent Psychology	6
GHMD965	Principles and Practices of Psychosocial Rehabilitation	6
GHMD971	Assessment and Diagnosis in Mental Health	6
GHMD973	Case Management in Mental Health*	6
GHMD983	Statistics in Health Research	6

*Enrolment in this subject requires prior approval from the Head of the Graduate School of Public Health.

Master of Psychology (Clinical)

The Master of Psychology (Clinical) is a fully accredited professional 5th and 6th year of study for the purpose of membership of the Australian Psychological Society College of Clinical Psychologists. Entry to the Master of Psychology program will be from an Honours degree in Psychology at a standard of Class II, Division 2 or its equivalent. Places in this course are limited and will be based on academic merit and personal suitability. The program will involve four sessions of full-time study or their equivalent part-time.

Program of Study

The program requires the successful completion of at least 96 credit points as follows:

i) 56 credit points of coursework subjects:

GHMC908	Professional Issues in Psychology	4
GHMC910	Child and Family Psychology	4
GHMC919	Clinical Applications of Health Psychology	4
GHMC926	Counselling Skills	4
GHMC931	Clinical Neuropsychology	4
GHMC932	Sociocultural Aspects of Applied Psychology	4
GHMC933	Professional Workshop Series A (or GHMC934 Professional Workshop Series B)	4
GHMC939	Introduction to Cognitive Behavioural Therapy	4
GHMC969	Advanced Cognitive Behavioural Therapy	8
GHMC970	Assessment and Psychopathology A	8
GHMC971	Assessment and Psychopathology B	8

ii) 16 credit points of supervised practical clinical experience:

GHMC938	Practicum 1A	4
GHMC942	Practicum 1B	4
GHMC943	Practicum 2A	4
GHMC944	Practicum 2B	4

iii) 24 credit points of independent but supervised research in the subjects:

GHMC946	Research Project A	8
GHMC947	Research Project B	16

Doctor of Psychology (Clinical)

To qualify for entry candidates must have an Honours Bachelor Degree of at least Class II, Division 1 standard or its equivalent. Candidates who have completed a Master of Psychology (Clinical) degree are also eligible to apply for entry and are given specified credit, assessed on a case by case basis, for the subjects completed during their Masters degree. The program will normally involve six academic sessions of full-time or equivalent part-time study. In addition to coursework and practicum requirements, the program for Doctor of Psychology candidates will require successful completion of a supervised research program on a topic that is in the field of Clinical Psychology. The research program will be written up as a thesis and constitutes one-third of the course program.

Program of Study

The program requires the successful completion of a total of 144 credit points as follows:

(i) 72 credit points of coursework subjects:

GHMC908	Professional Issues in Psychology	4
GHMC910	Child and Family Psychology	4
GHMC919	Clinical Applications of Health Psychology	4
GHMC926	Counselling Skills	4
GHMC931	Clinical Neuropsychology	4
GHMC932	Sociocultural Aspects of Applied Psychology	4
GHMC933	Professional Workshop Series A (or GHMC934 Professional Workshop Series B)	4
GHMC939	Introduction to Cognitive Behavioural Therapy	4
GHMC969	Advanced Cognitive Behavioural Therapy	8
GHMC970	Assessment and Psychopathology A	8
GHMC971	Assessment and Psychopathology B	8
GHMC993	Advanced Training in Personality Disorders A*	4
GHMC994	Advanced Training in Personality Disorders B*	4
GHMC995	Advanced Training - Clinical Supervision A*	4
GHMC990	Advanced Clinical Issues A*	4

ii) 24 credit points of supervised clinical practice:

GHMC938	Practicum 1A	4
GHMC942	Practicum 1B	4
GHMC943	Practicum 2A	4
GHMC944	Practicum 2B	4
GHMC991	Advanced Practicum A	4
GHMC992	Advanced Practicum B	4

*In certain circumstances these subjects may be substituted by another subject approved by the Director of Clinical Programs.

iii) 48 credit points of independent but supervised research in the subjects:

GHMC946	Research Project A	8
GHMC981	Research Project C	16
GHMC982	Research Project D	24

Coursework will be graded in the same manner as coursework completed by candidates for the degree of Master of Psychology.

Award of the degree of Doctor of Psychology is governed by the University Rules for the award of Doctoral degrees as described elsewhere.

The Graduate School of Public Health

Courses Offered

Doctor of Philosophy
 Doctor of Public Health
 Master of Science – Research
 Graduate Certificate in Public Health
 Graduate Diploma in Public Health
 Master of Public Health
 Graduate Certificate in Mental Health
 Graduate Diploma in Science (Mental Health)
 Master of Science (Mental Health)
 Graduate Certificate in Health Management
 Master of Health Management
 Master of Science (Health Policy and Management)
 Graduate Diploma in Science (Environmental Health)
 Master of Science (Environmental Health)

Programs in Mental Health, Public Health and Health Management are also offered by distance education. Please contact the Graduate School of Public Health directly for further details.

Occupational Health and Safety is offered jointly with the Departments of Biomedical Sciences and Management. Consult information in the Department of Biomedical Sciences pages for details.

Current Research Areas

Supervision in the following areas of research is likely to be available to candidates undertaking the Doctor of Philosophy, the Doctor of Public Health and the Master of Science - Research.

Cardiovascular disease prevention
 Environmental health
 Health information systems
 Health policy
 Health promotion
 Health services development and evaluation
 Health service management
 Health and society
 Mental health
 Nutrition (obesity, diabetes)
 Occupational health and safety

Doctor of Philosophy

The degree of Doctor of Philosophy (PhD) is available to candidates in the major research areas of the Graduate School of Public Health for which supervision is available, normally: Public Health, Environmental Health, Health Policy and Management, Mental Health, Nutrition, Health Information Systems, Epidemiology, Health Social Science. The PhD provides supervised research training in a program of not less than three years duration and no more than four years (full time).

Entry requirements

Admission detail and regulations governing the award are set out in the University Course Rules. To qualify for the program candidates must hold an Honours Bachelor Degree of Class II, Division 2 or equivalent in a relevant discipline or a Postgraduate degree of at least Graduate Diploma in Public Health or equivalent with research methodology and at least a credit average. Supervision in the research topic proposed by the student must also be possible.

Potential candidates should discuss their research plan with the Postgraduate Research Coordinator of the School at which time the supervision arrangements of the School will be outlined.

Program structure

Research seminars are held in Autumn and Spring sessions to assist research students in exchanges about research methodology and research content. Attending the research seminars is expected. A detailed research proposal must be prepared and submitted for examination at about one third of the duration of the candidature. This examination must be passed successfully for the candidature to be allowed to continue, and must have taken place within 1 year of commencing the candidature (full time or part time equivalent). Opportunities exist for outstanding candidates to gain scholarship support by application to the University. After three years of full time enrolment and within four years of enrolment the student will submit a thesis for examination under the regulations for Doctoral theses of the University.

Doctor of Public Health

The Doctor of Public Health (DrPH) is a professional degree granted on successful completion of an approved program of coursework and an independent and original investigation of a significant problem in public health and the presentation of the research as an acceptable thesis. This degree prepares the students for leadership positions in the health sector, that would require advanced analytic or conceptual capabilities.

The DrPH usually takes at least three years full time study, and includes a coursework component and a research component. There will be no advanced standing granted for previous graduate study at Masters level.

The course work involves a maximum of one year full time study (48 credit points) in both required and elective courses. The research component of the program involves at least two years of full time enrolment in the thesis following completion of the coursework component. Progression in the research component requires the development of a suitable research proposal at the end of which the student sits a qualifying examination. On successful completion of the qualifying examination the student undertakes the research under supervision. At the end of this period the student will submit a thesis for examination under the regulations for Doctoral theses of the university.

Entry requirements

To qualify for entry to the program, candidates must have a Master of Public Health degree or equivalent, usually at credit level or better, or an Honours Bachelor degree of at least Class II, Division 2 standard in a relevant discipline, followed by the equivalent of one year full time relevant and approved postgraduate study. Students should preferably have two or more years of appropriate professional experience and have demonstrated potential capacity for leadership in the area of specialisation. Applicant should submit a record of professional experience and names of two appropriate referees.

Coursework

Individual course work programs should be decided in conjunction with the intended supervisor for the research and the Head of School. The course work must be passed with a credit average mark to allow progression into the research component of the course. Applicants who have not had a background in Public Health may be advised to take the four core subjects listed below. Some applicants may be advised to undertake specialised programs in preparation for their research.

GHMD904	Epidemiology	6
GHMD983	Statistics in Health Research	6
GHMD984	Health Research Methodology	6
GHMD905	Social Foundations of Public Health	6

The minimum period for the completion of the degree of Doctor in Public Health will be six academic sessions of full time study. Full time students are required to submit their theses no later than eight academic sessions from the date of candidature.

Through an agreement with the School of Public Health, University of California, (Berkeley), it is expected that selected Doctor of Public Health students will be able to spend one session at the University of California (Berkeley) advancing research and/or coursework interests which are part of their approved program of study.

Master of Science - Research

The degree, Master of Science – Research, is designed to provide supervised training in independent research. For candidates admitted with an Honours Bachelor degree with a Class II, Division 2 or higher or with Graduate Certificate of Public Health equivalent with research skill subjects and a credit average, the program will consist of 48 credit points of research leading to the submission of a thesis. For candidates admitted with a Bachelor degree or degrees deemed less relevant for research skills, the program will consist of 72 credit points, involving research leading to the submission of a thesis, and directed course work in statistics (GHMD983), research methodology (GHMD984), epidemiology (GHMD904) and research preparation (GHMD907), or in other areas if so directed by the Head of School.

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 program recommended by the Head of School. 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 Masters by Research Degree Rules.

The total duration of the degree is no less than 1 year full time for those allowed into the 48 credit point version and no less than 1.5 year full time enrolled in the 72 credit point version and no more than 2 years full time.

Graduate Certificate in Public Health

The Public Health courses are available for on-campus attendance or nationally and internationally by distance education.

The aim of this course is to provide health professionals and others with the opportunity to develop primary competencies in public health research and evaluation.

Course Structure

The course provides students with the opportunity to gain a qualification in public health research in a flexible manner, including a choice of subjects and a manageable investment of time and money. The Graduate Certificate will be awarded on successful completion of 24 credit points of course work.

Entry Requirements

Entrants to the course normally hold a three-year undergraduate degree (or equivalent). An applicant holding other acceptable qualifications may be admitted to this course.

Articulation with the Graduate Diploma in Public Health

On completion of the Graduate Certificate in Public Health, students may apply to enter the Graduate Diploma in Public Health. Successful applicants will be required to complete a further 24 credit points of coursework from the Diploma program.

The Graduate Certificate in Public Health is awarded on the successful completion of 24 credit points of course work, selected from the following subjects:

GHMD903*	Public Health Communication and Data Skills	6
GHMD904	Epidemiology	6
GHMD905	Social Foundations of Public Health	6
GHMD906	Quality Management for Health Services	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD912	Health Promotion	6
GHMD913	Drug Problems and Issues	6
GHMD924	Health Information Systems	6
GHMD925	Aboriginal Health Issues	6
GHMD936	Public Health Nutrition	6
GHMD981*	Maternal and Child Health in Developing Countries	6
GHMD983	Statistics in Health Research	6
GHMD984	Health Research Methodology	6
GHMD985*	Applied Epidemiology	6
GHMD986*	Environmental Health	6
STAT252*	Statistics for the Natural Sciences	6

Note: GHMD904 and GHMD984 must be taken concurrently with STAT252 unless the student has previously studied a statistics subject.

Note: * These subjects are not available by distance education.

Graduate Diploma in Public Health

The Public Health courses are available for on-campus attendance or nationally and internationally by distance education.

This is an introduction to Public Health as the area associated with the efforts made by society to protect, promote and restore people's health. The Graduate Diploma is designed for health professionals and others intending to work in Public Health. Health is defined as a state of well being, not just the absence of disease. The goals of public health include the promotion and improvement of health as well as prevention of disease, premature death, and disease-produced discomfort and disability in the population.

Course Structure

The course requires the completion of 48 credit points of coursework. The course can be completed in one year of fulltime study or part time equivalent. Intending students requiring further course information should apply to the Graduate School of Public Health.

Entry Requirements

Candidates for the Graduate Diploma in Public Health should normally hold a relevant three-year undergraduate degree or equivalent. An applicant holding other acceptable qualifications may be admitted to this course.

Articulation with the Master of Public Health

On completion of the Graduate Diploma in Public Health, students may apply to enter the Master of Public Health and will be required to complete a further 24 cps of course work from the Master of Public Health degree.

Core Subjects

GHMD904	Epidemiology	6
GHMD905	Social Foundations of Public Health	6
GHMD906	Quality Management for Health Services	6
GHMD912	Health Promotion	6
GHMD983	Statistics in Health Research	6

plus at least 18 credit points selected from the Master of Public Health course structure and subjects from other departments approved by the Course Coordinator for a total of 48 credit points of coursework.

Master of Public Health

The Public Health courses are available for on-campus attendance or nationally and internationally by distance education.

The Master of Public Health provides the knowledge and understanding of the efforts made by society to protect, promote and restore the people's health. Health is defined as a state of well being, not just the absence of disease. The goals of public health include the promotion and improvement of health as well as prevention of disease, premature death, and disease-produced discomfort and disability in the population.

Course Structure

The course requires the completion of 72 credit points: six core subjects and six elective subjects. The course can be undertaken full-time over 18 months or part-time equivalent. For part time students the timetable is designed so that two core subjects may be taken on the same day. Intending students requiring further course information should apply to the Graduate School of Public Health.

Entry Requirements

Candidates for the Master of Public Health should normally hold a three-year undergraduate degree or equivalent. Candidates holding other acceptable qualifications (e.g. Registered Nurses) with appropriate experience may also be admitted on the completion of the Graduate Diploma.

International students admitted to candidature in the Master of Public Health will discuss their educational needs with the coordinator and may have a program of study specified which will best meet their requirements.

Core Subjects

GHMD904	Epidemiology	6
GHMD905	Social Foundations of Public Health	6
GHMD906	Quality Management for Health Services	6
GHMD912	Health Promotion	6
GHMD983	Statistics in Health Research	6
GHMD984	Health Research Methodology	6

Plus 36cp chosen from elective subjects:

Elective Subjects

GHMD903	Public Health Communication and Data Skills*	6
GHMD907	Independent Study in Public Health***	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD913	Drug Problems and Issues	6
GHMD924	Health Information Systems	6
GHMD925	Aboriginal Health Issues	6
GHMD936	Public Health Nutrition	6
GHMD937	Food Inspection for Public Health*	6
GHMD981	Maternal and Child Health in Developing Countries*	6
GHMD985	Applied Epidemiology*	6
GHMD986	Environmental Health*	6
GHMD997	Major Project***	24
ACCY969	Financial Management for Health Services	6
ECON918	Economics of Health Care	6
LAW960	Legal Studies for Professionals	6
GHMB940	Indigenous Family Studies	6
GHMB941	Indigenous Health Patterns	6
GHMB943	Health and Human Ecology	6
GHMB944	Community Resource Planning	6

Note: * These subjects are not available by Distance Education.

Note:*** Approval required by Head of Graduate School of Public Health.

On campus students will also be able to choose from subjects in Sociology, Geosciences and STS on the advice of the Course Coordinator.

Note: GHMD984 Health Research Methodology is a pre-requisite for GHMD997 Major Project. Students must have the permission of the Coordinator to undertake GHMD907 or GHMD997.

Graduate Certificate in Mental Health

The Mental Health courses are available for on-campus attendance or nationally, by distance education.

The aim of this course is to provide an introduction to advanced professional education for mental health practitioners in current legislation and policy regarding the care of people with serious mental illness and recent developments in concepts, theories, and practices of mental health intervention including assessment, diagnosis, treatment and rehabilitation.

Course Structure

The course can be undertaken part-time over one year. The Graduate Certificate will be awarded on successful completion of 24 credit points of coursework.

Articulation with the Graduate Diploma in Science (Mental Health)

Students with appropriate entry qualifications, who complete the Graduate Certificate may, on application, be granted advanced standing totalling 24 credit points towards the award of the Graduate Diploma in Science (Mental Health).

Entry Requirements

Admission to the course is normally by applicants who hold a relevant undergraduate degree or other acceptable qualifications (e.g.; Registered Nursing Certificate), together with a minimum of one year of work in a mental health service setting. In special circumstances an applicant holding other acceptable academic or professional qualifications may be admitted to studies.

A candidate for the Graduate Certificate in Mental Health shall undertake a 24 credit point program:

GHMD965	Principles and Practices of Psychosocial Rehabilitation	6
GHMD970	Comprehensive Systems of Mental Health Care	6
GHMD971	Assessment and Diagnosis in Mental Health	6
GHMD973	Case Management in Mental Health	6

Graduate Diploma in Science (Mental Health)

The Mental Health courses are available for on-campus attendance or nationally, by distance education.

The Graduate Diploma in Science (Mental Health) program responds to national priorities in order to equip the mental health workforce and the general health workforce, for comprehensive, community-based treatment and rehabilitation of people suffering form mental illness. The Graduate Diploma in Science (Mental Health) aims to produce students with the clinical and professional competence to work across the full range of mental health services and to provide assessment, diagnosis, case management, treatment, rehabilitation and support for people with mental health illness and their families in line with the National Mental Health Policy and Plan.

Course Structure

The course can be undertaken full-time over one year or part-time over two years. As with the Master of Science (Mental Health) degree, the Graduate Diploma is designed with the part-time student in mind, in that wherever possible, the two subjects of the part-time load can be undertaken by attendance at the campus for one half-day per week, from 1.30pm.

The course requires the completion of 48 credit points including six core subjects (36 credit points) and 2 electives (12 credit points). Relevant subjects from other programs may also be taken as electives, with the approval of the Head of Department.

Entry Requirements

Admission to the course is normally by applicants who hold a relevant undergraduate degree or other acceptable qualifications (eg. Registered Nursing Certificate), together with a minimum of one year of work in a mental health service setting. In special circumstances an applicant holding other acceptable academic or professional qualifications may be admitted to studies.

Articulation with the Master of Science (Mental Health)

The Graduate Diploma articulates with the Master of Science (Mental Health) in that students who successfully complete the Diploma may apply for advanced standing in 48 credit points of course work in the Master of Science degree. (Note that GHMD984 is a pre-requisite for enrolling in the Major Project).

Core Subjects

GHMD905	Social Foundations of Public Health	6
GHMD965	Principles and Practices of Psychosocial Rehabilitation	6
GHMD970	Comprehensive Systems of Mental Health Care	6
GHMD971	Assessment and Diagnosis in Mental Health	6
GHMD973	Case Management in Mental Health	6
GHMD983	Statistics in Health Research	6

together with 2 subjects from the following:

Elective Subjects

ACCY969	Financial Management for Health Services	6
ECON918	Economics of Health Care	6
GHMD904	Epidemiology	6
GHMD906	Quality Management for Health Services	6
GHMD907	Independent Study in Public Health	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD913	Drug Problems and Issues	6
GHMD924	Health Information Systems	6
GHMD925	Aboriginal Health Issues	6
GHMD976	Supervised Clinical Practice	6
GHMD984	Health Research Methodology	6

Master of Science (Mental Health)

The Mental Health courses are available for on-campus attendance or nationally, by distance education.

The degree places emphasis on quality clinical and practical training both at the individual and population level. It emphasises the development of essential skills and conceptual knowledge needed for mental health research. The postgraduate mental health program responds to national priorities to equip the mental health workforce for comprehensive, community-based treatment and the rehabilitation of people suffering from serious mental health illness. This program is multidisciplinary and in line with the National Mental Health Policy and Plan, provides knowledge and supervised skills for case-management, rehabilitation, health services management and mental health research.

Course Structure

The course can be undertaken full-time over 18 months or part-time over 3 years. The Master of Science (Mental Health) degree is designed with the part-time student in mind within the on-campus program. There are approximately four hours of contact per week for the part-time on campus candidate and wherever possible, classes are scheduled on one afternoon per week beginning at 1.30pm.

The course requires the completion of 72 credit points including 6 core subjects (36 credit points) and 2 electives (12 credit points). The remaining 24 credit points can be gained in one of two ways:

- by undertaking 4 approved elective subjects totalling at least 24 credit points; or
- by undertaking GHMD997 Major Project (24 credit points).

Note: GHMD984 Health Research Methodology is a pre-requisite for the Major Project. Students must have the permission of the Co-ordinator to undertake GHMD997.

Entry Requirements

The course is multidisciplinary and is open to appropriately qualified health professionals interested in further education and training in mental health.

Entry requirements include:

- a relevant three-year undergraduate degree or equivalent from an approved tertiary institution;
- two years (minimum) of relevant experience in the field.

Candidates satisfactorily completing the Graduate Diploma in Science (Mental Health) may seek admission to the Master of Science program.

Core Subjects

GHMD905	Social Foundations of Public Health	6
GHMD965	Principles and Practices of Psychosocial Rehabilitation	6
GHMD970	Comprehensive Systems of Mental Health Care	6
GHMD971	Assessment and Diagnosis in Mental Health	6
GHMD973	Case Management in Mental Health	6
GHMD983	Statistics in Health Research	6

together with at least two subjects from the following:

Elective Subjects

ACCY969	Financial Management for Health Services	6
ECON918	Economics of Health Care	6
GHMD904	Epidemiology	6
GHMD906	Quality Management for Health Services	6
GHMD907	Independent Study in Public Health	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD913	Drug Problems and Issues	6
GHMD924	Health Information Systems	6
GHMD925	Aboriginal Health Issues	6
GHMD976	Supervised Clinical Practice	6
GHMD984	Health Research Methodology	6

together with either 24 credit points of further course work from the elective subjects listed previously, or
GHMD997 Major Project 24
Note: GHMD984 Health Research Methodology is a pre-requisite for GHMD997 Major Project.

Subject to approval, relevant subjects from other programs may also be taken as electives.

Graduate Certificate in Health Management

Not on offer to students commencing in 2003

The Health Management courses are available for on-campus attendance or nationally, by distance education. The aim of this course is to provide an introduction to advanced professional education for health service managers in the concepts, theories, approaches and practices of health policy and management.

Course Design

The course provides students with the opportunity to gain a qualification in health service management in a flexible manner, including a wide choice of subjects and a manageable investment of time and money.

Articulation with the Master of Health Management or Master of Science (Health Policy and Management)

Students who complete the Graduate Certificate may, on application, be granted advanced standing totalling 24 credit points towards the award of the Master of Health Management or Master of Science (Health Policy and Management).

Entry Requirements

Entrants to the course normally hold a three-year undergraduate degree (or equivalent) together with a minimum of two years of relevant work experience. In special circumstances an applicant holding other acceptable academic or professional qualifications and with relevant work experience of not less than two years may be admitted as a candidate.

Course Structure

The Graduate Certificate will be awarded on successful completion of 24 credit points of course work selected from the following subjects.

Two subjects selected from:

GHMD906	Quality Management for Health Services	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD924	Health Information Systems	6

Two subjects selected from:

TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
ECON918	Economics of Health Care	6

Professional Recognition

For members of the Australian College of Health Service Executives, successful completion of individual subjects attracts Continuing Professional Development (CPD) credit.

Master of Health Management

Not on offer to students commencing in 2003.

The Health Management courses are available for on-campus attendance or nationally, by distance education.

Course Structure

The Master of Health Management program is designed for those in sectional, clinical or departmental management positions, or for those health professionals with relevant experience who wish to extend their activities into health policy and management.

The Master of Health Management is a 48 credit point multi-disciplinary, course work degree. The program is offered both full-time (two sessions) and part-time (four sessions) comprised of subjects from the Graduate School of Public Health and the Business School.

Entry Requirements

Candidates are required to have a three-year undergraduate degree in a relevant discipline, or equivalent, plus a total of two years full-time relevant work experience.

In special circumstances, candidates holding other acceptable academic or professional qualifications, plus a minimum of two years full-time relevant work experience, may be admitted to the program.

Core Subjects

GHMD906	Quality Management for Health Services	6
GHMD908	Health Service Planning and Evaluation	6
GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD924	Health Information Systems	6
TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
ECON918	Economics of Health Care	6

plus one elective

Master of Science (Health Policy & Management)

Not on offer to students commencing in 2003.

The Health Policy and Management courses are available for on-campus attendance or nationally, by distance education through the University of Wollongong Distance Education Programs or via Open Learning Australia (OLA).

The aim of this degree is to provide advanced study that develops professional health service managers and enhances their competence for senior management roles in the health industry. The degree is intended for graduates in health service management and other related health professions wishing to pursue a management career.

Professional Recognition

The Australian College of Health Service Executives and the Royal Australian College of Medical Administrators have accredited this degree.

Course Structure

The course develops the candidate's ability to address health service management problems and challenges in a logical and analytical manner. It emphasises the social and environmental factors impacting on the manager's task and the dynamic and pluralistic nature of health service management. The candidate acquires concepts and knowledge relevant to the work of senior health service managers.

The course requires the completion of 72 credit points including eleven core subjects (66 credit points) and one elective subject (6 credit points).

Entry Requirements

Entrants to the course should normally hold a three-year undergraduate degree (or equivalent) in a relevant discipline together with a minimum of two years of relevant work experience. In special circumstances, an applicant holding other acceptable academic qualifications and with relevant work experience of not less than two years may be admitted as a candidate.

Core Subjects

GHMD906	Quality Management for Health Services	6
GHMD908	Health Services Planning and Evaluation	6
GHMD909	Comparative Health Systems: Policies and Politics	6
ECON918	Economics of Health Care	6
GHMD924	Health Information Systems	6
TBS901	Accounting for Managers	6
TBS903	Managing People in Organisations	6
LAW960	Legal Studies for Professionals	6
GHMD983	Statistics in Health Research	6
GHMD904	Epidemiology	6

and two electives. Please see the Program Co-ordinator for the list of electives available.

Note: Membership of the Australian College of Health Service Executives requires completion of GHMD904 Epidemiology.

Graduate Diploma in Science
(Environmental Health)

The Graduate Diploma in Science (Environmental Health) is designed to cater for environmental health professionals in government or industry settings who want to upgrade their knowledge, or for Public Health Officers with an interest in environmental issues.

Course Structure

The course can be undertaken full-time over one year or part-time over two years. The course is designed with the part-time student in mind. The course requires a total of at least 48 credit points by satisfactory completion of subjects outlined in the accompanying schedule.

Candidates who satisfactorily complete the Graduate Diploma may apply for admission to the Master of Science (Environmental Health). The three core subjects of the Graduate Diploma also form part of the core subject requirements of the Master program.

Entry Requirements

Entrants to the course normally hold a relevant degree or other acceptable qualifications, together with one year of work in a relevant health area.

Core Subjects

GHMD904	Epidemiology	6
GHMD986	Environmental Health	6
GHMD983	Statistics in Health Research	6

plus 30 cp chosen from the following electives:

Elective Subjects

CIVL495	Public Health Engineering	6
ENVI921	Environmental Planning	8
GHMA921	Workplace Injury Management	6
GHMA922	Occupational Hygiene and Industrial Toxicology	6
GHMA923	OH& S Risk Management	6
GHMD903	Public Health Communication and Data Skills	6
GHMD905	Social Foundations of Public Health	6
GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD912	Health Promotion	6
GHMD985	Applied Epidemiology	6
GHMD984	Health Research Methodology	6
GHMD937	Food Inspection for Public Health	6
LAW960	Legal Studies for Professionals	6
STS929	Studies in Resource and Environmental Policy	8

Master of Science (Environmental Health)

Many government and industry institutions have legal obligations in environmental health. This course is designed for those wishing to pursue a career in environmental health or for those already in the field who wish to improve their understanding of health and environmental risk assessment and management, environmental epidemiology and toxicology, with a focus on health rather than the technical aspects of environmental science.

Course Structure

A candidate for the Master of Science (Environmental Health) will successfully complete a 72 credit point program. This includes 48 credit points of Core Subjects. The remaining 24 credit points can be gained in one of two ways:

- by undertaking 24 credit points of elective subjects; or
- by undertaking GHMD997 Major Project (24 credit points).

Entry Requirements

Pre-requisites to enrol in the Masters Program include a foundation in chemistry, mathematics and health sciences. Entrants to the course should normally hold a three-year undergraduate degree (or equivalent) in a relevant discipline.

Enrolment in the Major Project will be contingent on availability of supervision and evidence of former successful research or project work by the student. The content matter must also agree with the subjects covered in the current research program of the University.

Core Subjects

ENVI921	Environmental Planning	8
GHMA923	OH&S Risk Management	6
GHMD904	Epidemiology	6
GHMD983	Statistics in Health Research	6
GHMD984	Health Research Methodology	6
GHMD985	Applied Epidemiology	6
GHMD986	Environmental Health	6

together with either 30 credit points of further course work from the elective subjects listed below, or one elective plus GHMD997 Major Project 24

Enrolment in the Major Project will be contingent on the availability of supervision of the project and evidence of former successful research or project work by the student. The content matter must also fit with the research program carried out at the University.

The option exists to satisfy requirements for MSc (Environmental Health) by coursework only. This would require the substitution for the Major Project of 24 cp from the following electives:

Elective Subjects

GHMD903	Public Health Communication and Data Skills	6
GHMD905	Social Foundations of Public Health	6

GHMD906	Quality Management for Health Services	6
GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD912	Health Promotion	6
GHMD937	Food Inspection for Public health	6
LAW960	Legal Studies for Professionals	6
STS929	Studies in Resource and Environmental Policy	8
CIVL495	Public Health Engineering	6
GHMA921	Workplace Injury Management	6
GHMA922	Occupational Hygiene and Toxicology	6

or other subjects offered by the University with the approval of the Head of the Graduate School of Public Health.

The Smart Foods Centre

Courses Offered

Doctor of Philosophy
Graduate Certificate in Nutrition Management
Master of Nutrition Management
Master of Science (Nutrition Management)
Master of Business Administration

Current Research Areas

Nutrient Sources:

- Plant biology and livestock growth and metabolism studies to provide leaner meat products and improve the delivery of beneficial nutrients into the food supply.
- Identification of novel food plants and enhancement of nutrient levels/balance in plants, meat and eggs.

Key Nutrients:

- Laboratory and community based studies to examine actions and health benefits of fatty acids, antioxidants, phytoestrogens and other specific nutrients. Includes biochemical and physiological investigations into processes of oxidation and metabolism as they relate to heart, vascular and muscle function in health and disease.
- Bioavailability: Facilities are in place for the identification and accurate measurement of nutrients in foods and the human body.

Clever Cuisine:

- Research aimed at bringing together beneficial macro and micronutrients into a whole cuisine optimised for metabolic fitness and prevention of conditions like diabetes, obesity, hypertension and cardiac disease.

Consumer Insights:

- Identification and understanding of factors that influence healthy food choices, including good policy, food labelling and consumer information sources combined with surveys of consumer preferences and sensory evaluation of foods.

Doctor of Philosophy

Study at the doctoral level, usually for a minimum of 3 years full-time, is by advanced research thesis. Candidates are expected to develop a research thesis that leads to an original and significant contribution to the knowledge in their particular field.

To be eligible for admission to the program, candidates must have achieved Honours Class II Division 2 or higher in their undergraduate degree, or have completed the Master of Science -Research. In addition, a primary supervisor from the Department must be identified prior to commencing the degree.

Years 1-3

GHMA999	Major Thesis	48
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Graduate Certificate in Nutrition Management

Drawing on cutting edge Nutrition research, students will be able to critically examine key issues relating to food product development in Australia today, and apply new knowledge and skills to developments within their own work environments.

The Graduate Certificate in Nutrition Management comprises 2 nutrition and 2 management subjects (24cp) over two sessions (part-time). This is offered in flexible delivery mode, by building up subjects through completion of short courses. The Graduate Certificate in Nutrition Management is a full fee paying program.

- (i) Applicants must possess an undergraduate degree from a recognised Australian university or institution of equivalent standing with a grade average of at least 60%, or;
- (ii) Applicants must possess an undergraduate degree from a recognised Australian university or institution of equivalent standing with a grade average between 50% and 59% and must also have completed a minimum of two years full time relevant work experience (managerial or supervisory in nature and/ or which carries a level of responsibility) after graduation.

In special circumstances, applicants who hold other academic or professional qualifications and have a minimum of five years full-time or ten years part-time relevant work experience may also be granted admission to the program.

International students must have the following English Language qualifications or equivalent — an IELTS band of 6.5 with a minimum of 6.0 in reading, writing, listening and speaking.

Course Structure

Two subjects chosen from:

SFC901	Contemporary Issues in Food and Nutrition	6
SFC902	Food Regulation and Policy in Australia	6

SFC903	Nutrition Research	6
SFC904	Nutrition in Food Innovation	6
Plus two subjects chosen from:		
TBS901	Accounting for Managers	6
TBS902	Statistics for Decision Making	6
TBS903	Managing People in Organisations	6
TBS904	Marketing Management	6

Students should speak to an academic adviser regarding full-time enrolment.

Master of Nutrition Management

Drawing on cutting edge Nutrition research, students will be able to critically examine key issues relating to food product development in Australia today, and apply new knowledge and skills to developments within their own work environments.

The Master of Nutrition Management is available part time over four sessions. In addition, students may undertake another session of work including a project to receive a Master of Science (Nutrition Management) or undertake the remaining requirements of a Master of Business Administration program to achieve this as an additional qualification.

The Master of Nutrition Management comprises 4 nutrition and 4 management subjects (48cp), offered in flexible delivery mode. The Master of Nutrition Management is a full fee paying program.

- (i) Applicants must possess an undergraduate degree from a recognised Australian university or institution of equivalent standing with a grade average of at least 60%, or;
- (ii) Applicants must possess an undergraduate degree from a recognised Australian university or institution of equivalent standing with a grade average between 50% and 59% and must also have completed a minimum of two years full time relevant work experience (managerial or supervisory in nature and/ or which carries a level of responsibility) after graduation.

In special circumstances, applicants who hold other academic or professional qualifications and have a minimum of five years full-time or ten years part-time relevant work experience may also be granted admission to the program.

International students must have the following English Language qualifications or equivalent - an IELTS band of 6.5 with a minimum of 6.0 in reading, writing, listening and speaking.

Course Structure

SFC901	Contemporary Issues in Food and Nutrition	6
SFC902	Food Regulation and Policy in Australia	6
SFC903	Nutrition Research	6
SFC904	Nutrition in Food Innovation	6
TBS901	Accounting for Managers	6
TBS902	Statistics for Decision Making	6

TBS903	Managing People in Organisations	6
TBS904	Marketing Management	6

Students should speak to an academic adviser regarding full-time enrolment.

Master of Science (Nutrition Management)

The Master of Science (Nutrition Management) is a full fee paying program.

- (i) Applicants must possess an undergraduate degree from a recognised Australian university or institution of equivalent standing with a grade average of at least 60%, or;
- (ii) Applicants must possess an undergraduate degree from a recognised Australian university or institution of equivalent standing with a grade average between 50% and 59% and must also have completed a minimum of two years full time relevant work experience (managerial or supervisory in nature and/ or which carries a level of responsibility) after graduation.

In special circumstances, applicants who hold other academic or professional qualifications and have a minimum of five years full-time or ten years part-time relevant work experience may also be granted admission to the program.

International students must have the following English Language qualifications or equivalent — an IELTS band of 6.5 with a minimum of 6.0 in reading, writing, listening and speaking.

Course Structure

Completion of the Master of Nutrition Management plus:
GHMA997 Major Project 24
or
4 electives chosen from the Master of Business Administration subjects or other subjects approved by the Associate Director (Education).

Master of Business Administration

Students who have completed the requirements of the Master of Nutrition Management may progress to the MBA with 48 credit points of advanced standing.

For admission directly to the Master of Business Administration:

- (i) Applicants must possess an undergraduate degree from a recognised Australian university or institution of equivalent standing with a grade average of at least 60%, or;

- (ii) Applicants must possess an undergraduate degree from a recognised Australian university or institution of equivalent standing with a grade average between 50% and 59% and must also have completed a minimum of two years full time relevant work experience (managerial or supervisory in nature and/ or which carries a level of responsibility) after graduation.

In special circumstances, applicants who hold other academic or professional qualifications and have a minimum of five years full-time or ten years part-time relevant work experience may also be granted admission to the program.

International students must have the following English Language qualifications or equivalent - an IELTS band of 6.5 with a minimum of 6.0 in reading, writing, listening and speaking.

The Master of Business Administration is a full fee paying program. Subjects are as follows:

Completion of the Master of Nutrition Management plus:		
TBS905	Economic Analysis of Business	6
TBS906	Information Systems for Managers	6
TBS908	Supply Chain Management	6
TBS921	Strategic Decision Making	6
TBS920	International Business	6

FACULTY OF HEALTH & BEHAVIOURAL SCIENCE

Note: Except where shown otherwise all subjects are offered on the Wollongong Campus.

BIOMEDICAL SCIENCE

GHMA906 Research Projects 8cp

Autumn / Spring / Annual / Spring 2003 - Autumn 2004

Contact Hours: 5 hours per week minimum

Assessment: Research report and performance

Subject Description: A one semester research project designed to develop an understanding of the scientific process through the experience of research. Students will design, propose, conduct, analyse, interpret and then present the results of a research project which can be related to the topic of their Major Thesis.

Subject Objectives: On 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; better understand the scientific process through the experience of research.

GHMA909 Practicum 8cp

Autumn / Spring / Annual

Contact Hours: 5 hours per week minimum

Assessment: Report, Seminars, Research Performance

Subject Description: A subject which introduces student's to their supervisor's laboratory and allows for the development of technical skills and procedures critical to the success of their Major Project. If the student is undertaking a non-laboratory based thesis, another relevant subject may be substituted for GHMA909 with the approval of the HOD.

Subject Objectives: On successful completion of this subject students should be able to demonstrate skills and techniques associated with a specialised area acquired through practical experience.

GHMA913 Special Topics 8cp

Autumn / Spring / Annual

Contact Hours: 5 hours per week minimum

Assessment: Literature critique in specified research area.

Subject Description: A subject which develops the students' ability to examine, access, interpret and evaluate primary and secondary source research data and ideas. Students will write an extensive critical literature review in the scientific style in the area related to their Major Thesis.

Subject Objectives: On successful completion of this subject students should be able to: - access relevant data and information through appropriate databases and other sources. - organise, evaluate and synthesise existing data and other information. - produce a literature critique in a scientific style.

GHMA914 Ergonomics 8cp

Autumn

Exclusions: BEXS401

Assessment: Major Assignment 30%; Presentation 20%; Minor Assignment 10%; Exam 40%

Subject Description: This subject will analyse the relationship between the nature of work and the environment. Topics covered will include the design of work stations and jobs and the capacities and limitations of the human body.

GHMA920 Behavioural Change: Human Factors in OH&S 6cp

Autumn

Contact Hours: 3 hours per week

Assessment: Literature Critique 20%; Assignments 50%; Seminar Report 15%; Seminar Presentation 15%

Subject Description: Introduces the concept of the Accident Phenomenon and how individual behaviour relates. Behavioural modification techniques will be examined and demonstrated by experienced practitioners. The students gain skills in behavioural identification, understanding activators and promoting effective behaviour in OH&S. Students will research behavioural aspects of major accidents so as to develop programs that influence behaviour at work.

Subject Objectives: On successful completion of this subject students should be able to apply the concepts and principles of behavioural learning so as to directly influence behavioural modification and acceptance of behavioural change related to Occupational Health and Safety in the workforce.

GHMA921 Workplace Injury Management 6cp

Autumn

Contact Hours: 3 hours per week

Assessment: Literature Critique 20%; Assignment 20%; Seminar Report 10%; Seminar Presentation 10%; Final Exam 40%

Subject Description: Topics include the history and development of occupational health and safety, legislation, accident investigation, workplace injury management, and roles and responsibilities, functions and activities.

Subject Objectives: On successful completion of this subject students should have a solid understanding of the concepts and foundations of Workplace Injury Management. They will have skills to function as a Return to Work Coordinator and relate to service providers.

GHMA922 Occupational Hygiene and Toxicology 6cp

Spring

Contact Hours: 3 hours per week

Assessment: Test paper 10%; Exercise 20%; Exercise 20%; Exercise 20%; Final Exam 30%

Subject Description: Introduces the fundamental of basic anatomy and toxicology, routes of entry into human body, target organs, dose effect, threshold values and mechanisms of disease. Workplace exposure standards will be explored and the Hierarchy of Control to eliminate the hazard or reduce the level risk associated with exposure. Techniques for measuring dusts, gases, vapours, microbiological hazards and physical agents will be explored with practical demonstrations held.

Subject Objectives: On successful completion of this subject students should gain an understanding of how contaminants pose a risk to our health, the ways in which they enter the human body and the "dose-effect" relationship.

They will be capable of identifying suitable monitoring techniques, and equipment used to quantify exposure, and factors which can influence measurements such as worker activity, temperature and sampling duration.

GHMA923 OH&S Risk Management 6cp

Spring

Contact Hours: 2 hours per week

Assessment: Seminar (Report 15%, Presentation 15%) 30%; 2 Topical Tests (2 x 10%) 20%; 2 Assignments (2 x 25%) 50%

Subject Description: This subject will explore the nature of risk, hazard identification, risk assessment and control. Suitable hazard studies (Hazpac & Job Safety Analysis) and risk modeling techniques (HAZOP, HAZAN & PHA) will be introduced to allow for the prediction of risk and the development of risk management strategies.

Subject Objectives: On successful completion of this subject students should acquire an understanding of the concepts of risk, identifying and selecting the appropriate hazard study and risk modeling technique for the purpose of managing risks. There will be particular focus upon the Australian/New Zealand Standard for Risk Management: AS/NZS 4360, 1999.

GHMA929 Exercise Psychology and Dietary Counselling 8cp

Autumn

Contact Hours: 4 hours of Lectures / Seminars per week

Co-requisites: GHMA934 or BND434

Assessment: Counselling Practical Assessment 35%; Self Directed Learning Activities 15%; Psychology component 50%

Subject Description: The subject will combine an understanding of the central features of sports psychology with basic skills in dietary counselling and small group education in the context of diet and exercise. Students will study personality and situational factors influencing participation in sport, and cognitive and behavioural influences on the promotion of healthy lifestyles. They will counsel individuals in dietary change and conduct small group education programs for community members.

GHMA930 Community and Public Health Nutrition 8cp

Autumn

Contact Hours: 2 hours Lectures / Seminars per week

Pre-requisites: PHN203 or POP222

Exclusions: BMS310

Assessment: Activity Journal 20%; Essay 40%; Case Study 40%

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.

GHMA931 Nutrients and Metabolism 8cp

Autumn

Contact Hours: 4 hours of Lectures, 2 hours Practical per week

Pre-requisites: BIOL214 and BMS202; or equivalent

Exclusions: BMS311

Assessment: Examination 30%, Practical Assessment 30%, Presentations 10%; 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 understand various concepts such as bioavailability, recommended dietary intakes, dietary guidelines and basic metabolism; discuss the importance of quality and types of fat, carbohydrate and dietary fibre; search for relevant literature using various databases; critically evaluate the literature; understand nutrient requirements that can then be expressed as food recommendations and whole diet recommendations; and develop recommendations for a particular nutrient based on available scientific literature.

GHMA932 Research in Human Nutrition 8cp **Annual / Autumn**

Contact Hours: 8 x 4 hour workshops

Pre-requisites: STAT151 or STAT252 or equivalent

Exclusions: BMS312

Assessment: Literature review 20%; Scientific report 40%; Presentation of proposal 20%; Research proposal 20%

Subject Description: The 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.

GHMA933 Communication in Healthcare Practice 8cp

Autumn

Contact Hours: 4 hours of Lectures / Seminars per week

Co-requisites: GHMA934 OR BND434

Exclusions: BND433

Assessment: Assessment in Small Group 35%; Assessment in Counselling 35%; Assessment in Team Activities 30%

Subject Description: The subject will introduce you 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 you should prepare for each activity.

In order to promote an understanding of how people learn in small groups, you 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: 1. Outline contemporary theory on how people learn, and apply this to the design of a small group education session in a healthcare setting. 2. Conduct and evaluate a small group education session. 3. Analyse the communication processes displayed in healthcare counselling. 4. Conduct a counselling session at a basic level. 5. Prepare for media interviews and write press releases. 6. Participate constructively in group discussions in a range of settings where healthcare providers have a significant role.

GHMA934 Dietetics

8cp

Autumn

Contact Hours: 6 hours of Lectures / Seminars per week

Pre-requisites: BMS311 & BMS312, or GHMA931 & GHMA932

Co-requisites: GHMA930

Exclusions: BND434

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.

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.

GHMA938 Practicum in Dietetics and Exercise Science A

16cp

Contact Hours: Not on offer in 2003

Pre-requisites: GHMA934 OR BEXS402

Assessment: 100% practical experience. Grade of Satisfactory or Unsatisfactory given.

Subject Description: This subject comprises a practicum of at least 10 weeks duration which is spent in community health/fitness centres, hospitals and other food-related organisations. The students will be under the supervision of experienced practitioners appropriate to the placement requirements ie dietitians and exercise scientists. This placement is designed to develop the student's skills and competencies in a range of areas including provision of community nutrition programs and the design and delivery of exercise interventions for the general community. 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 /Exercise Scientist 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. This placement also partly meets requirements of the Dietitians Association of Australia, the balance of those requirements being met through the second placement program conducted in the final year of the MSc(Dietetics and Exercise Science) course.

GHMA935 Food Service and Dietetics Management

8cp

Autumn

Pre-requisites: BMS311 & BMS312, or GHMA931 & GHMA932

Exclusions: BND435

Assessment: Menu Planning Assignment 25%; Multiple Choice Quiz 10%; Group Consultancy 25%; Management Assignment 15%; TAFE 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.

GHMA937 Practical Studies in Nutrition and Dietetics

24cp

Spring / Autumn / Annual / Spring 2003 - Autumn 2004

Contact Hours: 21 week Placement 35 hours of Seminars

Pre-requisites: GHMA933 and GHMA934 and GHMA935

Exclusions: BND437

GHMA939 Practicum in Dietetics and Exercise Science B

16cp

Contact Hours: Not on offer in 2003

Assessment: 100% practical experience. Grade of Satisfactory or Unsatisfactory given.

Subject Description: This subject comprises a practicum of at least 10 weeks duration which is spent in the health care system or within organisations providing services for people with pathology. The students undertaking this subject will be under the supervision of experienced practitioners appropriate to the placement requirements ie nutritionists, dietitians and exercise scientists.

This placement is designed to develop the student's skills and competencies including provision of hospital-based nutrition and food service programs and the design and delivery of nutritional and exercise interventions for clients with pathology such as post-coronary patients, patients attending impatient obesity clinics and those people experiencing musculoskeletal pathology. This subject completes placement requirements of the Dietitians Australian Association of Australia and Australian Association for Exercise and Sports Science.

GHMA951 Exercise Rehabilitation I: Musculoskeletal **8cp**

Autumn

Contact Hours: 2 hours of Lectures, 3 hours Practical

Pre-requisites: BEXS351 and BMS203

Exclusions: BEXS451

Assessment: Theory Exam 25%; Clinical Exam 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. It is essential for students undertaking this subject to have excellent knowledge in Functional Musculoskeletal Anatomy and Exercise Physiology and Prescription. Students without this requisite knowledge will have difficulty completing this subject.

Subject Objectives: 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. Competent movement analysis of isolated and combined movement. Understanding of common musculoskeletal pathologies and intervention. Competence in designing and implementing effective exercise programs to maximise the potential functional gain of patients with musculoskeletal pathologies.

GHMA952 Exercise Rehabilitation II: Cardiorespiratory & Neurological **8cp**

Autumn

Contact Hours: 2 hours of Lectures, 3 hours Practical per week

Pre-requisites: BMS344 and BMS346 and BEXS352

Restrictions: For Exercise Science and Rehabilitation students plus authorised postgraduate students.

Exclusions: BEXS452

Assessment: Assignments 50%; Exams 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.

GHMA997 Major Project **24cp** **Spring / Autumn**

Contact Hours: 2 hours of Tutorials in Weeks 1-3 and 11-13

Pre-requisites: Satisfactory prior knowledge of research methods. Consult academic adviser.

Assessment: Report 80%; Poster 10%; Presentation 10%

Subject Description: Group or individual research project designed to give students an intensive one session research experience under the guidance of an academic supervisor. By the end of the session students will be able to - 1) Prepare a research proposal; 2) Present proposal in concise manner; 3) Prepare scientific report on research; 4) Present report at a research seminar; 5) Develop a poster.

GHMA998 Introduction to Major Thesis **24cp**

Contact Hours: Not on offer in 2003

Pre-requisites: GHMA906 and GHMA909 and GHMA913

Assessment: Research Proposal 40%; Oral Presentation 30%; Supervisor's Report 30%; Research (Initiation of major thesis)

Subject Description: This subject GHMA998, along with GHMA999-Major Thesis (48cp), constitute the 72cp research thesis component of the 96cp MSc (Hons) program. Students will be required to prepare, in a scientific style, a major research proposal document comprising of (i) a critical evaluation of existing research literature, (ii) clear articulation of hypothesis/es and ideas, (iii) a thorough detailing of all proposed experimental and statistical methods and (iv) a clear indication of the expected outcomes and sequencing/timing of the research plan. Students will also be required to present a research proposal seminar to departmental staff and postgraduate students. The oral presentation, along with the written proposal, will be evaluated by the department's Academic Program Committee (APC) and once approved the student will commence their experimental plan as outlined in the proposal document.

Subject Objectives: On successful completion of this subject students should be able to: 1. Critically analyse research literature, devise hypotheses and design appropriate research methodologies. 2. Prepare a major written research proposal in the scientific style. 3. Prepare and present an oral presentation outlining and, if required, defending the proposed research and its design. 4. Evaluate feedback and incorporate pertinent aspects into the proposed research. 5. Apply research skills to commence proposed research plan.

GHMA999 Major Thesis **48cp** **Annual / Spring / Autumn**

Assessment: Refereed Thesis

Subject Description: The Major Thesis is an individual research endeavour, under supervision. The subject involves an initial proposal process (within the first 6 months of the first year of enrolment only), completion of a research plan and production of a scholarly thesis. The proposal (written and oral) requires candidates to i) critically evaluate existing literature, ii) clearly articulate hypothesis/es and ideas,

iii) detail proposed experimental and statistical methods and, iv) clearly articulate expected outcomes, plus sequencing and timing of the research plan. The proposal document and oral presentation are critically evaluated, assessed and feedback provided to candidates before commencement of the major part of the research plan. Based on passing the proposal process, candidates commence their experimental plan as outlined in the proposal document. Both annual progress and final (after research completion) seminars are required.

NURSING

GHMB900 Nursing: The Professional Context 6cp

Autumn / Spring

Contact Hours: 3 hours per week

Subject Description: Students will be encouraged to explore nursing topics currently creating controversy and debate within the professional milieu of the nursing profession. Issues which impact on nursing education and management will be examined. Topics will include the career structure for the nursing profession and the role of the nurse within this context.

GHMB902 Nursing Management 6cp

Autumn

Contact Hours: 3 hours per week

Subject Description: The basic concept of nursing administration at the ward, middle management, and at senior levels will be introduced. Differences in management style, ward design and its impact on care delivery, nursing care delivery assignments, and nursing involvement in the public and private sector will be examined.

GHMB903 Scientific and Qualitative Developments in Acute Care Nursing 6cp

Spring

Contact Hours: 3 hours per week

Subject Description: Investigates technological, biological, psychological and sociological developments that have created an impact in acute care nursing in recent times. Insights into specific technology and pharmacology used for diagnostic or therapeutic purposes by nurses and the Health team will be targeted, including their characteristics, uses and efficacies within an holistic nursing care framework.

GHMB904 Modalities of Care: Mental Health 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject addresses the most frequently used of therapeutic modalities from mental health nursing perspectives. Selected theoretical approaches are discussed for each treatment modality. Specific characteristics of each type of therapy are presented. In addition, the psychiatric nurse's role and goals for therapy are described and analysed.

GHMB905 Special Topic in Nursing 12cp

Annual / Spring / Autumn

Contact Hours: 3 hours per week

Restrictions: Entry on advice from Postgraduate Coordinator only

Subject Description: This is a combined program of research and coursework leading to the completion of a minor project. Students will be expected to work closely with a supervisor on a project where a common interest exists.

GHMB906 Acute Care Nursing: Reflections on Practice 6cp

Autumn

Contact Hours: 3 hours per week

Subject Description: Focuses on relevant theories, themes and issues that have a practical bearing upon acute care nursing, and on models of acute care nursing that address evidence based practice. Practical aspects include pathophysiology of the Cardiovascular, Respiratory, Nervous and Alimentary systems and Acid Base balance; and Introduction to Electrocardiograph Interpretation.

GHMB907 Fundamental Concepts in Developmental Disability 6cp

Autumn

Wollongong

Flexible

Contact Hours: 3 hours per week

Subject Description: Provides the basic scientific knowledge on which developmental disability practice is based. Emphasis upon the student gaining sound understanding of the nature of developmental disability within a broad social context. The body of knowledge which defines and identifies the nature of the group and the philosophical, ethical and legal foundations for practice will be addressed in this course.

GHMB908 Applied Behavioural Science for Developmental Disability Practice 6cp

Spring

Wollongong

Flexible

Contact Hours: 3 hours per week

Pre-requisites: GHMB907 Fundamental Concepts in Developmental Disability

Subject Description: Developmental disability practice makes extensive use of such skills and roles as assessment, programming, teaching, behaviour management and supportive counselling. To use these skills effectively, the student requires a knowledge of selected principles drawn from the behavioural sciences. This subject will provide the necessary theoretical framework, together with an emphasis on practical application and problem-solving skills.

GHMB910 Contemporary Issues in Developmental Disability 6cp

Spring

Wollongong

Flexible

Contact Hours: 3 hours per week

Pre-requisites: GHMB907 Fundamental Concepts in Developmental Disability

Subject Description: It is vitally important that practitioners in the field of developmental disability are willing to critically assess current practice and to objectively consider other service options. There are also a number of controversial issues in relation to the rights and responsibilities of people with developmental disabilities that must be addressed. This course will require independent and thoughtful analysis of such issues and critical assessment of current practice.

GHMB920 Applied Midwifery Studies 12cp
Annual**Pre-requisites:** GHMB921 and GHMB922 (Part-time students)**Co-requisites:** GHMB924, GHMB921, GHMB922 (Full-time students)**Subject Description:** This subject is designed to prepare the student as a safe beginning midwifery practitioner to care for the family throughout pregnancy, parturition and the puerperium. Clinical practice will consist of the experiences suggested by the NSW Nurses' Registration Board.**GHMB921 Reproductive Bioscience 8cp**
Annual**Contact Hours:** 2 hours per week**Subject Description:** Designed to provide students with advanced knowledge of anatomy, physiology and pathophysiology related to conception, pregnancy and parturition. Biochemical, nutritional, genetic and teratogenic influences on conception and embryonic, foetal, neonatal and maternal development will be addressed. Technology used in assessment, diagnosis and intervention at all stages of the reproductive process will be explained.**GHMB922 Psychosocial Development of the Family 8cp**
Annual**Contact Hours:** 2 hours per week**Subject Description:** This subject will provide the student with an in depth knowledge of theory and research, on psychological, sociological and cultural influences during pregnancy, birth, and the antenatal period, and the implications of this for mental health throughout the lifespan.**GHMB923 Legal and Professional Issues 6cp**
Spring**Contact Hours:** 3 hours per week**Assessment:** Combination of seminar presentation and written assessment.**Subject Description:** This subject is designed to provide students with a knowledge of legal and professional issues in relation to their area of clinical practice. Relevant Australian legislation, appropriate case law and examples of moral reasoning will be used to provide a framework for clinical decision-making.**GHMB924 Midwifery Studies 8cp**
Annual**Contact Hours:** 3 hours per week**Subject Description:** This subject provides the theoretical framework for the student to function as a safe beginning practitioner caring for childbearing women and families through pregnancy, labour and the puerperium. An evidence-based approach to clinical practice and an ability to review literature critically will be encouraged.**GHMB927 An Introduction to Human Anatomy and Physiology 6cp**
Autumn**Contact Hours:** 4 hours of Lectures, 3 hours of Lab per week**Restrictions:** Entry on advice from Postgraduate Coordinator only**Subject Description:** This subject is designed to give the student an understanding of the structure and functioning of the human body. As this is a course designed for non-medical health professionals 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. The laboratory sessions form an integral part of the course, expanding on and complementing the lectures. They allow time for more in-depth study of structure and illustrate functioning through a series of carefully designed experimental procedures.**GHMB930 Clinical Education 6cp****Contact Hours:** Not on offer in 2003**Subject Description:** The concepts and practice of clinical education will be introduced. Addressed will be issues relating to the role of the clinical educator, factors influencing student learning, teaching strategies and teaching resources in clinical settings, the clinical environment as an educational topic, and bridging the theory and practice gap. Clinical education research and the health professional responsibilities and leadership in clinical education will be discussed.**GHMB931 Clinical Supervision and Assessment 6cp****Contact Hours:** Not on offer in 2003**Subject Description:** This subject covers the theoretical and practical aspects of clinical supervision and assessment within the health service context. It introduces the concept of competency based assessment, its origins, limitations and practical applications to assessment of professional performance. Students will critically assess and utilise a range of assessment tools and develop skills in assessing students both formatively and summatively. Practice experience in supervising performance and giving feedback will be included.**GHMB940 Indigenous Family Studies 6cp****Autumn** Wollongong Flexible**Subject Description:** This subject examines traditional Aboriginal family structures, kinship systems, child-rearing practices, the role of women within the Aboriginal family and the health related situations in town-camps.**GHMB941 Indigenous Health Patterns 6cp****Spring** Wollongong Flexible**Subject Description:** This subject examines different approaches to the study of Aboriginal health, contemporary patterns of morbidity and mortality, various health services and the related needs and community empowerment.**GHMB942 Special Topic 12cp****Annual / Autumn / Spring****Subject Description:** The subject examines the factors affecting illness patterns, health area analysis, epidemiological considerations and health program delivery patterns about the topic under consideration in an Indigenous context. In addition, health audit procedures, service efficiency, service appropriateness and interagency coordination will be scrutinised in an Indigenous context.

GHMB943 Health and Human Ecology 6cp**Spring** Wollongong Flexible

Subject Description: This subject examines global health care issues that impact upon society, with particular emphasis upon Indigenous communities. Pathogenic, social, political and economic processes that underlie health and health care are discussed.

GHMB944 Community Resource Planning 6cp**Autumn** Wollongong Flexible

Subject Description: In this subject students will apply the principles of primary health care to design and develop a project for an Indigenous community. Content includes: Theoretical frameworks for community development. Application of these to community controlled organisations. Health promotion - a theoretical framework. Health promotion - application of theoretical perspectives to community controlled organisations. Needs assessment in a community controlled context. Differentiation of needs assessment strategies between mainstream health services and community controlled organisations.

GHMB945 Contemporary Indigenous Health Issues 6cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject examines health issues of importance to Aboriginal families from an historical perspective. The impact of changing policy directions upon health service provision and morbidity and mortality is also examined.

GHMB946 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.

GHMB950 Reflective Practice 1 6cp**Autumn / Spring****Contact Hours:** 3 hours per week

Restrictions: Entry on advice from Postgraduate Coordinator only

Subject Description: This Reflective Practice subject develops (or enhances existing) personal conceptual frameworks and skills of reflectivity applicable to practice, so as to enable participants to 'stand back' from situations, to see the 'whole of the moon' rather than just 'the crescent'. The subject promotes reflection upon theory and research which underpins practice, so as to enable participants to identify potential areas for practice development and meaningful research.

GHMB951 Reflective Practice 2 6cp**Autumn / Spring****Contact Hours:** 3 hours per week**Pre-requisites:** GHMB950

Restrictions: Entry on advice from Postgraduate Coordinator only

Subject Description: This subject will build on the objectives for GHMB950 (its pre-requisite) in that it will enable students to further develop skills in writing literature reviews, as the rhetoric of literature searching and analysis. The particular focus of how these skills are utilised will be very much the domain of the student. He/she will be able to decide whether they wish to develop skills of: sustaining argument(s) through an extended piece of written work; writing for publication; or, developing an evidence base for planned innovation. There will also be an opportunity for students to consider skills related to framing research questions and writing research proposals from the basis of their reflections on practice.

GHMB953 Special Topic in Nursing 6cp**Autumn / Spring****Pre-requisites:** GHMB950

Subject Description: This subject is designed for students to develop a proposal for a research study towards a Master Of Nursing - Research, and for non research students wishing to complete a minor project in a specific content area. The research students will be supervised by a lecturer who has expertise in research and chosen the field of study. The techniques of study will include library searches, an oral presentation of the proposal, and a written proposal. For non-research students the content will reflect the content area of the specified topic being studied under a supervisor. The techniques of study will include library, an oral presentation of the proposal, and a written minor project.

GHMB989 Mental Health Nursing: Clinical Principles and Practice 12cp**Spring 2003 / Autumn 2004** Wollongong On Campus**Spring 2003 / Autumn 2004** Wollongong Distance**Annual** Wollongong Flexible

Subject Description: Students will combine theoretical underpinnings of mental health with a supervised clinical practice that will provide the opportunity to develop and refine clinical skills and interventions for people seriously affected by mental illness. Requirements for the clinical practice component will be based on best practice guidelines and students will utilise a reflective model to identify areas of professional development.

GHMB990 Applied Midwifery Studies - Part 1 6cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** GHMB921 and GHMB922 (Part-time students)

Co-requisites: GHMB924, GHMB921, GHMB922 (Full-time students)

Subject Description: This subject is designed to prepare the student as an autonomous midwifery practitioner to care for the family throughout pregnancy, parturition and the puerperium. Clinical practice will consist of the experiences suggested by the NSW Nurses' Registration Board.

GHMB991 Applied Midwifery Studies - Part 2 6cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** GHMB921 and GHMB922 (Part-time students)

Co-requisites: GHMB924, GHMB921, GHMB922 (Full-time students)

Subject Description: This subject is designed to prepare the student as an autonomous midwifery practitioner to care for the family throughout pregnancy, parturition and the puerperium. Clinical practice will consist of the experiences suggested by the NSW Nurses' Registration Board.

GHMB997 Major Project 24cp
Spring / Autumn
Annual

Restrictions: Entry on advice from Postgraduate Coordinator only

Assessment: Major Project

Subject Description: This is a combined program of research and coursework leading to the completion of a major project. Students will be expected to work closely with a supervisor on a project where a common interest exists.

GHMB998 Minor Thesis 24cp
Spring / Autumn / Annual

Restrictions: Entry on advice from Postgraduate Coordinator only

Assessment: Minor Thesis

Subject Description: This is a major component of a combined coursework/thesis program in the Masters of Nursing undertaken by candidates enrolled in the Department of Nursing. A thesis must be submitted and assessed according to the Course Rules for Masters' Candidates. Thesis work is only commenced with the approval from the co-ordinator of the subject and the Head of the Nursing Department. Students will be required to present a seminar on their chosen thesis topic prior to completion of the thesis.

GHMB999 Major Thesis 48cp
Annual

Restrictions: Entry on advice from Postgraduate Coordinator only

Assessment: Major Thesis

Subject Description: A thesis must be submitted and assessed according to the Course Rules for the research degree. Thesis work is only commenced with the approval from the co-ordinator of the subject and the Head of the Nursing Department. Students will be required to present a seminar on their chosen thesis topic prior to completion of the thesis.

PSYCHOLOGY

GHMC908 Professional Issues in Psychology 4cp
Autumn

Contact Hours: 1.5 hours Seminars per week

Assessment: Report on personal learning or group process, case report on ethical or legal issues.

Subject Description: Focuses on ethical and legal issues relevant to clinical psychologists. Other areas of professional practice covered include: communication, the NSW Mental Health Act, Supervision, quality assurance and burn-out and self care.

GHMC910 Child and Family Psychology 4cp
Autumn

Contact Hours: 1.5 hours Seminars per week

Assessment: Essay on models, in class exam, case report.

Subject Description: The subject examines a range of common childhood issues and focusses on the nature of intervention within the context of typical and atypical child development from a Scientist practitioner framework. Topics will include work with children, parents and families concerned with emotional and behavioural disorders, learning difficulties, ADHD problems, anxiety disorders, and depression.

GHMC914 Thesis 48cp
Annual

Subject Description: Thesis for the Doctor of Psychology (Clinical). This subject, in conjunction with Research Project A and Research Project C, comprises the research component of the DPsych degree.

GHMC918 Thesis 48cp
Annual

Subject Description: This thesis for the Doctor of Philosophy (Clinical) requires the equivalent of 5.5 full-time sessions of study or its part-time equivalent.

GHMC919 Clinical Applications of Health Psychology 4cp
Autumn

Contact Hours: 1.5 hours Seminars per week

Assessment: Class presentation 25%, in class test 30%, case study treatment plan 45%

Subject Description: This subject examines models of intervention for individual, groups and larger populations. The origins of stress, immune system functioning and coping skills are examined within a health and well being focus as well as from an illness perspective. Focus will be on applications where a clinical psychologist in practice may be active, including pain, cancer, cardiovascular disease, HIV/AIDS, and living with chronic and terminal illness.

GHMC926 Counselling Skills 4cp
Autumn

Contact Hours: 1.5 hours Seminar per week

Assessment: Transcript analysis, video/audio tape evaluation of applied counselling skills and participation.

Subject Description: The subject focuses on the development of counselling skills from a client-centred and cognitive behavioural therapy (CBT) perspective. A workshop format involving roleplay, observation, feedback and discussion will be used. The subject will examine concepts and procedures of cognitive therapy, and its application to a range of problems.

GHMC931 Clinical Neuropsychology 4cp
Autumn

Contact Hours: 1 hour Seminar per week

Assessment: Seminar presentation, assignments, examinations.

Subject Description: This subject aims to introduce students to neuroanatomy and theories of neuropsychological assessment and approaches to rehabilitation. The subject will deal with: basic brain anatomy; principles of neuropsychological assessment;

administration and interpretation of neuropsychological tests; neuropsychological report writing; neuropsychological disorders.

GHMC932 Sociocultural Aspects of Applied Psychology 4cp

Spring

Contact Hours: 1.5 hours Seminar per week

Assessment: Seminar presentations, case analysis.

Subject Description: This subject deals with the sociocultural nature of, and the various sociocultural influences on, psychological theory and practice. This includes sociocultural influences on psychologists and their values, and the sociocultural factors that affect concepts of the person, and which shape theories and modes of psychological intervention. The subject also deals with the impact of sociocultural factors upon the expectations, attitudes and values of both psychologists and their clients in psychological interventions.

GHMC933 Professional Workshop Series A 4cp

Autumn

Contact Hours: 26 hours of Lectures

Assessment: Case work and/or essay based on specified workshops.

Subject Description: The subject aims to orient students to a wide variety of approaches and skills pertinent to specialised areas in professional psychology, and to develop skills in one or more designated areas. The subject includes a number of workshop sessions relevant to the practice of professional psychology and conducted by qualified persons from both within the university and from external agencies who have expertise in an area of professional practice.

GHMC934 Advanced Professional Workshop 4cp

Contact Hours: Not on offer in 2003

Assessment: Case work and/or essay based on specified workshops, final examination.

Subject Description: The subject aims to orient students to a wide variety of approaches and skills pertinent to specialised areas in professional psychology, and to develop skills in one or more designated areas. The subject includes a number of workshop sessions relevant to the practice of professional psychology and conducted by qualified persons from both within the University and from external agencies who have expertise in an area of professional practice.

GHMC938 Practicum 1A 4cp

Autumn

Contact Hours: 1.5 hours Seminar per week

Assessment: Assessment and/or therapy reports, field placement notebooks.

Subject Description: The lecture/demonstration sessions are intended to prepare students for client contact under supervision. The practicum is composed of 150 hours of supervised case-work from the Northfields/other specified clinics, and should include adult and child case-work. The student will be required to attend group and individual supervision sessions as well as have assessment/therapy sessions taped for discussion and feedback.

GHMC939 Introduction to Cognitive Behavioural Therapy 4cp

Autumn

Contact Hours: 2 hours Seminars per week

Assessment: Audio or video-taped, written examination.

Subject Description: The subject aims to provide students with an understanding of the theoretical principles underlying cognitive behavioural therapy (CBT), the theoretical rationale for cognitive-behavioural techniques, an overview of outcome research on and the practical applications of CBT in clinical and non-clinical settings. Preliminary skills with regard to conduct of behavioural assessments, relaxation and systematic-desensitisation therapies will be demonstrated.

GHMC942 Practicum 1B 4cp

Autumn

Pre-requisites: GHMC938 Practicum 1A

Assessment: Psychological assessment and/or therapy reports, field placement notebooks, reports from external supervisors.

Subject Description: The practicum is composed of 300 hours of supervised case-work from the Northfields Clinic and/or an external agency. The student will be required to attend group and individual supervision sessions as well as have assessment/therapy sessions taped for discussion and feedback. The placement may occur with agencies providing either child or adult services, however when considered together with GHMC943 and GHMC944, exposure to a wide range of clinical/applied contexts will be required.

GHMC943 Practicum 2A 4cp

Autumn

Pre-requisites: GHMC938 Practicum 1A

Assessment: Case presentation, field placement notebooks, reports from external supervisors, assessment and/or therapy reports

Subject Description: The practicum is composed of 300 hours of case-work from the Northfields Clinic and/or external agencies providing psychological services. The student might be required to attend group and individual supervision sessions as well as have assessment/therapy sessions taped for discussion and feedback. The placement may occur with agencies providing either child or adult services, however when considered together with GHMC942 and GHMC944, exposure to a wide range of clinical/applied contexts (specified elsewhere) will be required.

GHMC944 Practicum 2B 4cp

Spring

Pre-requisites: GHMC938 Practicum 1A

Assessment: Psychological assessment and/or therapy reports, field placement notebooks, reports from external supervisors, audio tape of therapy session.

Subject Description: The practicum is composed of 250 hours of case-work from Northfields clinic and/or external agencies. The student might be required to attend group and individual supervision sessions as well as have assessment/therapy sessions taped for discussion and feedback. The placement may occur with agencies providing either child or adult services, however when considered together with GHMC938, and GHMC943, exposure to a wide range of clinical/applied contexts will be required.

GHMC946 Research Project A 8cp
Spring**Contact Hours:** 1.5 hours Seminar per week**Assessment:** literature review, thesis

Subject Description: Research Project A aims to equip students with a wide variety of research skills required for professional psychology. The content will begin by covering the conceptual bases, aims, context, sampling, designs, methods of data collection, followed by discussion of principles and procedures governing selection and implementation of data analyses. Ethical issues in conducting research are reviewed. Students will develop skills to evaluate research critically and interpret data. Students will develop and conduct a research project in a relevant area of professional psychology and submit a comprehensive literature review. Students completing the MPsych program will also complete Research Project B and a project report in the format of a journal article. Students completing the DPsych program will also complete Research Project C and the Thesis (GHMC914)

GHMC947 Research Project B 16cp
Spring**Contact Hours:** 1 hour Seminar per week**Pre-requisites:** GHMC946 Research Project A**Assessment:** empirical thesis

Subject Description: Research Project B in combination with Research Project A, aims to equip MPsych (Clinical) students with a wide variety of research skills required for professional psychology. The context will begin by covering the conceptual bases, aims, context, sampling, designs, methods of data collection, followed by discussion of principles and procedures governing selection and implementation of data analyses. Ethical issues in conducting research are reviewed. Students will develop skills to evaluate research critically and interpret data. Students will develop and conduct a research project in a relevant area of professional psychology and submit a comprehensive literature review and a project report in the form of a journal article.

GHMC967 Models of the Human Brain and Their Applications 8cp**Autumn****Contact Hours:** 1 hour Seminar per week**Assessment:** essay, exam, video journal summaries, presentation

Subject Description: The biophysics of human brain function is the frame of reference for all subject content. It explores a broad range of approaches, including evolutionary and anatomical models of the brain, models of electrical and metabolic brain function, psychological models of the brain, artificial neural networks and artificial intelligence models, the mind/body problem, psychoanalytic and psychotherapy models, brain imaging technologies, application of brain models to psychology, medicine, artificial neural networks and artificial intelligence, and human-computer interactions.

GHMC969 Advanced Cognitive Behavioural Therapy 8cp**Spring****Contact Hours:** 2 x 2 hours Seminars**Pre-requisites:** GHMC939 Introduction to CBT**Assessment:** Audio-tape of therapy conducted by student, examination.

Subject Description: The subject aims to provide students with training in the practical applications of cognitive behavioural therapy (CBT) in clinical settings among both adult and child populations. Topics will include: rationale for the selection of treatment strategies, description of therapeutic procedures, and outcome research for a wide range of disorders including anxiety, mood, eating, substance abuse and chronic psychiatric disorders. Training methods will include demonstration of therapy, role-play and feedback sessions.

GHMC970 Assessment and Psychopathology A 8cp
Autumn**Contact Hours:** 4 hours Seminars per week**Assessment:** Psychological test reports and exam.

Subject Description: The subject aims to provide students with an overview of descriptive psychopathology. Issues surrounding models of abnormal behaviour and the classification of mental disorders will be examined. The signs and symptoms associated with less severe psychological disorders and the assessment of these conditions by clinical interview and psychological tests will be covered. The subject also covers the theoretical rationale and procedures for administration, scoring and interpretation of core psychological tests. Ethical issues will also be examined.

GHMC971 Assessment and Psychopathology B 8cp
Spring**Contact Hours:** 2 x 2 hours Seminars per week**Pre-requisites:** GHMC970 Assessment and Psychopathology A**Assessment:** Seminar presentations, audio-tape of assessment interview, exam.

Subject Description: The subject aims to provide students with an overview of descriptive psychopathology. Issues surrounding models of abnormal behaviour and the classification of mental disorders will be examined. The signs and symptoms associated with severe disorders and the assessment of these conditions by clinical interview and by psychological tests will be covered. The subject also covers the theoretical rationale and procedures for administration, scoring and interpretation of psychological tests. Ethical issues will also be examined.

GHMC978 Child and Adolescent Psychology 6cp
Autumn**Contact Hours:** 2 hours Seminars per week**Assessment:** assignments 70%, take home examination 30%

Subject Description: This subject will review a number of topics essential to understanding the nature of Child and Adolescent development and threats to normal functioning. For example, the subject covers advanced conceptual and theoretical discussion and knowledge concerned with what constitutes the nature of self control, information processing, the structure of memory and the acquisition of reading skills in relation to developmental progression in children's development. This subject will also develop an understanding of the factors and conceptual underpinnings of the nature of at-risk behaviour in childhood and adolescence.

The focus of this subject will be on further developing a wider theoretical understanding of some of the most important issues in relation to threats to normal child and adolescent development.

Subject Objectives: On successful completion of this subject, students should be able to: 1. understand how children's thinking and emotional development are linked in relation to theories of intelligence, informational processing & self referencing language as factors in the development of self control; 2. to examine the inadequacies in current conceptualisations of some disorders such as ADHD; 3. to understand conceptualisations and linkages between self control, behavioural inhibition and executive functioning processes; and to examine the causes of at-risk behaviour in childhood and adolescence.

GHMC979 Major Research Project 18cp
Annual

Contact Hours: 1 hour Seminar per week

Assessment: empirical study report of between 6,000 and 8,000 words

Subject Description: Students complete an empirical study on a research topic chosen from given areas of staff expertise. Projects may be conducted in small groups, however, write-ups will be completed and assessed individually. Weekly research seminars consist of discussion of the research process, selecting a topic, and enhancing writing and oral presentation skills.

GHMC981 Research Project C 16cp
Spring

Contact Hours: 1 hour Seminar per week

Pre-requisites: GHMC946 Research Project A

Assessment: Thesis

Subject Description: Research Project C in combination with Research Project A, aims to equip students with a wide variety of research skills required for professional psychology. The subject covers ethical issues in research, the importance of conceptual and theoretical foundations in research, how to critically evaluate research, establishing aims, sampling, design, methods of data collection, principles and procedures governing selection and implementation of data analyses. Students will receive assistance in data entry, screening, and analysis using SPSS. Students will learn the stylistic requirements of scientific writing for research publication. Research Project A, C and the Major Thesis comprise the research component of the Doctor of Psychology (Clinical) degree.

GHMC982 Research Project D 24cp
Annual

Assessment: Thesis

Subject Description: This subject focuses on advancement of research skills particularly within the areas of data analyses and thesis writing. The candidate will be required to attend regular sessions with the research supervisor. In certain cases, attendance at specified research lectures, seminars and other workshops might be required. The project culminates in the submission of a research thesis.

GHMC983 Research Project E 12cp
Spring

Assessment: Research proposal

Subject Description: This subject focuses on research skills appropriate for practising professionals, including setting up systems for data collection and management in agencies, analyses of clinical data, and reporting of results. If data collection is involved, this will be a minor component. In certain cases, attendance at specified research seminars and workshops might be required. The project will culminate in a) a research proposal describing research aims, procedures for collection, management and analyses of routinely collected data, or b) analyses of archival data and preparation of a manuscript for submission to a scientific journal. Occasionally the report may also take the form of a comprehensive review of literature on a clinical topic.

Subject Objectives: On successful completion of this subject, a student should be able to demonstrate application of research skills to planning, management, and analyses of clinical data.

GHMC984 Social Psychology and Health 6cp
Spring

Contact Hours: 2 hours Seminars per week

Assessment: Feature article 25%, Health promoting program report 40%, Exam 25%

Subject Description: This subject addresses key theoretical and empirical issues in the area of Social Psychology and explains their implications for health behaviours. The focus is on the joint effects of internal and external processes in the causation and maintenance of human behaviours. Emphasis is placed on elaborating social psychological models of health behaviours, the roles of attitudes, values and beliefs in shaping different behaviours and the effects of conformity, compliance and life events on behaviour. A range of psychological and health principles will be examined within the context of formulating treatment and evaluation proposals or prevention programs designed to change social behaviours in relation to health issues, such as stress and coping strategies, drug and alcohol abuse, sexual behaviours, exercise and nutrition, and aged care. The applicability of major research findings across cultures will also be addressed.

Subject Objectives: On successful completion of this subject, students will be able to: 1. identify a range of social psychological principles in relation to health behaviour; and 2. evaluate critically current theories and models of social behaviours and understand their implications for health related research and health promotion.

GHMC985 Principles and Practices of Psychological Assessment 6cp
Autumn

Contact Hours: 1 hour of Lectures and 1 hour of Tutorials per week

Assessment: Reflective journal 30%, Assessment report 50%, Test report 20%

Subject Description: The aim of this subject is to examine the principles underpinning psychological assessment and introduce students to the practices of psychological assessment. The subject is designed to integrate learning in previous years including theories of personality, intelligence combined with statistical theory and then examine how these issues are used in practice.

Criteria to understand and evaluate psychological tests will be used as a common theme throughout the subject, including examination of their construct validity. The general ethical issues of psychological assessment will be compared to the specific Australian Psychological Society guidelines for psychological assessment. After examination of the theoretical principles, students will have the opportunity to administer, score and interpret commonly used assessment tools used to assess general intelligence, emotional intelligence, personality, emotional intelligence and vocational preference and psychological well-being.

Subject Objectives: On successful completion of this subject, students should be able to: 1. describe and critique the key theoretical constructs underpinning the relevant psychological assessments; 2. describe a wide range of psychological assessment measures and know their uses, advantages and limitations- including reliability, validity, utility and feasibility for routine use; 3. choose the appropriate tests to measure specific abilities; 4. score and interpret some commonly used tests; and write reports for clinical and human resource contexts; describe the ethical considerations in the context of their work.

GHMC988 Contemporary Issues for Professional and Research Psychologists 6cp

Autumn

Contact Hours: 1 hour of Lectures and 1 hour of Tutorials per week

Assessment: Ethical dilemmas essay 30%, Research proposal 30%, Progress report 15%, Exam 25%

Subject Description: The first part of this subject draws together key issues in ethics, research and professional practices in psychology. Ethics theory will be addressed and ethical and legal issues will be explored in research, therapeutic and professional settings. The second part deals with contemporary issues in experimental psychology including, for instance, the psychophysiology of ADHD, reading disorders, emotional intelligence, etc.

Subject Objectives: On successful completion of this subject, students should be able to: 1. identify theoretical and practical issues in the practice of psychology regarding legality, ethics and duty of care; 2. demonstrate an awareness of the legal, ethical and professional requirements of conducting psychological research; 3. demonstrate and understanding of specific research techniques appropriate to special groups; and 4. demonstrate an understanding of contemporary issues regarding a number of topics in experimental psychology.

GHMC989 Advanced Abnormal Psychology 6cp Spring

Contact Hours: 2.5 hours of Seminars per week

Assessment: Essay 50%, Final exam 50%

Subject Description: This subject builds upon previous study in core areas of abnormal psychology, with contributions from personality, learning, and developmental psychology to consider the way theories of human behaviour are translated into tools for understanding and responding to psychopathology. Students will be expected to develop a critical and analytical understanding of the conceptual frameworks and assumptions of a number of major schools of abnormal psychology. Students will actively critique the types of evidence put forward to substantiate the benefits of psychological interventions developed to ameliorate psychopathology.

Topics will include : the placebo effect, the ethical and practical problem of defining appropriate controls; implications of using consumer, observer, or practitioner perspectives of outcome; the efficacy vs effectiveness debate; the problem of common vs specific factors in interventions; issues in developing and evaluating theory-relevant qualitative vs. quantitative tools.

Subject Objectives: On successful completion of this subject, students should be able to: 1. demonstrate a detailed understanding of the conceptual foundations underlying a number of schools of abnormal psychology; 2. understand some of the major issues in operationalising theories of abnormal psychology; and 3. demonstrate an understanding of the problems involved in measuring and evaluating the impacts of interventions designed to ameliorate psychopathology.

GHMC990 Advanced Clinical Issues A 4cp Spring

Contact Hours: 2 hours per week

Assessment: Research proposal

Subject Description: This subject refers to an in-depth coverage of any specific topic of assessment or therapy determined by the Clinical Programs Director to be of relevance for the student's unique set of circumstances. The topic can relate to a specific disorder or a specific assessment or therapeutic intervention. Coverage will include a intensive review of current literature including current controversies, a critical evaluation of theoretical bases and practical applications. Teaching and assessment methods will depend on the topic chosen.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Demonstrate superior clinical skills within a specific clinical domain and/or; 2. Summarise, analyse and critically evaluate current knowledge about a clinical topic and draw out its implications for theory, research and practice.

GHMC991 Advanced Practicum A 4cp Autumn

Assessment: Case presentation; clinical supervisor's report; therapy case submission.

Subject Description: The practicum is composed of at least 200 hours of supervised casework from the Northfields Clinic or other specified agencies that provide psychological services. Casework will include assessment and treatment of difficult psychological problems. The student will be required to attend group and individual supervision sessions.

GHMC992 Advanced Practicum B 4cp Spring

Assessment: Case presentation; clinical supervisor's report; therapy case submission.

Subject Description: The practicum is composed of at least 200 hours of supervised casework from the Northfields Clinic or other specified agencies that provide psychological services. Casework will include assessment and treatment of difficult psychological problems. The student will be required to attend group and individual supervision sessions.

GHMC993 Advanced Training in Personality Disorders A 4cp**Autumn****Contact Hours:** 1.5 hours of Seminars per week**Assessment:** Exam (50%) Clinical logbook of supervision and casework (50%)

Subject Description: This subject focuses on advanced training in the treatment of personality disorders. Classification, etiology, clinical features, and treatment models and methods will be addressed through workshops, clinical presentations, supervision and 20 hours of practicum placement. Part A of this series will focus on the basics of working with people with personality disorders, with emphasis on team approach, setting goals, problem solving, and strategies for dealing with crises. The clinical emphasis will be on conducting a skills based approach for enhancing a client's interpersonal effectiveness, emotion regulation, and distress tolerance based on principles of Dialectical Behaviour Therapy.

GHMC994 Advanced Training in Personality Disorders B 4cp**Spring****Contact Hours:** 1.5 hours Seminars per week**Assessment:** Case presentation and essay (45%) Clinical logbook of supervision and casework (55%)

Subject Description: This subject focuses on advanced training in the treatment of personality disorders (PD). Clinical features and treatment models and methods will be addressed through workshops, clinical presentations, supervision and 30 hours of practicum placement. Part B of this series will focus on advanced techniques for dealing with more complex difficulties that can arise within treatment. Emphasis will be on developing skills to deal with therapeutic stalemates, comorbid psychopathology, self-harm behaviours, hospitalisations, adolescent clients and termination issues. Consideration will be given to dealing with therapist responses to working with people with PD and building effective supervision and case management teams.

GHMC995 Advanced Training - Clinical Supervision A 4cp**Autumn****Contact Hours:** 1.5 hours Seminars per week**Assessment:** Final examination Assignment: development of a supervision program

Subject Description: This subject covers theories and models of clinical supervision, discusses rationale and procedures for setting up programs for clinical supervision, and analyses theoretical and practical issues surrounding the various components including objectives, methods, assessment and evaluation of clinical supervision. Ethical issues and common difficulties arising within supervision are also addressed. The trainee will be required to formulate and co-supervise a trainee psychologist, so some time in supervision practica (20-40 hours) should be expected. In addition to lectures and seminars, skills training methods, including demonstration, video tapes and role play are used.

GHMC996 Advanced Training - Clinical Supervision B 4cp**Spring****Contact Hours:** 1 hour Seminars per week**Assessment:** Video tape of actual supervision sessions Final exam

Subject Description: This subject focuses on knowledge and skills to provide psychologists with clinical supervision. The trainee will be required to formulate supervision plans and supervise trainee psychologists, so an investment of 40-60 hours in supervision work should be expected. The trainee supervisor will also receive supervision during this period. The subject will also cover a critical analysis of theoretical and practical issues surrounding the various components, including objectives, methods, assessment and evaluation of clinical supervision. In addition to lectures and seminars, skills training methods including demonstration, video tape feedback, and role play are used.

GHMC998 Thesis 48cp**Annual****Pre-requisites:** Available to graduates with an Honours degree of at least Class II, Division 2 standard or equivalent**Subject Description:** Master of Science (Research) thesis**GHMC999 Thesis 48cp****Annual****Pre-requisites:** Available to graduates with an Honours degree of at least Class II, Division 1 standard or equivalent**Subject Description:** Doctor of Philosophy thesis**GRADUATE SCHOOL OF PUBLIC HEALTH****GHMD903 Public Health Communication and Data Skills 6cp****Autumn / Spring****Contact Hours:** 2 hours per week**Restrictions:** Approval from Head of the Graduate School of Public Health**Exclusions:** Students who have already demonstrated acquisition of these communication and data skills.**Assessment:** Each module will be assessed separately on a pass/fail basis.

Subject Description: The aim is to acquire and practise a number of skills using public health examples. With the agreement of the coordinator, the student selects three modules. Modules include: 1) Epi-Info including small case studies; 2) Communication in public health including written and oral presentation; 3) Information sources including library and Internet searches with presentation of results; 4) project management for public health.

Subject Objectives: On completion of this subject, you should be able to do three of the following: a) demonstrate skills in and knowledge of the complexity of communication (both orally and written) in the public health setting; (b) apply, analyse and synthesise the various methods of searching for information using the currently available tools;

Subject Descriptions

c) manipulate various computer packages and understand their uses and limitations and d) plan and evaluate the progress of a public health project and demonstrate knowledge about the theories of project management.

GHMD904 Epidemiology 6cp

Spring Wollongong On Campus

Spring Wollongong Distance

Contact Hours: 2 hours per week

Pre-requisites: GHMD983 - Statistics in Health Research

Assessment: Two assignments - 25% each, Examination - 50%

Subject Description: This subject addresses principles and methods of epidemiological investigation including analytic and experimental epidemiology. Topics to be covered are: measurement in epidemiology, screening, design of ecological studies, surveys, case control and cohort studies, clinical trial design, analysis of studies, critical appraisal of the literature, biological inference and causality. These methodological issues will be applied to a wide range of content areas such as occupation, cancer, health services and infectious diseases.

Subject Objectives: On completion of this subject you should be able to: critically evaluate epidemiological literature; design an epidemiological study and evaluate the strengths and limitations of that design in relation to the questions researched; use the results of epidemiological research in the disciplines of public health.

GHMD905 Social Foundations of Public Health 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Contact Hours: 2 hours of Seminars per week

Assessment: Two assignments - 60%, Final examination - 40%

Subject Description: This subject introduces students to theories and concepts from the social sciences necessary for the understanding and analysis of public health issues. Topics include: trends in public health; socio-economic and environmental influences on health and health inequities; biomedical and anthropological models of health and illness; the role of culture in health; and health behaviour and the political economy of health.

GHMD906 Quality Management For Health Services 6cp

Spring Wollongong On Campus

Spring Wollongong Distance

Contact Hours: 2 hours per week

Assessment: Two assignments - 30% each, One assignment - 40%.

Subject Description: Develops knowledge and skills in the application of contemporary quality management theories and concepts. Examines the powerful forces driving change in the organisation and management of health care organisations and the implications for health care managers. Traditional approaches are contrasted with contemporary approaches using case studies. The subject is in three modules: agenda for change; managing people through change; and the tools of quality management.

GHMD907 Independent Study in Public Health 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Spring Wollongong Distance

Spring Wollongong On Campus

Restrictions: Approval from Head of the Graduate School of Public Health

Assessment: Will reflect on the learning contract.

Subject Description: The program for this subject may vary. A supervisor will be appointed by the Head of the Graduate School of Public Health and a learning contract will be drawn up between the supervisor and student. Students may enrol only if a supervisor is available. The time commitment for an independent study is the same as that for any subject of equivalent credit points. Assessment is usually based on a research proposal or a written report.

GHMD908 Health Services Planning and Evaluation 6cp

Spring Wollongong On Campus

Spring Wollongong Distance

Contact Hours: 2 hour lecture per week

Assessment: Case analyses 30%, Major assignment 50%, Minor assignment 20%.

Subject Description: This subject covers the theory and practice of health planning. Topics include: Needs analysis, planning approaches, strategy analysis and formulation, setting goals and objectives, performance measurement and evaluation. Students will develop skills in service planning for population/public health programs and institutional services.

GHMD909 Comparative Health Systems: Policies and Politics 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Contact Hours: 2 hours per week

Assessment: One assignment - 30%, One assignment - 40%, Final examination - 30%

Subject Description: This subject examines how ideologies and political processes influence health policy development and health service delivery. The impact of broad socio-economic forces on health status and health policy development are emphasised. The subject is designed to assist individuals to develop analytical and strategic skills.

GHMD912 Health Promotion 6cp

Spring Wollongong On Campus

Spring Wollongong Distance

Contact Hours: 2 hours per week

Assessment: Assignments and an examination.

Subject Description: This subject will introduce students to the concept of health promotion and how it has been applied in particular settings - health services, worksites, schools and communities. Theoretical perspectives of behaviour change and public policy, as they are applied within the field of health promotion, will be critically reviewed. Subject involves on-line student discussions.

Subject Objectives: To demonstrate an understanding of the notion of health promotion in the context of its historical and conceptual development. To apply a health promotion perspective with different settings. To identify and critically review current theories and approaches to health promotion at the local, state and/or national level. To discuss health promotion concepts using an electronic medium.

GHMD913 Drug Problems and Issues 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Contact Hours: 2 hours per week

Assessment: To be advised

Subject Description: This course will provide an understanding of the pharmacological, psychological, and sociological basis of drug dependence; methods of treatment and prevention of drug abuse; an analysis of government policies to combat drug related problems; the development and management of drug and alcohol services; contemporary issues and controversies.

GHMD924 Health Information Systems 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Contact Hours: 2 hours per week

Assessment: Case analyses 30%, Major assignment 40%, Database assignment 30%.

Subject Description: This subject will introduce information systems in health and health informatics to students. Topics will include: clinical systems development, systems management, electronic health record, clinical decision support, classification and coding, privacy and confidentiality and IT risk assessment. Current and future computer applications in health (e.g. PAS, order management, tele health) will be discussed. Students are required to have access to the Internet at home or on campus.

GHMD925 Aboriginal Health Issues 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Contact Hours: 2 hours per week

Assessment: Three assignments.

Subject Description: 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. Critiques current strategies to improve health.

Subject Objectives: Students will 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.

GHMD936 Public Health Nutrition 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Contact Hours: 2 hours per week

Exclusions: Not to count with GHMA930 or BMS310

Subject Description: This subject will introduce the student to the principles of community health and the history of public health nutrition in Australia. Key areas of public health nutrition discussed include food and nutrition surveillance, food policy, programme planning and nutrition promotion. Subject involves on-line student discussions.

Subject Objectives: At the end of the session, students should be able to: 1. Describe the components of food and nutrition systems and discuss the development of food and nutrition policies. 2. Describe and discuss methods for assessing nutritional status and nutrition surveillance strategies. 3. Describe and discuss key principles employed in developing health promotion strategies. 4. Describe and critique approaches to program planning and evaluation and apply a planning model to a community nutrition issue. 5. Discuss public health nutrition issues using an electronic medium. 6. Discuss the potential influence of electronic media on public health nutrition professional practice.

GHMD937 Food Inspection for Public Health 6cp

Contact Hours: Not on offer in 2003

Assessment: To be advised.

Subject Description: This subject will contain a mix of practical food inspection skills and the principles of systematic food inspection. It will also cover responses to food-borne outbreaks and options of monitoring, investigation and prevention of such outbreaks. Both Australian and overseas practices and requirements will be addressed depending on the student needs.

GHMD965 Principles and Practices of Psychosocial Rehabilitation 6cp

Autumn Wollongong Distance

Autumn Wollongong On Campus

Assessment: One assignment - 40%, One assignment - 60%

Subject Description: This subject provides students with a contemporary framework for understanding the rehabilitation and recovery process for people with a mental illness. It provides students with a set of knowledge and skills that can be applied in a range of contexts including case management and psychosocial rehabilitation services in both government and non-government sectors located in metropolitan, rural and remote areas. The subject examines theoretical and empirical issues associated with change enhancement, needs identification, collaborative goal setting, and collaborative task setting and monitoring outcomes. The skills component focuses on an understanding of the relationship between the clinician and the consumer (working alliance) and the process of recovery from mental illness undertaken by an individual consumer.

GHMD970 Comprehensive Systems of Mental Health Care 6cp

Spring Wollongong Distance

Assessment: A variety of methods including service review, case reports, and essays.

Subject Description: This subject provides an overview of basic theoretical models used to explain psychiatric disorder and presents a historical overview of mental health services. It examines the impact of the National Mental Health Strategy on the development of an integrated, comprehensive mental health service.

Students are provided with an understanding of each component of a community service network, including the role and function of crisis intervention services, residential services, hospital based services, and multidisciplinary mental health structures. The role of consumer and carer advocacy organisations is examined.

GHMD971 Assessment and Diagnosis in Mental Health 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Assessment: Two case vignettes - 15% each, One clinical study - 70%.

Subject Description: This subject examines the definitions and classification systems widely used to identify, describe and communicate about mental illness. The history and philosophical models which underpin DSM IV and ICD 10 are examined and analysed. The approaches and methods of assessment are outlined and subjected to analysis, including the assessment interview, the psychiatric history, symptom descriptions, functional assessment and family assessment. Ongoing assessment, uses and abuses of diagnosis, uses of assessment for management and research and ethics of assessment are also considered.

GHMD973 Case Management in Mental Health 6cp

Spring Wollongong On Campus

Spring Wollongong Distance

Assessment: One essay - 40%, One Case study - 60%

Subject Description: This subject provides an overview of the application of different models of case management in the context of mental health. It addresses both the evidence-base for case management and the question of who should be case managed. The principles and practices of clinical case management are examined in detail with a focus on the skills required of case managers in working with the client, carers and the broader social environment.

GHMD976 Supervised Clinical Practice 6cp

Autumn / Spring

Restrictions: Prior approval from Course Co-ordinator on 4221 4279

Subject Description: A range of clinical placement opportunities are available within Mental Health Services. However, before enrolling in this subject students must negotiate details of their proposed placement with the course coordinator and nominated clinical supervisor. Students must develop and submit an outline of the program including a description of the nature of the clinical work, specific competencies to be developed, and how the development of competencies will be monitored and evaluated by the clinical supervisor.

GHMD981 Maternal and Child Health in Developing Countries 6cp

Spring

Contact Hours: 2 hours per week

Assessment: MCH service analysis 30%, Exam 30%, Project plan 40%.

Subject Description: Students will critically examine the 'safe motherhood' and 'reproductive health' programs in developing countries. They will develop skills in obtaining and assessing evidence based practices in Maternal Health and Child Health. They will develop a project for a MCH intervention in a selected developing country.

GHMD983 Statistics in Health Research 6cp

Autumn Wollongong On Campus

Autumn Wollongong Distance

Contact Hours: 3 hours per week

Subject Description: Introduces basic statistical concepts and methods. Topics covered: collecting data, designing statistical studies, principles of data presentation; exploratory data analysis, probability and statistical models emphasising binomial and normal distributions; categorical data, contingency tables and the Chi-squared distribution; sampling, sample means and the central limit theorem; inference - point estimation, confidence intervals, testing hypotheses; inference about single parameters; comparing means and proportions, analysis of variance, demography.

GHMD984 Health Research Methodology 6cp

Spring Wollongong On Campus

Spring Wollongong Distance

Contact Hours: 2 hours of Seminars per week

Pre-requisites: GHMD983 - Statistics in Health Research or equivalent.

Assessment: Three written assignments.

Subject Description: This subject introduces students to health research methodology. Topics include formulating a research question, conducting a literature review and writing a research proposal. Students will acquire skills in interviewing, survey design, and appropriate methods of qualitative and quantitative analysis. Ethical issues such as informed consent and confidentiality will be addressed.

GHMD985 Applied Epidemiology 6cp

Autumn

Contact Hours: 3 hours per week

Pre-requisites: GHMD904 - Epidemiology

Assessment: One assignment - 10%, 3 assignments - 15%, 1 assignment - 20%, 1 assignment - 25%

Subject Description: The subject consists of a self directed computer based case study to be conducted in teams of 2 students. The case study concerns an environmental contamination and the methods to investigate the situation and its health effects. The students are placed in the situation of a public health official with a limited financial budget and many options for research. Primary investigation, risk evaluation, potential study designs and actual study analysis will be covered. Presenting the results to a critical audience will be simulated in class presentations.

Subject Objectives: At the end of this subject, the student will be able to: actively engage in small team problem solving; utilize available datasets on health, environmental contamination levels and exposure; use and apply knowledge on epidemiology, statistics and various types of computer software; integrate datasets and literature information into a view as to whether there is a health risk to a population;

present and defend the conclusions based on the use of datasets and literature to a critical audience and in a written format according to established professional standards.

GHMD986 Environmental Health 6cp

Autumn

Contact Hours: 2 hours per week

Assessment: 4 assignments

Subject Description: This subject covers various case studies in environmental health such as air pollution, soil contamination, climate change, water availability and contamination, waste problems and urbanisation. The lectures present the theories and internationally relevant cases. The students will present their own case studies in class and critique another in writing.

Subject Objectives: At the end of this subject the student will be able to: present an environmental health problem in a clear and articulate manner, and relate the particular problem to the literature; use the acquired knowledge on a wide variety of environmental problems to assess the relevance of a particular problem and to assess the available literature; and critically evaluate the presentation and analysis of an environmental health problem.

GHMD995 Minor Project 12cp

Autumn / Spring

Pre-requisites: 24 cp

Restrictions: Approval required from Head of Graduate School of Public Health.

Subject Description: Students are normally required to present a report which deals with an agreed problem or area in health services research or provision or development, to agreed guidelines and to a maximum length of 10,000 words.

GHMD996 Thesis MSc (Research) 48cp

Annual

Pre-requisites: Bachelor (Hons) or MSc or MPH

Assessment: Examination of the thesis

Subject Description: The Masters (Research) thesis is an individual research endeavour under supervision. The candidate is encouraged to research a contemporary issue in their area of specialisation within the research areas 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 is based on the written thesis but oral presentations are required at various times.

Subject Objectives: On successful completion of this subject, you should be able to identify and define a significant issue or problem of limited complexity; demonstrate understanding of the nature and extent of factors which contribute to the issue; conduct a comprehensive literature search and demonstrate skills in the evaluation of the literature; write a feasible logistic plan that can pass an ethics committee; formulate clear aims; demonstrate competence in independent maintenance of quality control; demonstrate appropriate data analysis skills; demonstrate competence in interpreting results and drawing conclusions; present the results in an appropriate professional format (both oral and written).

GHMD997 Major Project 24cp

Annual / Autumn / Spring

Pre-requisites: GHMD984 - Health Research Methodology

Restrictions: Approval from Head of Graduate School of Public Health

Assessment: Examination of report

Subject Description: The major project is an individual research endeavour under supervision. The candidate is encouraged to research a contemporary issue in their area of specialisation within the research areas of members of the Graduate School in Public Health. It is expected that there be both a theoretical and empirical content to the project. Students must have the permission of the Coordinator to undertake this subject. 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 is based on the written report but oral presentations are required at various times.

Subject Objectives: On successful completion of this subject, you should be able to identify and define a limited issue or problem; demonstrate an understanding of the nature and extent of factors that contribute to the issue; conduct a comprehensive literature search and demonstrate skills in the evaluation of the literature; write a feasible logistic plan that can pass an ethics committee; formulate clear aims; demonstrate competence in the independent maintenance of quality control; demonstrate appropriate data analysis skills; demonstrate competence in interpreting results and drawing conclusions; present the results in an appropriate professional format (both oral and written).

GHMD998 Thesis DrPH 48cp

Annual

Pre-requisites: Master of Science/Master of Public Health or Master of Science (Research) or equivalent and 48 credit points of additional coursework.

Assessment: Examination of thesis

Subject Description: The doctoral thesis is an individual research endeavour under supervision. The candidate is encouraged to research a contemporary issue in their area of specialisation within the research areas of members of the Graduate School of Public Health. It is expected that there be both a substantive 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 is based on the written thesis but oral presentations are required at various times.

Subject Objectives: On successful completion of this subject, you should be able to identify and define a significant issue or problem of substantial complexity; demonstrate understanding of the nature and extent of factors which contribute to the issue; conduct a comprehensive literature search and demonstrate skills in the evaluation of the literature; write a feasible logistic plan that can pass an ethics committee; formulate clear aims; demonstrate competence in the independent maintenance of quality control; demonstrate appropriate data analysis skills;

demonstrate competence in interpreting results and drawing conclusions; present the results in an appropriate professional format (both oral and written).

GHMD999 Major Thesis (PhD) 48cp
Annual

Pre-requisites: BSc (Hons), MSc/MPH with research or MSc (Research) or equivalent.

Assessment: Examination of thesis

Subject Description: The doctoral thesis is an individual research endeavour under supervision. The candidate is encouraged to research a contemporary issue in their area of specialisation within the research areas of members of the Graduate School of Public Health. It is expected that there be both a substantive 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 is based on the written thesis but oral presentations are required at various times.

Subject Objectives: On successful completion of this subject, you should be able to identify and define a significant issue or problem of substantial complexity; demonstrate understanding of the nature and extent of factors which contribute to the issue; conduct a comprehensive literature search and demonstrate skills in the evaluation of the literature; write a feasible logistic plan that can pass an ethics committee; formulate clear aims; demonstrate competence in the independent maintenance of quality control; demonstrate appropriate data analysis skills; demonstrate competence in interpreting results and drawing conclusions; present the results in an appropriate professional format (both oral and written).

SMART FOODS CENTRE

SFC 901 Contemporary Issues in Food and Nutrition 6cp

Spring Wollongong Flexible

Contact Hours: 48 hours

Pre-requisites: As per course entry requirements

Co-requisites: As per course entry requirements

Restrictions: This is a full-fee subject costing \$1500 for all students who enrol. Tuition fees to exclude compulsory service fees. All students are required to pay in addition to tuition fees a compulsory service fee (CSF) which is GST liable.

Assessment: Written Assignments 70%; Presentations 30%

Subject Description: This subject introduces students to ideas on the causes, nature, and effect of a number of current food and nutrition issues. This includes but will be not limited to, the alteration of nutrient composition in the development of foods to meet specific needs and the food regulatory environment including consideration of labelling requirements that must be addressed. 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.

Subject Objectives: By the end of the session students will be able to: 1. Identify current major food and nutrition issues in Australia, the public health ramifications and the strategies employed to address these issues including influencing the food supply 2. Examine the scientific support for the development of new foods based on nutritional changes and describe the regulations that cover the development and marketing of these foods. 3. Identify potential nutritional issues, social trends, and consumer interests that are likely to effect the future food supply system. 4. Identify key stakeholders/influencers of the food supply system and describe their role/s in effecting trends in the development of new foods. 5. Discuss the effect of new technologies on the production and delivery of new foods for the community.

SFC 902 Food Regulation and Policy in Australia 6cp

Autumn Wollongong Flexible

Contact Hours: 48 hours

Pre-requisites: As per course entry requirements

Co-requisites: As per course entry requirements

Restrictions: This is a full-fee subject costing \$1500 for all students who enrol. Tuition fees to exclude compulsory service fees. All students are required to pay in addition to tuition fees a compulsory service fee (CSF) which is GST liable.

Assessment: Written Assignments 70%; Presentations 30%

Subject Description: This subject describes and analyses aspects of the Australian food regulatory system and its relationship with the production and promotion of foods. Issues are discussed within 3 modules: food regulatory system and the legal framework; food policy: development, organisational structures and analysis; and food and nutrition system - examples of food regulation and policy issues.

Subject Objectives: On successful completion of this subject students should be able to 1. Outline the basic legal structure in Australia and relevant international treaties; 2. Describe the structure and regulatory role of ANZFA and other key agencies; 3. Describe what is policy and key influences on the policy process; 4. Critically analyse the development and implementation of national food policy; 5. Relate aspects of this subject to key elements of their work environment.

SFC 903 Nutrition Research 6cp

Autumn Wollongong Flexible

Contact Hours: 48 hours

Restrictions: This is a full-fee subject costing \$1500 for all students who enrol. Tuition fees to exclude compulsory service fees. All students are required to pay in addition to tuition fees a compulsory service fee (CSF) which is GST liable.

Exclusions: None

Assessment: Written assignments 70%; Presentations 30%

Subject Description: The subject introduces students to the critical interpretation of research findings in nutrition and to the evaluation of primary and other source material as a foundation for evidence based nutrition. It will provide a series of research edge seminars based on activities of the Smart Foods Centre and collaborators. This will initially focus on identification, development and scientific evaluation of key nutrients in foods optimising carbohydrate and fat balance in the diet, and consumer evaluation of nutrients and foods. Students will complete a critique of current research and report on learning outcomes as they relate to their work environment.

Subject Objectives: On successful completion of this subject students should be able to: 1. Critically read and evaluate research reports and research methodology 2. describe specific outcomes from current nutrition research and identify practical implications for their work environment 3. make recommendations for directions in food product development based on nutrition research 4. understand and reconcile some of the complexities in translating nutrition research outcomes to product development 5. demonstrate increased awareness of current nutrition research issues and outcomes.

SFC 904 Nutrition and Food Innovation 6cp

Autumn Wollongong Flexible

Contact Hours: 48 hours

Restrictions: This is a full-fee subject costing \$1500 for all students who enrol. Tuition fees to exclude compulsory service fees. All students are required to pay in addition to tuition fees a compulsory service fee (CSF) which is GST liable.

Assessment: Written assignments 70%; Presentations 30%

Subject Description: The subject introduces students to the use of technologies which underpin the development of the contemporary Australian food supply. These include but are not limited to genetic modification and its applications in food production, the impact of feeding programs on livestock, issues concerning trends to home replacement or ready to eat meals, use of risk assessment frameworks and an overall critique of biotechnology in food production.

Subject Objectives: On successful completion of this subject students should be able to: 1. outline the basic principles of genetic modification and discuss its roles in the development of the food supply; 2. examine specific case studies in feeding programs for livestock and describe nutritional and other criteria to evaluate feeds for livestock; 3. describe trends in the production and retailing of home meal replacement; 4. identify potential nutrient and or safety problems associated with new technology and ways of addressing these problems; and 5. develop a framework within which to critique the role of biotechnology in food production and retailing.

Faculty of Informatics

Courses Offered

The Faculty of Informatics offers the following postgraduate qualifications in the Schools of Electrical, Computer and Telecommunications Engineering; Information Technology and Computer Science; and Mathematics and Applied Statistics:

School of Electrical, Computer and Telecommunications Engineering

Doctor of Philosophy
Master of Engineering – Research
Master of Engineering Practice (Mechatronics)
Master of Engineering Studies
Master of Internet Technology

School of Mathematics and Applied Statistics

Doctor of Philosophy
Master of Science - Research (Mathematics)
Master of Science - Research (Statistics)
Master of Mathematics
Master of Statistics
Graduate Diploma in Statistics

School of Information Technology and Computer Science

Doctor of Philosophy
Master of Information and Communication Technology - Research
Master of Computer Science - Research
Master of Computer Science
Master of Computer Studies
Master of Electronic Commerce
Master of Health Informatics
Master of Industry-based Information Technology
Master of Information and Communication Technology
Master of Information Technology Management
Master of Digital Multimedia
Graduate Certificate in Health Informatics
Graduate Certificate in Industry-based Information Technology
Graduate Certificate in Information and Communication Technology

Current Areas of Study and Research

For current areas, see as listed under the entries for the three Faculty Schools

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.

School of Electrical, Computer and Telecommunications Engineering

Courses Offered

Doctor of Philosophy
Master of Engineering – Research
Master of Engineering Practice (Mechatronics)
Master of Engineering Studies
Master of Internet Technology

Current Research Areas

There are two major research centres within the School. The Telecommunications Research Centre researching in the area of Telecommunications and the Industrial Automation Research Centre researching in the areas of Automation and Power Engineering. The School has significant industry linkages and scholarships are frequently available with industry partners. The following areas of research are available to candidates undertaking the degrees of Master of Engineering - Research and the Doctor of Philosophy:

Telecommunications: Switched Networks

Active networks
Ad hoc multi-hop networking
Closed loop control in packet networks
Location aware networking
Network dimensioning
Network management
Network traffic modelling and control
Wireless ATM
Wireless internet protocols

Telecommunications: Network Services

Internet and WWW services
Internet telephony
Multimedia databases
Network games
Video on demand
Virtual reality

Telecommunications: Digital Signal Processing

Adaptive filtering
Blind signal processing
Coding for error-prone channels
Computational auditory scene analysis
Filter banks and wavelets
Image and video segmentation, compression and retrieval
Internet access technologies (xDSL)
Low-rate speech coding
Multirate signal processing
Wideband speech/audio coding
3D Audio objects and environments

Industrial Automation: Automation

Advanced control systems
Computer integrated manufacturing systems
Embedded internet systems
Machine tool design
Machine vision
Mechatronics
Precision position and speed control
Robotics and sensors

Telerobotics
Virtual surgery

Industrial Automation: Applications

Arc welding control
Renewable energy sources
Superconducting magnetic energy storage

Power Quality

Monitoring and analysis
Planning
Equipment susceptibility
Power electronics
Variable speed drives

Doctor of Philosophy

Introduction

Candidates are expected to develop a research thesis that leads to an original and significant contribution to the knowledge in their particular field. Candidates for this degree enrol in ECTE951 Thesis.

Entry Requirements

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, or
- a Master of Engineering Studies degree with a weighted average mark of 67.5% or higher, or
- a Master of Engineering – Research degree, or
- an equivalent qualification from another recognised tertiary institution;

in one of the following areas: Computer, Electrical, Electronics or Telecommunications Engineering.

In addition, a primary supervisor from the School of Electrical, Computer and Telecommunications Engineering must be identified prior to commencing the program.

Program of Study

All new students enrolling in a research degree are expected to prepare and defend a research proposal early in their candidature. Normally, the degree will be completed in not less than four, and not more than eight, academic sessions of full-time study, or six to 16 sessions of part-time study.

Master of Engineering - Research

Introduction

The aims of the course are to provide specialised research training for those preparing for careers in academia, government and industry; and to provide practising engineers with the means to increase their knowledge and upgrade their qualifications.

Entry Requirements

This degree is primarily a research degree for those who have completed:

- an Honours Bachelor degree at a standard of Class II, Division 2 or higher, or
- a Master of Engineering Studies degree with a weighted average mark of 67.5% or higher, or
- an equivalent qualification from another recognised tertiary institution;

in one of the following areas: Computer, Electrical, or Telecommunications Engineering, or related area.

If a candidate has a good academic record, entry from a Pass Bachelor degree in computer, electrical, or telecommunications engineering, or related area, is possible.

Program of Study

The degree is normally 72 credit points, consisting of a 48 credit point research thesis and 24 credit points of coursework. The program must be completed in a maximum time of two years' full-time and requires satisfactory completion of the following:

- 24 credit points of coursework, consisting of 900 level ECTE subjects chosen from those listed under the Master of Engineering Studies and approved by the Head of the School of Electrical, Computer and Telecommunications Engineering, in consultation with the School Postgraduate Research Committee, to constitute a coherent introduction to the proposed area of research; and
- subject to students gaining a weighted average mark of 67.5% for the coursework, the 48 credit point thesis subject ECTE951.

Candidates who fail to meet the requisite standard for the coursework component will be required to transfer to the Master of Engineering Studies.

Candidates with an Honours Bachelor degree at a standard of Class II, Division 2 or higher, or a Master of Engineering Studies degree with a weighted average mark of 67.5% or higher in computer, electrical, or telecommunications engineering or related area, or equivalent, may be given exemption from all, or some, of the 24 credit points of coursework. This would be contingent on evidence of considerable research strength.

Master of Engineering Practice
(Mechatronics)

Introduction

This course is offered jointly by the Faculty of Engineering and the School of Electrical, Computer and Telecommunications Engineering. Details of the Entry Requirements and Program of Study are contained in the Faculty of Engineering entry.

Candidates with Electrical, Telecommunications, Computer or similar engineering backgrounds can also study mechatronics subjects via the Master of Engineering Studies by enrolling in ECTE953 Report in a mechatronics field and ECTE955 Advanced Laboratory undertaking special mechatronics projects. Five other subjects would then be selected from the Automation and Power Engineering Program and the mechatronics subject offerings from the Faculty of Engineering.

Master of Engineering Studies

Introduction

The objective of this program is to provide graduates with engineering skills at a level between the Bachelor and Masters by Research degree levels.

Entry Requirements

A four-year Bachelor degree in Computer, Electrical, Electronics or Telecommunications Engineering, or an equivalent degree from a recognised tertiary institution.

Program of Study

Under the Masters Degree Rules, candidates must accumulate a total of not less than 48 credit points by the satisfactory completion of subjects, approved by the Head of School, as indicated below.

The complete list of subjects available under the Master of Engineering Studies is presented below. In any given year, the subjects presented under the individual programs that follow may be replaced by equivalent subjects from this list.

List of Subjects

ECTE901	Fast Signal Processing Algorithms	6
ECTE902	Stochastic Signal Processing	6
ECTE903	Image and Video Processing	6
ECTE904	Adaptive Signal Processing	6
ECTE905	Speech and Audio Processing	6
ECTE911	AC-Sourced Power Electronics	6
ECTE912	DC-Sourced Power Electronics	6
ECTE913	Micro-Electronics	6
ECTE921	Power Quality	6
ECTE922	Power Quality Monitoring	6
ECTE923	Power Systems	6
ECTE924	Power Systems Abnormalities	6
ECTE925	Industrial Drives and Actuators	6
ECTE926	Power Equipment Design	6
ECTE931	Real-Time Computing	6
ECTE932	Computer Systems	6
ECTE941	Intelligent Control	6
ECTE942	Computer Controlled Systems	6
ECTE943	Digital Control	6
ECTE944	Identification and Optimal Control	6
ECTE953	Report	12
ECTE955	Advanced Laboratory	6
ECTE961	Telecommunications Queuing Theory	6
ECTE962	Telecommunications System Modelling	6
ECTE963	Transmission Systems	6
ECTE964	Antennas and Propagation	6
ECTE965	Wireless Communications	6

ECTE966	Spread Spectrum Communications	6
ECTE967	Mobile Networks	6
ECTE968	Error Control Coding	6
ECTE971	Robotics Manipulators	6
ECTE972	Robotics Sensory Control	6
ECTE981	Internet Protocols	6
ECTE982	Internet Engineering	6
ECTE983	Computer Networking	6
ECTE984	Network Design and Analysis	6
ECTE985	Internet Communications	6
ECTE986	Telecommunications Network Management	6

Automation & Power Engineering Program

This program includes mechatronics studies. Students interested in mechatronics would complete a project in the mechatronics field in ECTE953 Report, and mechatronics laboratory work in ECTE955 Advanced Laboratory.

Part A

Five subjects* from the list of subjects below:

ECTE901	Fast Signal Processing Algorithms	6
ECTE902	Stochastic Signal Processing	6
ECTE911	AC-Sourced Power Electronics	6
ECTE912	DC-Sourced Power Electronics	6
ECTE921	Power Quality	6
ECTE923	Power Systems	6
ECTE931	Real-Time Computing	6
ECTE932	Computer Systems	6
ECTE941	Intelligent Control	6
ECTE942	Computer Controlled Systems	6
ECTE963	Transmission Systems	6
ECTE971	Robotics Manipulators	6
ECTE972	Robotics Sensory Control	6

and

Part B

both of the following subjects:

ECTE953	Report**	12
ECTE955	Advanced Laboratory***	6

* Only a limited number of subjects will be available in any one year in Part A. As indicated above, the subjects listed in Part A may be replaced by equivalent subjects selected from the complete list given above. The Head of School may also approve relevant subjects from other programs. Under normal circumstances, this approval would not exceed subjects to a total value of 12 credit points.

** With the approval of the Head of School, this subject may be replaced by two of the subjects listed in Part A.

*** With the approval of the Head of School, this subject may be replaced by one of the subjects listed in Part A.

Computer & Telecommunications Engineering Program

Part A

Five subjects* from the list of subjects below:

ECTE901	Fast Signal Processing Algorithms	6
ECTE902	Stochastic Signal Processing	6
ECTE903	Image and Video Processing	6
ECTE905	Speech and Audio Processing	6
ECTE912	DC-Sourced Power Electronics	6
ECTE931	Real-Time Computing	6
ECTE932	Computer Systems	6

ECTE941	Intelligent Control	6
ECTE942	Computer Controlled Systems	6
ECTE961	Telecommunications Queuing Theory	6
ECTE962	Telecommunications System Modelling	6
ECTE963	Transmission Systems	6
ECTE965	Wireless Communications	6
ECTE982	Internet Engineering	6
ECTE983	Computer Networking	6
ECTE985	Internet Communications	6
ECTE986	Telecommunications Network Management	6

and

Part B

both of the following subjects:

ECTE953	Report**	12
ECTE955	Advanced Laboratory***	6

* Only a limited number of subjects will be available in any one year in Part A. As indicated above, the subjects listed in Part A may be replaced by equivalent subjects selected from the complete list given above. The Head of School may also approve relevant subjects from other programs. Under normal circumstances, this approval would not exceed subjects to a total value of 12 credit points.

** With the approval of the Head of School, this subject may be replaced by two of the subjects listed in Part A.

*** With the approval of the Head of School, this subject may be replaced by one of the subjects listed in Part A.

Master of Internet Technology

Introduction

The Telecommunications and Information Technology Research Institute (TITR) and the School of Electrical, Computer and Telecommunications Engineering offer a course leading to the award of the Master of Internet Technology (MIT).

The objective of the MIT degree is to provide advanced knowledge and specialist skills on a broad range of Internet technologies and systems. The Internet is recognised as the primary driving force that is providing the impetus for the rapidly evolving online economy, electronic commerce and the proliferation of virtual communities and interest groups.

The MIT degree is designed to enable a wide range of entry to candidates who have existing technical qualifications or who have significant experience in related fields or to candidates from areas when a fundamental understanding of Internet Technology is crucial for the evolution of that particular area. The latter aspect recognises the fact that many other areas of industrial and commercial endeavour will need to understand the broad range of Internet Technology in order to take full advantage of its potential and to realise its strategic value.

Entry Requirements

1. Candidates with an undergraduate degree from a recognised tertiary institution, with a grade average of at least 60%, in, Computer Electrical or Telecommunications Engineering, Computer science, Information Technology or equivalent will have direct entry to the MIT degree.
2. Applicants with a degree in areas other than those identified above plus at least two years' relevant computer/internet relevant work experience may be considered by the Faculty.
3. Applicants with an undergraduate degree but who do not meet the requirements for direct entry may be eligible for entry after satisfactory completion of an on-campus 24 credit point preparatory program, or equivalent undertaken at another recognised institution.

Program of Study

The degree will normally occupy two sessions of full-time study, or part-time equivalent, and requires the satisfactory completion of 48 credit points of coursework subjects, including a project, as follows:

ECTE991	Internet Fundamentals	6
ECTE956	Internet Project*	6

Plus six subjects** from the following, of which three must be ECTE subjects:

CSCI968	Network Security	6
ECTE992	Internet Networking Protocols	6
ECTE993	Access Technologies	6
ECTE994	Wireless and Mobile Communication Systems	6
ECTE995	Content Servers and Caching Technologies	6
ECTE996	Multimedia Communications	6
ECTE997	Web Technology and Applications	6
IACT906	Business On-Line	6
IACT918	Corporate Network Management	6
ITCS922	Computer Security	6
ITCS937	Security, Risk Management and Control in Electronic Commerce	6

or

ECTE991	Internet Fundamentals	6
ECTE956	Internet Project*	6

and

ECTE957	Advanced Internet Project***	12
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Plus four subjects** from the following, of which one must be an ECTE subject:

CSCI968	Network Security	6
ECTE992	Internet Networking Protocols	6
ECTE993	Access Technologies	6
ECTE994	Wireless and Mobile Communication Systems	6
ECTE995	Content Servers and Caching Technologies	6
ECTE996	Multimedia Communications	6
ECTE997	Web Technology and Applications	6
IACT906	Business On-Line	6
IACT918	Corporate Network Management	6
ITCS922	Computer Security	6
ITCS937	Security, Risk Management and Control in Electronic Commerce	6

* ECTE956 Internet Project must be undertaken in the first session of a student's enrolment.

**Only a limited number of subjects will be available in any one session.

***Entry to this subject is restricted to those students who gain a weighted average mark of 72.5% for the full-time first session load (i.e. four six credit point subjects, including ECTE956 Internet Project and ECTE991 Internet Fundamentals).

School of Information Technology & Computer Science

Courses Offered

Doctor of Philosophy
 Master of Information and Communication Technology - Research
 Master of Computer Science - Research
 Master of Computer Science
 Master of Computer Studies
 Master of Electronic Commerce
 Master of Health Informatics
 Master of Industry-based Information Technology
 Master of Information and Communication Technology
 Master of Information Technology Management
 Master of Digital Multimedia
 Graduate Certificate in Health Informatics
 Graduate Certificate in Industry-based Information Technology
 Graduate Certificate in Information and Communication Technology

Areas of Research

The following major areas of research are available:

Secure Communication

Combinatorial designs
 Computer Security
 Cryptography
 Distributed Systems Security
 Error control coding
 Network and Communication security

Software Engineering

Databases
 Distributed systems
 Internet technologies
 Safety and risk and hazard analysis
 Workflow and process modelling

Intelligent Systems

Machine vision
Neural networks
Robotics
Spatial databases
Ultrasonic sensing

E-Applications

E-Commerce
E-Education
E-Health
E-Learning
E-Manufacturing
Information Management
Smart card applications
Telecommunications network planning

Doctor of Philosophy

The degree of Doctor of Philosophy is available to candidates in the major SITACS research areas. Admission details and regulations governing the award are set out in the University Course Rules.

Candidates for this degree enrol in CSCI993 (for Computer Science) or IACT970 (for Information and Communication Technology), and repeat the same enrolment for each year of study.

Master of Information and Communication Technology - Research

Entry Requirements

This degree is primarily a research degree for those who have completed an Honours Bachelor degree at a standard of Class II, Division 2 or higher, or a Masters by coursework in Information and Communication Technology. If a candidate has a good academic record, entry from a Pass Bachelor degree, Pass Bachelor degree and Graduate Diploma, or Pass Bachelor Degree and Graduate Certificate is possible.

Program of Study

The degree is normally 72 credit points, consisting of a 48 credit point research thesis and 24 credit points of coursework. The degree will normally occupy three sessions of full-time study or part-time equivalent, with a maximum completion time of two years' full-time. It requires satisfactory completion of the following:

- (a) IACT940 Research Methodology (6cp)
- (b) Three subjects (18cp) from the IACT Graduate Subject list to constitute a coherent introduction to the proposed area of research, as agreed to by Head of School. The candidate must achieve at least a WAM of 67.5% in this coursework component.
- (c) The 48cp thesis IACT970 Major Thesis.

Candidates who fail to meet the requisite standard for the coursework component may have their enrolment cancelled. In this case, a candidate may be eligible to apply for one of the graduate certificates offered by the School or transfer to a 48 credit point Masters by coursework degree.

Candidates with an Honours Bachelor degree at a standard of Class II, Division 2 or higher, or Masters by coursework degree, may be given exemption from all, or some, of the 24 credit points of coursework and admitted directly to the 48 credit point research thesis component. This would be contingent on evidence of proven research experience.

A candidate may not include for this degree subjects similar in content to subjects included in their honours or masters course.

Each candidate shall have a supervisor and a co-supervisor appointed on the recommendation of the Head of School of Information Technology and Computer Science.

Master of Computer Science - Research

Entry Requirements

This degree is primarily a research degree for those who have completed an Honours Bachelor degree at a standard of Class II, Division 2 or higher, or a Masters by coursework in Computer Science. If a candidate has a good academic record, entry from a Pass Bachelor degree, Pass Bachelor degree and Graduate Diploma, or Pass Bachelor Degree and Graduate Certificate is possible.

Program of Study

The degree is normally 72 credit points, consisting of a 48 credit point research thesis and 24 credit points of coursework. The degree will normally occupy three sessions of full-time study or part-time equivalent, with a maximum completion time of two years' full-time. It requires satisfactory completion of the following:

- (a) IACT940 Research Methodology (6cp)
- (b) Three subjects (18cp) from the CSCI Graduate Subject list to constitute a coherent introduction to the proposed area of research, as agreed to by Head of School. The candidate must achieve at least a WAM of 67.5% in this coursework component.
- (c) The 48cp thesis CSCI993 Thesis.

Candidates who fail to meet the requisite standard for the coursework component may have their enrolment cancelled. In this case, a candidate may be eligible to apply for one of the graduate certificates offered by the School or transfer to a 48 credit point Masters by coursework degree.

Candidates with an Honours Bachelor degree at a standard of Class II, Division 2 or higher, or Masters by coursework degree, may be given exemption from all, or some, of the 24 credit points of coursework and admitted directly to the 48 credit point research thesis component. This would be contingent on evidence of proven research experience.

A candidate may not include for this degree subjects similar in content to subjects included in their honours or masters course. Each candidate shall have a supervisor and a co-supervisor appointed on the recommendation of the Head of the School of Information Technology and Computer Science.

Master of Computer Science

Introduction

The Master of Computer Science is designed to provide advanced studies in Computer Science at a professional level to graduates of this or another university who have some background in Computer Science.

Entry Requirements

Entry to the Master of Computer Science will normally be from a three-year undergraduate degree in computer science, software engineering or computer engineering, with a grade average of 65% or better, from a recognised Australian university or institution of equivalent standing.

Program of Study

The degree will normally occupy one year of full-time study or part-time equivalent, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points (excluding the subjects CSCI992 and IACT993). The 48cp must include:

- At least five (5) subjects, with a minimum credit point value of 30, selected from the CSCI Graduate Subjects.
- If only five (5) subjects are chosen, three (3) subjects selected from either the IACT Graduate Subjects or the Graduate Additional Subjects List.

The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

Master of Computer Studies

Introduction

This course has been specifically designed to meet the demand for students with a bachelor degree outside the computing field to gain a Master level qualification.

Entry Requirements

Entry to the Master of Computer Studies will normally be from a three year undergraduate degree, with a grade average of at least 65%, from a recognised Australian university or institution of equivalent standing.

In addition, international students must meet the University of Wollongong's English language entry requirements.

For candidates who do not have knowledge or experience of C++, the course will usually be completed in three sessions (equivalent to 12 months). Commencement in Spring (July) Session is recommended as this allows students to take ITCS902 Data Structures over Summer Session (November - February). As ITCS902 is a pre-requisite for many subjects on the MCompStud schedule, this increases subject options in the following Autumn (February) Session. Students commencing in Autumn Session have limited subject options as ITCS902 is available in Spring and Summer Sessions only.

Program of Study

Candidates must successfully complete 48 credit points (8 subjects) chosen from the following list:

Subject	Pre-req	Subject Name	
ITCS901		Computer Programming	6
ITCS902	ITCS901	Data Structures	6
ITCS903	ITCS902	C Family & UNIX	6
ITCS904		Database Systems	6
ITCS905		Information Technology B	6
ITCS906		Computer Systems Architecture	6
ITCS907	ITCS902	JAVA Programming and the Internet	6
ITCS908		Citizens' Rights in the Information Society	6
ITCS909		Operating Systems	6
ITCS911		Special Topic A	6
ITCS912		Special Topic B	6
ITCS913		Special Topic C	6
ITCS915		Information Technology A	6
ITCS916		Theory of Computer Science	6
ITCS917	ITCS902	Development Methods and Tools	6
ITCS918	ITCS902	Data Structures, Algorithms, Systems	6
ITCS921	ITCS904	Database Design and Implementation	6
ITCS922	ITCS902	Computer Security	6
ITCS923		The Wired World	6
ITCS936		Detailed Design of Integrated Solutions for eBusiness	6

Master of Electronic Commerce

Introduction

This degree is designed to prepare managers for the Electronic Commerce world. The recent surge in the use of the Internet to conduct all forms of business has left many graduates without the required skills to maximise their effectiveness in the new business economy.

Employees skilled in electronic commerce concepts and practices will be well placed to operate more effectively and take advantage of the opportunities of doing business in the e-world.

Entry Requirements

Applicants are required to have a three-year Bachelor degree in computer science, information technology, computer engineering, commerce, management or a related discipline from a recognised Australian university or institution of equivalent standing.

Students who do not have this qualification may be admitted to a 96 or 72 credit point program, in which undergraduate and/or postgraduate subjects are completed to ensure students have the prerequisite understanding to undertake the program.

Program of Study

Students must complete two compulsory core subjects, and choose at least two subjects from Group A (Applied E-Commerce), at least two subjects from Group B (E-Commerce Management) plus two elective subjects.

Core Subjects

ITCS938	eBusiness Technologies	6
BUSS907	Fundamentals of E-Business	6

Group A: Applied E Commerce

Students must choose at least 12 credit points from the following:

BUSS909	Office Automation and Intranets	6
IACT906	Business On-Line	6
IACT924	Corporate Network Design & Implementation	6
ITCS932	Web Design	6
ITCS936	Detailed Design of Integrated Solutions for eBusiness	6
ITCS937	Security, Risk Management & Control in Electronic Commerce#	6

Group B: E Commerce Management

Students must choose at least 12 credit points from the following:

ACCY936	Management & Information Systems	6
BUSS952	Strategic Information Systems Management	6
BUSS953	Management of Information Systems Development	6
ECON915	Electronic Commerce & the Economics of Information	6
MARK901	Marketing on the Internet#	6
TBS908*	Supply Chain Management	6

Plus 12 credit points of electives to be chosen from subjects in Group A, B or C or any other subject approved by the Course Coordinator/s.

Group C: Elective Subjects

ACCY901	Accounting for Managers	6
or		
TBS901*	Accounting for Managers	6
BUSS950	Systems Development Methodologies	6
BUSS951	Critical Issues in Information Systems	6
CSCI946	Multimedia Studies	6
IACT917	Information Management	6
ITCS923	The Wired World	6

ITCS933	Software Engineering Requirements & Specifications	6
ITCS934	Software Process Management	6
MARK922	Marketing Management	6
or		
TBS904*	Marketing Management	6
TBS903*	Managing People in Organisations	6
TBS905*	Economic Analysis of Business	6
TBS906*	Information Systems for Managers	6

#Pre-requisites apply

* Offered by the University of Wollongong Graduate School of Business and Professional Development. Start dates differ from the standard University Calendar.

Note: Any advanced standing granted for this course, will be deemed to be Electives not Core, students must still complete 12 credit points from Group A & 12 credit points from Group B.

Master of Health Informatics

This degree will be offered in 2003 subject to final approval by University Council. Please refer to <http://www.uow.edu.au/discover/courses/> or contact the Faculty of Informatics office.

Introduction

Health services in Australia, as in most countries, are experiencing a surge of interest and investment in e-health. This degree is designed to equip IT and Health professionals with an understanding of the health sector, and the application of relevant systems, in order to take on key roles in successful strategy development and health systems projects.

Entry Requirements

A three-year bachelor degree from a recognised Australian university or equivalent institution, with a major in information technology, computer science, health sciences or any other relevant discipline approved by the Course Coordinators.

Program of Study

This one year degree (or part-time equivalent) requires satisfactory completion of at least 48 credit points as follows:

Core Subjects

IACT917	Information Management	6
ITCS929	Concepts and Issues in Healthcare Computing	6
ITCS930	Introduction to Health Informatics	6

Elective Subjects

Plus at least 30 credit points from the following:

GHMD909	Comparative Health Systems: Policies and Politics	6
GHMD924	Health Information Systems	6
GHMD983	Statistics in Health Research	6
IACT901	IT Strategic Planning	6
IACT902	Applied Project Management	6
IACT905	Information Technology and Innovation	6

IACT906	Business On-Line	6
IACT940	Research Methodology	6
IACT950	Research Report	12
INFO911	Data Mining and Knowledge Discovery	6
ITCS905	Information Technology B	6
ITCS908	Citizens' Rights in the Information Society	6

or any other subject approved by the Head of School or the Course Co-ordinator/s.

Note: not all subjects may be available every year.

Master of Industry-based Information Technology

Introduction

This industry-based degree has been specifically tailored for the practising IT professional, providing a deeper understanding of the issues that arise in the implementation and application of IT. The program informs and educates high-level professionals about the organisational, economic, regulatory and socio-technical issues essential to the effective management of information technology.

The degree aims to improve the skills of professionals who are using the latest software technologies by providing a combined program of academic guidance to work-based activities plus traditional academic subjects.

Entry Requirements

An applicant must be in current employment in an information and/or communication technology (ICT) related job and have:

- an undergraduate degree from a recognised tertiary institution with a grade average of at least 60% and demonstrated IT knowledge; OR
- other qualifications showing an appropriate balance between other academic or professional qualifications, and relevant professional experience in information and/or communication technology.

Ideally, all candidates would have a minimum of two years' professional experience in information and/or communication technology.

Program of Study

This one year degree (or part-time equivalent) requires satisfactory completion of at least 48 credit points, consisting of the following three components:

- 1) 12 credit points for Core Professional Development;
- 2) 12 credit points for Industry-based Project (ITCS949);
- 3) 24 credit points for Academic subjects (of 6 credit points each)

To be awarded a major study, 3 subjects must be selected from **one** of the following groups:

Software Engineering

CSCI925	Advanced Topics in Software Engineering	6
CSCI957	Advanced Topics in Database Management	6

ITCS933	Software Engineering Requirements and Specifications	6
ITCS934	Software Process Management	6
ITCS935	Software Engineering Formal Methods	6

Electronic Commerce

IACT901	IT Strategic Planning	6
IACT906	Business On-Line	6
IACT919	On-Line Information Services	6
ITCS931	Advanced Web Application Development	6
ITCS937	Security, Risk Management and Control in Electronic Commerce	6

Information Management

CSCI957	Advanced Topics in Database Management	6
IACT916	Organisational Issues in Information Technology	6
IACT917	Information Management	6
IACT919	On-Line Information Services	6
IACT926	Information Society, Knowledge Work and Information Technology	6
ITCS936	Detailed Design of Integrated Solutions for eBusiness	6

Multimedia

CSCI946	Multimedia Studies	6
CSCI963	Advanced Computer Graphics	6
IACT931	Special Topics in Information Technology A	6
ITCS907	JAVA and the Internet	6
ITCS932	Web Design	6

Enterprise Network Planning, Design and Management

IACT901	IT Strategic Planning	6
IACT918	Corporate Network Management	6
IACT924	Corporate Network Design	6
ITCS937	Security, Risk Management and Control in Electronic Commerce	6

Master of Information & Communication Technology

Introduction

The purpose of this degree is to provide graduates working in the area of information and/or communication technology with a deeper understanding of the organisational, economics and policy issues essential to the effective management of information technology.

Entry Requirements

Candidates would normally have, either:

- a) Graduate Certificate in Information and Communication Technology (with an average of 65% or better); or
- b) A three-year Bachelor degree from a recognised tertiary institution (with a grade average of 65% or better) related to ICT, for example: computer science; information technology; business information systems; computer, electrical or telecommunications engineering; or

- c) A three-year Bachelor degree from a recognised tertiary institution (with a grade average of 65% or better) in any area plus at least one year (full-time) or two years' (part-time) employment in the ICT industry; or
- d) Applicants who meet the academic requirements for entry but have a degree in an area unrelated to ICT and who do not have work experience in ICT (one year full-time or two years' part-time) may take the Pathways course prior to entry. Upon successful completion of this program students will be permitted to enrol in the above course.

Program of Study

The Master of Information and Communication Technology degree will normally occupy one year of full-time study or part-time equivalent, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points (excluding the subjects IACT960 and IACT970).

The 48 credit points must include:

- (a) At least five (5) subjects, with a minimum credit point value of 30, selected from the IACT Graduate Subjects.
- (b) If only five (5) are chosen, three (3) subjects selected from either the CSCI Graduate Subjects or the Graduate Additional Subjects List.

Master of Information Technology Management

This degree is a one year Masters program (48 credit point) designed to provide graduates and professionals with the competencies sought by global business leaders at the forefront of global IT development, who want innovative IT managers with drive and ambition.

Entry Requirements

Applicants will normally have:

- (a) an Australian Bachelor degree or equivalent (with a grade average of 65% or better) related to ICT for example computer science; information technology; business information systems; computer, electrical or telecommunications engineering; or
- (b) a Bachelor degree (with a grade average of 65% or better) in any area plus at least one year (full-time) or two years' (part-time) employment in the ICT industry; or
- (c) applicants who meet the academic requirements for entry but have a degree in an area unrelated to ICT and who do not have work experience in ICT (one year full-time or two years' part-time) may take the Pathways course prior to entry. Upon successful completion of this program, students will be permitted to enrol in the above course.

In special circumstances, applicants who hold other academic or professional qualifications and have a minimum of 5 years' full-time or ten years' part-time relevant employment in the ICT industry, may be granted admission to the program.

In addition, international students must meet the University of Wollongong's English language entry requirements.

The MITM will articulate to the MBA degree, (only a further seven (7) subjects instead of the usual 12 would need to be completed to gain the MBA Degree).

Course Requirements

For the Master of Information Technology Management, students must normally complete:

- a) 4 subjects from Group A and 4 Subjects from Group B; or
- b) in special circumstances 5 subjects from Group A and 3 Subjects from Group B may be chosen.

Group A

IACT901	IT Strategic Planning	6
IACT906	Business On-Line	6
IACT916	Organisational Issues in Information Technology	6
IACT917	Information Management	6
IACT918	Corporate Network Management	6
IACT919	On-line Information Services	6
IACT922	Case Studies in Information Technology Applications	6
ITCS936	Detailed Design of Integrated Solutions for eBusiness	6
ITCS937	Security, Risk Management & Control in Electronic Commerce	6

Or any other subject approved by the Head of School

Group B

BUSS952	Strategic Information Systems Management	6
MARK901	Marketing on the Internet	6
TBS901*	Accounting for Managers	6
TBS902*	Statistics for Decision Making	6
TBS903*	Managing People in Organisations	6
TBS904*	Marketing Management	6
TBS906*	Information Systems for Managers	6
TBS908*	Supply Chain Management	6
TBS920*	International Business	6
TBS929*	Management of Process Innovation	6
TBS950*	Quality in Management	6
TBS981*	Employment Relations in an International Context	6

or any other subject approved by the Head of School.

*Offered by the University of Wollongong Graduate School of Business and Professional Development. Start dates differ from the standard University Calendar. Quotas may apply to TBS subjects offered at the Sydney Business School.

Master of Digital Multimedia

This degree will be offered in 2003 subject to final approval by University Council. Please refer to <http://www.uow.edu.au/discover/courses/> or contact the Faculty of Informatics office.

Introduction

Production units that write multimedia software for media creation and presentation via the web, videos, education, computer games or interactive DVDs require employees that have appropriate creative and technical skills. This degree is designed to provide IT graduates with the opportunity to develop skills in both these areas through training in multimedia programming and creation, and in the use of professional multimedia tools.

Entry Requirements

A three-year undergraduate degree from a recognised Australian university or equivalent institution, with a major in computer science, information technology, business information systems, computer, electrical or telecommunications engineering or related area, with at least a 65% grade average; or a Master of Computer Studies degree, or equivalent.

Program of Study

This one year degree (or part-time equivalent) requires satisfactory completion of at least 48 credit points as follows:

Core

ITCS940	Multimedia Programming Foundations	6
DESN921	Creative Industries – Design for Interactive Multimedia	6

Plus 36 credit points from the following:

CSCI944	Perception and Planning	6
CSCI946	Multimedia Studies	6
ECTE996	Multimedia Communications	6
EDGI911	Information Technology in Education and Training	6
ENGG923	Advanced Digital Sound & Imaging Techniques	6
ITCS932	Web Design	6
ITCS941	Multimedia Graphics	6
ITCS942	Multimedia 3D Modelling and Animation	6
ITCS943	Game design and programming	6
ITCS945	Multimedia Project	12

Graduate Certificate in Health Informatics

This course will be offered in 2003 subject to final approval by University Council. Please refer to <http://www.uow.edu.au/discover/courses/> or contact the Faculty of Informatics office.

Introduction

This graduate certificate is designed as an early exit point from the Master of Health Informatics degree.

Program of Study

Students enrolled in the Master of Health Informatics may apply to graduate with the Graduate Certificate in Health Informatics after satisfactory completion of 24 credit points, which must include the three core subjects IACT917, ITCS929 and ITCS930, and one 6 credit point subject chosen from the electives listed for the Master of Health Informatics.

Graduate Certificate in Industry-based Information Technology

Introduction

This graduate certificate is designed as an early exit point from the Master of Industry-based Information Technology (MIIT) degree.

Program of Study

Students enrolled in the MIIT may apply to graduate with a Graduate Certificate in Industry-based Information Technology after satisfactory completion of 24 credit points, chosen from any combination of the following:

1. 6 credit points for core professional development
2. 12 credit points for industry-based project, ITCS949
3. Up to three academic subjects (up to 18cp), chosen from the subjects listed under the MIIT.

Graduate Certificate in Information and Communication Technology

Introduction

The objective of the Graduate Certificate is to provide an introductory study of the concepts of information and communication technology. The course will cover the issues that arise in the implementation and application of information technology. It addresses the challenge of educating managers and executives about the organisational, economic, regulatory and social problems that must be solved as highly complex technological systems are implemented.

Entry Requirements

Candidates would normally have, either:

- (a) A three-year Bachelor degree from a recognised tertiary institution in an area related to ICT (eg. Computer Science, Information Technology, Business Information Systems, Computer Engineering, Electrical Engineering, Telecommunications Engineering); or
- (b) A three-year Bachelor degree from a recognised tertiary institution in any area plus at least one year (full-time) or two years' (part-time) employment in the ICT industry; or

- (c) Applicants who meet the academic requirements for entry but have a degree in an area unrelated to ICT and who do not have work experience in ICT (one year full-time or two years' part-time) may take the Pathways course prior to entry. Upon successful completion of this program, students will be permitted to enrol in the above course.

Applicants with other professional or academic qualifications plus a minimum of five years' full-time (or ten years' part-time) employment in the ICT industry may be considered by the Faculty.

Program of Study

This graduate certificate will normally occupy one session (6 months) of full-time study or one year of part-time study, and requires satisfactory completion of 900 level subjects to the value of at least 24 credit points (4 subjects) chosen from the IACT Graduate Subjects List.

Students may choose to undertake a major study in either Information Security or Telecommunications.

Information Security

To obtain a major study in Information Security, candidates must satisfactorily complete at least 24 credit points of subjects, as follows:

IACT922	Case Studies in Information Technology Applications	6
CSCI980	Preliminary Topics in Computer Science A	6
IACT930	Special Topics in Information and Communication Technology	6
CSCI971	Advanced Computer Security	6

Not all subjects may be available every year.

Telecommunications

To obtain a major study in Telecommunications, candidates must satisfactorily complete at least 24 credit points (4 subjects) from Parts A and B of the following list of subjects. Of the 24 credit points attempted, at least 12 credit points (2 subjects) must be IACT subjects from Part A.

Part A

IACT904	International Telecommunications Policy Issues	6
IACT918	Corporate Network Management	6
IACT919	On-Line Information Services	6
IACT924	Corporate Network Design and Implementation	6

Part B

IACT901	IT Strategic Planning	6
IACT902	Applied Project Management	6
IACT905	Information Technology and Innovation	6
IACT916	Organisational Issues in Information Technology	6
IACT917	Information Management	6
IACT922	Case Studies in Information Technology Applications	6
IACT926	Information Society, Knowledge Work and Information Technology	6
IACT933	Special Topics in Telecommunications Issues	6

or any other subject approved by the Head of the School of Information Technology and Computer Science.

Not all subjects may be available every year.

Articulation

Students who qualify for the Graduate Certificate in Information and Communication Technology and who have achieved an average grade of 65% or better over all subjects, will be able to proceed to the Master of Information and Communication Technology. Advanced standing of 24 credit points will be granted towards the Masters degree.

Prior to the conferring of a Master of Information and Communication Technology upon a candidate who holds a Graduate Certificate in Information and Communication Technology of this University, the candidate shall surrender the testamur and all rights relating to the Graduate Certificate.

CSCI Graduate Subjects

CSCI907	Corba & Enterprise JAVA	6
CSCI908	Distributed JAVA	6
CSCI925	Topics in Software Engineering	6
CSCI944	Perception and Planning	6
CSCI945	Parallel Computing	6
CSCI946	Multimedia Studies	6
CSCI957	Advanced Topics in Database Management	6
CSCI963	Advanced Computer Graphics	6
CSCI964	Neural Computing	6
CSCI965	Design and Analysis of Algorithms	6
CSCI966	Coding for Secure Communication	6
CSCI967	Complexity Theory	6
CSCI968	Network Security	6
CSCI971	Computer Security	6
CSCI974	Systems Analysis	6
CSCI991	Project	12
INFO911	Data Mining and Knowledge Discovery	6
INFO912	Mathematics for Cryptography	6
INFO913	Information Theory	6
ITCS931	Advanced Web Application Development	6
ITCS932	Web Design	6
ITCS933	Software Engineering Requirements and Specifications	6
ITCS936	Detailed Design of Integrated Solutions for eBusiness	6

IACT Graduate Subjects

IACT901	IT Strategic Planning	6
IACT902	Applied Project Management	6
IACT904	International Telecommunications Policy Issues	6
IACT905	Information Technology and Innovation	6
IACT906	Business On-Line	6
IACT916	Organisational Issues in Information Technology	6
IACT917	Information Management	6
IACT918	Corporate Network Management	6
IACT919	On-line Information Services	6
IACT922	Case Studies in Information Technology Applications	6

IACT924	Corporate Network Design and Implementation	6
IACT926	Information Society, Knowledge Work and Information Technology	6
IACT930	Special Topics in Information and Communication Technology	6
IACT931	Special Topics in Information and Communication Technology - A	6
IACT932	Special Topics in Information and Communication Technology - B	6
IACT933	Special Topics in Telecommunications Issues	6
ITCS929	Concepts and Issues in Healthcare Computing	6
ITCS930	Introduction to Health Informatics	6
ITCS932	Web Design	6
ITCS936	Detailed Design of Integrated Solutions for eBusiness	6
ITCS937	Security, Risk Management and Control in Electronic Commerce	6
ITCS938	eBusiness Technologies	6
ITCS950	Patterns for eBusiness	6
ITCS951	Web Services for Dynamic eBusiness	6

Graduate Additional Subjects List

CSCI980	Preliminary Topics in Computer Science A	6
CSCI981	Preliminary Topics in Computer Science B	6
CSCI982	Preliminary Topics in Computer Science C	6
CSCI983	Preliminary Topics in Computer Science D	6
ITCS921	Database Design & Implementation	6
ITCS922	Computer Security	6
ITCS923	The Wired World	6
ITCS934	Software Process Management	6
ITCS935	Software Engineering Formal Methods	6
ITCS940	Multimedia Programming Foundations	6
ITCS941	Multimedia Graphics	6
ITCS942	Multimedia 3D Modelling and Animation	6
ITCS943	Game Design and Programming	6

Any subject at 900 level from: BUSS, MATH, STAT, ECTE, TBS or any other 900 level subject approved by the Head of School. Note that quotas may apply to TBS subjects offered at the Sydney Business School.

School of Mathematics & Applied Statistics

Courses Offered

Doctor of Philosophy
Master of Science - Research (Mathematics)
Master of Science - Research (Statistics)
Master of Mathematics
Master of Statistics
Graduate Diploma in Statistics

Current Research Areas

The following areas of research are available to candidates undertaking the Master of Science - Research degree and the Doctor of Philosophy degree:

Analysis of aggregate data
Combinatorial designs
Continuum mechanics
Epidemiology
Experimental design
Financial mathematics
Fluid mechanics
Functional analysis
Goodness of fit
Granular materials
Groundwater flow
Image analysis
Industrial applications of mathematics
Logic
Mathematical modelling of microwave heating
Measure theory
Multivariate analysis
Non-linear boundary value problems
Non-linear partial differential equations
Nonparametric and partially parametric inference
Numerical wave modelling
Partially parametric testing
Population dynamics
Quantum mechanics
Quasi-likelihood
Sample survey design analysis and methodology
Set theory
Solid and fracture mechanics
Spatial and geographical data analysis
Statistical decision theory
Statistical quality control
Symmetry analysis
Topological Groups
Topology
Tumour growth models

Doctor of Philosophy

Introduction

Doctor of Philosophy (PhD) candidates undertake in-depth research in order to make an original contribution to the body of knowledge in mathematical or statistical studies. This qualification can lead to, or enhance, an academic career and is highly regarded by private and public sector employers.

Entry Requirements

- A four-year Honours Bachelor degree in any relevant area of Mathematics or Statistics at a standard of Class II, Division 2 or higher; or
- A Master of Science – Research in Mathematics or Statistics with a strong performance in the 48 credit point thesis; or

- An equivalent degree from a recognised tertiary institution.

Program of Study

Candidates for this degree enrol in either MATH993 or STAT993.

**Master of Science- Research
(Mathematics)**

Introduction

This program is designed to consolidate and expand at an advanced level students' knowledge of their area of interest in mathematics. The degree will provide students with the skills required for sound practice in mathematics research in preparation for doctoral level research.

Entry Requirements

This degree is primarily a research degree for those who have completed a Bachelors Honours degree at a standard of Class II, Division 2 or higher in Mathematics, or an equivalent Masters by coursework degree in Mathematics.

Entry from a relevant Pass Bachelor degree, or Pass Bachelor degree and Graduate Diploma, with a very good academic record is also possible.

Program of Study

The degree is normally 72 credit points, consisting of a 48 credit point research thesis and 24 credit points of coursework. The degree will usually be studied full-time over one and one half years or may be studied part-time over three years, with a maximum completion time of two years full-time or four year on a part-time basis. The program requires the satisfactory completion of the following:

- 1) 24 credit points of subjects chosen from the 900 level Mathematics subjects listed below, which together provide research skills and competencies required to complete a research project in Mathematics.
- 2) The 48 credit point thesis subject MATH993.

The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

Each candidate shall have a supervisor appointed on the recommendation of the Head of the School of Mathematics and Applied Statistics.

Before the award Master of Science - Research (Mathematics) is conferred on a candidate who holds a testamur of the University of Wollongong for the degree of Master of Mathematics, the candidate shall surrender the testamur and the corresponding rights to the degree of Master of Mathematics.

Candidates with a Bachelors Honours degree at a standard of Class II, Division 2 or higher, or an equivalent Masters by coursework degree may be given exemption from all, or some, of the 24 credit points of coursework and admitted directly to the 48 credit point thesis component.

900 level Mathematics Subjects

MATH902	Solution of Differential Equations by One-Parameter Groups	6
MATH903	Mean Periodic Functions	6
MATH904	Stability for Partial Differential Equations	6
MATH905	Functional Analysis and Control Theory	6
MATH912	Mathematics of Microwave Heating	6
MATH913	Fluid Mechanics and Wave Theory	6
MATH915	Applied Nonlinear Partial Differential Equations	6
MATH916	Heat Conduction and Moving Boundary Problems	6
MATH917	Advanced Numerical Analysis	6
MATH918	Computational Fluid Mechanics	6
MATH921	Advanced Functional Analysis	6
MATH923	Measure and Integration	6
MATH924	Distributions	6
MATH925	Topics in Algebra	6
MATH926	Logic and Set Theory	6
MATH927	Combinatory Logic	6
MATH928	Advanced Measure Theory	6
MATH929	General Topology	6
MATH931	Statistical Behaviour in Dynamical Systems	6
MATH971	Advanced Topics in Applied Mathematics A	6
MATH972	Advanced Topics in Applied Mathematics B	6
MATH973	Advanced Topics in Pure Mathematics A	6
MATH974	Advanced Topics in Pure Mathematics B	6
MATH980	Preliminary Topics in Mathematics A	6
MATH981	Preliminary Topics in Mathematics B	6

Note: Subjects offered may change each year. Check the subject database or contact the School.

Master of Science - Research (Statistics)

Introduction

This program is designed to consolidate and expand at an advanced level students' knowledge of their area of interest in statistics. The degree will further enhance the analytical and communication skills required by a professional statistician, as well as provide students with the skills required for sound practice in statistics research in preparation for doctoral level research.

Entry Requirements

This degree is primarily a research degree for those who have completed a Bachelors Honours degree at a standard of Class II, Division 2 or higher in Statistics, or an equivalent Masters by coursework degree in Statistics. Entry from a relevant Pass Bachelor degree, or Pass Bachelor degree and Graduate Diploma, with a very good academic record is also possible.

Program of Study

The degree is normally 72 credit points, consisting of a 48 credit point research thesis and 24 credit points of coursework. The degree will usually be studied full-time over one and one half years or may be studied part-time over three years, with a maximum completion time of two years full-time or four year on a part-time basis. The program requires the satisfactory completion of the following:

- 1) 24 credit points of subjects chosen from the 900 level Statistics subjects listed below, which together provide research skills and competencies required to complete a research project in Statistics
- 2) The 48 credit point thesis subject STAT993.

The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

Each candidate shall have a supervisor appointed on the recommendation of the Head of the School of Mathematics and Applied Statistics.

Before the award Master of Science - Research (Statistics) is conferred on a candidate who holds a testamur of the University of Wollongong for the degree of Master of Statistics, the candidate shall surrender the testamur and the corresponding rights to the degree of Master of Statistics.

Candidates with a Bachelors Honours degree at a standard of Class II, Division 2 or higher, or an equivalent Masters by coursework degree may be given exemption from all, or some, of the 24 credit points of coursework and admitted directly to the 48 credit point thesis component.

900 level Statistics Subjects

STAT901	Modern Inference	6
STAT902	Advanced Data Analysis	6
STAT903	Survey Design and Analysis	6
STAT904	Statistical Consulting	6
STAT905	Time Series	6
STAT906	Experimental Design	6
STAT941	Statistical Quality Control 1	6
STAT942	Design and Analysis for Quality Control	6
STAT944	Regression and Observational Studies	6
STAT951	Statistics in Health Research	6
STAT971	Preliminary Topics in Statistics A	6
STAT972	Preliminary Topics in Statistics B	6
STAT981	Advanced Topics in Statistics A	6
STAT982	Advanced Topics in Statistics B	6
STAT983	Advanced Topics in Statistics C	6

Note: Subjects offered may change each year. Check the subject database or contact the School.

Master of Mathematics

Introduction

This program is designed to consolidate and expand the mathematics knowledge gained by a student in an undergraduate program and to develop skills in undertaking mathematical research projects.

Entry Requirements

Entry to the Master of Mathematics will normally be from a three-year Bachelor degree with a major in a relevant area of Mathematics. Candidates with a degree or diploma containing a substantial study in an appropriate discipline may be considered by the Faculty, on the recommendation of the Head of School.

Program of Study

The degree will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of at least 48 credit points, as follows:

Core Subject

MATH991	Project	12
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Elective Subjects

Plus at least 36 credit points chosen from the following list, as approved by the Head of School:

MATH902	Solution of Differential Equations by One-Parameter Groups	6
MATH903	Mean Periodic Functions	6
MATH904	Stability for Partial Differential Equations	6
MATH905	Functional Analysis and Control Theory	6
MATH912	Mathematics of Microwave Heating	6
MATH913	Fluid Mechanics and Wave Theory	6
MATH915	Applied Nonlinear Partial Differential Equations	6
MATH916	Heat Conduction and Moving Boundary Problems	6
MATH917	Advanced Numerical Analysis	6
MATH918	Computational Fluid Mechanics	6
MATH921	Advanced Functional Analysis	6
MATH923	Measure and Integration	6
MATH924	Distributions	6
MATH925	Topics in Algebra	6
MATH926	Logic and Set Theory	6
MATH927	Combinatory Logic	6
MATH928	Advanced Measure Theory	6
MATH929	General Topology	6
MATH931	Statistical Behaviour in Dynamical Systems	6
MATH971	Advanced Topics in Applied Mathematics A	6
MATH972	Advanced Topics in Applied Mathematics B	6
MATH973	Advanced Topics in Pure Mathematics A	6
MATH974	Advanced Topics in Pure Mathematics B	6
MATH980	Preliminary Topics in Mathematics A	6
MATH981	Preliminary Topics in Mathematics B	6

Or any other 900 level subjects offered by the School of Mathematics and Applied Statistics, as approved by the Head of School.

Note: Subjects offered may change each year. Check the Subject Database or contact the School.

In exceptional circumstances and subject to approval by the Head of the School, up to two 6 credit point subjects may be replaced by 900 level subjects of the same value offered by Units other than the School of Mathematics and Applied Statistics.

The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

Each candidate shall have a supervisor appointed on the recommendation of the Head of the School of Mathematics and Applied Statistics.

Master of Statistics

Introduction

This program is designed to upgrade statistical skills, and to educate the candidate to undertake advanced statistical work in industry, commerce or government, including the ability to communicate effectively with the users of their skills.

Entry Requirements

Entry to the Master of Statistics will normally be from a three-year Bachelor degree with a major in a relevant area of Statistics, or from the Graduate Diploma in Statistics. Candidates with a degree or diploma containing a substantial study in an appropriate discipline may be considered by the Faculty, on the recommendation of the Head of School.

Program of Study

The degree will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of at least 48 credit points, as follows:

Core Subject

STAT990	Minor Project	6
or, with the approval of the Head of School, candidates may replace STAT990 with:		
STAT991	Project	12

Elective Subjects

Plus at least 42 credit points (or 36 credit points if STAT991 is undertaken) chosen from the following list, as approved by the Head of School:

STAT901	Modern Inference	6
STAT902	Advanced Data Analysis	6
STAT903	Survey Design and Analysis	6
STAT904	Statistical Consulting	6
STAT905	Time Series	6
STAT906	Experimental Design	6
STAT941	Statistical Quality Control 1	6
STAT942	Design and Analysis for Quality Control	6
STAT944	Regression and Observational Studies	6
STAT951	Statistics in Health Research	6
STAT971	Preliminary Topics in Statistics A	6
STAT972	Preliminary Topics in Statistics B	6
STAT981	Advanced Topics in Statistics A	6

STAT982	Advanced Topics in Statistics B	6
STAT983	Advanced Topics in Statistics C	6

Or any other 900 level subjects offered by the School of Mathematics and Applied Statistics, as approved by the Head of School.

Note: Subjects offered may change each year. Check the subject databasc or contact the School.

In exceptional circumstances and subject to approval by the Head of the School, up to two 6 credit point subjects may be replaced by other 900 level subjects of the same or greater value.

The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

Each candidate shall have a supervisor appointed on the recommendation of the Head of the School of Mathematics and Applied Statistics.

Articulation

Satisfactory completion of the Master of Statistics permits registration for Master of Science - Research (in the School of Mathematics and Applied Statistics).

Graduate Diploma in Statistics

Introduction

This program is intended for students with limited or no background in statistics but who have the equivalent of first-year mathematics. Students with an appropriate statistical background may be able to complete the Diploma in one year of full-time study.

Entry Requirements

Candidates must have a three-year Bachelor degree from a recognised tertiary institution.

Program of Study

The graduate diploma will normally occupy two sessions of full-time study or four sessions of part-time study, and requires the satisfactory completion of at least 48 credit points, with the following requirements:

- 1) At least 36 credit points are to be chosen from those subjects listed in the Bachelor of Mathematics and Master of Statistics course structures, including at least 24 credit points of 300-level or 900-level subjects.
- 2) Candidates are not to include subjects which, in the opinion of the Head of School, are equivalent in content to those for which credit has already been obtained towards some other degree or diploma;
- 3) The chosen program is to be approved by the Head of School prior to enrolment.

Articulation

Satisfactory completion of the Graduate Diploma in Statistics permits registration for Master of Statistics.

INFORMATICS SUBJECT DESCRIPTIONS

Note: Except where shown, all subjects are offered on the Wollongong Campus.

CSCI907 Corba and Enterprise Java 6cp

Autumn

Contact Hours: 2 hrs Lectures plus independent work in the computer laboratories

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: 1. Implement Corba systems that exploit the language independent characteristic of this technology. 2. Utilize Corba services including at least one of Naming, Trading, Events (Notification), or Transaction services. 3. Implement and deploy an EJB server and Java client application. 4. Implement and deploy a complete EJB-based web-application with front-end servlet and JSP components.

CSCI908 Distributed Java 6cp

Contact Hours: Not on offer in 2003

Exclusions: CSCI408

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: 1. Implement Java RMI systems, including systems with activatable objects and systems that utilize a variety of naming services. 2. Implement distributed computing environments based on the Javaspaces and Jini systems. 3. Utilize the JXTA peer-to-peer computing framework.

CSCI925 Topics in Software Engineering 6cp

Autumn

Contact Hours: 2 hours per week

Exclusions: CSCI425

Assessment: Assignments 100%

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 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; iv) evaluate relevant software engineering constraints, such as risk, cost, time, safety, for a given software engineering project.

CSCI941 Advanced Topics in Computer 6cp **Science**

Contact Hours: Not on offer in 2003

Subject Description: Topics will be selected from those areas of computing science in which visiting staff members of the School are engaged in active research.

CSCI942 Advanced Topics in Computer 6cp **Science**

Contact Hours: Not on offer in 2003

Subject Description: Topics will be selected from those areas of computing science in which visiting staff members of the School are engaged in active research.

CSCI943 Advanced Topics in Computer 6cp **Science C**

Contact Hours: Not on offer in 2003

Subject Description: Topics will be selected from those areas of computing science in which visiting staff members of the School are engaged in active research.

CSCI944 Perception and Planning 6cp **Spring**

Contact Hours: 2 hours per week

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; iv) select appropriate data structure and algorithms for path planning.

CSCI945 Parallel Computing 6cp

Contact Hours: Not on offer in 2003

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; vi) apply divide-and-conquer and master-slave techniques to appropriate parallel applications.

CSCI946 Multimedia Studies 6cp

Autumn

Contact Hours: 2 hour lecture, 1hour lab per week

Assessment: Assignmnets 40% Exam 60%

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: 1. select the appropriate media for communication of information, 2. explain their choice in terms of the communication requirements, 3. select the appropriate standards for the media chosen, 4. understand the processes involved in the acquisition, representation, compression, delivery, display and human perception of the infomation, 5. select suitable software tools for producing the information, 6. understand the algorithms used to process the information, and 7. write programs to manipulate the information.

CSCI957 Advanced Topics in Database Management 6cp

Spring

Contact Hours: 3 hours per week

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, ii) Identify and describe the differences among the various concurrency control techniques in database systems and determine their impact on performance of database systems.

CSCI963 Advanced Computer Graphics 6cp

Contact Hours: Not on offer in 2003

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; (iii) discuss the advantages and disadvantages of several visualisation techniques.

CSCI964 Neural Computing 6cp

Autumn

Contact Hours: 2 hours per week

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, ruus-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; iv) understand the need for preprocessing the available neural data.

CSCI965 Design and Analysis of Algorithms 6cp

Contact Hours: Not on offer in 2003

Assessment: 50% assessment 50% exam

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; v) be able to quantify that an algorithm cannot be used with given resources.

CSCI966 Coding for Secure Communication 6cp**Contact Hours:** Not on offer in 2003**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 algorithms ii) efficient error control strategies for secure and reliable communication and storage systems; 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.

CSCI967 Complexity Theory 6cp**Contact Hours:** Not on offer in 2003**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 should be able to: i) classify decision problems according to their computational difficulty; ii) understand different types of indistinguishability and their relation to pseudorandomness; iii) use interactive proof systems for identification and knowledge proving.

CSCI968 Network Security 6cp**Spring****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 should 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 iv) evaluate, compare and recommend network security applications and systems.

CSCI971 Computer Security 6cp**Contact Hours:** Not on offer in 2003**Assessment:** 50% assessment 50% exam

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 should 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; iv) understand what is required to get a certified security evaluation.

CSCI974 Systems Analysis 6cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject concentrates on the analysis and design stages of the software implementation process. It provides students with an understanding of the engineering issues related to the initial implementation of a specified system and to the problems of long term maintenance and evolution. Dataflow, entity-relationship, object models and other design approaches are reviewed. Case studies include projects in the real time area.

CSCI981 Preliminary Topics in Computer Science B 6cp**Contact Hours:** Not on offer in 2003

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.

CSCI982 Preliminary Topics in Computer Science C 6cp**Contact Hours:** Not on offer in 2003

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.

CSCI983 Preliminary Topics in Computer Science D 6cp**Contact Hours:** Not on offer in 2003

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.

CSCI991 Project 12cp**Annual****Contact Hours:** 2 hours per week

Subject Description: This subject involves undertaking a project. Where possible the projects are related to the research interests of the School and/or staff and are chosen to develop the student's research skills.

CSCI993 Thesis 48cp**Spring / Annual**

Subject Description: Phd candidates are enrolled in this subject. The PhD is an internationally recognised qualification for postgraduate research of the highest standard. The PhD is a purely research degree that has only one component, the thesis, which should make an original research contribution to the chosen field of study.

CSCI994 Project Part 1 6cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject involves undertaking a project. Where possible the projects are related to the research interests of the School and/or staff and are chosen to develop the student's research skills.

CSCI995 Project Part 2 6cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** CSCI994

Subject Description: This subject involves undertaking a project. Where possible the projects are related to the research interests of the School and/or staff and are chosen to develop the student's research skills.

CSCI996 Thesis 36cp
Spring / Annual**ECTE901 Fast Signal Processing Algorithms 6cp****Contact Hours:** Not on offer in 2003**Exclusions:** ELEC901/ECTE401

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 undergraduate courses. It forms a useful basis for subsequent DSP applications subjects. Topics covered will include: Discrete Transforms, including: FFT, DFT, DCT, etc.; Wavelet transforms; Filter Design and Structures and Multirate Signal Processing (Interpolation, Decimation ,etc.); and current research developments.

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.

ECTE902 Stochastic Signal Processing 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ELEC901/ECTE402

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 undergraduate courses. 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.

ECTE903 Image and Video Processing 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ECTE403

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 digital signal processing knowledge gained in undergraduate courses. The contents will consist of: applying digital signal processing in image and video processing applications, including current research developments.

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.

ECTE904 Adaptive Signal Processing 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ELEC907/ECTE404

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 digital signal processing knowledge gained in undergraduate courses. The contents will consist of: applying digital signal processing in adaptive signal processing (echo cancellation, channel equalisation, etc.) applications, including current research developments.

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.

ECTE905 Speech and Audio Processing 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ELEC908/ECTE405

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 undergraduate courses. The contents will consist of: applying digital signal processing in speech and audio processing applications, including current research developments.

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.

ECTE911 AC-Sourced Power Electronics 6cp

Contact Hours: Not on offer in 2003

Exclusions: ELEC912/ECTE411

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.

ECTE912 DC-Sourced Power Electronics 6cp

Contact Hours: Not on offer in 2003

Exclusions: ELEC911/ECTE412

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 and current research developments.

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.

ECTE913 Micro-Electronics 6cp

Contact Hours: Not on offer in 2003

Exclusions: ECTE413

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 undergraduate courses.

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 and current research developments. 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.

ECTE921 Power Quality 6cp

Contact Hours: Not on offer in 2003

Exclusions: ELEC970/ECTE421

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; design techniques to ensure standards are met; and current research developments.

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; and (e) suggest appropriate mitigation means where standard levels are exceeded; and (f) demonstrate appropriate practical and problem solving skills.

ECTE922 Power Quality Monitoring 6cp

Contact Hours: Not on offer in 2003

Exclusions: ECTE422

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 and current research developments will be included.

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.

ECTE923 Power Systems

6cp

Contact Hours: Not on offer in 2003

Exclusions: ELEC920/ECTE423

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, environmental considerations and current research developments.

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.

ECTE924 Power System Abnormalities

6cp

Contact Hours: Not on offer in 2003

Exclusions: ECTE424

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; the application of electromagnetic transient programmes (EMTP) for insulation co-ordination and current research developments 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.

ECTE925 Industrial Drives and Actuators

6cp

Contact Hours: Not on offer in 2003

Exclusions: ELEC928/ECTE425

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, including current research developments. 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.

ECTE926 Power Equipment Design

6cp

Contact Hours: Not on offer in 2003

Exclusions: ECTE426

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) and current research developments 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 (e) demonstrate appropriate practical and problem solving skills.

ECTE931 Real-Time Computing

6cp

Autumn

Contact Hours: 24 hours

Exclusions: ECTE431

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 undergraduate courses. 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; direct digital control; and current research developments. 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.

ECTE932 Computer Systems

6cp

Autumn

Contact Hours: 24 hours**Exclusions:** ELEC932/ECTE432

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 undergraduate courses. 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 and current research developments. 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.

ECTE941 Intelligent Control

6cp

Contact Hours: Not on offer in 2003**Exclusions:** ELEC943/ECTE441

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, neuro-fuzzy control systems and current research developments.

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.

ECTE942 Computer Controlled Systems

6cp

Contact Hours: Not on offer in 2003**Exclusions:** ELEC943/ECTE442

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 and current research developments.

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

ECTE943 Digital Control

6cp

Contact Hours: Not on offer in 2003**Exclusions:** ELEC943/ECTE443

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.

ECTE944 Identification and Optimal Control

6cp

Contact Hours: Not on offer in 2003**Exclusions:** ELEC944/ECTE444

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, including current research developments.

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.

ECTE945 Advanced Intelligent Control 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ECTE941

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 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. Students will be required to undertake an advanced project involving current research developments.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. model a system using fuzzy and artificial neural networks methods; 2. design, simulate and implement crisp and adaptive fuzzy controllers to improve the performance of a system. 3. design, simulate and implement neuro-fuzzy systems to improve the performance of a system; and 4. undertake a literature survey and/or undertake practical research on the project topic; 5. demonstrate a high level of written and oral communication skills; and 6. demonstrate high level practical and problem solving skills.

ECTE946 Advanced Computer Controlled Systems 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ECTE942

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 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. Students will be required to undertake an advanced project involving current research developments.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. model a system using the discrete state space approach; 2. analyse the behaviour and stability of a discrete time system using state space approach; 3. design, simulate and implement state feedback controllers to improve the performance of a system; 4. design, simulate and implement observers to improve the performance of a system; 5. undertake a literature survey and/or undertake practical research on the project topic; 6. demonstrate a high level of written and oral communication skills; and 7. demonstrate high level practical and problem solving skills.

ECTE951 Thesis 48cp**Annual / Spring 2003 - Autumn 2004****Subject Description:** Thesis**ECTE953 Report 12cp****Spring / Autumn****Contact Hours:** 13 hours Tutorials**Pre-requisites:** ECTE955**Co-requisites:** 36 credit points at 900-level**Exclusions:** ELEC953

Assessment: A final report marked (Supervisor - 60%, and Examiner - 40% report). The Supervisor's mark includes both the project and report component.

Subject Description: Projects may involve a hardware project; a software project; or an extensive literature survey; or a combination of any of these. Where possible the projects are related to the research programs of the School and are chosen to develop the student's initiative. Each student is required to deliver an oral seminar and to prepare a final thesis on the result of the work undertaken.

ECTE955 Advanced Laboratory 6cp**Spring / Autumn****Contact Hours:** 39 hours Practical**Exclusions:** ELEC955

Assessment: See Subject Information Sheet those presented here are only a guide. Reports 40%; Examination 60%.

Subject Description: The aim of this subject is to provide students with an opportunity to apply and verify theory in areas associated with the postgraduate programs through laboratory experiments and computer studies. Students will be expected to design, and perform experiments; analyse results; and write reports on projects selected to illustrate practical issues selected from the two postgraduate programs.

Subject Objectives: On successfully completing this subject, the student should be able to: (a) understand the theory underpinning the projects; (b) design and perform experiments and computer studies to illustrate theory; (c) write reports covering the theoretical background, justification and description of the experimental procedure, analysis of results and conclusions arising from the experiments; and (d) show initiative and ability in solving engineering problems and producing practical results with minimum supervision.

ECTE956 Internet Project 6cp**Autumn / Spring****Contact Hours:** 2 hour tutorial per week**Co-requisites:** ECTE991

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Assessment: See Subject Information Sheet those presented here are only a guide. Technical report Oral presentation and project demonstration

Subject Description: This subject involves students working on a 6 credit point project. The project may either be undertaken by an individual or a group of students. It may be a project that involves hardware and or software development associated with Internet technology. It may also take the form of an extensive literature survey or market evaluation of various internet related technologies including specific internet applications. Each student is required to deliver an oral presentation and demonstrate the results obtained. Each student will be required to complete a final thesis report detailing the work undertaken and results achieved.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. demonstrate an ability to plan and execute a project from its initial definition phases to final completion, 2. demonstrate an understanding of the theoretical/practical aspects of the project to the point where given project specifications can be satisfied, 3. carry out critical literature reviews and or undertake practical research on the defined project, and 4. show a high level of written and oral communication skills 5. demonstrate independent initiative and ability to solve practical problems.

ECTE957 Advanced Internet Project 12cp

Spring / Autumn

Contact Hours: 2 hour tutorial per week

Pre-requisites: A WAM of 72.5% for the full-time first session load (i.e., four six credit point subjects, including ECTE956 Internet Project and ECTE991 Internet Fundamentals).

Co-requisites: ECTE991

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Exclusions:

Assessment: See Subject Information Sheet those presented here are only a guide. Technical report Oral presentation and project demonstration

Subject Description: This subject involves students working on a major 12 credit point project. The project can be either undertaken by an individual or a group of students. It may be a project that involves hardware and or software development associated with Internet technology. It may also take the form of an extensive literature survey or market evaluation of various internet related technologies and associated aspect including specific applications. Each student is required to deliver an oral presentation and demonstration of the results obtained. A final thesis report will provided by the student detailing the work undertaken and results achieved.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. demonstrate an ability to plan and execute a project from its initial phases to final completion, 2. demonstrate an understanding of the theoretical/practical aspects of the project to the point where given project specifications can be satisfied, 3. carry out critical literature reviews and or undertake practical research on the defined project, and 4. show a high level of written and oral communication skills 5. demonstrate independent initiative and ability to solve practical problems.

ECTE958 Advanced Mechatronics Laboratory 6cp

Contact Hours: Not on offer in 2003

Exclusions: ECTE955

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) - 40%

Subject Description: The aim of this subject is to provide students with an opportunity to apply and verify theory through mechatronics laboratory experiments and computer studies. Students will be expected to design, and perform experiments; analyse results; and write reports on projects related to mechatronics activities within the research programs.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. understand the theory underpinning the projects; 2. design and perform experiments and computer studies to illustrate theory; 3. write reports covering the theoretical background, justification and description of the experimental procedure, analysis of results and conclusions arising from the experiments; and 4. show initiative and ability in solving engineering problems and producing practical results with minimum supervision; 5. demonstrate a high level of written and oral communication skills; and 6. demonstrate high level practical and problem solving skills.

ECTE961 Telecommunications Queueing Theory 6cp

Autumn

Contact Hours: 24 hours

Exclusions: ELEC960/ECTE461

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, overflow traffic and current research developments.

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.

ECTE962 Telecommunications System Modelling 6cp

Autumn

Contact Hours: 24 hours Lec/Tut/Prac.

Exclusions: ELEC960/ECTE962

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 and current research developments.

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.

ECTE963 Transmission Systems 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ELEC962/ELEC980/ECTE463**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, optical fibres and current research developments. 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.**ECTE964 Antennas and Propagation 6cp****Contact Hours:** Not on offer in 2003**Exclusions:** ELEC962/ELEC983/ECTE464**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, signal radiation, antennas and current research developments. 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.**ECTE965 Wireless Communications 6cp****Contact Hours:** Not on offer in 2003**Exclusions:** ECTE465**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, error control coding and current research developments. 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.**ECTE966 Spread Spectrum Communications 6cp****Contact Hours:** Not on offer in 2003**Exclusions:** ECTE466**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, detection techniques for CDMA and current research developments. 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.**ECTE967 Mobile Networks 6cp****Contact Hours:** Not on offer in 2003**Exclusions:** ECTE467**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 and current research developments.**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; (d) demonstrate appropriate practical and problem solving skills.**ECTE968 Error Control Coding 6cp****Contact Hours:** Not on offer in 2003**Exclusions:** ECTE468**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 and current research developments.**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.

ECTE970 Advanced Topics in Engineering 6cp**Contact Hours:** Not on offer in 2003**Assessment:** See Subject Information Sheet.

Subject Description: The aim of ECTE970 is to enable students to further their knowledge and abilities in topics selected from the advanced technical subject areas in the relevant postgraduate program areas. Topics will be selected from the fields of computer and telecommunications engineering or automation and power engineering and will include current research developments.

ECTE971 Robotics Manipulators 6cp**Spring****Contact Hours:** 24 hours**Exclusions:** ELEC973/ECTE471

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 and current research developments.

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.

ECTE972 Robotics Sensory Control 6cp**Spring****Contact Hours:** 24 hours**Exclusions:** ELEC973/ECTE472

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 and other sensors, and current research developments.

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.

ECTE973 Advanced Robotics Manipulators 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ECTE971

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 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. Students will be required to undertake an advanced project involving current research developments.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. design and simulate a robotics manipulator to perform a specific task; 2. plan the trajectory of the motion of a robotics manipulator; 3. control a robotics arm; 4. plan the integration of a robot arm in a production line; 5. undertake a literature survey and/or undertake practical research on the project topic; 6. demonstrate a high level of written and oral communication skills; and 7. demonstrate high level practical and problem solving skills.

ECTE974 Advanced Robotics Sensory Control 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ECTE972

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 the knowledge and skills required to design appropriate sensors for the intelligent operation of a 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. Students will be required to undertake an advanced project involving current research developments.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. design and employ a vision sensor for hand-eye control of a robot arm; 2. design and employ a tactile sensor for intelligent grasping; 3. design and employ a force sensor for compliant motion; 4. design and employ an ultrasound sensor for autonomous motion of a robot arm.; and 5. undertake a literature survey and/or undertake practical research on the project topic; 6. demonstrate a high level of written and oral communication skills; and 7. demonstrate high level practical and problem solving skills.

ECTE981 Internet Protocols 6cp**Contact Hours:** Not on offer in 2003**Exclusions:** ECTE481

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 computer networks. Examples will be drawn from existing networks including the Internet. 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, internetworking and current research developments.

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 scenerios; (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.

ECTE982 Internet Engineering 6cp

Contact Hours: Not on offer in 2003

Exclusions: ECTE482

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.

ECTE983 Computer Networking 6cp

Contact Hours: Not on offer in 2003

Exclusions: ELEC969/ECTE483

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, congestion control in computer networks and current research developments.

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.

ECTE984 Network Design and Analysis 6cp

Contact Hours: Not on offer in 2003

Exclusions: ECTE484

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, and current research developments.

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.

ECTE985 Internet Communications 6cp

Contact Hours: Not on offer in 2003

Exclusions: ELEC969/ECTE485

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, flow control and current research developments.

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.

ECTE986 Telecommunications Network Management 6cp

Contact Hours: Not on offer in 2003

Exclusions: ELEC965/ECTE486

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, to provide practical hands-on experience of network configuration and management systems and to make students aware of economic, management and political issues in telecommunications management. Topics covered will include: private and public communications systems; LANs and SNMP; integration of voice, data and video in networks; general management issues; international standards; and current research developments.

Subject Objectives: A student who successfully completes this subject should be able to (a) demonstrate an understanding of the technical issues involved in telecommunications management; (b) explain strategic management issues, including the options created by emerging technologies;

(c) undertake practical experimentation in network configuration; and (d) demonstrate appropriate practical and problem solving skills.

ECTE991 Internet Fundamentals

6cp

Autumn / Spring

Contact Hours: 3 hours Lecture/Tutorial/Practical per week

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Exclusions: ECTE485 and ECTE985

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination Individual and group assignments (involving theoretical and practical/laboratory projects) Oral presentation

Subject Description: The aim of this subject is to provide an overview of the Internet at a system level. In other words, the subject will provide an operational description of the Internet and its main components. The following topics will be covered: Internet evolution and current status, generic network infrastructure and configuration, layered communication architectures and protocols, access technologies, Internet security and management, case studies of Internet applications.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. explain the Internet system functionality including the interrelationships between various components, 2. describe typical Internet networking solutions including access technologies, 3. explain peer to peer layered protocol architectures, 4. describe and understand the various issues and trade-offs associated with Internet security and management aspects; and 5. demonstrate appropriate practical skills in terms of typical Internet applications and their requirements.

ECTE992 Internet Networking Protocols

6cp

Contact Hours: Not on offer in 2003

Co-requisites: ECTE991

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination Individual and group assignments (involving theoretical and practical/laboratory projects) Oral presentation

Subject Description: This subject will provide students with an understanding of protocols used in computer networks with a particular focus on Internet networks. Topics to be studied will include: LAN medium access control protocols, congestion/flow/error control, routing, addressing, internetworking; design and operation of the Internet (including IPv4 & 6, OSPF, BGP, Mobile IP, CIDR, TCP and UDP, MPOA, and MPLS) quality of service provisioning (such as RSVP, RTP, IETF DiffServ) and current research developments.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. enumerate the functionality associated with protocols such as IP, OSPF, BGP, CIDR, TCP, UDP, MPOA and MPLS, 2. describe the expected performance of error and flow control mechanisms including an understanding of the advantages and disadvantages of various competitive approaches, 3. explain quality of service mechanisms and their performance,

4. explain the operation of routing and addressing functions associated with Internet protocols, and 5. demonstrate appropriate practical skills by implementing a simple protocol.

ECTE993 Access Technologies

6cp

Contact Hours: Not on offer in 2003

Co-requisites: ECTE991

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Exclusions:

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination Individual and group assignments (involving theoretical and practical/laboratory projects) Oral presentation

Subject Description: The aim of this subject is to provide a detailed overview of wire line Internet access networks. The following topics will be covered: wire line access technologies, 56K modems, xDSL technology for broadband internet access using existing copper loop, cable modem technology, optical fibre technology (including fibre to the home and curb options), optical fibre link design considerations.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. Explain the range of wire line access technologies options currently available and their future evolution, 2. describe the functionality and performance of 56kbps modem technology, 3. explain the functionality and performance characteristics of xDSL and cable modem technology for broadband Internet access, 4. describe characteristics of fibre technology including network link design guide lines (such as power and rise time budget criteria); and 5. demonstrate appropriate practical skills in terms of typical Internet applications and their requirements.

ECTE994 Wireless and Mobile Communication Systems

6cp

Contact Hours: Not on offer in 2003

Co-requisites: ECTE991

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Exclusions: ECTE465/466 and ECTE965/966

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination Individual and group assignments (involving theoretical and practical/laboratory projects) Oral presentation

Subject Description: The aim of this subject is to provide a detailed overview of wireless and mobile communication systems. The following topics will be covered: mobile radio channel characterisation, channel access techniques, basic spread-spectrum techniques, principles of code division multiple access (CDMA), digital mobile networks (including, GSM and third generation mobile networks). As a special case study, this subject will cover in detail the IEEE 802.11 wireless data network standard and its effective use in a campus environment for Internet access.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. describe the transmission characteristics associated with wireless channels, 2. explain the trade-offs and select the most appropriate channel access technique given a specific wireless application,

3. explain the principles of spread-spectrum and CDMA wireless communication systems, 4. describe the functional operation of mobile networks and the evolution towards third generation systems, 5. demonstrate appropriate practical skills associated with the IEEE 802.11 standard in terms of its implementation and deployment.

ECTE995 Content Servers and Caching Technologies 6cp

Contact Hours: Not on offer in 2003

Co-requisites: ECTE991

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination Individual and group assignments (involving theoretical and practical/laboratory projects) Oral presentation

Subject Description: The aim of this subject is to provide a detailed overview of content servers and cache technology. The following topics will be covered: content server technology (including the different classes RADE systems) and their comparative performance in terms of functionality, cost and reliability; analyse selection criteria for content servers given a functional specification; caching technology, analyse best practice cache dimensioning and selection guidelines.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. explain the functionality and performance of available content server technology, 2. describe and understand the various issues and trade-offs associated with content server technologies, 3. explain the functionality and performance of caching technology, 4. describe and understand the various issues and trade-offs associated with caching technologies; and, 5. demonstrate appropriate practical skills by selecting the most appropriate content server class for a given application as well as selecting the most suitable level of caching for a specified campus-wide Internet network.

ECTE996 Multimedia Communications 6cp

Contact Hours: Not on offer in 2003

Co-requisites: ECTE991

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination Individual and group assignments (involving theoretical and practical/laboratory projects) Oral presentation

Subject Description: The aim of this subject is to provide a detailed overview of multimedia communication systems. The following topics will be covered: image and video coding, motion picture expert group (MPEG) and JPEG standards and their functionality, speech and audio coding, speech and audio coding standards for internet applications (Internet telephony), universal multimedia access (UMA) and MPEG 7.

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. explain the concepts of image and video coding including a description of the various approaches and their relative performance,

2. describe the MPEG family of standards and their interrelationships as well as JPEG, 3. explain the concepts of speech and audio coding including a description of the various approaches and their relative performance, 4. describe speech and audio coding standards with specific application for internet use; and 5. demonstrate appropriate practical skills by using real-time algorithms and evaluating their performance.

ECTE997 Web Technology and Applications 6cp

Contact Hours: Not on offer in 2003

Co-requisites: ECTE991

Restrictions: For students not enrolled in the MIT, approval from the MIT Course Co-ordinator is required for enrolment in this subject.

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination Individual and group assignments (involving theoretical and practical/laboratory projects) Oral presentation

Subject Description: The aim of this subject is to provide a detailed overview of web technologies and applications. The following topics will be covered: real-time streaming technologies, embedded Internet devices, web-based intelligent agent technology, web-application case studies (such as distance and flexible delivery of multimedia education, meta catalogue services etc).

Subject Objectives: Students who successfully complete this subject should acquire the following competencies and abilities. In particular, students should be able to: 1. explain the functionality and use a variety of real-time streaming technologies, 2. describe the concept of embedded Internet devices and their application, 3. explain web-based intelligent agent technology and their application, and 4. demonstrate appropriate practical skills by evaluating typical Internet applications and their practical requirements. This will be based on project work.

IACT901 IT Strategic Planning 6cp

Autumn

Contact Hours: 3 hours per week

Exclusions: BUSS907

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.

IACT902 Applied Project Management 6cp

Autumn

Contact Hours: 2 hours per week

Subject Description: This subject 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.

IACT904 International Telecommunications 6cp Policy Issues

Contact Hours: Not on offer in 2003

Subject Description: IACT 904 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).

IACT905 Information Technology and Innovation 6cp

Autumn

Subject Description: IACT 905 provides students with an understanding of the various political, economic, social and technical factors surrounding information technology and the innovation process. 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.

IACT906 Business On-Line 6cp

Spring

Contact Hours: 3 hours per week

Assessment: Group Assignment 25% Tutorial Tests x 5 15% Case Studies x 5 20% Exam 40%

Subject Description: This subject aims to provide students with an understanding of e-business in the context of to-days global business environment. Today most businesses compete in a global environment; a sound business strategy for on-line business is essential to facilitate this. This subject covers key areas of e-business, including: Strategy formulation and implementation; e-branding; service leadership; economics and industry impacts of e-business and Internet effectiveness.

Subject Objectives: A student who successfully completes this subject should be able to: 1. Demonstrate a thorough grounding in e-line business strategy principles and practices; 2. Identify success factors essential to e-business strategy leadership; 3. Explain the role of technology in e-strategy formulation; and 4. Critically assess the role and effectiveness of the Internet in Online business

IACT916 Organisational Issues in Information Technology 6cp

Spring

Subject Description: 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; implications of broad-band networks for traffic integration.

IACT917 Information Management 6cp

Autumn

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.

IACT918 Corporate Network Management 6cp

Autumn

Contact Hours: 3 hours per week

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 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; 4. Develop documentation to support organisational requirements for a telecommunications network

IACT919 Online Information Services 6cp

Spring

Subject Description: This subject examines the emergence of electronic information supermarkets and the changes within the online information industry as mass media conglomerates have entered the field. Other aspects covered include: the role of government in online services development; the future of public information sources such as libraries; and the potential of the Internet and the world wide web in online information delivery. Some practical experience in the use of electronic information services is provided.

IACT922 Case Studies in Information Technology Applications 6cp

Spring

Subject Description: IACT922 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.

IACT924 Corporate Network Design & Implementation 6cp

Spring

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.

IACT926 Information Society, Knowledge Work and Information Technology 6cp

Contact Hours: Not on offer in 2003

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; (vii) critically analyse the role of knowledge workers.

IACT927 Research Report Part 1 6cp

Spring

Subject Description: This subject involves undertaking a project. Where possible the projects are related to the research interests of the School and/or staff and are chosen to develop the student's research skills. Each student is required to deliver an oral seminar and to prepare a final thesis on the result of the work undertaken.

IACT928 Research Report Part 2 6cp

Autumn

Pre-requisites: IACT927

Restrictions: only available to students who have completed IACT927 in the previous year

Subject Description: This subject involves undertaking a project. Where possible the projects are related to the research interests of the School and/or staff and are chosen to develop the student's research skills. Each student is required to deliver an oral seminar and to prepare a final thesis on the result of the work undertaken.

IACT930 Special Topics in Information and Communication Technology 6cp

Contact Hours: Not on offer in 2003

Subject Description: This subject 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 Department. These will include topics in the application of information and communication technology.

IACT931 Special Topics in Information and Communication Technology A 6cp

Autumn

Contact Hours: 3 hours per week

Exclusions: IACT403, CSC1324

Subject Description: 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. IT is a rapidly changing area. This subject will allow investigation into topics at the forefront of the discipline.

IACT932 Special Topics in Information and Communication Technology B 6cp

Contact Hours: Not on offer in 2003

Subject Description: Topics will be selected from areas of interest of staff members or visiting staff members to the Department. These will include topics in the application of information and communication technology. IT is a rapidly changing area. This subject will allow investigation into topics at the forefront of the discipline.

IACT933 Special Topics in Telecommunications Issues 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Topics will be selected from areas of interest of staff members or visiting staff members to the Department in the area of telecommunications. IT is a rapidly changing area. This subject will allow investigation into topics at the forefront of the discipline.

IACT940 Research Methodology 6cp**Autumn****Contact Hours:** 2 hours per week

Subject Description: This subject introduces the MInfoTech students to research methodology. Topics include the purpose of research, formulating a research question, conducting a literature review and writing a research proposal. Students will gain an understanding of the different research methodologies, including quantitative and qualitative analysis. 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.

IACT950 Research Report 12cp**Spring****Contact Hours:** 1 hour per week**Pre-requisites:** IACT940

Assessment: Research report of 12,000 words (90%) and seminar presentation (10%)

Subject Description: This subject involves undertaking a project. Where possible the projects are related to the research interests of the School and/or staff and are chosen to develop the student's research skills. Each student is required to deliver an oral seminar and to prepare a final thesis on the result of the work undertaken.

IACT960 Minor Thesis 36cp**Spring / Annual****Subject Description:** This subject will be externally accessed.**IACT970 Major Thesis 48cp****Spring / Annual**

Subject Description: PhD candidates are enrolled in this subject. The PhD is an internationally recognised qualification for postgraduate research of the highest standard. The PhD is a purely research degree that has only one component, the thesis, which should make an original research contribution to the chosen field of study.

INFO911 Data Mining and Knowledge Discovery 6cp**Spring****Contact Hours:** 2 hours per week**Pre-requisites:** 36 cp

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

INFO912 Mathematics for Cryptography 6cp**Autumn****Contact Hours:** 6 hours per week**Assessment:** Final exam 85%, Assignments 15%

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; (iii) apply knowledge of number theory and group theory to the implementation of some modern methods of cryptography; (iv) apply basic notions from combinatorics, game theory and linear programming to cryptography. All these objectives will be tested in the assignments as well as in the final exam.

INFO913 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.

ITCS901 Computer Programming 6cp**Spring / Autumn****Contact Hours:** 6 hours per week**Restrictions:** Only available to MCompStud candidates**Assessment:** Exam - 70% Assignments - 30%

Subject Description: This subject 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"; (iv) express their solutions in well structured programs written in ANSI C++.

ITCS902 Data Structures 6cp

Summer 2003 – 2004 / Spring

Contact Hours: 8 hours lectures, 4 hours labs per week

Pre-requisites: ITCS901

Restrictions: Only available to MCompStud candidates

Assessment: Exam - 60% Assignment - 40%

Subject Description: This subject 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. 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++; (vi) display an understanding of some object-based programming concepts by using appropriate C++ constructions.

ITCS903 C Family & UNIX 6cp

Autumn / Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: ITCS902 Data Structures

Restrictions: Only available to MCompStud candidates

Assessment: Exam - 60% Assignment - 40%

Subject Description: In ITCS903 the algorithms and data structures from ITCS901 & ITCS902 will be applied to solving text processing problems. Solutions to these problems will be designed using object based design and implemented in C++ in a Unix environment. Emphasis will be placed on achieving correct, robust and efficient programs.

Subject Objectives: On successfully completing this subject the student 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.

ITCS904 Database Systems 6cp

Spring / Autumn Wollongong On Campus

Contact Hours: 3 hours Lectures, 2 hours Computer Lab per week

Restrictions: Only available to MCompStud candidates

Assessment: Exam - 60% Assignment - 40%

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, (v) explain the principles of transaction management and database recovery mechanisms

ITCS905 Information Technology B 6cp

Spring / Autumn

Contact Hours: 4 hours per week

Restrictions: Only available to MCompStud candidates

Assessment: Diary - 10% objectives Project - 30% Essay - 10% objective Exam - 40% Presentation of Project - 10%

Subject Description: This subject 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. The development of the Information Society will be addressed against the changing nature of the IT Professionals job to that of "people-centred" rather than "technology-centred". Built into this subject will be case studies and group work. The subject is designed to develop the students communication skills and understanding of group dynamics. Progressive assessment will involve writing technical reports and involve group tasks.

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; (iv) solve a problem in a procedural style, using a visual design and code generating tool

ITCS906 Computer Systems Architecture 6cp

Spring

Contact Hours: 5 hours per week

Restrictions: Only available to MCompStud candidates

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; (v) extract the essence of what an arbitrary sequence of machine instructions appears to perform.

ITCS907 Java Programming & the Internet 6cp

Autumn / Spring

Contact Hours: 3 hours Lectures, 2 hours Computer Labs per week.

Pre-requisites: ITCS902 - Fundamentals of Computer Science B

Exclusions: Only available to MCompStud candidates

Assessment: Assignments - 50% Final examination - 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 graphics libraries, (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, (v) explain the security problems in a networked environment and detail Java's security mechanisms.

ITCS908 Citizens Rights in the Information 6cp Society

Autumn

Contact Hours: 3 hours per week

Exclusions: only available to MCompStud candidates

Assessment: Exam - 40% Assignment - 60%

Subject Description: This subject 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: Students 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; (iii) evaluate existing laws and regulations relating to privacy legal and security issues.

ITCS909 Operating Systems

6cp

Autumn

Contact Hours: 5 hours per week

Exclusions: only available to MCompStud candidates

Assessment: Exam - 60% Assignment - 40%

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.

ITCS911 Special Topic A

6cp

Contact Hours: Not on offer in 2003

Exclusions: only available to MCompStud candidates

Assessment: Exam - 40% Assignment - 60%

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Studies.

Subject Objectives: Objectives will be designed when the subject is offered.

ITCS912 Special Topic B

6cp

Contact Hours: Not on offer in 2003

Restrictions: only available to MCompStud candidates

Assessment: Exam - 40% Assignment - 60%

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Studies.

Subject Objectives: Objectives will be designed when the subject is offered.

ITCS913 Special Topic C

6cp

Contact Hours: Not on offer in 2003

Restrictions: only available to MCompStud candidates

Assessment: Exam - 40% Assignment - 60%

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Studies.

Subject Objectives: Objectives will be designed when the subject is offered.

ITCS915 Information Technology A

6cp

Autumn

Restrictions: only available to MCompStud candidates

Assessment: Laboratory Assignments 50%; Exam 50%.

Subject Description: This subject 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.

Subject Descriptions

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; (iv) solve a problem in a procedural style, using a visual design and code generating tool

ITCS916 Theory of Computer Science 6cp Spring

Exclusions: only available to MCompStud candidates

Assessment: 1. 6 Assignments 40% 2. 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: 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; (v) describe a number of formal models of computational processes.

ITCS917 Development Methods & Tools 6cp Spring

Pre-requisites: ITCS902

Restrictions: available only to MCompStud candidates

Assessment: 50% for a final examination. 50% for assignments

Subject Description: This subject develops the knowledge, experience, and confidence needed to participate in a group project involving the design and implementation of a system of significant size. Covers the standard software life cycle, use of development tools. Reviews issues relating to quality of code. Provides experience with standard design methodologies. Introduces estimation of program size and use of program metrics.

Subject Objectives: On completion of this subject, the successful student should be able to: 1. explain the techniques and stages of the particular analysis and design method; 2. describe the range of application domains to which the method can properly be applied; 3. demonstrate proficiency in the correct use of the techniques learnt; 4. properly apply the method to a particular analysis and design problem within the method's application domain. 5. demonstrate proficiency in the use of appropriate CASE tools

ITCS918 Data Structures, Algorithms, Systems 6cp

Autumn

Contact Hours: 3hours lecture, 2hours Clab per week.

Pre-requisites: ITCS902

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 consideration 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.

ITCS921 Database Design and Implementation 6cp

Autumn

Contact Hours: 3 hours Lectures per week

Pre-requisites: ITCS904 (for MCompStudies students only)

Assessment: 1. Assignments - 3*10% 2. Class tests - 4*5% 3. 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, (viii) design a distributed database system.

ITCS923 The Wired World 6cp Spring

Exclusions: ITCS910

Assessment: Exam - 40% Assignment - 60%

Subject Description: This subject investigates the issues list in the objectives 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 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; and (vi) evaluate use of global networks as an educational medium.

ITCS929 Concepts and Issues in Healthcare Computing 6cp

Spring

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

Restrictions: Not available to MCompStud students

Exclusions: IACT930 or IACT932

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 4. Evaluate relevant health computing techniques.

ITCS930 Introduction to Health Informatics 6cp

Autumn

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

Exclusions: IACT930 or IACT932 or ITCS430

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.

ITCS931 Advance Web Application Development 6cp

Spring

Contact Hours: 3 hours per week

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: At the end of this subjects 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 6. understand components, component architectures, and how to design and implement component applications using VB IDE

ITCS932 Web Design 6cp

Spring

Contact Hours: 2 hours per week plus labs

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: 1) appreciation of the principles underlying good web design for information presentation 2) understand the process of creating web pages 3) able to 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, 6) understand the multi-tier model for efficient delivery of dynamic data over the web

ITCS933 Software Engineering Requirements and Specifications 6cp

Spring

Contact Hours: 3 hours per week

Assessment: Assignments 50% Examination 50%

Subject Description: This subject will demonstrate how software development can be viewed as a kind of engineering - an activity of building useful things to serve recognisable purposes. For software engineers, these useful things are a special kind of machine known as software systems. 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: 1. describe state of the art techniques of software requirements capture and analysis; 2. explain how software system requirements are translated to appropriate software specifications expressed in a range of different formalisms; 3. demonstrate an ability to interpret a particular set of software requirements and translate into a specification; 4. apply the knowledge and skills presented in this subject to typical software development scenarios encountered in the software industry.

ITCS934 Software Process Management 6cp

Autumn

Assessment: Assignments 50% Examination 50%

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 1. describe various models of software development process; 2. explain the principles and practices of software process management; 3. demonstrate proficiency in a selection of process management techniques; 4. apply process management skills and knowledge to a group software project.

ITCS935 Software Engineering Formal Methods 6cp

Autumn

Assessment: Assignments 50% 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: On completion of this subject the student should be able to 1. understand and use propositional and predicate calculus; 2. understand formal specifications written in the Z notation; 3. translate informal descriptions into formal specifications in the Z notation; 4. use software tools for the manipulation of formal specifications; 5. describe case studies of the applications of formal methods; 6. describe current industrial practice of formal methods in software development.

ITCS936 Detailed Design of Integrated Solutions for eBusiness 6cp

Spring

Contact Hours: 3 hours per week

Exclusions: ITCS436

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. starting 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 2. describe at a detailed level the pattern-oriented approach to specifying and analysing eBusiness problems. 3. describe at a detailed 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. 4. exploit the techniques implicit in the patterns for eBusiness approach in order to:-- develop a high-level business description and a Solution Overview Diagram- identify Business Patterns, Integration Patterns, Composite Patterns and Application Patterns.

ITCS937 Security, Risk Management and Control in Electronic Commerce 6cp

Contact Hours: Not on offer in 2003

Pre-requisites: IACT906

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 should 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 5. differentiate between control weakness and control risk

ITCS938 eBusiness Technologies 6cp

Autumn

Contact Hours: 3 hours per week

Restrictions: Not available to MCompStud students

Exclusions: IACT305 or ITCS950

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. 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.

ITCS940 Multimedia Programming Foundations 6cp

Autumn / Spring

Contact Hours: For 2003 Autumn session it is proposed that the 2nd hour of the lecture be held in the lab., Spring 2 hours lecture, 1hour laboratory tutorial

Assessment: Programming Assignments - 60% Final exam - 40%

Subject Description: This subject provides an introduction to multimedia programming by exploring multimedia infrastructure and developing skills in the programming technologies used in multimedia. Infrastructure includes both how the elements of a multimedia system relate, for example MPEG 21, and foundational concepts used in producing multimedia, for example matrix transforms, simulations, kinematics and the dynamics of motion. Programming technologies include OO programming, 2D graphics, simple image and audio processing in Java; web presentation technologies such as SMILE; multimedia messaging; and an overview of multimedia applications programming interfaces, such as Java media framework and QuickTime.

Subject Objectives: On successful completion of this subject, students should be able to. 1. Design and code medium sized programmes and classes in Java. 2. Understand coordinate frames, transformations and simulations used in multimedia graphics. 3. Develop object oriented designs for multimedia applications. 4. Write programmes to simulate and visualise simple physical systems 5. Explain how multimedia elements relate to form a multimedia infrastructure

ITCS941 Multimedia Graphics 6cp

Contact Hours: Not on offer in 2003

Co-requisites: ITCS940

Assessment: Assignments (Programming and/or essay) - 60% Exam - 40%

Subject Description: This subject explores the creation of graphics for multimedia applications, covering graphics theory, programming and creative tools. It will commence with an overview of 2D graphics, including an examination of the support for 2D graphics in languages, such as Java 2D and their use in creative tools, such as Adobe Illustrator.

It will focus on 3D graphics. Theory topics include basic three dimensional theory, reflection models, shading techniques, rendering, event models of user interaction, parametric representations, ray tracing, radiosity, shadows, texture, colour science and simple animation. Programs will be implemented in a common graphics language used in multimedia, such as OpenGL. The subject will compare and contrast it to other graphics programming technologies used in multimedia, such as MPEG-4 objects, Java 3D and VRML.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Write an interactive graphics program for a Multimedia application using Open GL. 2. Understand the computational science underlying 3D graphics. 3. Compose a multimedia scene from simple objects and manipulate the objects with user events. 4. Design and implement simple animations. 5. Critically analyse 3D graphics technologies for multimedia

ITCS942 Multimedia 3D Modelling and Animation 6cp

Contact Hours: Not on offer in 2003

Assessment: Individual Assignments - 30% Group project - 30% Exam - 40%

Subject Description: This subject studies the design, creation and animation of 3D models with a professional 3D modelling tool, such as Lightwave. Model design and creation topics include coordinate frames, solids of revolution, designing objects from a set of 3D primitives, lighting, design for motion, textures, filters, shading, effects, inverse kinematics, rendering and surface modelling. Animation involves the theory of object motion and relative motion between components of an object, the practical problems of rendering images to visualise motion, the creative skills of coordinating image sequences with audio (voice, music and sound effects) and the programming of images and audio into timed sequences to produce movies in multimedia formats, such as MPEG-1 and QuickTime.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Design and implement a 3D model using Lightwave. 2. Understand the principles of kinematics and motion control. 3. Analyse the motion of an object and its parts in order to animate a 3D model of it. 4. Explain the relationships between lighting, texture and effects. 5. Describe the coordination of the motion 3D objects with audio to produce realistic animations

ITCS943 Game Design and Programming 6cp

Contact Hours: Not on offer in 2003

Assessment: Assignments - 40% Essay - 20% Oral presentation - 10% Group project - 30% Exam - 40%

Subject Description: This subject studies the design and implementation of games engines, artificial intelligence and media creation for different genres of games. It starts with the design of game play within the context of different genres of games. It examines in detail the technical requirements of games engines both for playing the game and presenting the multimedia to the user. A significant component of the subject is the use of artificial intelligence (expert systems, fuzzy logic and simulation) to make the game appear intelligent to the user.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Describe the technology components of a game. 2. Discuss the design of game play within the context of game genre. 3. Design and implement a simple game in Java.

4. Design and implement a simple artificial intelligence module for game play. 5. Present an interactive game in an appropriate multimedia format

ITCS945 Multimedia Project 12cp

Spring 2003 - Summer 2004

Contact Hours: Regular meeting with supervisor

Pre-requisites: 24 cp of subjects from Master of Multimedia Technologies with $\geq 75\%$ average

Assessment: Multimedia Seminars - 10% Project proposal - 10% Regular appraisals - 10% Project report - 70%

Subject Description: This subject involves undertaking a project in an area of multimedia. Projects will be closely aligned to the content of the subjects in the Master of Multimedia, and related to the research interests of the staff. They will be chosen to develop the student's research skills. Each student will deliver a seminar on a recent paper in the area of their project. Also, each student will prepare a final thesis and deliver a multimedia seminar about the work undertaken.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Write an academic project proposal with realistic aims, milestones, deliverables and deadlines. 2. Demonstrate management and research skills for a multimedia project. 3. Show that effective communication has been achieved with supervisors. 4. Demonstrate a solution to a multimedia problem using multimedia technologies. 5. Write a substantial project report at Masters level.

ITCS949 MIIT Research Project 12cp

Annual / Spring 2003 - Autumn 2004

Contact Hours: Annual regular meetings with supervisor, Spring 2003/Autumn 2004 regular meeting with supervisor

Assessment: Project management (10%) Project proposal (10%) Regular appraisals (10%) Project report (70%)

Subject Description: This subject involves undertaking a project related to the student's employment. The projects are to be closely aligned with current developments in IT, ideally associated with project development or management and are chosen to develop the student's research skills. Each student is required to deliver an oral seminar and to prepare a final thesis on the result of the work undertaken.

Subject Objectives: On successful completion of this subject, students should be able to: 1. write an academic project proposal with realistic aims, milestones, deliverables and deadlines. 2. demonstrate management skills for an industrial non-trivial project. 3. show that effective communication has been achieved with technical and academic supervisors. 4. write a substantial project report of Master thesis level.

ITCS950 Patterns for eBusiness 6cp

Autumn

Contact Hours: 3 hours per week

Exclusions: CSCI942 or ITCS936

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 should 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; 5. experiment with technologies and products that implement the software application framework.

ITCS951 Web Services for Dynamic eBusiness 6cp

Spring

Contact Hours: 3 hours per week

Exclusions: ITCS451

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 should 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; 4. exploit a high-level Web Services Development Toolkit to implement and deploy Web Services.

MATH902 Solution to Differential Equations 6cp By One-Parameter Groups

Spring

Contact Hours: 2 hours per week

Assessment: Assignments 25%; presentation 5%; final exam 70%.

Subject Description: One-parameter groups and Lie series, linear ordinary differential equations, first and second order ordinary differential equations, linear and non-linear partial differential equations.

MATH903 Mean Periodic Functions 6cp

Contact Hours: Not on offer in 2003

Subject Description: An introduction to L. Schwartz's theory of mean periodic functions using the transform of J P Kahane. Applications to differential equations.

MATH904 Stability for Partial Differential Equations 6cp**Contact Hours:** Not on offer in 2003**Assessment:** Assignments and examination

Subject Description: This subject is concerned with parabolic and elliptic partial differential equations. The main topic is the stability of solutions under changes in initial values or other parameters connected with the equations. Some of the tools that will be used are an analysis of the spectrum for elliptic operators and the Linearization Principle.

Subject Objectives: On successfully completing this subject students should be able to : (i) Select, compare and analyse different approaches to stability theory (particularly bifurcation theory) from a mathematical viewpoint. (ii) Adequately describe the physical interpretations of the stability of the given models. (iii) Understand new mathematical publications in the area of stability. (iv) Estimate the difficulty and significance of new achievements in stability theory.

MATH905 Functional Analysis and Control Theory 6cp**Contact Hours:** Not on offer in 2003**Assessment:** Assignments and examination

Subject Description: This subject introduces several function spaces and then examines how they can be used in the theory of partial differential equations and control theory. Some of the topics considered will be the existence and uniqueness of solutions for hyperbolic and parabolic partial differential equations and the exact controllability for systems governed by the wave equation.

Subject Objectives: On successfully completing this subject students should be able to : (i) Describe the major properties of some function spaces and indicate how they can be applied to proving some results about partial differential equations. (ii) Derive conditions which ensure that a system governed by the wave condition is exactly controllable. (iii) Describe the major steps in finding a control which will drive a system to rest. (iv) Understand new mathematical publications in the area of Exact Control Theory

MATH912 Mathematics of Microwave Heating 6cp**Autumn****Contact Hours:** 2 hours per week

Subject Description: Electrostatics, Gauss' law, magnetic fields, induction, Maxwell's equations, the damped wave equation, the forced heat equation, solutions of microwave heating for constant conductivity, temperature dependent conductivity, hotspots.

MATH913 Fluid Mechanics and Wave Theory 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Hyperbolic partial differential equations, conservation laws, shallow water equations, dispersive waves, solution theory, gas dynamics, shock waves, flow past bodies, conformal mapping, aerofoil theory.

MATH914 Analytic Dynamics 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Lagrangian and Hamiltonian formulations, symmetry and conservation laws. Regular and chaotic motion. Strange attractors.

MATH915 Applied Non-Linear Partial Differential Equations 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Fluid flow in porous media. Exact solution of related nonlinear boundary value problems. Introduction to inverse scattering transforms and soliton equations. Tests for integrability of a nonlinear equation. Chaotic flows.

MATH916 Heat Conduction and Moving Boundary Problems 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Solutions of the heat equation, semi-infinite media, solution by Fourier series, solutions by heat-balance, classical moving boundary problems, large Stefan number expansions, integral formulation, bounds, integral equations, polynomial approximations, boundary fixing series solutions.

MATH917 Advanced Numerical Analysis 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Solution of Ordinary and Partial Differential Equations. Integration including multiple integration. Solution of Integral Equations. The algebraic eigenvalue problem.

MATH918 Computational Fluid Mechanics 6cp**Spring****Contact Hours:** 2 hours per week

Subject Description: Finite-difference and finite element methods applied to incompressible inviscid flow problems and incompressible viscous flow problems. Introduction to Boundary-element technique and its application to potential flows. The relationship between these numerical approaches will also be discussed.

MATH921 Advanced Functional Analysis 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Normed spaces, Banach spaces, linear operators, applications of the theory of linear operators to other areas of analysis such as Fourier analysis, quadrature formulae and integral equations.

MATH923 Measure and Integration 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Lebesgue measure and more general measures, measurable functions, Lebesgue integration and its properties, behaviour of integrals under taking limits, product integrals.

MATH924 Distributions 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Mikusinski's theory of convolution quotients and an introduction to L. Schwartz's theory of distributions. Properties of the space of continuous functions of a single real variable (equipped with a suitable topology) and dual space.

MATH925 Topics in Algebra 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Partially ordered sets, lattices, modular lattices, Boolean Algebras and Boolean rings, orthomodular lattices.

MATH926 Logic and Set Theory 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Axiomatic propositional and predicate logic, nonclassical logics, applications to circuit theory and logic programming, introduction to Axiomatic Set Theory.

MATH927 Combinatory Logic 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Introduction to Pure and Illature combinatory logic, relation to lambda-conversion, functionality, application to propositional and predicate calculus.

MATH928 Advanced Measure Theory 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Construction of outer, measures, Hausdorff measures, signed measures, Radon-Nikodym theorem, differentiation of measures.

MATH929 General Topology 6cp**Contact Hours:** Not on offer in 2003

Subject Description: This subject is a systematic discussion of topological spaces and associated concepts which are of fundamental importance in various areas of mathematics. The topics covered will include topologies, bases and sub bases for topologies, separation properties of topologies, product and quotient topologies, and connectedness and compactness. Depending upon students' interests and backgrounds, excursions into the following or other areas are possible: topological groups, programming language semantics, elementary algebraic topology, dimension theory and cardinal invariants.

MATH931 Statistical Behaviour in Dynamical Systems 6cp**Autumn****Contact Hours:** 2 hours per week

Subject Description: Two different statistical phenomena in dynamical systems are considered; recurrence and averaging. In tossing an unbiased coin, recurrence is illustrated by eventually obtaining 'heads', while averaging is illustrated by obtaining approximately the same number of 'heads' and 'tails' over a large number of tosses. The ideas are discussed in the context of systems on an interval, probability and general ergodic theory. Applications will be discussed, and these may include number theory, information theory, mathematical economics, chaos and statistical mechanics.

MATH971 Advanced Topics in Applied Mathematics A 6cp**Autumn****Contact Hours:** 2 hours per week

Subject Description: Topics will be selected from the areas of interest of staff members or visiting staff members of the School. In 2000, the special topic will be Elasticity and Fracture Mechanics.

MATH972 Advanced Topics in Applied Mathematics B 6cp**Spring****Contact Hours:** 2 hours per week

Subject Description: Topics will be selected from the areas of interest of staff members or visiting staff members of the School.

MATH973 Advanced Topics in Pure Mathematics A 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Topics will be selected from the areas of interest of staff members or visiting staff members of the School. These may include topics in Analysis, Algebra, Logic or Number Theory.

MATH974 Advanced Topics in Pure Mathematics B 6cp**Contact Hours:** Not on offer in 2003

Subject Description: Topics will be selected from the areas of interest of staff members or visiting staff members of the School. These may include topics in Analysis, Algebra, Logic or Number Theory.

MATH980 Preliminary Topics in Mathematics A 6cp**Contact Hours:** Not on offer in 2003

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Mathematics.

MATH981 Preliminary Topics in Mathematics B 6cp**Contact Hours:** Not on offer in 2003

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Mathematics.

MATH990 Project Part 2 6cp**Spring / Autumn**

Co-requisites: MATH188

MATH991 Project 12cp**Annual / Spring 2003 - Autumn 2004****MATH993 Thesis 48cp****Annual / Spring 2003 - Autumn 2004 / Autumn**

MATH994 Minor Thesis 24cp

Annual

Co-requisites: MATH188

STAT901 Modern Inference 6cp

Autumn

Contact Hours: 2 hours week

Subject Description: Introduction to programming in S-Plus; bootstrap methods; Monte-Carlo methods; permutation tests; nonparametric regression; the sign, Kruskal-Wallis and Spearman tests and extensions of them; ties.

STAT902 Advanced Data Analysis 6cp

Autumn

Contact Hours: 2 hours per week

Assessment: Assignments 30%; exam 70%.

Subject Description: A selection of topics from: Regression model building and checking; Causal modelling; Cluster analysis; Multi-dimensional scaling; Log-linear models; Generalised linear models; Time series methods; Principal components, Factor analysis; Canonical correlations; Statistical computer packages.

STAT903 Survey Design and Analysis 6cp

Spring

Contact Hours: 2 hours per week

Assessment: assignments 20%, reports 10%; exam 70%

Subject Description: Survey methods - survey development; Cluster and multi-stage sampling; Repeated and longitudinal surveys; Non-sampling errors; General methods of variance estimation; Small area estimation; Non-response adjustment; Analysis of complex survey data; Report writing.

STAT904 Statistical Consulting 6cp

Contact Hours: Not on offer in 2003

Subject Description: Project management; Client liaison; Problem identification; Consulting ethics and principles; Sources of data; Choosing design and analysis procedures; Common problems in statistical consulting; Setting sample size - power calculations; Consulting case studies; Report writing.

STAT905 Time Series 6cp

Contact Hours: Not on offer in 2003

Subject Description: Prediction theory; Linear models: identification, estimation, diagnostic checking; Multivariate models.

STAT906 Experimental Design 6cp

Contact Hours: Not on offer in 2003

Subject Description: The general linear model; Complete and incomplete block designs; The construction of optimal block designs; Factorial designs and fractional factorial designs; Response surface methodology.

STAT941 Statistical Quality Control 1 6cp

Contact Hours: Not on offer in 2003

Subject Description: Why control charts?; Level of variability; Differences between specification limits and control limits; Deming's philosophy; Quality circles; Cause and effect diagrams; Pareto diagrams; Control charts; Benefits of using control charts; Shewhart charts, such as x-charts, c-charts, p-charts, R-charts, s-charts; Cumulative sum (CUSUM) control charts; Exponentially weighted moving averages; Moving average and moving range charts; Average run length of the above mentioned control charts; Comparison of charting methods; Process capability indices; Determining process capability using control charts; Some case studies.

STAT942 Design and Analysis For Quality Control 6cp

Contact Hours: Not on offer in 2003

Subject Description: Experimental design; Principles of design; Importance of randomisation; Randomised block designs; Factorial designs; Fractional factorials; Taguchi's philosophy and how it relates to experimental design; Introduction to variance components; Fixed models as opposed to random (mixed) models; Estimation of variance components; Evolutionary processes.

STAT944 Regression and Observational Studies 6cp

Contact Hours: Not on offer in 2003

Subject Description: Linear regression; Regression diagnostics; Multicollinearity; Residual analysis; Response surface methodology; Logistic regression; Planning of observational studies; Effects of matching and covariates as controls. Concepts of confounding.

STAT955 Sample Surveys and Experimental Design (With Project) 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours of Lectures, one hour of Tutorial
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 level or better, or (STAT131 and STAT231 both at Credit level or better)

Exclusions: Not to count with STAT335 or STAT355.

Assessment: Assignments 20%, project 25%; exam 55%

Subject Description: 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. Statistical computing is an essential part of this subject. Project: Students will undertake a project that relates the work of this subject to an investigation in their field of major interest.

Subject Objectives: On successful completion of this subject, students 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;

Subject Descriptions

(vii) evaluate critically the methodology used in a survey and the validity of the results; (viii) present conclusions in a clear and simple manner; (ix) apply the work of this course to a significant practical project.

STAT971 Preliminary Topics in Statistics A 6cp

Autumn

Contact Hours: 2 hours per week

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Statistics.

STAT972 Preliminary Topics in Statistics B 6cp

Spring

Contact Hours: 2 hours per week

Subject Description: A selection of topics will be available from time to time to serve as preliminary material in the Master of Statistics.

STAT990 Minor Project 6cp

Spring / Autumn

STAT991 Project 12cp

Annual / Spring 2003 - Autumn 2004

STAT993 Major Thesis 48cp

Annual / Spring 2003 - Autumn 2004

STAT994 Thesis 24cp

Annual

Pre-requisites: MATH188

Faculty of Law

Courses Offered

Research

Doctor of Philosophy
Master of Laws – Research
Master of Laws - Research (Natural Resources Law)
Master of Laws - Research (Court Management)
Master of Court Management – Research
Master of Maritime Studies – Research
Master of Natural Resources Law - Research

Coursework

Master of Laws (International and Comparative)
Master of Maritime Studies
Master of Transnational Crime Prevention
Graduate Diploma in Law
Graduate Diploma in Legal Practice
Graduate Certificate in Maritime Studies
Graduate Certificate in Transnational Crime Prevention

Current Areas of Study and Research

Supervision in research in the following areas is likely to be available to candidates undertaking research degrees:

Anti-discrimination law	Information technology law
Biotechnology and the law	Insurance law
Commercial and finance law	Intellectual property law
Company law	International law
Comparative law	Jurisprudence and legal theory
Conflict of laws	Law and literature
Constitutional law	Law relating to evidence, remedies and court procedure
Consumer protection law	Law relating to the sea
Contract law	Natural resources law
Court policy and administration	Property law
Criminal law	Refugee law
Cross-cultural legal issues	Regulation of economic activity
Dispute Resolution	Sociology and law
Environmental and planning law	Taxation law and practice
Family law and welfare policy	Torts
Feminism and law	Transnational crime
Indigenous people and law	Trusts and equity
Industrial relations law	

Doctor of Philosophy

This course is open to applicants with a degree with Honours Class II or equivalent. Applicants who do not possess such a degree may be permitted to demonstrate capacity for research for example by first completing a Special Research Paper in Law and should contact the Faculty of Law's Postgraduate Co-ordinator. The requirement of the degree is the satisfactory completion of a thesis to the value of 48 credit points [LAW998 Major Thesis] in accordance with Rules 10.1 - 10.5 of the General Course Rules.

Master of Laws – Research
Master of Laws - Research (Natural
Resources Law)
Master of Laws - Research (Court
Management)

Duration: min of 1.5 years or part time equivalent
Location: Wollongong/Distance
Starting session/s: Autumn/Spring

Entry requirements

A recognised law degree.

Purpose of the program

These research programs are designed for students to complete a thesis in relation to a discipline of law.

Program structure

Students enrolling in a LLM - Research program will complete a 48 credit point research paper [LAW998 Major Thesis], and, as part of this degree, students are required to complete 24 credit points of coursework prior to completion of the 48 credit point research thesis.

The 24 credit points of coursework comprise:

LAW993*	Research Project (minor thesis)	8
*Some students may be exempt from this subject if they have completed a substantial piece of written research as part of their Honours Law Degree at undergraduate level.		
LAW994	Legal Research Proposal	8
Plus one 8 credit point subject relevant to the particular needs of the student chosen from the following:		
SOC306	Sociological Research: Methodology and Practice	8
SOC933	Advanced Research Techniques	8
LLB9337	Comparative Studies in Law	8
LLB9100	Introduction to Legal Systems	8

Master of Court Management – Research

Duration: min of 1.5 years or part time equivalent
Location: Wollongong/Distance
Starting session/s: Autumn/Spring

Entry requirements

A recognised degree.

Purpose of the program

The program is designed to provide research opportunities for qualified candidates interested in policy and management of courts, tribunals and justice systems.

Program structure

Students enrolling in the Master of Court Management - Research program will complete a 48 credit point research paper [LAW998 Major Thesis], and, as part of this degree, students are required to complete 24 credit points of coursework prior to completion of the 48 credit point research thesis.

The 24 credit points of coursework comprise:

LAW993*	Research Project (minor thesis)	8
*Some students may be exempt from this subject if they have completed a substantial piece of written research as part of their Honours Degree at undergraduate level.		
LAW994	Legal Research Proposal	8
Plus one 8 credit point subject relevant to the particular needs of the student chosen from the following:		
SOC306	Sociological Research: Methodology and Practice	8
SOC933	Advanced Research Techniques	8
LLB9337	Comparative Studies in Law	8
LLB9100	Introduction to Legal Systems	8

Master of Maritime Studies - Research

Duration: min of 1.5 years or part time equivalent
Location: Wollongong/Distance
Starting session/s: Autumn/Spring

Entry requirements

Students should have an undergraduate degree in any discipline from a recognised institution (or equivalent); or a University of Wollongong Graduate Certificate in Maritime Studies; or relevant professional experience.

Purpose of the program

The course is a research degree with a specialisation in Maritime Studies.

Program structure

Students enrolling in the Master of Maritime Studies – Research program will be required to complete a 48 credit point thesis [CMP950 Major Thesis in Maritime Studies], plus 24 credit points of coursework prior to completion of the thesis. Some students may be exempt from all or part of the coursework requirement depending on their research/academic and/or professional experience.

The 24 credit points of coursework comprise:

CMP911	Research Project in Maritime Studies	8
Plus two 8 credit point subjects relevant to the particular needs of the student chosen from the Master of Maritime Studies coursework schedule, or other subjects approved by the Course Co-ordinator.		

Master of Natural Resources Law - Research

Duration: min of 1.5 years or part time equivalent
Location: Wollongong/Distance
Starting session/s: Autumn/Spring

Entry requirements

A recognised degree.

Purpose of the program

To enable students to complete supervised research in an area of their choice.

Program structure

Students enrolling in the Master of NRL - Research program will complete a 48 credit point research paper [LAW998 Major Thesis], and, as part of this degree, students are required to complete 24 credit points of coursework prior to completion of the 48 credit point research thesis.

The 24 credit points of coursework comprise:

LAW993*	Research Project (minor thesis)	8
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*Some students may be exempt from this subject if they have completed a substantial piece of written research as part of their Honours Degree at undergraduate level.

LAW994	Legal Research Proposal	8
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Plus one 8 credit point subject relevant to the particular needs of the student chosen from the following:

SOC306	Sociological Research: Methodology and Practice	8
SOC933	Advanced Research Techniques	8
LLB9337	Comparative Studies in Law	8
LLB9100	Introduction to Legal Systems	8

Master of Laws (International & Comparative)

Duration: 1 year or part-time equivalent
Location: Wollongong
Starting session/s: Autumn/Spring

Entry requirements

An undergraduate degree in Law from a recognised institution, or recognised overseas equivalent.

Purpose of the program

This program is designed to introduce students from a range of different countries and legal systems to the principles of international and comparative law. Students may also study and research various aspects of natural resources law, commercial law and the Anglo-American system of common law as it is practiced in Australia. Options cater for students from civil law and common law countries and those who do not use English as their language of first choice.

Program Structure

Students complete 48 credit points, comprising compulsory subjects, research essay and other subjects chosen to complement the student's background and interests.

Compulsory Subjects

LLB9100	Introduction to Legal Systems	8
LLB9337	Comparative Studies in Law	8
LLB9343	International Law	8
or		
INTR900	International Law and Diplomacy	8
LAW993	Research Essay	8

Options: Language

ELS900	English for Postgraduate Studies	6
LLB9395	Legal Research and Writing	2

Options: Natural Resources/Environmental Law

LLB911	Introduction to Natural Resources Law	8
LAW924	International Environmental Law	8
LLB918	Law of Land and Nature Conservation	8
LAW922	International Maritime Environment Law	8
LLB919	Water Resources Law	8
LLB920	Local Government and Natural Resources	8

Options: International Law

LAW922	International Maritime Environmental Law	8
LAW923	Law of the Sea	8
LAW924	International Environmental Law	8
LLB9344	Indigenous Peoples and Legal Systems	8

Options: Commercial Law

LLB9320	Commercial and Consumer Contracts	8
LLB9331	Intellectual Property Law	8
LLB9360	Foreign Investment Law in the People's Republic of China	8

Options: Industrial Relations Law

LLB9330	Law of Employment	8
LLB9332	Labour Relations Law	8
LLB9335	Anti-Discrimination Law	8

Options: Common Law

LLB9210	Law of Contracts	8
LLB9307	Law of Torts	8
LLB9304	Criminal Law and the Process of Justice	8
LLB9305	Law of Property A	8
LLB9301	Evidence	8
LLB9344	Indigenous Peoples and Legal Systems	8
LLB9348	Media Law	8
LLB9349	Feminism and Law	8
LLB9350	Special Study in Law A	8
LLB9351	Special Study in Law B	8
LLB9360	Foreign Investment Law in the People's Republic of China	8
LLB9362	Advanced Revenue Law	8

Master of Maritime Studies

Duration: min. of 1.5 years or part-time equivalent
 Location: Wollongong
 Starting session/s: Autumn/Spring

Entry requirements

The course is open to Officers of the Royal Australian Navy and their civilian equivalents in the Department of Defence (or similar) who have completed the Graduate Certificate in Maritime Studies or who are in possession of a bachelor's degree or its equivalent and/or satisfy the entry requirements of the University and corresponding personnel from throughout the Asia-Pacific region.

Purpose of the program

The program is designed to meet the needs of members of the Royal Australian Navy and other regional navies and professional groups who are involved in maritime issues.

Program Structure

This is a 48 credit point full-time or equivalent part-time program. Students will be required to undertake the following compulsory subjects comprising 16 credit points:

Core Subjects:

CMP902	Law of the Sea	8
CMP911	Research Project	8

Elective Subjects:

AND 32 credit points of elective subjects from the following:

CMP901	Strategy & Sea Power	8
CMP903	Australian Maritime Power	8
CMP904	Maritime Regulation and Enforcement	8
CMP905	Legal Regulation of Shipping	8
CMP906	Comparative Ocean Policy	8
CMP907	Shipping and Ports	8
CMP908	Contemporary Maritime Issues in the Asia-Pacific Region	8
CMP909	International Marine Environmental Law and Management	8
CMP910	Selected Topic in Maritime Studies	8
CMP912	Minor Thesis	16

With approval of the Course Co-ordinator students may be permitted to enrol in up to two subjects totalling 16 credit points from other relevant Master level subjects offered by the University.

Master of Transnational Crime Prevention

Duration: 1 year or part-time equivalent
 Location: Wollongong
 Starting session/s: Autumn/Spring

The Master of Transnational Crime Prevention is a full-fee paying course aimed at both the domestic and overseas market.

The course is a specialised program attractive to students from law enforcement agencies and the private sector, including police, customs, anti-corruption, immigration, banking, finance, accounting and other institutions, from Australia, the Asia-Pacific region and beyond.

The course is an interdisciplinary program taught in flexible delivery mode involving students in short on-campus intensives and undertaking research and other assignments by distance, using the internet and email.

This unique program will require students to undertake a range of subjects that will provide the knowledge and skills to be effective in a complex, multi-jurisdictional environment requiring co-operation between both governmental and private organisations. The skills addressed include both financial and auditing, and computer IT skills required in tracking fraudulent and other criminal activity. Completion of the program should, therefore, enhance students' career opportunities, including risk management and corporate crime prevention.

Entry requirements

Candidates should be graduates or should have extensive relevant experience at a high level.

English language requirements

IELTS overall band 7.0, or

IELTS overall band 6.0 with attendance at ELS151 Introduction to English for Academic Purposes.

Program of Study

This course is a 48 credit point one year full time or equivalent part time program. Students will be required to undertake the following prescribed subjects:

LEGL910	International Co-operation in Crime Prevention	4
LEGL911	International Criminal Law	4
LEGL912	Comparative Criminal Justice	4
LEGL920	Transnational Corporate Crime	4
LEGL921	Crime and Transnational Financial Transactions	4
LEGL922	Financial Investigations Practice and Procedure	4
LEGL923	Crime and Information Technology Regulation	4
LEGL930	Legal Research and Writing	2
LEGL931	Computing and Statistical Skills	2
LEGL940	Transnational Organised Crime	8

AND one of the following electives:

LEGL950	Transnational Crime Prevention Research Project	8
LEGL951	Special Studies in Transnational Crime Prevention and Investigation	8

Graduate Diploma in Law

LAW810	Law in Society	8
LAW811	Law of Contracts	8
LLB8395	Legal Research and Writing	2

The Graduate Diploma in Law is intended for those who wish to study law at postgraduate level without embarking on a law degree. It is also designed for those students interested in pursuing entry into the graduate law program. Students who have been unsuccessful in gaining admission to the graduate law program on the basis of their first degree results, may, on successful completion of the Graduate Diploma, apply again for entry into the graduate law program. The Faculty guarantees entry into the graduate law program if a credit grade point average of 65 is achieved in the Graduate Diploma.

Subject to pre-requisites, students may choose a program to suit their needs from LLB subjects offered by the Faculty.

A candidate must complete subjects to a value of at least 50 credit points including LAW810, LAW811 and LLB8395.

Graduate Diploma in Legal Practice

Duration:	20 weeks
Location:	Wollongong
Starting session/s:	Autumn/Spring

This accredited course will be delivered through independent and interactive learning, incorporating information technology, group workshops and seminars. Course activities will relate to work undertaken at the placement or employment site and computer technology will develop students' familiarity with the use of technology in a modern legal practice.

The following subjects must be completed:

LLB843	Professional Practice	8
LLB844	Practice Management	8
LLB845	Conducting Litigation	16
LLB846	Commercial and Property Practice	16

Graduate Certificate in Maritime Studies

Duration:	1 year full time or part time equivalent
Location:	Australian Defence College, Canberra
Delivery:	Intensive
Payment type:	Fee-paying contract basis
Starting session:	Autumn/Spring

Entry requirements

The course is opened to Officers of the Royal Australian Navy and their civilian equivalents in the Department of Defence who are in possession of a Bachelor's degree or its equivalent and/or satisfy the entry requirements of the Navy for entry to the Command and Staff College.

Purpose of the program

The program is designed to meet the professional education requirements of the Royal Australian Navy.

Program Structure

For the Graduate Certificate students must complete the following subjects (24 credit points):

CMP901	Strategy and Sea Power	8
CMP902	Law of the Sea	8
CMP903	Australian Maritime Power	8

Graduate Certificate in Transnational Crime Prevention

The Graduate Certificate in Transnational Crime Prevention is a full-fee paying course aimed at both the domestic and overseas market. The course is a specialised program attractive to students from law enforcement agencies and the private sector, including police, customs, anti-corruption, immigration, banking, finance, accounting and other institutions, from Australia, the Asia-Pacific region and beyond.

The course is an interdisciplinary program taught in flexible delivery mode involving students in short on-campus intensives and undertaking research and other assignments by distance, using the internet and email.

This unique program will require students to undertake a range of subjects that will provide the knowledge and skills to be effective in a complex, multi-jurisdictional environment requiring co-operation between both governmental and private organisations. The skills addressed include both financial and auditing, and computer IT skills required in tracking fraudulent and other criminal activity. Completion of the program should, therefore, enhance students' career opportunities, including in risk management and corporate crime prevention.

On successful completion of the Graduate Certificate in Transnational Crime Prevention students will be guaranteed entry into the Master of Transnational Crime Prevention program.

Entry requirements

Candidates should be graduates or should have extensive relevant experience at a high level.

English language requirements

IELTS overall band 7.0, or IELTS overall band 6.0 with attendance at ELS151 Introduction to English for Academic Purposes.

Program of Study

This course is a 24 credit point one session full time or equivalent part time program. Students will be required to undertake the following prescribed subjects:

Core Subjects:

LEGL911	International Criminal Law	4
LEGL930	Research and Writing	2

Elective Subjects:

AND any other electives to the value of at least 18 credit points

LEGL910	International Co-operation in Crime Prevention	4
LEGL912	Comparative Criminal Justice	4
LEGL920	Transnational Corporate Crime	4
LEGL921	Crime and Transnational Financial Transactions	4
LEGL922	Financial Investigations Practice and Procedure	4
LEGL923	Crime and Information Technology Regulation	4
LEGL931	Computing and Statistical Skills	2
LEGL940	Transnational Organised Crime	8
LEGL951	Special Studies in Transnational Crime Prevention and Investigation	8

LAW SUBJECT DESCRIPTIONS

Note: Except where shown all subjects are offered on the Wollongong Campus.

CMP 901 Strategy and Sea Power 8cp

Contact Hours: Not on offer in 2003

Restrictions: Officers of the Royal Australian Navy or civilian equivalents in the Department of Defence who are in possession of a bachelor's degree or its equivalent and/or satisfy the entry requirements of the Navy for entry to the Command and Staff College.

Assessment: Class presentations, Research Paper

Subject Description: The course will cover the following issues: the Mahanian legacy, the great White Fleet, the Gunboat Diplomacy, the Washington Disarmament Conference, Power in the Pacific, the Pacific War, the Cold War and the Nuclear Age, ANZUS and the Radford-Collins Agreement, the Asia-Pacific Regional Context, Lehman and the Forward Maritime Strategy, the New World Order.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. Identify the major historical and political developments of sea power in the 20th century, including the evolution of modern naval warfare and the function of navies in peacetime; 2. Understand the theories of geopolitics from Mahan and Mackinder to the contemporary American School of (post) Cold War practitioners; and 3. Develop skills in evaluating rival arguments about the role of sea power in the rise of the nation State.

CMP 902 Law of the Sea 8cp

Autumn	Australian Defence Force Academy (Navy)	On Campus
Spring	Australian Defence Force Academy (Navy)	On Campus

Restrictions: Officers of the Royal Australian Navy or civilian equivalents in the Department of Defence who are in possession of a bachelor's degree or its equivalent and/or satisfy the entry requirements of the Navy for entry to the Command and Staff College.

Assessment: Class presentations, Research Paper

Subject Description: The subject will cover the following: the history of international ocean management regimes; the 1982 Law of the Sea Convention; the Law of Armed Conflict of the Sea; the international legal regulation of marine resources; the protection of the marine environment; and law and order at sea.

Subject Objectives: On successful completion of this subject, a student should be able to understand and evaluate: 1. the historical development of the law of the sea; 2. the scope of the 1982 Law of the Sea Convention; 3. the international law rules applicable to armed conflict at sea; and 4. the law of the sea rules applicable to law and order at sea and the limitations of the rules.

CMP 903 Australian Maritime Power 8cp

Contact Hours: Not on offer in 2003

Restrictions: Officers of the Royal Australian Navy or civilian equivalents in the Department of Defence who are in possession of a bachelor's degree or its equivalent and/or satisfy the entry requirements of the Navy for entry to the Command and Staff College.

Assessment: Class presentations, Research Paper

Subject Description: The course deals with the historical evolution of Australian maritime power from a naval perspective. Topics covered include: international oceans politics; the uses of the sea; the development of national oceans policy; regional maritime policy issues in the Asia-Pacific; maritime and security arrangements in the Asia-Pacific region; Australia's maritime science and technology plan; co-operative arrangements for regional maritime surveillance and maritime transport.

Subject Objectives: On successful completion of this subject, a student should be able to understand and evaluate: 1. the uses of the sea in historical perspective; 2. maritime security issues in the Asia-Pacific region and the co-operative efforts developed by States to deal with such issues; 3. the concept of ocean policy and the factors that shape its development; 4. the strategic significance of maritime transport for Australia.

CMP 904 Maritime Regulation and Enforcement 8cp

Autumn / Spring

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry to the Command and Staff College.

Assessment: Syndicate work and other class presentations, research paper.

Subject Description: The course focuses on the specific enforcement and regulatory powers, and responsibilities of states in the various maritime zones of jurisdiction, i.e. the territorial sea, the EEZ, continental shelf and high seas. Relevant policy and legal considerations in the development and enforcement of maritime jurisdiction will be covered.

Subject Objectives: On successful completion of this subject, students should be able to understand: 1. The legal differences between the various maritime zones of jurisdiction; 2. The responsibilities of both coastal and flag states within those zones; 3. The rights and regulatory powers enjoyed by coastal states in those zones; and 4. The powers of enforcement of coastal states in their respective maritime zones, limitations on those powers, and policy implications.

CMP 905 Legal Regulation of Shipping 8cp

Spring

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry into the Command and Staff College and/or University;

and their equivalents from the Asia-Pacific region; or other civilians with an appropriate professional background.

Subject Description: The course addresses the legal and regulatory frameworks relevant to shipping. It comprises two main elements: 1. The International Regulatory Framework, including: the Law of the Sea Convention; the role of the IMO; IMO related conventions; regional regulatory frameworks; and the arrest and detention of ships. 2. The Australian Domestic Regulatory Framework, including: the constitutional framework; the administrative framework; the Navigation Act; marine insurance; and salvage.

Subject Objectives: On successful completion of this subject, students should be able to demonstrate an understanding of: 1. The legal and regulatory frameworks relevant to international and domestic shipping; 2. The role of the International Maritime Organisation; and 3. The importance of the Navigation Act.

CMP 906 Comparative Oceans Policy 8cp
Spring

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry into the Command and Staff College and/or University; and their equivalents from the Asia-Pacific region; or other civilians with an appropriate professional background.

Subject Description: The course analyses policy implications of increased sea use, comprising the following aspects: the conceptual basis for an integrated national ocean policy; the integration of national sectoral interests such as marine industries and other stakeholders; integrating ocean and coastal management; Australia's Oceans Policy; ocean policy developments in other parts of the world; and regional cooperation and management of shared ocean space, especially within the Southeast Asia.

Subject Objectives: On successful completion of this subject, students should be able to understand: 1. Theoretical and conceptual issues of ocean use and policymaking; 2. The national ocean policies of Australia and other selected states; 3. The components of ocean policy; and 4. The bases for international cooperation for ocean management.

CMP 907 Shipping and Ports 8cp
Contact Hours: Not on offer in 2003

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry into the Command and Staff College and/or University; and their equivalents from the Asia-Pacific region; or other civilians with an appropriate professional background.

Subject Description: The subject addresses the key economic, geographic and policy aspects of international and domestic shipping and port operations. Key content includes global and Asia-Pacific trade, the emergence of a system of hub ports, and introduction to shipping and port/logistics economics, types of shipping, technology trends in shipping and port operations, flagging out of merchant fleets and port state control issues.

Subject Objectives: On successful completion of this subject, students should be able to understand: 1. The key economic and policy issues relevant to international and domestic shipping and port operations; 2. The nature of integrated logistics operations and the role of shipping within that structure; and 3. The politics of regional shipping and the hub-feeder port system.

CMP 908 Contemporary Maritime Issues 8cp
in the Asia-Pacific Region

Contact Hours: Not on offer in 2003

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry into the Command and Staff College and/or University; and their equivalents from the Asia-Pacific region; or other civilians with an appropriate professional background.

Subject Description: This course deals with the leading maritime issues in the Asia-Pacific region, including: maritime territorial disputes (South China Sea, Taiwan, East China Sea, Kuriles); piracy/sea robbery; archipelagic sea lane passage; military operations in the EEZ; confidence-building; naval cooperation and competition; and maritime terrorism.

Subject Objectives: On successful completion of this subject, students should be able to understand: 1. The major issues of concern/dispute in the Asia-Pacific region and the cooperative efforts developed by states to deal with such issues; 2. Maritime security issues in the Asia-Pacific region and the cooperative efforts developed by states to deal with such issues; 3. The political, legal and strategic background to territorial disputes; and 4. New threats to continued good order at sea in the region.

CMP 909 International Marine 8cp
Environmental Law and Management
Autumn

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry into the Command and Staff College and/or University; and their equivalents from the Asia-Pacific region; or other civilians with an appropriate professional background.

Subject Description: The subject covers International marine environmental law and conventions, including Part XII of the Law of the Sea Convention and Agenda 21; the specific concerns with, and importance of, the marine environment; important international conventions impacting upon the use and protection of the marine environment, and the domestic and international legal and policy implications of those conventions; the state of world and regional fisheries, and the legal and political efforts to sustain fish stocks.

Subject Objectives: On successful completion of this subject, students should be able to understand: 1. The structure of, and trends in, international environmental law; 2. The specific concerns with, and importance of, the marine environment; 3. Important international conventions impacting upon the use and protection of the marine environment, and the domestic and international legal and policy implications of those conventions; and 4. The state of world and regional fisheries, and the legal and political efforts to sustain fish stocks.

CMP 910 Selected Topic in Maritime Studies 8cp

Autumn	Wollongong	Distance
Spring	Wollongong	Distance

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry into the Command and Staff College and/or University; and their equivalents from the Asia-Pacific region; or other civilians with an appropriate professional background.

Subject Description: 10,000 word research paper in an approved topic in maritime studies.

Subject Objectives: On successful completion of this subject, students should have produced: 1. An original research paper of 10,000 words sufficient to demonstrate genuine understanding of the relevant topic, and adequate research and writing skills.

CMP 911 Research Project in Maritime Studies 8cp

Autumn / Spring

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry into the Command and Staff College and/or University; and their equivalents from the Asia-Pacific region; or other civilians with an appropriate professional background.

Assessment: Research Paper

Subject Description: 10,000 word research paper in an approved topic in maritime studies.

Subject Objectives: On successful completion of this subject, students should have produced: 1. An original research paper of 10,000 words sufficient to demonstrate genuine understanding of the relevant topic, and adequate research and writing skills.

CMP 912 Minor Thesis in Maritime Studies 16cp

Autumn / Spring

Restrictions: Students should be officers of the Royal Australian Navy, other ADF officers, or their civilian equivalents in the Department of Defence (or similar) who possess a bachelor's degree or its equivalence and/or satisfy the entry requirements of the Navy for entry into the Command and Staff College and/or University; and their equivalents from the Asia-Pacific region; or other civilians with an appropriate professional background.

Assessment: Thesis

Subject Description: 20,000 word minor thesis in an approved topic in maritime studies.

Subject Objectives: On successful completion of this subject, students should have produced: 1. A 20,000 word thesis representing original research sufficient to demonstrate genuine understanding of the relevant topic, and relevant research and writing skills.

CMP 950 Major Thesis in Maritime Studies 48cp

Autumn / Spring

Subject Description: This is a 48 credit point thesis in an approved topic in maritime studies.

Assessment: Major thesis.

Subject Objectives: On successful completion of this subject students should have acquired: 1. written communication skills; 2. research skills – developed through researching legal and other information sources, and utilising proper referencing and bibliographical standards; 3. clear Analysis – developed through a requirement, in all components of assessment, of problem solving, appraisal of information sources and argument; 4. computer skills – word processed research project, and internet dependent research into contemporary international developments; and 5. appreciation of the wider social context and recognition of the importance of change in improving relationships between individual societies and cultures in local, national and international flora.

LAW 810 Law in Society

8cp

Autumn

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

Assessment: Two 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 to 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.

LAW 811 Law of Contract

8cp

Spring

Contact Hours: 2 hour seminar per week

Pre-requisites: LAW 810

Assessment: Class participation, assignments, 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. 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 expected 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; and 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.

LAW 902 Research Project A 6cp
Spring / Autumn
Assessment: 8,000 word dissertation
Subject Description: The student shall propose a research project for approval by the Dean.

LAW 903 Research Project B 12cp
Spring / Autumn
Assessment: 12,000 word dissertation
Subject Description: The student shall propose a research project for approval by the Dean.

LAW 904 Research Project C 8cp
Spring / Autumn
Assessment: 10,000 word dissertation
Subject Description: The student shall propose a research project for approval by the Dean.

LAW 905 Research Project D 8cp
Spring / Autumn
Assessment: 10,000 word dissertation.
Subject Description: The student shall propose a research project for approval by the Dean.

LAW 923 The Law of the Sea 8cp
Spring
Pre-requisites: LAW 910 and LAW 911
Assessment: Class participation, examination, research essay
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: To be familiar with the framework of 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 the law of the sea now facing the Asia-Pacific region.

LAW 930 Research Project in Natural Resources Law 24cp
Spring / Autumn
Pre-requisites: 24 credit points at 900 level from the Natural Resources Law & Policy course
Co-requisites: 24 credit points at 900 level from the Natural Resources Law & Policy course
Assessment: Research essay
Subject Description: Content as arranged.

LAW 950 Foreign Investment Law in the People's Republic of China 8cp
Contact Hours: Not on offer in 2003
Assessment: class participation, negotiation group work, examination

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 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.

LAW 951 Taxation Policy and Practice 6cp
Contact Hours: Not on offer in 2003

Subject Description: An examination of the revenue laws including income tax, sales tax, property tax, stamp duty and payroll tax.

LAW 960 Legal Studies For Professionals 6cp
Spring Wollongong On Campus
Spring Wollongong Flexible
Assessment: problem assignment, research essay, examination

Subject Description: This subject is offered in a series of modules. The first module lasts for 5 weeks and is completed by all students. It introduces Australia's constitutional and legal structure and explores the nature and processes of law. The second and third modules are designed for postgraduate students and, currently, address areas of law relevant to health and accounting professionals and general management issues.

Subject Objectives: Refer to subject outline for a list of the objectives.

LAW 961 Selected Legal Topics in Management 6cp

Spring / Autumn
Subject Description: Selected legal topics in management. The selection will be made by the Dean, taking into account the expertise of academic staff, including visiting staff and the interest of students.

LAW 969 Occupational Health and Safety Law 6cp
Autumn

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 Robens 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 workers' 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 Robens' Report 1972; evaluate the main principles of self-regulation as proposed in the Robens' Report; trace the impact of the Robens' 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 970 Banking and Financial Institutions Law 6cp

Autumn

Contact Hours: Refer to Faculty

Pre-requisites: Bachelor of Commerce specialising in Finance or approval by the Head of Department

Exclusions: Not to count with LLB321

Assessment: Refer to subject outline

Subject Description: The legal framework establishing, controlling and regulating financial institutions, including the Reserve Bank, banks, money market dealers and securities. The law dealing with financial money market instruments, particularly bills of exchange, promissory notes and cheques. Legal basis of the relationship between financial institutions and their clients. The law of securities - nature and types of securities; capacity and authority of borrowers entering transactions; remedies available to secured lenders.

Subject Objectives: Discuss the legal framework governing financial institutions and banking and the relationship between the law and business practice; Identify law relevant to financial institutions and critically evaluate the impact of legal regulation on the practical operations of these institutions; demonstrate the application of contract law to the specific relationship between financial institutions and their clients, and the particular rules applying to this relationship; analyse the law relating to secured interests in property; demonstrate an understanding of the need for a lender to determine that a borrower has the capacity and authority to enter into a particular transaction; and critically evaluate the remedies available to secured lenders in the event of default.

LAW 987 Special Topic in Law - A 6cp

Spring / Autumn

LAW 988 Special Topic in Law - B 6cp

Spring / Autumn

Subject Description: A special topic to be selected from any area of commercial law. The selection will be made by the Sub-Dean taking into account the expertise of academic staff, including visiting staff, and the interest of students.

LAW 993 Research Essay 8cp

Spring / Autumn

Assessment: 10,000 word dissertation

Subject Description: Information may be obtained from the Postgraduate Co-ordinator or Sub-Dean regarding the research essay.

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; present preliminary findings and reflect on the process of research; and report in writing the results of that research.

LAW 994 Legal Research Proposal 8cp

Autumn / Spring

Pre-requisites: LAW 993 or equivalent

Subject Description: This subject will provide students with the skills to develop a research proposal suitable for research at Master's level, and to choose an appropriate methodology for carrying out the research. It will explore the range of approaches available to legal researchers at a time when legal research is in a considerable state of flux. Traditional approaches based on detailed analysis of case law and legislation will be compared and contrasted with socio-legal approaches which rely on theoretical and methodological inputs from other disciplines. In particular, the relevance of empirical research to the issues of implementation and law reform, both qualitative and quantitative, will be examined. After completing the subject, students will be in a position to pursue more detailed studies in relation to their methodology of choice.

Subject Objectives: On successful completion of this subject a student should be able to develop a research proposal; identify an appropriate methodology for carrying out the proposed research; evaluate the strengths and weaknesses of research proposals developed by others.

LAW 998 Major Thesis 48cp

Annual

Pre-requisites: A degree in law with Honours Class II or equivalent.

Subject Description: Content as arranged.

LAW8311 Lawyers and Legal Ethics 6cp

Autumn / Spring

Pre-requisites: LAW810

Subject Description: The nature of professionalism and ethics; the legal profession, its regulation and ethics; how the law in practice relates to access to justice; the role of the legal profession in Australian society.

Subject Objectives: After completing this subject a student should be able to: 1. Discuss and explain: i) the nature of the legal profession; ii) the nature of the relations between lawyers and their clients;

iii) the rules of conduct of the legal profession; iv) the law relating to legal practice. 2. 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; iii) the influence of lawyers in society.

LAW9317 E-Commerce Law

6cp

Spring

Pre-requisites: 24 credit points of Master of Electronic Commerce

Exclusions: LAW317, LLB317

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.

LAW9380 Law For Environmental Managers 8cp

Spring

Contact Hours: 2 hours Seminar , 1 hour Lecture.

Pre-requisites: 72 credit points in a discipline other than Law or enrolled in MEnvSc

Exclusions: Not to count with LAW100, LAW334 or LAW380

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.

LEGL910 International Cooperation in Crime Prevention

4cp

Autumn

Contact Hours: 2 days

Assessment: class presentation, take-home examination, research paper

Subject Description: The politics of international relations, regional security and transnational crime and their historical background. UN institutions including the proposed International Criminal Court, different regional institutions, anti-corruption mechanisms, whistleblowing, transparency in governance and the role of civil society.

Subject Objectives: On successful completion of this subject, a student should be able to: demonstrate an understanding of the politics of international relations and their effect on international cooperation to combat Transnational Crime; appreciate how forms of multilateral and bilateral international cooperation are developed; identify relevant norms and instruments applicable in international cooperation arrangements in the prevention and detection of organised crime eg. regimes established by the 1988 Narcotic Drugs and Psychotropic Substances Treaty; analyse the strengths and weaknesses of international cooperation regionally and globally.

LEGL911 International Criminal Law

4cp

Autumn

Contact Hours: 2 days

Assessment: class presentation, take-home examination, research paper

Subject Description: International law related to national extraterritorial regulatory and enforcement jurisdiction, mutual assistance and extradition, and international crimes and tribunals. Includes an overview of relevant international instruments such as the UN Narcotic Drugs and Psychotropic Substances Treaty, the OECD Convention Bribery, the Draft UN Convention against Transnational Organised Crime, the Law of the Sea Convention, and bilateral instruments such as extradition treaties and mutual assistance treaties.

Subject Objectives: On successful completion of this subject, a student should be able to: demonstrate an understanding of the limits in international law of national extraterritorial jurisdiction to proscribe and regulate criminal conduct; appreciate how forms of multilateral and bilateral international cooperation are developed to extend jurisdictional limits; identify relevant legal norms and instruments applicable in international criminal law and procedure; analyse the strengths and weaknesses of international criminal law in its current state of development.

LEGL912 Comparative Criminal Justice

4cp

Autumn

Contact Hours: 2 days.

Assessment: class presentation, take-home examination, research paper

Subject Description: Common Law, civil law and shari'a criminal justice systems are compared with the objective of developing an appreciation of different legal systems, cultures and ethics. International criminal procedure is examined including international policing cooperation.

Subject Objectives: On successful completion of this subject, a student should be able to: demonstrate an understanding of the basic structure and principles of civil law, shari'a and common law systems; explore and analyse the substantive law of the different legal systems in key subject areas; develop a working knowledge of key issues when confronted with inter-jurisdictional problems involving different legal systems with a view to formulating appropriate solutions.

LEGL920 Transnational Corporate Crime 4cp

Spring

Contact Hours: 2 days.

Co-requisites: LEGL911 International Criminal Law

Assessment: class presentation, take-home examination, research paper

Subject Description: Fraud, money laundering, tax evasion and tax havens, securities offences, corporate structures including holding companies and subsidiaries, directors' responsibilities. Case studies and examples provided by relevant guest lecturers from government and commerce.

Subject Objectives: On successful completion of this subject, a student should be able to: demonstrate an understanding of the character of the international corporate environment; appreciate how public international law impacts on corporate regulation; identify barriers to effective law enforcement and crime prevention in a global and regional context; analyse, discuss and propose solutions for problems in the subject area using legal methodology including reference to legal instruments, cases and public policy.

LEGL921 Crime and Transnational Financial Transactions 4cp

Autumn

Contact Hours: 2 days.

Co-requisites: LEGL911 International Criminal Law

Assessment: class discussions, take-home examination, individual essay

Subject Description: The subject focuses on the implications of fraud for the financial sector. It entails analysis of fraudulent activity in financial transactions, e.g. letters of credit, credit cards, electronic transfers, insurance, banking codes, and other banking procedures, together with the rules governing the disclosure of account holders and other forms of government record tracing.

Subject Objectives: On successful completion of this subject, a student should be able to: discuss and illustrate the impact of crime and transnational financial transactions within the financial sector; demonstrate an understanding of the legal considerations involved in crime and transnational financial transactions; identify the types of financial instruments available in financial sectors and the potential problems that can arise while using these financial instruments; demonstrate an understanding of transactional financial crime; analyse new developments in preventing crime within the financial sector; assess relevant social, economic and political factors.

LEGL922 Financial Investigations Practice and Procedure

4cp

Spring

Contact Hours: 2 days

Co-requisites: LEGL911 International Criminal Law

Assessment: class discussions, take-home examination, individual essay

Subject Description: This subject focuses on the investigation of accounts and other relevant financial information held by financial organisations. It entails analysis of financial and other account information, auditing of accounts, and accountant and lawyer ethics and responsibilities eg. in relation to confidentiality, search warrants and subpoenas.

Subject Objectives: On successful completion of this subject, a student should be able to: discuss and illustrate the impact of financial investigations, both in theory and practice, within the financial sector; display a knowledge of the legal considerations involved in financial investigations; identify potential areas that warrant further financial investigations and the potential problems that can be encountered; demonstrate an understanding of the responsibilities of lawyers, bankers and accountants when undertaking confidential financial investigations; analyse new developments in asset tracing; demonstrate an understanding of the auditing function; assess relevant, economic and political implications.

LEGL923 Crime and Information Technology Regulation

4cp

Spring

Contact Hours: 2 days

Co-requisites: LEGL911 International Criminal Law

Assessment: class discussions, individual assignments and essay.

Subject Description: The subject focuses on the implications of developments in information technology for corporate and governmental security. It entails analysis of E-commerce regimes, theft of services and intellectual property and information piracy, dissemination of offensive materials, money laundering, vandalism, illegal interception, fraud, mobility and location of crime together with the rules governing the disclosure of account holders by Internet Service Providers (ISP) and forensic skills.

Subject Objectives: On successful completion of this subject, a student should be able to: discuss and illustrate the impact of information technology crimes on both the corporate and governmental sectors; demonstrate an understanding of the legal considerations involved in information technology regulation and security; identify the potential problems that can arise in protecting intellectual property; demonstrate an understanding of financial crime and the internet; analyse new developments in preventing and detecting crime facilitated by the World Wide Web; assess relevant social, economic and political factors.

LEGL930 Legal Research and Writing 2cp

Autumn / Spring

Contact Hours: 1 day.

Assessment: A case summary; a web-based exercise; small group exercise

Subject Description: The subject is intended to introduce students to the particular characteristics of legal research and writing relevant to the Master of Transnational Crime Prevention (MTCP) program. The subject content is similar to that offered by the Faculty in LLB9395 Legal Research and Writing.

Subject Objectives: On successful completion of this subject, a student should be able to: analyse a legal problem and develop a research plan for it; undertake research involving primary sources, including: case law, statutes, regulations, other government publications; undertake research involving secondary sources, including: journals, texts, digests and encyclopaedias, and non-legal materials; understand and evaluate various approaches to legal writing; write and edit effectively; provide accurate citations and references.

LEGL931 Computing and Statistical Skills 2cp

Autumn / Spring

Contact Hours: 1 day.

Assessment: practical exercises and assignments

Subject Description: The subject is intended to introduce students to the application of information technology in legal and financial work, including information retrieval, litigation support, property (land) transactions, company searches, court and office management and the use of expert systems. The subject content is similar to that offered by the Faculty in LLB390.

Subject Objectives: On successful completion of this subject, a student should be able to: save, transport and organise electronic information using a variety of platforms and applications; send an E-mail message with standard 'signature' and attachments; create a document using Microsoft Word, and copy it to an E-mail message; understand the basic concepts of information storage and retrieval using databases; construct their own database using Filemaker Pro, using appropriate fields and layouts; search for and find legal and other resources on-line using AustLI, Lexis and other databases; export data from a Filemaker to a Word file and edit that data to an acceptable format for legal citation; comprehend the fundamental notions of statistical inference interpretation of numerical data; manipulate numerical data in tables and graphs using Excel.

LEGL940 Transnational Organised Crime 8cp

Spring

Contact Hours: 3 days.

Pre-requisites: LEGL 911 International Criminal Law

Assessment: class presentations and research paper

Subject Description: All students will undertake a common core module on the analysis and structure of transnational organised crime, including the sociology of the development of such crime. Thereafter, students will choose one case study on serious organised crime to be selected from Terrorism, Banking Fraud, Firearms Trafficking, Narcotics, People Trafficking, Environmental Crime, Maritime Crime and Intellectual Property Crimes. Examples and case studies will be provided by relevant experts from Government and Commerce.

Subject Objectives: On successful completion of this subject, a student should be able to: demonstrate an understanding of the sociology of organised crime groups and gangs and the impact of corruption; appreciate how forms of multilateral and bilateral international cooperation are developed to combat the international dimensions of organised crime; identify relevant legal norms and instruments applicable in international criminal law and procedure;

analyse the strengths and weaknesses of national and international criminal laws as well as law enforcement and crime prevention models in relation to transnational organised crime.

LEGL950 Transnational Crime Prevention 8cp Research Project

Autumn / Spring

Pre-requisites: 24 credit points of LEGL subjects

Assessment: 10,000 word dissertation.

Subject Description: Students will research and write a dissertation of approximately 10,000 words, on a subject selected by the student and approved by the subject coordinator. The student should approach the topic from an international and comparative law perspective drawing together different threads of the Master of Transnational Crime Prevention (MTCP) program undertaken by the student in light of the students experience and background. Where appropriate, assistance from external experts is encouraged.

Subject Objectives: On successful completion of this subject, a student should be able to: conduct independent research; draw on a range of international and comparative material; complete a significant piece of writing; report on the results of that research.

LEGL951 Special Studies in Transnational 8cp Crime and Prevention

Autumn / Spring

Pre-requisites: 24 credit points of LEGL subjects

Assessment: 5,000 word essay

Subject Description: This subject permits the inclusion in the Master of Transnational Crime Prevention (MTCP) program of an in depth study of a particular aspect of transnational crime prevention within the specialisation of a visiting expert, which would otherwise not be offered by the Faculty.

Subject Objectives: On successful completion of this subject, a student should be able to: demonstrate an understanding of a specialist topic relevant to transnational crime prevention; identify relevant policy and rules for addressing the selected topic in the context of international cooperation; analyse the strengths and weaknesses of the relevant regulatory regime and develop potential future directions for crime prevention; conduct independent research under the supervision of the visiting expert, drawing on a range of international and comparative material, reporting on the results of the research in a significant piece of writing.

LLB 843 Professional Practice 8cp

Spring / Autumn

Pre-requisites: Bachelor of Laws degree or equivalent

Co-requisites: LLB844

Subject Description: An introductory program which will provide frameworks, foundations and strategies for the other Practice Subjects of the course. The subject contains four modules: Professional Responsibility and Competent Practice; Problem Solving; Writing and Drafting; Professional Experience Program. Students attend on-campus for the first week of the Course, and thereafter meet the requirements of the Professional Experience program in law-related employment or in a placement arranged by the Practical Legal Training Unit. The requirements of this subject are not completed until all components of professional experience.

LLB 844 Practice Management 8cp**Autumn / Spring****Pre-requisites:** Bachelor of Laws degree or equivalent**Co-requisites:** LLB843

Subject Description: This subject will introduce students to the statutory and professional requirements in relation to clients' Trust monies and securities, and to principles of practice management including computerised accounting and recording systems, costing, risk management and related matters. The subject contains two inter-related modules: Trust and Office Accounting; and Law Office Management.

LLB 845 Conducting Litigation 16cp**Autumn / Spring****Pre-requisites:** Bachelor of Laws degree or equivalent**Co-requisites:** LLB843 and LLB844

Subject Description: The subject is organised in six modules involving a combination of workshops, self-directed learning, assignments, Court visits, and interactive legal files: Litigation Strategy Workshop; Civil Litigation Practice; Civil Advocacy; Administrative Law Practice; Criminal Law Practice and Advocacy; Family Law Practice and Advocacy.

LLB 846 Commercial and Property Practice 16cp**Autumn / Spring****Pre-requisites:** Bachelor of Laws degree or equivalent**Co-requisites:** LLB843 and LLB844

Subject Description: The subject is delivered in 8 modules: Commercial Planning; Revenue Implications; Real Property Transactions; Commercial Contracts; Small Business Practice; Trusts, Wills and Estate Planning; Probate and Estate Administration; Commercial Litigation. It involves a combination of workshops, seminars, an auction report, workbook exercises, assignments, and conduct of a legal file. The subject provides an overview of particular aspects of commercial and property transactions, and related matters which affect clients in planning their business and personal affairs.

LLB 950 Foreign Investment Law in the People's Republic of China 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** Refer to Faculty

Assessment: Class participation, negotiation group work, examination.

Subject Description: An analysis of the law 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: After successful completion of this 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.

LLB8395 Legal Research and Writing 2cp**Autumn****Co-requisites:** LAW 810

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.

LLB9100 Introduction to Legal Systems 8cp**Autumn / Spring**

Subject Description: An overall perspective on the Australian legal system and its role in the Australian social order; an introduction to the sources and authority of legal rules, the nature of legal institutions and practices, legal materials, reasoning and terminology. Aspects of substantive law will be used to illustrate general principles.

Subject Objectives: Refer to Subject Outline

LLB9210 Law of Contracts 8cp**Spring****Contact Hours:** 3 hours Seminar per week**Co-requisites:** LLB9100

Assessment: class participation, assignments, 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. 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: After successful completion of this course a students 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; and 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.

LLB9222 Perspectives on Law 8cp**Spring****Contact Hours:** 2 hours Seminar per week.**Co-requisites:** LLB9100**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 successful 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.

LLB9300 Remedies and Procedure 8cp**Spring****Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** LLB9210 and LLB9307**Assessment:** class participation, assignment, 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 will 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.

LLB9301 Evidence 8cp**Spring****Contact Hours:** 1 hour Lecture, 2 hours Seminar per week**Pre-requisites:** LLB9210**Assessment:** class participation, research essay, 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: At the end of the course a student should be able to identify and apply the basic concepts of the rules of evidence; discuss whether the rules are necessary; evaluate whether the rules should be flexible and discretionary or rigid and predictable; assess the effectiveness of the rules and decide if they are applied fairly; relate the common law to the Evidence Act 1995 (Cth) and Evidence Act 1995 (NSW) where appropriate.

LLB9302 Law of Business Organisations 8cp**Autumn****Contact Hours:** 1 hour Lecture, 2 hours Seminar per week**Pre-requisites:** LLB9210**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 course 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.

LLB9303 Family, Children and Welfare 8cp**Autumn****Contact Hours:** 2 hours Seminar per week**Pre-requisites:** LLB9100**Assessment:** class participation, essay, 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 conclusion of this subject a student should be expected 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.

LLB9304 Criminal Law and the Process of Justice 8cp**Autumn****Contact Hours:** 2 hours Seminar per week.**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; and vi. develop ideas relating to reform of the criminal law in an attempt to adapt it to the contours of specific problems.**LLB9305 Property and Trusts A 8cp****Autumn****Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Pre-requisites:** LLB9210**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; legal and equitable interests in property and the notion of title; the notion of ownership; legal protection of property interests. The relationship of landlord and tenant; easements and covenants.**Subject Objectives:** At the end of the course a student should be able to, demonstrate knowledge of the legal doctrine applicable to the ownership of interests in real and personal property, apply these doctrinal elements to solve problems concerning conflicting property claims and the acquisition of property rights, critically evaluate the legal doctrine applicable to Australian property law and identify potential areas of 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.**LLB9306 Property and Trusts B 8cp****Spring****Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Pre-requisites:** LLB9305**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 the legal and beneficial ownership of 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.

LLB9307 Law of Torts 8cp**Autumn****Contact Hours:** 1 hour Lecture, 2 hours Seminar per week**Pre-requisites:** LLB9100**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; international 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**LLB9308 Public Law A 8cp****Autumn****Contact Hours:** 2 hours Seminar per week**Pre-requisites:** LLB9100**Assessment:** problem assignment and takehome exam.**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 and 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.**LLB9309 Public Law B 8cp****Spring****Contact Hours:** 2 hours Seminar per week**Pre-requisites:** LLB9308**Assessment:** research essay and exam.**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.

LLB9312 Legal Theory 8cp

Spring

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB9100

Assessment: class participation, assignment, research essay

Subject Description: This subject addresses a range of fundamental issues in jurisprudence, revolving around 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

LLB9320 Commercial and Consumer Contracts 8cp

Autumn

Contact Hours: 2 hours Seminar per week

Pre-requisites: LLB9210

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: At the end of the course 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.

LLB9321 Finance and Security 8cp

Spring

Contact Hours: 2 hours Seminar per week

Pre-requisites: LLB9210

Assessment: class participation, assignment, examination

Subject Description: LLB9321 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: At the end of the course 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.

LLB9330 Law of Employment 8cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week

Pre-requisites: LLB9210

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; anti-discrimination law; unfair work contracts; occupational health and safety.

Subject Objectives: At the end of the 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 of factual problems; analyse current issues in the law of employment and assess their significance.

LLB9331 Intellectual Property Law 8cp

Autumn

Contact Hours: 1 hour Lecture, 2 hours Seminar per week

Pre-requisites: LLB9100

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: By the end of the 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; and 5. identify the application of intellectual property rights in commercial planning and management.

LLB9332 Labour Relations Law 8cp**Spring****Contact Hours:** 2 hours Seminar per week**Pre-requisites:** LLB9210**Assessment:** class participation, essay, examination

Subject Description: The legal regulation of collective relations between employers and employees under the Workplace Relations Act 1996 (Cth) and the Industrial Relations Act 1996 (NSW). 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; liability for 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.

LLB9334 Environmental Law 8cp**Autumn****Contact Hours:** 2 hours Seminar per week**Pre-requisites:** LLB9100**Assessment:** assignment, research essay, class participation, examination

Subject Description: Legal and policy issues of environmental protection, resource utility and management.

Subject Objectives: After completing this subject, a student should be expected to have, among other: 1. a critical appreciation of the general anthropocentric and fragmented nature of environmental law; 2. an understanding of basic principles of international environmental law and their implications for environmental law in Australia; 3. an understanding of the division of environmental responsibilities between 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; 4. a critical appreciation of current directions in Commonwealth environmental law.

LLB9335 Anti-Discrimination Law 8cp**Spring****Contact Hours:** 1 hour Lecture, 2 hours Seminar per week**Pre-requisites:** LLB9100**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, 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.

LLB9336 Regulation of Business 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** LLB9100**Assessment:** Class participation, assignment and research paper 4,000 words.

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: At the end of the course 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.

LLB9337 Comparative Studies in Law 8cp**Spring****Contact Hours:** 4 day intensive**Pre-requisites:** LLB9100**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 students: 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.

LLB9338 International Trade Law 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** A Law degree**Assessment:** Class participation, assignments, research papers or take home examination

Subject Description: Public and private law aspects of international trade and investment, including contracts, transport, insurance and the settlement of international commercial disputes, the role of the World Trade Organisation, its regime of trade regulation and dispute resolution mechanisms, multilateral agreement on trade in services, and the financing of international transactions.

Subject Objectives: On completion of this subject, students are expected to have a satisfactory knowledge of international commerce, international investment, international sale and carriage of goods, insurance, general global trade and international financial institutions; understand the effect of the operation of international trade and investment liberalisation policies pursued by the world trading community; recognise the impact of trade investment induced economic growth and the advent of the World Trade Organisation's multilateral trading system, which is marking a new era in world trade, and appreciate that international trade and investment-related issues are closely aligned to the international financial system; identify changes in the financing of international commercial transactions, analyse the reasons for such change, and evaluate the law as a mechanism for regulating such transactions.

LLB9341 Revenue Law 8cp**Spring****Contact Hours:** 2 hours Seminar per week**Pre-requisites:** LLB9210**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. LLB9341 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 their Degree.

Subject Objectives: At the end of the subject a student should 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.

LLB9343 International Law 8cp**Autumn****Contact Hours:** 2 hours Seminar per week**Pre-requisites:** LLB9100**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 subject are to equip students 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.

LLB9344 Indigenous Peoples and Legal Systems 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** LLB9100**Assessment:** essays, class participation, 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 a description of the objectives.

LLB9348 Media Law 8cp**Contact Hours:** Not on offer in 2003**Pre-requisites:** LLB9100**Co-requisites:** LLB9210**Assessment:** research project, class tests, open book 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: By the end of the subject a student should 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.

LLB9349 Feminism and Law 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: LLB9100

Subject Description: This subject introduces the major themes in feminist thought and modes of contemporary feminist scholarship and applies them to law, legal institutions and the practice of law in Australia. It provides a foundation for future analysis of substantive and procedural law by students and subjects the institutions of law and their practitioners to scrutiny from a feminist perspective.

LLB9350 Special Study in Law A 8cp

Autumn/ Spring

Pre-requisites: LLB9210

Subject Description: A study in depth of selected area of law.

LLB9351 Special Study in Law B 8cp

Autumn / Spring

Wollongong

On Campus

Pre-requisites: LLB9210

Subject Description: A study in depth of a selected area of law.

LLB9360 Foreign Investment Law in the People's Republic of China 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: LLB9100

Co-requisites: LLB9210

Assessment: class participation, negotiation group work, examination

Subject Description: An analysis of the law 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 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

LLB9362 Advanced Revenue Law 8cp

Contact Hours: Not on offer in 2003

Pre-requisites: LLB9341

Assessment: class participation, assignments (including minimum 40% research assignment), examination.

Subject Description: Advanced aspects of taxation law and an examination of other taxes including sales tax, stamp duty and payroll tax.

Subject Objectives: At the end of the course a student will be expected to: 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 to solve practical problems; communicate with students and work in teams.

LLB9395 Legal Research and Writing 2cp

Autumn / Spring

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.

MPOL970 Major Thesis in Maritime Policy 48cp

Annual / Spring 2003 - Autumn 2004

Pre-requisites: (Bachelor's degree with Honours in an appropriate discipline involving study of maritime policy with a grade of 2(i) or better) or (MA MPOL with a minimum credit average)

Assessment: Thesis only, following such pre-requisites as may be required.

Subject Description: The subject consists of research, including preparation of a detailed proposal outlining objectives, methodology and sources, for an original, substantial contribution to scholarship. The thesis subject, which must be approved before enrolment, concerns an aspect (or aspects) of maritime policy, broadly defined. The research will generally be multi- or inter-disciplinary. Students will be required to attend and present work-in-progress papers to a regular postgraduate seminar series.

Faculty of Science

Courses Offered

The Faculty of Science offers the following postgraduate qualifications in Biological Sciences; Chemistry; Environmental Science; and Geosciences:

Biological Sciences

Doctor of Philosophy
Master of Science - Research (Biological Sciences)
Master of Science - Research (Biotechnology)
Master of Science (Biological Sciences)
Master of Science (Biotechnology)
Master of Science (Forest Conservation and Management)
Graduate Diploma in Science (Biological Sciences)
Graduate Certificate in Forest Conservation and Management

Chemistry

Doctor of Philosophy
Master of Science - Research (Chemistry)
Master of Science - Research (Medicinal Chemistry)
Master of Science (Chemistry)
Master of Science (Medicinal Chemistry)
Graduate Diploma in Science

Environmental Science

Doctor of Philosophy
Honours Master of Environmental Science
Master of Environmental Science – Research
Master of Environmental Science

Geosciences

Doctor of Philosophy
Master of Arts - Research (Geography)
Master of Science - Research (Geography)
Master of Science - Research (Geology)
Master of Arts (Geography)
Master of Science (Geography)
Master of Science (Geology)
Graduate Diploma in Science

Current Areas of Study and Research

Biological Sciences

Terrestrial Ecology
Marine Biology
Animal Physiology & Systematics
Plant physiology and molecular biology
Cell biology and biotechnology

Chemistry

See relevant entry in this Chapter

Environmental Science

See relevant entry in this Chapter.

Geosciences

Physical Geography
Human Geography
Geology

Biological Sciences

Courses Offered

Doctor of Philosophy
 Master of Science - Research (Biological Sciences)
 Master of Science - Research (Biotechnology)
 Master of Science (Biological Sciences)
 Master of Science (Biotechnology)
 Master of Science (Forest Conservation and Management)
 Graduate Diploma in Science (Biological Sciences)
 Graduate Certificate in Forest Conservation and Management

Current Research Areas

The following areas of research are available to candidates undertaking the Doctor of Philosophy and the Master of Science Research

Terrestrial Ecology

Pollination biology and genetics
 Weeds and urban ecology
 Avian biology and physiological ecology
 Fire ecology
 Antarctic ecology and climate change research
 Biodiversity and conservation studies
 Plant/animal interactions
 Threatened species biology and legislation

Marine Biology

Marine ecology and genetics
 Seabird physiological ecology
 Marine invertebrate self-recognition
 Marine chemical ecology
 Marine bioprospecting
 Biological invasions of marine environments

Animal Physiology & Systematics

Hormones and environment
 Effects of pesticides on non-target species
 Energetics, thermobiology and metabolic physiology
 Insect molecular systematics
 Evolutionary genetics
 Applications of insects to forensic science

Plant physiology and molecular biology

Photosynthetic carbon fixation
 Photoprotection and photoinhibition
 Phytoremediation
 UV-B damage to plants
 Signal transduction
 Secondary product metabolism

Cell biology and biotechnology

Vaccine development
 Microbial pathogenesis
 Bacterial genetics
 Apoptosis
 Extracellular chaperones
 Signal transduction
 Cancer therapy
 Biotechnology policy and ethics
 Intellectual property in biotechnology

Doctor of Philosophy

PhD candidates undertake in-depth research in order to make an original contribution to the body of knowledge in Biological Sciences. This qualification can lead to, or enhance, an academic career.

Entry requirements

Honours degree of at least four years' duration in a relevant discipline at Class II, Division 2 or higher (or equivalent).

Candidates for this degree enrol in BIOL999 (Major Thesis) and undertake a research project in one of the areas listed above. Intending students should first contact the Postgraduate Coordinator in the Department of Biological Sciences (Dr Sharon Robinson).

Master of Science - Research (Biological Sciences)

The Master of Science - Research (Biological Sciences), is a research-based degree, examined principally by thesis. The objective of this degree is to provide a grounding in experimental biological research.

Entry to the degree requires a Bachelor degree of at least three years duration with a major study in Biological Sciences (or equivalent qualification or work experience).

The course consists of 72 credit points to be completed in a maximum time of 2 years (4 sessions) as follows

1. 24 credit points chosen from sections A and B of the Schedule of Postgraduate Subjects (listed below). Students will only be enrolled in subjects in section B where an appropriate supervisor and topic have been identified. For further information, consult research interests of particular staff members at:
<http://www.uow.edu.au/science/boil/bioresearch.html>
 and contact the Masters Coordinator.
2. a 48 credit point research project, BIOL999 Major Thesis

Graduates entering the degree who hold a Bachelor degree with Honours at a standard of Class II, Division 2 or higher may be given advanced standing for the 24 cp of coursework, but are required to complete the 48 credit point BIOL999 Major Thesis.

Students entering the degree with qualifications below Honours Class II, Division 2 must complete subjects which aggregate to not less than 72 credit points. These will consist of at least 48 credit points of research obtained by completing the subject BIOL999 Major Thesis. Prior to undertaking BIOL999, students will complete 24cp of 900-level Biology subjects to provide appropriate background in relevant techniques (see (1) above). The combination of subjects must be approved by the Masters Coordinator.

Section A**Autumn session only**

BIOL970	Advances in Conservation Biology	12
BIOL972	Ecological and Evolutionary Physiology	12
BIOL980	Biotechnology	12
BIOL981	Molecular Cell Biology	12
BIOL983	Research Methods in Biotechnology	12

Spring session only

BIOL971	Marine and Terrestrial Ecology	12
BIOL973	Fisheries and Aquaculture	12
BIOL982	Cellular and Molecular Immunology	12
BIOL984	Applied Bioinformatics	12

Summer session only

MARE957	Advanced Topics in Molluscan Biology	12
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Or 900 level subjects from other units, subject to the approval of the Heads of those units and the Masters Coordinator.

NB. Students cannot enrol in a subject where they have completed the equivalent 300 level subjects at this University.

Section B**Autumn or Spring session**

BIOL992	Literature review	12
BIOL993	Research Project	12
BIOL991	Major Research project	24

Master of Science - Research (Biotechnology)

The Master of Science - Research (Biotechnology) is a research-based degree, examined principally by thesis. The objective of this degree is to provide a grounding in experimental biological research.

Entry to the degree requires a Bachelor degree of at least three years duration with a major study in Biological Sciences (or equivalent qualification or work experience).

The course consists of 72 credit points to be completed in a maximum time of 2 years (4 sessions) as follows

1. 24 credit points chosen from sections C (below) and B (above). Students will only be enrolled in subjects in section B where an appropriate supervisor and topic have been identified. For further information, consult research interests of particular staff members at

<http://www.uow.edu.au/science/boil/bioresearch.html>

and contact the Biotechnology Masters Coordinator (Dr Ren Zhang).

2. a 48 credit point research project research project (BIOL999 Major Thesis)

Graduates entering the degree who hold a Bachelor degree with Honours at a standard of Class II, Division 2 or higher may be given advanced standing for the 24 cp of coursework, but are required to complete the 48 credit point BIOL999 Major Thesis.

Students entering the degree with qualifications below Honours Class II, Division 2 must complete subjects which aggregate to not less than 72 credit points. These will consist of at least 48 credit points of research obtained by completing the subject BIOL999 Major Thesis. Prior to undertaking BIOL999, students will complete 24cp of 900-level Biology subjects to provide appropriate background in relevant techniques. The combination of subjects must be approved by the Biotechnology Masters Coordinator.

Section C**Autumn session only**

BIOL980	Biotechnology	12
BIOL981	Molecular Cell Biology	12
BIOL983	Research Methods in Biotechnology	12

Spring session only

BIOL982	Cellular and Molecular Immunology	12
BIOL984	Applied Bioinformatics	12

Or 900 level subjects from other academic units subject to the approval of the Heads of those units and the Masters Coordinator.

NB. Students cannot enrol in a subject where they have completed the equivalent 300 level subjects at this University.

Master of Science (Biological Sciences)

The Master of Science (Biological Sciences) is designed for applicants in education and industry who seek further knowledge and skills in biological sciences or who seek to qualify for a postgraduate research degree.

Entry into the degree requires a 3-year degree in biological life sciences or other relevant discipline from an accredited tertiary institution.

Candidates for the Master of Science (Biological Sciences) complete coursework to the value of 48 credit points chosen from Section A (see above). Subjects from Section B of the Schedule may be substituted after consultation with the Masters Coordinator.

Master of Science (Biotechnology)

(This is a fee-paying course only)

The Master of Science (Biotechnology) will produce graduates with up-to-date knowledge and technological expertise in specific areas of Cell and Molecular Biology, which are the basis for modern biotechnological research and development. Coursework to a value of at least 48 credit points is required.

Entry into the course normally requires a Bachelors degree an appropriate discipline, or an appropriate Graduate Diploma in Science (Biological Sciences) completed at a satisfactory standard.

Candidates for the Master of Science (Biotechnology) complete coursework to a value of 48 credit points, as follows:

Core subjects

Autumn session only

BIOL980	Biotechnology	12
BIOL981	Molecular Cell Biology	12

Spring session only

BIOL982	Cellular and Molecular Immunology	12
BIOL984	Applied Bioinformatics	12

Optional subjects

One of the following subjects may be substituted for one of the core subjects after consultation with the Biotechnology Masters Coordinator.

BIOL972	Ecological and Evolutionary Physiology	12
BIOL983	Research Methods in Biotechnology	12
BIOL992	Literature review	12
BIOL993	Research Project	12

Master of Science (Forest Conservation and Management)

(This is a fee-paying course only)

This Masters program includes the Graduate Certificate in Forest Conservation and Management (32 credit points) plus a major project which is examined by thesis.

Students who have already completed the Graduate Certificate may convert this qualification to the Master of Science (Forest Conservation and Management) by completing the research project and thesis. Entry into the course normally requires a Bachelors degree with Honours at a standard of Class II, Division 2 or above in an appropriate discipline, or an appropriate Graduate Diploma in Science (Biological Sciences) completed at a satisfactory standard.

Candidates for the Master of Science (Forest Conservation and Management) must undertake the 32 credit points set out under the Graduate Certificate of Forest Conservation and Management plus:

BIOL995	Forest Management Research Project	
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Graduate Diploma in Science (Biological Sciences)

The purpose of the Graduate Diploma (Biological Sciences) is to provide graduates who have insufficient background in parts of Biological Sciences with the skills and knowledge necessary to enable them to proceed with further study.

Successful completion of appropriate subjects with a value of at least 48 credit points is required, the subjects being chosen from the undergraduate science schedule. At least 24 credit points must be from 300-level or 400-level Biology subjects.

The selection of subjects will be approved by the Head of Biological Sciences.

Graduate Certificate in Forest Conservation and Management

(This is a fee-paying course only)

The Graduate Certificate is a 32 credit point program which provides candidates with the concepts and techniques of conservation ecology that are fundamental to effective forest management. The course is offered in two modules, BIOL951 Research Techniques in Conservation and a study tour, BIOL952 Sustainable Forest Management which integrates theory with field work in a range of locations in eastern Australia.

This Graduate Certificate articulates to a Master of Science (Forest Conservation and Management).

Entry to the course requires an undergraduate degree in a relevant area of Science (including forestry and agriculture) or a similar tertiary qualification with relevant work experience.

Chemistry

Courses Offered

Doctor of Philosophy
Master of Science - Research (Chemistry)
Master of Science - Research (Medicinal Chemistry)
Master of Science (Chemistry)
Master of Science (Medicinal Chemistry)
Graduate Diploma in Science

Current Research Areas

The following areas of research are available to candidates undertaking the Master of Science - Research degree and the Doctor of Philosophy degree:

Synthetic Organic/Heterocyclic and Medicinal Chemistry
Bio-Active Natural Products
NMR Studies of Peptides and Proteins
Interactions between Proteins, DNA and Drugs
Atmospheric Chemistry
Atmospheric FTIR Spectroscopy
High Resolution and Infrared Spectroscopy
Gas Phase Ion-Molecule Chemistry
Medicinal Chemistry and Organic Synthetic Methodology
Use of Chiral Conducting Polymers and Organometallic Reagents in Asymmetric Synthesis
Analytical/Environmental Chemistry
Model Compounds of Metalloproteins
Physical Chemistry of Food and Food Analysis
Asymmetric Synthesis of Bioactive Molecules and Pharmaceuticals

Inorganic Chemistry Research
 Mass spectrometry to biological molecules
 Cataract: Lens Biochemistry and Post-Translational
 Protein Modification
 Intelligent Polymer Research
 Ultraviolet Radiation
 Chemical Education Studies

Doctor of Philosophy

Students complete a major thesis and undertake a research project arranged in consultation with the appropriate member of staff and approved by the Head of Department before enrolment. PhD theses must make a major original contribution to scientific knowledge in the chosen area of research. This degree requires at least three years full-time (or equivalent part-time) and carries a weighting of 48 credit points per year.

Candidates enrol in the subject CHEM920.

Entry requirements

Honours degree in a relevant discipline at Class II, Division 2 or higher (or equivalent).

Master of Science - Research (Chemistry)

Introduction and Objectives

Over the past decade there have been many rapid advances in Chemistry, particularly in chemical instrumentation. Techniques and applications now in common use did not exist five years ago. Therefore it is essential for Chemistry graduates to be aware of at least some of these new developments. Courses provide for the specific needs and interests of applicants from both industry and education, as well as for students wishing to obtain experience in a modern research program.

Structure of the Course

The course consists of 72 credit points to be completed in a maximum time of 2 years (4 sessions), as follows

1. 24 credit points of coursework
 2. 48 credit point research project
- | | | |
|------------------------------|---|----|
| CHEM910 | Research Skills Training | 12 |
| Plus one subject chosen from | | |
| CHEM915 | Laboratory Project (conditional entry) | 12 |
| CHEM919 | Literature Report in Chemistry | 12 |
| CHEM940 | Contemporary Topics in Biomolecular Chemistry | 12 |
| CHEM950 | Contemporary Topics in Analytical/Environmental Chemistry | 12 |
| CHEM920 | Major Research Thesis | 48 |

Progression to the CHEM920 Major Thesis is dependent on satisfactory performance in CHEM910 and CHEM918.

Students entering with a degree in Chemistry at the level of at least Bachelor Honours Class II, Division 2 may be awarded the 24 credit points of coursework as advanced standing based on prior research training.

Entry Requirements

Minimum entry requirement is a Bachelor degree with a major study in chemistry.

Articulation

This course may articulate to a PhD with the approval of the Head of Department.

Master of Science - Research (Medicinal Chemistry)

Introduction and Objectives

The course provides vocational and extended research training in medicinal chemistry, an area where there is currently a high demand for graduates. The first year of the program consists of special coursework in medicinal chemistry followed in the second year by the opportunity to undertake a full-time research project in medicinal chemistry.

Structure of the Course

The course consists of 72 credit points to be completed in a maximum time of 2 years (4 sessions), as follows

1. 24 credit points of coursework
 2. 48 credit point research project
- | | | |
|---------|--|----|
| CHEM910 | Research Skills Training | 12 |
| CHEM930 | Selected Topics in Medicinal Chemistry | 12 |
| CHEM920 | Major Research Thesis | 48 |

Progression to the CHEM920 Major Thesis is dependent on satisfactory performance in CHEM910 and CHEM931.

Students entering with a degree in Chemistry at the level of at least Bachelor Honours Class II, Division 2 may be awarded the 24 credit points of coursework as advanced standing based on prior research training.

Entry Requirements

Minimum entry requirement is a Bachelor degree with a major study in medicinal chemistry or chemistry.

Articulation

This course may articulate to a PhD with the approval of the Head of Department.

Master of Science (Chemistry)

Introduction and Objectives

The objectives of this course are similar to those of the Master of Science - Research above. It is designed for applicants from industry and education and for students who wish to proceed beyond the 3 year pass degree but for whom the research degree is inappropriate.

Structure

This is a 48 credit point coursework degree in which students complete the four subjects:

CHEM910	Research Skills Training	12
CHEM915	Advanced Chemistry Laboratory Project	12
CHEM919	Literature Report in Chemistry	12

Entry Requirements

Students must consult the Departmental Head for approval of overall entry.

Pre-requisite

The minimum pre-requisite is that the student must have graduated with at least 24 credit points of 300-level Chemistry subjects.

Master of Science (Medicinal Chemistry)

Introduction and Objectives

The course provides vocational training in medicinal chemistry, an area where there is currently a high demand for graduates. The program consists of special coursework in medicinal chemistry and a small research project.

Structure

Students complete 48 credit points of coursework over one year (or equivalent part-time) by enrolling the following three subjects:

CHEM910	Research Skills Training	12
CHEM930	Selected Topics in Medicinal Chemistry	12

Plus two subjects chosen from:

CHEM915	Laboratory Project (conditional entry)	12
CHEM919	Literature Report in Chemistry	12
CHEM940	Contemporary Topics in Biomolecular Chemistry	12
CHEM950	Contemporary Topics in Analytical/Environmental Chemistry	12

Entry Requirements

A Bachelor of Science or the appropriate science-related degree is required with enrolment subject to approval of the Head of Department.

Articulation

This course articulates to a Master of Science - Research (Medicinal Chemistry).

Graduate Diploma in Science

Introduction and Objectives

This one year Graduate Diploma is designed principally as a Masters Qualifying course for students who have an inadequate preparation for direct entry into our MSc degree programs. It will be found useful by international students and by students either without a full major in Chemistry at undergraduate level or who completed their first degree some years ago.

Entry Requirements

Students must consult with the Departmental Head for approval of overall entry. The particular combination of subjects to be taken by each student will be decided after discussion with the Head and will take into account the student's specific background and needs.

Subjects to the value of 48 credit points chosen from the following list in consultation with the Head of the Department of Chemistry. The Departmental Head may also nominate other subject(s) deemed appropriate.

CHEM215	Food Chemistry
CHEM311	Inorganic Chemistry III
CHEM314	Instrumental Analysis
CHEM320	Biological Chemistry
CHEM321	Organic Synthesis and Reactivity
CHEM364	Molecular Structure and Spectroscopy
CHEM327	Environmental Chemistry
CHEM340	Chemistry Laboratory Project
CHEM910	Research Skills Training
CHEM911	Selected Topics in Chemistry
CHEM919	Literature Report in Chemistry

Articulation

This course may articulate to a MSc/MSc - Res course with the approval of the Head of Department.

Environmental Science

Courses Offered

The following courses are available:
 Doctor of Philosophy
 Honours Master of Environmental Science
 Master of Environmental Science – Research
 Master of Environmental Science

Current Research Areas

Current research covers a number of environmental areas, including the following:

Integrated estuarine and watershed management studies
 Effects of pollution on aquatic organisms
 Waste management technology and strategies
 Seagrass and fish biology
 Environmental chemistry, especially the development of new methods for the analysis and treatment of industrial wastes and trace toxins

Responses of plant and animal populations to bushfires
 Plant succession and recolonisation of disturbed land
 Conservation genetics of native plants and animals
 Marine ecology and genetics
 Atmospheric reaction mechanisms
 Studies of heavy metals levels in the Illawarra region and investigations of the mechanism of toxic action
 Coastal marine pollution
 Soil genesis and management
 Coastal and fluvial geomorphology
 Environmental prehistory
 Environmental impact
 Remote sensing applications
 Biogeography
 Economic and environmental geology
 Sedimentology of terrestrial and shallow marine sequences
 Coastal and marine resource policy

Doctor of Philosophy

Students complete a major thesis and undertake a research project arranged in consultation with the appropriate member of staff and approved by the Head of Environmental Science before enrolment. PhD theses must make a major original contribution to scientific knowledge in the chosen area of research.

Entry requirements

Honours bachelor degree in a relevant discipline at Class II, Division 2 or higher (or equivalent).

Candidates for this degree enrol in ENVI999.

Honours Master of Environmental Science**

(This is a full fee-paying program)

This degree is aimed primarily at international students and combines research and coursework to provide a two-year (or part-time equivalent) degree for Science and Engineering graduates or others with a limited undergraduate background in the environmental science area.

The course structure facilitates the tailoring of coursework to suit the individual requirements of candidates with differing undergraduate qualifications and employment experience.

Entry Requirements

Bachelor degree in Environmental Science, Science, Applied Science, Agriculture, Forestry, Veterinary Science or Engineering, or equivalent tertiary qualifications and/or professional experience. Students must consult with the Coordinator of the Environmental Science Unit for approval of overall entry.

The subjects offered for postgraduate study leading toward the Honours Master of Environmental Science degree are:

Core subjects for all candidates

ENVI930	Thesis
ENVI920	The Scientific Basis of Environmental Management
ENVI921	Environmental Planning
STS929	Studies in Resource and Environmental Policy

Elective subjects*

MGMT310	Introduction to Management for Professionals B
LAW380	Law for Environmental Managers
ENVE985	Environmental Engineering
STS300	The Environmental Context

Plus at least two of the following subjects

ENVI910	Directed Studies in Pollution Chemistry
ENVI911	Directed Studies in Ecology
ENVI912	Directed Studies in Land Resources
ENVI913	Directed Studies in Earth Sciences

*Other relevant subjects can be included in the selection available to students but must have approval of the Head. This includes relevant 900-level subjects from the Faculties of Arts, Commerce, Engineering and Science.

** This degree is currently under review for 2003. Please refer to the Faculty for further information.

Master of Environmental Science - Research

This Program involves a major project in one of the many research areas of environmental science available in the Faculty. The research project will provide information for improved understanding of how ecosystems work, for solving environmental problems of immediate concern and to assist policy makers in developing new strategies and legislation for environmental management. This degree provides the opportunity for students to contribute to this work by undertaking a major research project in one of the areas of environmental science within the Faculty. One year full time or part time equivalent.

Entry requirements

A Bachelor Honours degree in environmental science, science or engineering at a level of at least Class 2, Division 2, or a Master of Environmental Science or Master of Science (by coursework with credit average), or equivalent qualifications or appropriate publications and work experience.

Entry must be approved by the Head of Environmental Science and, if thesis work is being supervised by staff from an Academic Unit, the Head of that Unit.

Structure

The course consists of 72 credit points to be completed in a minimum time of one year and a maximum time of 2 years (4 sessions), as follows

1. a 48 credit point research project (ENVI940 Environmental Science Research Thesis)

2. a maximum of 24 credit points of subjects, chosen from the Environmental Science postgraduate schedule (see previous entry for Master of Environmental Science by research and coursework) in consultation with the Head of Environmental Science.

Special Note: Students entering with an Honours degree at the level of at least Bachelor Honours Class 2, Division 2, or a Master of Environmental Science degree (or equivalent) will normally be awarded advanced standing for the 24 credit points of coursework, except for candidates with no background in environmental science who will be required to complete ENVI920 Scientific Basis of Environmental Management (8 cps).

Master of Environmental Science

This program is designed for applicants who wish to extend their knowledge of science relating to the environment by studying areas not covered in their undergraduate science or engineering degree (including environmental policy, planning and management).

Entry Requirements

Bachelor degree in Environmental Science, Science, Applied Science, Agriculture, Forestry, Veterinary Science or Engineering (or equivalent qualifications and/or professional experience). Students must consult with the Co-ordinator of the Environmental Science Unit for approval of overall program.

Core Subjects

ENVI920	The Scientific Basis of Environmental Management
ENVI921	Environmental Planning

Elective Subjects

ENVI910	Directed Studies in Pollution Chemistry
ENVI911	Directed Studies in Ecology
ENVI912	Directed Studies in Land Resources
ENVI913	Directed Studies in Earth Sciences
ENVI919	Directed Studies in Environmental Science
GEOS941	Coastal Environments
GEOS942	Geomorphology of Rivers
GEOS946	Geographic Information Systems
GEOS948	Quaternary Studies
GEOS949	Soils, Landscape and Hydrology
STS929	Studies in Resource and Environmental Policy

Other relevant subjects can be included in the selection available to students but must have the approval of the Head. This includes relevant 900 level subjects from the Faculties of Arts, Commerce, Engineering and Science.

Geosciences

Courses Offered

The following courses are available:

Doctor of Philosophy
 Master of Arts - Research (Geography)
 Master of Science - Research (Geography)
 Master of Science - Research (Geology)
 Master of Arts (Geography)
 Master of Science (Geography)
 Master of Science (Geology)
 Graduate Diploma in Science

Postgraduate Programs

Physical Geography and Environments
 Human Geography and Environments
 Geology and other studies in Geoscience.

Current Research Areas

The following areas of research are available to candidates undertaking the Masters by Research degrees and the Doctor of Philosophy degree:

Physical Geography

Quaternary studies
 Australian prehistory
 Coastal geomorphology
 Fluvial geomorphology
 Evolution of landforms
 Soils and landscapes
 Environmental impact
 Environmental management
 Remote sensing applications
 Geographical information systems
 Biogeography
 Palynology
 Natural hazards

Human Geography

Agricultural geography
 Asia-Pacific Rim
 Environmental management
 Rural Studies
 Geographical information systems
 Australian prehistory
 Urban studies
 Population studies
 Health and welfare
 Food resources and World economy
 Economic restructuring
 Cultural landscapes
 Development Studies

Geology

Coal geology
 Environmental geology
 Environmental geochemistry
 Hydrology
 Igneous petrology
 Isotope geochemistry
 Marine Geoscience

Metamorphic petrology
Ore geology
Palaeontology and stratigraphy
Petroleum geology and oil shales
Sedimentology
Structural geology and tectonics
Volcanology

Doctor of Philosophy

Students complete a major thesis and undertake a research project arranged in consultation with the appropriate member of staff and approved by the Head of Department before enrolment. PhD theses must make a major original contribution to scientific knowledge in the chosen area of research.

Candidates enrol in GEOS999 Major Thesis. The degree carries a weighting of 48 credit points per year for a minimum of 3 years.

Entry Requirements

Honours bachelor degree in a relevant discipline at Class II, Division 2 or higher (or equivalent).

Master of Arts - Research (Geography)

Master of Science - Research (Geography)

Master of Science - Research (Geology)

The course consists of 72 credit points to be completed in a maximum time of 2 years (4 sessions), as follows

1. 24 credit points (three 8 cp subjects) chosen in consultation with the Head of School from the appropriate postgraduate program (listed below) offered by the School of Geosciences, and
2. a 48 credit point research project (GEOS944 Major Thesis)

The subject combination may be varied to take account of the individual candidate's qualifications, objectives and study plan.

Students entering with a degree in Geosciences at the level of at least Bachelor Honours Class 2, Division 2 may be awarded the 24 credit points of coursework as advanced standing based on prior research training.

Minimum entry requirement is a Bachelor degree with at least the equivalent of 24 credit points of Geosciences subjects in the relevant discipline.

Master of Arts (Geography)

Master of Science (Geography)

Master of Science (Geology)

These coursework programs have been devised to meet the needs of students who wish to proceed to the postgraduate level in Geography or Geology to enhance their qualifications in an area without undertaking a research project.

Students with a satisfactory background in Geosciences will be required to complete subjects with a value of 48 credit points. Other students will be required to complete postgraduate subjects with a value of 72 points. The subjects are grouped in three strands which reflect the major research strengths of the school of Geosciences. Students are encouraged to focus their studies on one of these strands. Entry to the program and the choice of subjects require the approval of the Head of the School of Geosciences.

Postgraduate Programs

Master of Science and Master of Arts (Physical Geography and Environments)

GEOS935	Research Report	8
GEOS941	Coastal Environments	8
GEOS942	Geomorphology of Rivers	8
GEOS943	Biogeography	8
GEOS945	Remote Sensing	8
GEOS946	Geographical Information Systems	8
GEOS948	Quaternary Studies	8
GEOS949	Soils, Landscape and Hydrology	8
GEOS952	Climate and Natural Hazards	8

Master of Science and Master of Arts (Human Geography and Environments)

GEOS935	Research Report	8
GEOS946	Geographical Information Systems	8
GEOS951	Environmental Policy and Management	8
GEOS963	Population and Health: Dynamics, Analysis and Policy	8
GEOS964	Food and Development Studies	8
GEOS965	Change in the Asia-Pacific Rim	8
GEOS966	Urban and Regional Studies	8
GEOS967	Rural Studies	8
GEOS968	Cultural Heritage Management	8

Master of Science (Geology)

Autumn Session

GEOS914	Volcanology and Global Crises	8
GEOS919	Basin Setting and Analysis	8
GEOS920	Organic Petrology	8
GEOS923	Dynamic Earth	8

Spring Session

GEOS901	Isotope Geochemistry	8
GEOS904	Ore Genesis	8
GEOS917	Petroleum Geology	8
GEOS921	Environmental Geology	8

Autumn, Spring, and Annual Sessions

GEOS910	Advanced topics in Geosciences A	16
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Graduate Diploma in Science

The Graduate Diploma in Science offers graduates lacking a major strand of Geosciences in their degree the opportunity to acquire competence in the discipline. Alternatively, Geosciences graduates may enrol in the program in order to update, broaden and/or intensify their knowledge, e.g. for teaching, or to equip themselves for work in applied fields such as environmental studies, fuels or mining resources, or in urban, regional or social planning. In addition to the University's Rules for Graduate Diplomas, candidates for the Graduate Diploma in Science shall:

- i) complete Geoscience subjects to a value of not less than 48 credit points from those listed in the General Schedule, at least 24 credit points being for subjects at the 300-level and the remainder at 200-level, provided that by approval of the Head of School, up to 12 credit points at 200-level may be obtained for cognate subjects offered by another Department;
- ii) not include in the diploma program subjects which, in the opinion of the Head of School, are substantially equivalent in content to those for which credit has already been obtained towards some other degree or diploma;
- iii) have their program approved by the Head of School before enrolling;
- iv) successfully complete the graduate diploma program in not more than four academic sessions.

SCIENCE SUBJECT DESCRIPTIONS

Note: Except where shown all subjects are offered on the Wollongong Campus.

BIOL970 Advances in Conservation 12cp **Biology**

Autumn

Contact Hours: 6 hours per week

Restrictions: Students must qualify for entry into the MSc (Biological Sciences) and have an undergraduate background, at senior undergraduate level, in ecology.

Assessment: Critical review paper & seminar; seminar, Land & Environment Court assignment; Practical reports; Field camp & report; Final examination.

Subject Description: This subject examines the science behind modern conservation biology, integrating ecology, ecological genetics & legislation. Emphasis is placed on understanding ecological & genetic principles, mastering lab. & field skills & elementary mathematical modelling, & then placing these in the context of current legislation & other conservation instruments. Students use these skills & knowledge to assess a recent issue in conservation biology, as a critical review of methodology & conclusions.

Subject Objectives: To understand the factors that contribute to biological variability; interpret demographic data & plan a simple demographic study; determine genetic composition of populations; understand consequences of human modification of ecological processes; understand the need for conservation of biodiversity; have knowledge of major legislative instruments; apply effective sampling design & methodology; use algebraic & statistical methods in genetics & ecology for population processes prediction; understand critical published literature, report preparation, seminar presentation; ability to critically review concepts, methodology, conclusions, etc.

BIOL971 Advanced Topics in Marine & 12cp **Terrestrial Ecology**

Spring

Contact Hours: 2 hours lectures, 4 hours tutorial/practical per week

Assessment: Research project or literature review; seminar presentation

Subject Description: Introduction to ecology - levels of organisation (individual, population, community and ecosystem) and the importance of spatial and temporal variation. Experiments in ecology - field and laboratory, their design and analysis, including the detection of human impacts. Biotic interactions: the roles of competition, herbivory, predation, mutualisms and disturbance, in community structure and function. Behavioural ecology: innate vs learned behaviours and their effects on individual fitness, demography and community structure. Applied ecology: rehabilitation and ecological management. Literature review examining contemporary research in ecology (tailored to the specialisations of MSc students enrolled in the subject).

Subject Objectives: 1. Appreciate the importance of ecological variation in communities, whether marine or terrestrial. 2. Use a range of techniques to describe communities. 3. Identify a range of biotic and abiotic factors that determine community structure. 4. Understand the nature of biotic interactions occurring within ecological communities. 5. Appreciate the effects of innate and learned behaviours on the fitness of individuals.

6. Design and complete an experiment to answer a specific ecological question. 7. Analyse ecological data in an appropriate manner and present these effectively in both written and verbal formats. 8. Show concern for accuracy, precision, honesty, for the organisms under study, and for the safety and welfare of others in the laboratory or field (OH & S awareness). 9. Use computers for data analysis and graphical presentation. 10. Critically evaluate information sources. 11. Work in a group towards a common goal.

BIOL972 Ecological and Evolutionary 12cp **Physiology**

Autumn

Assessment: Literature reports & project reports; seminar presentation; theory exam.

Subject Description: Physiological and biochemical responses of animals and plants to environmental variables (light intensity, temperature, water, salt content, gas composition and pressure). Physiological and behavioural adaptations of organisms to particular aquatic and terrestrial environments. Effect of organism size and phylogeny on physiological performance. Evolution of endothermy. Using allometry to predict and evaluate physiological performance. Literature review examining contemporary research in physiology.

Subject Objectives: Understand the physiological & biochemical responses of animals & plants to environmental variation. Identify how marine, aquatic, & terrestrial environments select for different biochemical & physiological adaptations in animals & plants. Explain the adaptive significance for the evolution of particular biochemical & physiological processes in organisms. Appreciate the relevance of whole-organism physiology to other biological disciplines. Design & complete an experiment to answer a specific physiological question. Analyse physiological data in an appropriate manner & present these effectively in both written and lecture formats. Show concern for accuracy, precision, honesty, for the organisms under study, & for the safety & welfare of others in the laboratory (OH & S awareness). Use computers for data gathering (data logging), data analysis, & graphical presentation. Critically evaluate information sources. Work in a group towards a common goal.

BIOL980 Biotechnology 12cp **Autumn**

Contact Hours: 2 hours lectures, 4 hours tutorial/practical per week

Assessment: Tutorial presentation; literature review/critique and presentation; practical/research project reports and presentation; theory examinations.

Subject Description: Recombinant DNA technology and genetic engineering of micro-organisms, plant cells and animal cells. Expression, production and purification of recombinant proteins, cytokines and hormones. Fermentation technology and industrial scale-up. Applications of Biotechnology to the fields of human therapeutics, agriculture and diagnostics. Bioinformatics, ethical and patent issues of Biotechnology.

Subject Objectives: 1. Achieve an understanding of genetic engineering. 2. Achieve an understanding of the application and processes of biotechnology. 3. Show competence in basic molecular biological techniques.

4. Achieve an understanding and appreciation of the regulatory and ethical issues of biotechnology. 5. Show concern for accuracy, precision, honesty, for the organisms under study, and for the safety and welfare of others in the laboratory (OH & S awareness). 6. Use computers to perform basic bioinformatical analysis. 7. Critically evaluate information sources. 8. Work in a group towards a common goal.

BIOL981 Molecular Cell Biology 12cp

Autumn

Contact Hours: 2 hours lecture, 4 hours tutorial/practical per week

Restrictions: Assumed knowledge: basic biochemistry, cell biology (cell structures of prokaryote versus eucaryotes) & molecular biology (DNA, RNA structure, basic mechanisms of DNA replication, transcription, translation & gene expression).

Assessment: Literature review & seminar presentation on advanced topics in Molecular Cell Biology; mid-session quiz, practical report and student laboratory report book; poster, theory exam; practical exam.

Subject Description: This subject covers many specific aspects of cell biology, including cell and tissue structure, protein sorting mechanisms, secretion, membrane transport, energetics, signal transduction, apoptosis, cellular and molecular genetics of development, the cell cycle and cancer. In addition, focused lab-based practicals are offered which will provide an understanding of the techniques used for studying cell biology. These include: cell and organelle isolation and analysis, growth of various cell types in aseptic culture, observation and manipulation of cellular functions and cell surface labelling and protein blotting.

Subject Objectives: 1. Demonstrate an understanding of the fundamental importance of cellular structure and function to all life forms. 2. 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. 3. Demonstrate laboratory proficiency in a range of cell biological techniques. 4. Analyse experimental data achieved in practicals or read in scientific journals in an appropriate manner and present these effectively in both written and seminar formats. 5. Show concern for accuracy, precision, honesty, and for the safety and welfare of others in the laboratory (OH & S awareness). 6. Use computers for data gathering (data logging), data analysis, and graphical presentation. 7. Critically evaluate information sources. 8. Work in a group towards a common goal.

BIOL982 Cellular and Molecular Immunology 12cp

Spring

Contact Hours: 2 hours lectures per week, 4 hours tutorial/prac. per week

Pre-requisites: BIOL 320

Assessment: Research project, literature review, theory examination(s); seminar presentation.

Subject Description: Cells (T cells, B cells, macrophages, dendritic cells, etc.) and organs (thymus, lymph nodes, etc.) of the immune system. Antigen presenting cells, clonal selection theory and the humoral response. Molecules of the immune system (cell surface receptors, MHC, cytokines). B and T cell activation. Antibody structure and function, generation of antibody diversity. Innate immunity, complement, phagocytosis. Tolerance and autoimmunity.

ELISA techniques, monoclonal antibodies, antibody engineering, phage antibodies, flow cytometry. HIV and AIDS.

Subject Objectives: 1. Understand and discuss many of the theoretical principles underlying modern cellular and molecular immunology. 2. Demonstrate competence in performing a variety of immunological techniques, including purification and conjugation of antibodies. 3. Show concern for accuracy and precision in experimental work. 4. Demonstrate a respect for animals, and an understanding of the importance of appropriate controls when designing experiments using immunological techniques. 5. Work in a group towards a common goal. 6. Critically evaluate information sources.

BIOL983 Research Methods in Biotechnology 12cp

Autumn

Contact Hours: 5 hours per week

Restrictions: Attainment of a standard equivalent to the third year of the Bachelor of Biotechnology.

Assessment: Literature research project; presentation of one seminar; written examination.

Subject Description: The role of proteins in biotechnology. Aspects of protein 3-dimensional structure & folding, ligand binding & catalysis important in biotechnology. Extraction & recovery of proteins in the biotechnology industry. Purification & characterisation of proteins. Animal cell & tissue culture: advanced culture techniques, flow cytometry & genetic engineering. Antibody technology: radio-immunoassay & enzyme-immunoassay techniques, signal amplification strategies. Transgenics: current status & prospects. Recent advances in gene cloning & screening. Resistance of plants to disease & abiotic stress. Genetic engineering of plants. Bioremediation using plants & microbes. Vaccines: antigen selection, presentation & delivery.

Subject Objectives: 1. Understand the contribution by the technologies of cell culture, protein & monoclonal antibodies to fundamental research, agriculture, medicine & industry. 2. Comprehend the structure-function relationships of proteins & the principles for their isolation, purification & characterisation for industrial use. 3. Appreciate antibody structure & function & understand their application to biotechnology. 4. Understand the role which nucleic acid technology plays in biotechnology as research, diagnostic, clinical and therapeutic tools. 5. Comprehend the principles & methods involved in recombinant DNA technology. 6. Have an understanding of the ethical issues involved in the implementation of biotechnology & a developed scientifically critical & socially responsible attitude to these issues.

BIOL984 Applied Bioinformatics 12cp

Spring

Restrictions: Students enrolled in this subject are assumed to have a knowledge of biology commensurate with that of a 3rd year life science student.

Assessment: Individual practical exercises; written formal report; presentation of seminar; written examination.

Subject Description: A revolution is underway in Biological Sciences due to the impact of Genomics, Transcriptomics and Proteomics. These new technologies have transformed Biology from a data-poor to a data-rich science. Bioinformatics is concerned with the utilisation of this new data. Bioinformatics will be explored in lectures and computer-based 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, compare and analyse biological data. Each student will prepare a literature research paper and deliver a seminar on a relevant aspect of Bioinformatics.

Subject Objectives: 1. Understand the significance and scope of bioinformatics in fundamental research and in the biotechnologies, including medicine and agriculture. 2. Understand the roles of genomics, transcriptomics, proteomics and other technologies in generating the information base for bioinformatics. 3. Appreciate the range of biological databases available and be capable of identifying those relevant to a given bioinformatics task. 4. Be experienced in accessing and utilising some of the major biological databases. 5. Appreciate the range of applications available and identify those relevant to a given task. 6. Apply and use a limited range of bioinformatics applications.

BIOL991 Major Research Project 24cp
Spring / Autumn / Summer 2003 - 2004

Subject Description: The student will undertake a research project on a topic in Biotechnology and present a research report and seminar on a topic chosen by the supervising staff. The research can be undertaken in collaboration with industry or another recognised institution.

BIOL992 Literature Review Project 12cp
Autumn / Spring / Summer 2003 - 2004

Assessment: Literature report, seminar and other assessment as directed by the Head of Department.

Subject Description: Under the supervision of staff (nominated by the Masters Coordinator) the student will survey the biological literature and present a written report and a seminar on a topic chosen by the supervisory academic.

Subject Objectives: On successful completion of this subject, a student should be able to 1. critically review a specified area of biological sciences research in a written form; and 2. prepare and present a seminar based on this review.

BIOL993 Research Project 12cp
Autumn / Spring / Summer 2003 - 2004

Restrictions: Students enrolled in this subject are assumed to have a knowledge of biology commensurate with that expected of a life sciences BSc graduate. Before enrolling in this subject, students need to identify a supervisor and an appropriate research project.

Assessment: Supervisor's assessment 5%; seminar 20%; project report 75%.

Subject Description: Under the supervision of staff (nominated by the Masters Coordinator) the student will undertake a research project and present a written report and a seminar on a topic chosen by the supervising staff.

Subject Objectives: On successful completion of this subject, a student should be able to: 1. design and complete an experiment to answer a specific biological question; and 2. analyse biological data in an appropriate manner and present these effectively in both written and seminar formats.

BIOL999 Major Thesis 48cp

Annual / Spring 2003 - Summer 2004

Subject Description: Thesis research to be chosen from the current research areas within the Department listed above. Topic to be arranged in consultation with relevant staff and approved by Head of Department.

CHEM910 Research Skills Training 12cp

Annual / Autumn / Spring

Pre-requisites: Appropriate degree. Compulsory for all students undertaking an MSc in Chemistry by coursework, except for students who have passed CHEM411 or completed the subject in a Graduate Diploma in Science (Chemistry). Not to count with CHEM411 or CHEM911

Assessment: Written/oral assignments and examinations (as appropriate). Research Skills Directed Studies 67%; Generic Skills Modules 33%.

Subject Description: This subject provides training in generic research skills such as data interpretation and analysis, library skills, literature evaluation, quality control and assurance, and Occupational Health and Safety. In addition, students will carry out directed studies in topics of advanced chemistry, chosen to complement their research interests, in discussion with the course Co-ordinator.

CHEM911 Selected Topics in Chemistry 8cp

Autumn / Spring

Pre-requisites: Appropriate degree. Not to count with CHEM910

Assessment: Written/oral assignments and examinations (as appropriate)

Subject Description: This subject provides training in generic research skills such as data interpretation and analysis, library skills, literature evaluation, quality control and assurance, and Occupational Health and Safety. In addition, students will carry out directed studies in topics of advanced chemistry, chosen to complement their other subjects, in discussion with the course Co-ordinator.

CHEM915 Advanced Chemistry Laboratory Project 12cp

Spring / Autumn / Annual

Contact Hours: 168 hours lab work,

Pre-requisites: Appropriate degree.

Restrictions: Entry is subject to availability of an appropriate supervisor and by agreement with the Head of Department.

Assessment: Thesis: 70%; Poster: 15%; Seminar: 15%

Subject Description: Under the supervision of staff appointed by the Head of Department, students will undertake a laboratory project and present a written report, poster and a seminar on a topic chosen by the supervising staff.

CHEM919 Literature Report in Chemistry 12cp

Spring / Autumn / Annual

Pre-requisites: Appropriate degree

Assessment: Substantial report 85%, seminar 15%

Subject Description: Students in this subject undertake a literature search on recent advances in a research topic in chemistry. The topic is chosen in consultation with their supervisor and the course coordinator.

A substantial report is the written outcome and the students meet in regular tutorials with their supervisor to discuss issues raised in the topic and compilation of the report.

CHEM920 Major Research Thesis 48cp

Annual / Autumn

Pre-requisites: Appropriate degree

Assessment: Major thesis

Subject Description: Topic to be arranged in consultation with the Departmental Head and approved by the Board of Research and Postgraduate Studies. Involves supervised research work.

CHEM930 Selected Topics in Medicinal Chemistry 12cp

Annual / Autumn / Spring

Contact Hours: 4 hours lectures + 1 hour per week contact with supervisor,

Pre-requisites: Entry is subject to approval of Head of Department

Assessment: Written examination; essays (2); seminar

Subject Description: Specialist courses in aspects of medicinal chemistry and related areas (drug design, synthesis, pharmacology, computer modelling and structural studies). Directed Medicinal Chemistry studies, in an area related to the student's individual research project.

Subject Objectives: 1. To develop (a) a broadening of the student's medicinal chemistry knowledge base; (b) the student's understanding of recent advances and current issues in medicinal chemistry; (c) the student's understanding of the principles and techniques used in drug design and development; (d) the student's ability to apply problem solving skills to medicinal chemistry issues. 2. To acquire specialised knowledge fundamental to an aspect of the student's individual major research project.

CHEM940 Contemporary Topics in Biomolecular Chemistry 12cp

Autumn / Spring / Annual

Contact Hours: lecture/ tutorial 6 hours per week; Lab 4 hours per week

Assessment: Laboratory work and quizzes (20%), written exam (40%), written report (30%), oral presentation (10%).

Subject Description: This unit gives students a good grounding in modern aspects of biomolecular chemistry. The exact course of study will vary depending on the student's background and interests. It may include studies of advanced methods of synthesis; studies of molecular structure via spectroscopy and modelling; and biological chemistry and bioinformatics. In addition, students undertake a small project in which they are given a research problem in biomolecular science to solve. This may take the form of a synthetic target or data to analyse. Students will present their findings by means of a short presentation and a report.

Subject Objectives: On successful completion of this subject, students should be able to: 1. Demonstrate a good understanding of synthesis and characterisation of biomolecules; 2. Apply modern synthetic techniques to molecular design problems; and 3. Interpret spectral data to elucidate molecular structures.

CHEM950 Contemporary Topics in Analytical and Environmental Chemistry 12cp

Autumn / Spring / Annual

Contact Hours: lecture/ tutorial 6 hours per week; Lab 4 hours per week

Pre-requisites: None.

Assessment: Laboratory work and quizzes (20%, written exam (40%), written report (30%), oral presentation (10%).

Subject Description: This unit gives students a good understanding in modern aspects of environmental chemistry and related analytical techniques. The exact course of study will vary depending on the student's background and interests. It may include modules of study of: atmospheric processes and their chemistry; water and soil chemistry and analysis; environmental sampling; instrumental analysis; Quality Control/Quality Assurance/Total Quality Management. In addition, students undertake a small project in which they are given a research problem in environmental chemistry to solve. This may take the form of a pollution or remediation/disposal problem or data to analyse. Students will present their findings by means of a short presentation and a report.

Subject Objectives: On successful completion of this subject, students should be able to: 1 identify appropriate sample collection and analysis methodologies for environmental samples; 2. undertake quality control and quality assurance procedures to verify sample results; and 3. explain the underlying processes associated with major environmental systems.

ENVI910 Directed Studies in Pollution Chemistry 12cp

Spring / Autumn / Annual

Contact Hours: See office door for availability, or by appointment.

Pre-requisites: 24 cp

Assessment: Continuous assessment, a final exam and a major case study report.

Subject Description: The chemistry of water and air pollution. Toxins in the environment. Sources, sinks and transport processes, methods for quantitative measurement and control.

ENVI911 Directed Studies in Ecology 12cp
Spring 2003 - Autumn 2004 / Autumn / Annual / Spring

Assessment: Continuous assessment and final examinations for coursework (autumn session); major case study report and seminar (either session)

Subject Description: This subject includes a coursework component and an independent research component. The coursework provides an introduction to the basics of Biology and the principles of ecology and evolution, including the diversity of organisms, population growth and interactions, principles of evolution, impacts of humans on ecosystems. The research project focusses on a current issue in field work, analysis and communication.

ENVI912 Directed Studies in Land Resources 12cp**Annual / Autumn / Spring / Spring 2003 - Autumn 2004**

Subject Description: This subject will examine coastal, river, water and soil managements focussing on human induced changes to these natural systems. Emphasis will be given to geomorphological processes, remote sensing of land and biological resources.

ENVI913 Directed Studies in Earth Sciences 12cp**Annual / Autumn / Spring**

Subject Description: Topics include the relationship of mining operations to communities; composition of mine waters, dusts and stack emissions; reclamation of mine sites; effects of mine subsidence; the composition, uses and disposal of waste residues; environmental effects of pollution, erosion and deposition; environmental impact studies.

ENVI919 Directed Studies in Environmental Science 12cp**Spring / Autumn / Annual / Spring 2003 - Summer 2004 / Spring 2003 - Autumn 2004**

Contact Hours: By appointment with coordinator.

Pre-requisites: Must be enrolled in MEnvSc by Coursework.

Assessment: Major written report based on work completed.

Subject Description: In this subject students will undertake either a major literature review or carry out a practical study on a problem of current environmental interest. The work will normally be related to one of the ongoing activities of the Unit, giving the student the opportunity to become well acquainted with a particular aspect of environmental science. International students will be encouraged to undertake activities with significant relevance to their home countries.

ENVI920 Scientific Basis of Environmental Management 8cp**Spring**

Contact Hours: Spring 2 x 2 hour lectures plus at least one field trip.

Pre-requisites: Must be enrolled in MEnvSc

Subject Description: This course gives a comprehensive overview, with case studies, of the scientific basis of environmental management by adopting a multi-disciplinary approach to the scientific understanding of how major ecosystems work. The science of aquatic, alpine, forest, grassland and semi-arid environments, along with hazardous waste (including radioactive) management will be amongst those discussed. Students will complete a team project that develops interdisciplinary skills in addressing appropriate management strategies.

ENVI921 Environmental Planning 8cp**Autumn**

Contact Hours: By appointment with Professor John Morrison.

Subject Description: This course presents a comprehensive overview of environmental planning in government and industry. Students are introduced to the basic principles followed by presentations from staff from a wide range of organisations involved in environmental planning.

The mechanisms, difficulties and benefits of current planning activities in Australia are explained. While the emphasis is on the Australian situation, reference to activities in other countries and the global situation of environmental planning is included.

ENVI930 Thesis 24cp**Spring / Autumn / Annual / Spring 2003 - Autumn 2004**

Contact Hours: By appointment with coordinator.

Subject Description: A research topic in an area of environmental science will be selected by each candidate after consultation with the degree co-ordinator. The thesis will be supervised by staff from the appropriate department or departments.

ENVI931 Thesis 32cp**Spring 2003 - Autumn 2004 / Annual**

Subject Description: A research topic in an area of environmental science will be selected by each candidate after consultation with the degree co-ordinator. The thesis will be supervised by staff from the appropriate department or departments.

ENVI940 Research Thesis 48cp**Annual**

Subject Description: A research topic in an area of environmental science will be selected by each candidate after consultation with the degree co-ordinator. The thesis will be supervised by staff from the appropriate department or departments.

ENVI999 Major Thesis 48cp**Annual**

Subject Description: The major thesis takes the form of a supervised research project on a topic approved by the Professor of Environmental Science.

GEOS901 Isotope Geochemistry 8cp**Spring**

Assessment: as appropriate from essays, reports, seminars, final examination

Subject Description: Topics include sample preparation; mass spectrometry; applications of both radiogenic and stable isotopic systems; geochronology modelling; petrogenetic modelling.

GEOS904 Ore Genesis 8cp**Spring**

Contact Hours: 42 hours, + field work

Assessment: as appropriate from essays, reports, seminars, final examination

Subject Description: Topics include principles of ore genesis; spatial and temporal considerations; experimental studies; plate tectonics and ore genesis; hydrothermal fluids, fluid inclusions; genesis of hydrothermal, magmatic, metasomatic, sedimentary and residual deposits.

GEOS910 Advanced Topics in Geosciences A 16cp**Annual / Autumn / Spring****Assessment:** as appropriate from essays, reports, seminars, final examination.**Subject Description:** This project will consist of a library and/or laboratory study on some topical aspect of geosciences equivalent to one third of full-time study.**GEOS911 Advanced Topics in Geosciences B 16cp****Annual / Autumn / Spring****Assessment:** as appropriate from essays, reports, seminars, final examination**Subject Description:** This project will consist of a library and/or laboratory study on some topical aspect of geosciences equivalent to one third of full-time study.**GEOS914 Volcanology and Global Crises 8cp**
Autumn**Contact Hours:** 42 hours, + field work**Assessment:** as appropriate from essays, reports, seminars, 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; the "Mediterranean desert"; physical properties of magmas; tectonic setting of volcanoes; effects of volcanic processes and deposits; major earthquakes.**GEOS917 Petroleum Geology 8cp**
Spring**Contact Hours:** 42 hours, + field work**Assessment:** as appropriate from essays, reports, seminars, final examination**Subject Description:** Topics include definition and prediction of subsurface petroleum reservoirs based on sedimentological and petrological criteria; use of facies models for reservoir prediction and evaluation; reservoir dynamics - fluid migration, entrapment and extraction; drilling and extraction methods, well testing, reservoir and reserve evaluation; Australian and international petroleum reserves.**GEOS919 Basin Setting and Analysis 8cp**
Autumn**Assessment:** as appropriate from essays, reports, seminars, final examination**Subject Description:** Topics include tectonic development of sedimentary basins; coal, petroleum and mineral deposits in sedimentary basins; spatial relationships; analytical aspects of basin analysis including palaeocurrent analysis, sedimentary facies relationships within the basin fill, petrological parameters in sedimentary basins and mathematical analysis of basin data.**GEOS920 Organic Petrology 8cp**
Autumn**Assessment:** as appropriate from essays, reports, seminars, final examination**Subject Description:** Topics include sample preparation; fluorescence and white light microscopy; macerals, microlithotypes, lithotypes; evolution of flora; coal-forming environments; formation of peat; coalification; type and rank; heat-affected coals, coke; Gondwana coals; coal petrology and associated stratigraphic, tectonic and palaeogeographic problems; minerals in coal and oil shale.**GEOS921 Environmental Geology 8cp**
Spring**Contact Hours:** 42 hours, + field work**Assessment:** as appropriate from essays, reports, seminars, final examination**Subject Description:** Topics include the relationship between mining operations and communities; downstream pollution problems; mineralogical composition and types of associated dusts; composition of mine waters and stack emissions, the reclamation of mine sites; effects of mine subsidence; the composition, uses and disposal of waste residues; environmental impact studies; alienation of resources; conflicts of interest in mining operations.**GEOS923 Dynamic Earth 8cp**
Autumn**Assessment:** as appropriate from essays, reports, seminars, final examination**Subject Description:** The subject provides an overview of 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.**GEOS935 Research Report 8cp**
Spring / Autumn**Contact Hours:** 2 hours workshop per week**Assessment:** research report**Subject Description:** This subject will allow the student to research in detail a problem identified in another subject within the program. Approval to enrol in this subject will only be granted to students who have demonstrated their capacity to undertake research by their performance in one or more of the other subjects in the strand.**GEOS941 Coastal Environments 8cp**
Spring**Contact Hours:** 5 hours per week, + field work**Assessment:** as appropriate from class tests, essays, research project, practical work, final examination**Subject Description:** This subject examines sedimentary and ecological processes on the coast. Coastal management is considered from geomorphological and ecological perspectives. Topics include the morphology and development of coastal landforms, particularly estuaries, deltas, chenier and beach-ridge plains, beaches and dunes, and coral reefs.

Emphasis is placed on interpreting Holocene morphostratigraphy and morpho-dynamics, reconstructing sea-level changes and the effect of sea-level changes on coastal environments, and on understanding longer-term ecological and geomorphological processes.

GEOS942 Geomorphology of Rivers 8cp **Autumn**

Contact Hours: 5 hours week, + field work

Assessment: as appropriate from class tests, essays, research project, practical work, final examination

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.

GEOS943 Biogeography 8cp **Autumn**

Contact Hours: 5 hours per week, + field work

Assessment: as appropriate from class tests, essays, research project, practical work, 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.

GEOS944 Major Thesis 48cp **Annual / Spring 2003 - Autumn 2004**

Subject Description: The major thesis for the Honours Master degree takes the form of a supervised full-time research project on an approved topic over at least two sessions.

GEOS945 Remote Sensing 8cp **Spring**

Contact Hours: 6 hours per week

Assessment: as appropriate from class tests, essays, research project, practical work, 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.

GEOS946 Geographic Information Systems 8cp **Autumn**

Contact Hours: 5 hours per week

Assessment: as appropriate from class tests, essays, research project, practical work, final examination

Subject Description: This subject provides students with an understanding of Geographic Information Systems and the technical skills required to operate GIS software and analyse spatial data. Practical applications in natural resource management, urban and regional planning, pollution management, distribution of plant and animal communities, natural hazards, medical geography, economic and environmental geology and environmental impact assessment are emphasised. Topics include data acquisition, spatial databases and analysis, georeferencing, digital terrain modelling, and accuracy.

GEOS948 Quaternary Studies 8cp **Autumn**

Contact Hours: 5 hours per week, + field work

Assessment: as appropriate from class tests, essays, research project, practical work, 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.

GEOS949 Soils, Landscape and Hydrology 8cp **Spring**

Contact Hours: 5 hours per week, + field work

Assessment: as appropriate from class tests, essays, research project, practical work, 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.

GEOS952 Climate and Natural Hazards 8cp **Autumn**

Contact Hours: 5 hours per week, + field work

Assessment: as appropriate from class tests, essays, research project, practical work, final examination

Subject Description: Natural hazards such as tropical cyclones, coastal storms, droughts, earthquakes, volcanoes and tsunami are undergoing extensive research in terms of our understanding about their behaviour and occurrence. The increasing frequency of these events is overwhelming existing global capabilities in mitigating their impacts and responding to their effects. This subject examines recently developed concepts on hazards and assesses changing societal consequences leading into the 21st century.

GEOS963 Population and Health: Dynamics, Analysis and Policy 8cp**Spring****Contact Hours:** 5 hours per week & fieldwork**Assessment:** as appropriate from class tests, essays, research project, practical work, 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. 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.

GEOS964 Food and Development Studies 8cp**Spring****Contact Hours:** 5 hours per week & field trip**Assessment:** as appropriate from class tests, essays, research project, practical work, final examination

Subject Description: This subject seeks to increase student understanding of the processes operating from the local to international levels that result in inequalities in the distribution of food resources. It introduces key aspects of and explanations for the geography of hunger, including the roles of technology, aid and corporate interests in food resources. Food security issues are analysed using major theories of underdevelopment. Proposals for the alleviation of global hunger are canvassed.

GEOS965 Change in the Asia-Pacific Rim 8cp**Autumn****Contact Hours:** 5 hours per week + field work,**Assessment:** as appropriate from class tests, essays, research project, practical work, final examination

Subject Description: This subject examines the recent growth in the economies of South East and North Asia. This subject aims to examine the concept of development in Asia by addressing various case studies and theoretical perspectives. The subject not only compares mechanisms and consequences of economic development between Asian countries, but also with other less industrialised countries.

GEOS966 Urban and Regional Studies 8cp**Autumn****Contact Hours:** 4 hours per week, + field work**Assessment:** essay, tutorial/practical assignments, field report, theory examination

Subject Description: This subject considers the ideas, methods and practices of urban and regional policy since the Second World War. Problems such as inequitable distribution of and access to resources, locational conflict and disadvantage are examined. The appropriateness of spatial and physical planning policies in resolving these problems will be assessed.

GEOS967 Rural Studies 8cp**Autumn****Contact Hours:** 4 hours per week, + field work**Assessment:** essay, tutorial paper, practical/field assignments, field report, theory examination

Subject Description: Changing global markets and technologies have created economic and social difficulties for rural communities. This subject examines the linkages between global development, trade relations, agricultural markets and rural restructuring and social and environmental conditions. Examples are drawn from domestic and international case studies.

GEOS968 Cultural Heritage Management 8cp**Autumn****Contact Hours:** 2 hours lectures, 3 hours 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; and 5. demonstrate an understanding of heritage assessment processes and procedures, including appropriate community consultation.

GEOS970 Project A 18cp**Annual****Assessment:** reports, seminars, essays and examinations as appropriate

Subject Description: This project will consist of a field and/or laboratory study on some topical aspect of geosciences equivalent to one third of full-time study.

GEOS971 Project B 18cp**Annual****Assessment:** report, seminar and essays and examinations as appropriate

Subject Description: This project will consist of a field and/or laboratory study on some topical aspect of geosciences equivalent to one third of full-time study.

GEOS999 Major Thesis 48cp**Annual / Spring 2003 - Autumn 2004**

Subject Description: The major thesis for the Doctor of Philosophy degree takes the form of a supervised research project on an approved topic.

MARE973 Advanced Topics in Fisheries & Aquaculture 12cp**Spring**

Contact Hours: 2 hours lecture per week; 4 hours tutorial/practicals per week.

Assessment: Theory examinations; research project reports and presentation; literature review/critique

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. Literature review examining contemporary research in ecology (tailored to the specialisations of MSc students enrolled in the subject).

Subject Objectives: On successful completion of this subject, students should be able to: 1. appreciate the diversity of fisheries and aquaculture in Australia and overseas; 2. understand the factors (physical and biotic) regulating fished populations; 3. understand the basis of fisheries management and construct simple predictive models; 4. appreciate the potential roles of biological research in aquaculture (diseases, nutrition, parasitology, etc); 5. appreciate the diversity and research needs of local fisheries and aquaculture; 6. understand fish harvesting techniques and selected research methods; 7. analyse fisheries data in an appropriate manner and present these effectively in both written and verbal formats; 8. show concern for accuracy, precision, honesty, for the organisms under study, and for the safety and welfare of others in the laboratory or field (OH & S awareness); 9. use computers for data analysis and graphical presentation; and 10. critically evaluate information sources.



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 (\$)
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

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

A. General University 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

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.

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

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.

General Information

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;

- '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

1. To qualify for admission as a candidate for:
 - a) a bachelor degree, a person shall comply with requirements of the Rules for Admission to Undergraduate Courses; or
 - b) 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
 - c) 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
 - d) 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.
2. An application for admission as a candidate shall be made on the prescribed form and be lodged as directed by the specified date.
3. 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.
4. 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.
5. 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.
6. 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.

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

- 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.

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:
- a) may recommend to the Vice-Chancellor that the candidate receive a zero mark;
 - b) 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.

- c) 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.
- d) No candidate shall be admitted to an examination room more than thirty (30) minutes after the commencement of the writing time of the examination.
- e) 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.
- f) 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.
- g) 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.
- h) 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.
- i) Smoking is not permitted in the examination room.
- j) 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.
- k) 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

1. 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.
2. 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
3. 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.
4. Such dictionaries may be used by eligible students for the length of their registration for a course at this University.
5. Such dictionaries may be used in all subjects, except where otherwise directed to the contrary by the relevant Head of Academic Unit.
6. 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.
7. At the approved examination:
 - (a) 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
 - (b) 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.
8. 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

1. 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.

2. 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%.

3. a) 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.

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 A-E	WAM <67.5	67.5< WAM ≥72.5	72.5< WAM ≥77.5	WAM ≥77.5
Project mark range Ø				
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:

- a) received a 'FAIL' grade for a subject for which you were formally enrolled, but did not attempt; or
- b) 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.

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.

9. A candidate for a Masters by research degree may apply to change registration to a Doctoral degree under these requirements:

- a) 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.
- b) 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.
- c) 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.
- d) the final determination will be made by the Thesis Examination Committee.

10.3 Procedures Governing the Preparation & Submission of Theses

1. 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.
2. 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) a statement from their supervisor stipulating that the thesis is in a form suitable for submission for examination;
 - b) a statement indicating the extent to which the work is their own work;
 - c) in the first instance, three spiral bound copies of the thesis and supporting work for submission to examiners; and
 - d) 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).

3. 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.
4. 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.
5. Theses are to be prepared in accordance with the following specifications, save that variation may be approved after consultation with the supervisor:
 - a) the text of the thesis, normally in English, shall be in double-spaced or one and a half spaced typescript;
 - b) 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;
 - c) 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;
 - d) 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;
 - e) 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;
 - f) the thesis shall be presented in a permanent and legible form as original typescript, offset printing, or copy by other approved technique; and
 - g) there shall be a title sheet set out in accordance with the approved style sheet.
6. The copies of the thesis provided for examination:
 - a) can be either spiral bound or bound in boards, covered with buckram; and
 - b) may be printed single or double sided on the paper.
7. The two final bound copies of the thesis shall be presented in the following manner:
 - a) the thesis shall be bound in boards, covered with buckram;
 - b) the lettering on the spine binding will be 10mm in height and will be:
 - i) 15mm from the bottom and across - UoW;
 - ii) 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

- 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.....	BEEnvSc
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.....	BEEnvSc (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

1. An applicant shall comply with relevant provisions of the Admission Rules and 103 (2) to (8) below.
2. To qualify for admission to the conversion course leading to the degree of Bachelor of Education a person shall have:
 - a) qualified for the appropriate Diploma in Teaching or Bachelor of Teaching of this University or an approved equivalent qualification; and
 - b) satisfactorily completed other approved requirements.
3. To qualify for admission to the course leading to the degree of Bachelor of Laws a person shall have:
 - a) qualified for the award of a bachelor degree; or

- 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.

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

- 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 EducationGCertGiftedEd
- GCert in Health Informatics
- GCert in Health Policy and Management GCertHP&M
- GCert in Higher EducationGCertHigherEd
- GCert in History Education..... GCertHistEd
- GCert in Indigenous Health Studies GcertIndHealth
- GCert in Industrial RelationsGCertIR
- GCert in Information & Communication Technology
.....GCertInfoTech
- GCert in International Business..... GCertIB

- GCert in Information Systems GCertIS
- GCert in LiteracyGCertLit
- 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 NursingGCertNurs
- GCert in Nutrition Management.....GCertNutrMgmt
- GCert in Occupational Health & SafetyGCertOHS
- 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:

- a) 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
- b) be subject to any provisions of the Course Requirements for that particular graduate certificate.
- c) 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

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	MSHRM
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	DPSyc
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.html#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.

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

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.

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 co-ordinator;
- (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 co-ordinator 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:

- (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 meet, 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
	BE-BA
	BE-BCom
Engineering	BE-BSc
	BCA-BCom
	BCA-BA
	BCA-BCompSci
Creative Arts	BCA-BSc
	BE-BA
	BE-BCom
Informatics	BE-BMath
	BE-BSc
	BCompSc-BSc
	BMath-BCompSc
Science	BSc-BA
	BSc-BCom
	BA-LLB
Law	BCA-LLB
	BCom-LLB
	BMath-LLB
	BSc(Health Science)-LLB
	BMedSc - LLB
	BCompSc-LLB
	BInfoTech-LLB

Health & Behavioural
Sciences

BE-LLB
BSc-LLB

BPsyc-BCom
BSc-BCom
BMedSc - BCom

Appendix 2

Double Degree Student Guide

1. 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.
2. All double degree students are obliged to consult with the Sub-Deans of the Faculties participating in the degree before finalising enrolment.
3. 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.
4. 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.
5. 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.
6. A student wishing to undertake Honours should note that:
 - i. 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.
 - ii. 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 pre-requisites, or the terms of a conditional offer) are not satisfied.

The applicant is unable to obtain a visa from an Australian Diplomatic Post.

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.....	325
Teaching & Assessment.....	326
Practical Placements	332
Supervision.....	334
Research.....	339

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

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.

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.

Academic Units

- (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

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.

- 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;

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

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 disgruntled 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

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.