The University of Sydney

Faculty of Architecture Handbook 2002

Architecture semester and vacation dates 2002

Summer School	
Lectures begin	Wednesday 2 January
Summer School ends	Friday 1 March
Semester 1	
Lectures begin	Monday 4 March
Easter recess:	
Last day of lectures	Thursday 28 March
Lectures resume	Monday 15 April
Study vacation: 1 week beginning	Monday 17 June
Examinations commence	Monday 24 June
Semester 1 ends	Saturday 6 July
Semester 2	
Lectures begin	Monday 29 July
Mid-semester recess:	
Last day of lectures	Friday 27 September
Lectures resume	Monday 14 October
Study vacation: 1 week beginning	Monday 11 November
Examinations commence	Monday 18 November
Semester 2 ends	Saturday 7 December

Last dates for withdrawal or discontinuation 2002

Semester 1 units of study	
Last day to add a unit	Friday 15 March
Last day for withdrawal	Friday 29 March
Last day to discontinue without failure (DNF)	Friday 26 April
Last day to discontinue (Discontinued - Fail)	Friday 14 June
Semester 2 units of study	
Last day to add a unit	Friday 9 August
Last day for withdrawal	Friday 30 August
Last day to discontinue without failure (DNF)	Friday 13 September
Last day to discontinue (Discontinued - Fail)	Friday 8 November
Full Year units of study	
Last day for withdrawal	Friday 29 March
Last day to discontinue with permission (DNF)	Friday 2 August
Last day to discontinue (Discontinued - Fail)	Friday 8 November

Academic year information (Academic Board policy and dates 1998-2002) is available at:
www.usyd.edu.au/su/planning/policy/acad/3_0aca.html.

The University of Sydney, NSW 2006
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Faculty of Architecture

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A welcome from the Dean

Welcome to the Faculty of Architecture at The University of Sydney. This is a broad, multidisciplinary faculty comprised not only of leading architects, urban designers and planners, design computing and digital media specialists and other design professionals, but also practicing artists, architectural scientists, architectural technologists and computer scientists. All are focused on giving you the very best education in your chosen profession and the ability to handle the myriad of issues confronting our built and designed environments.

As the first Faculty of Architecture in Australia, Sydney offers you a unique blend of compassion for history with a forward vision for the 21st century. With a long and distinguished history of being one of the premier design schools in Australasia and the neighbouring Asia-Pacific, you will receive an excellent design education from distinguished staff and many of the most exciting young architects and design-computing experts working in the profession.

The majority of students entering our Faculty do so to become architects through our BDes(Arch)/BArch combined degree program. For you we have a broad, integrative curriculum that is centred on architectural design but incorporates and integrates all the knowledge areas you need to be a practicing architect. It is organised around designing the built environment, inhabiting the built environment and constructing the built environment. The curriculum is flexible to allow you ample time to take electives, either from our Faculty or from the rest of The University of Sydney. Many students complete the equivalent of a minor in Arts, in Art History and Theory, in a language and other fields in the University, or in digital media or visual arts right here in the Faculty.

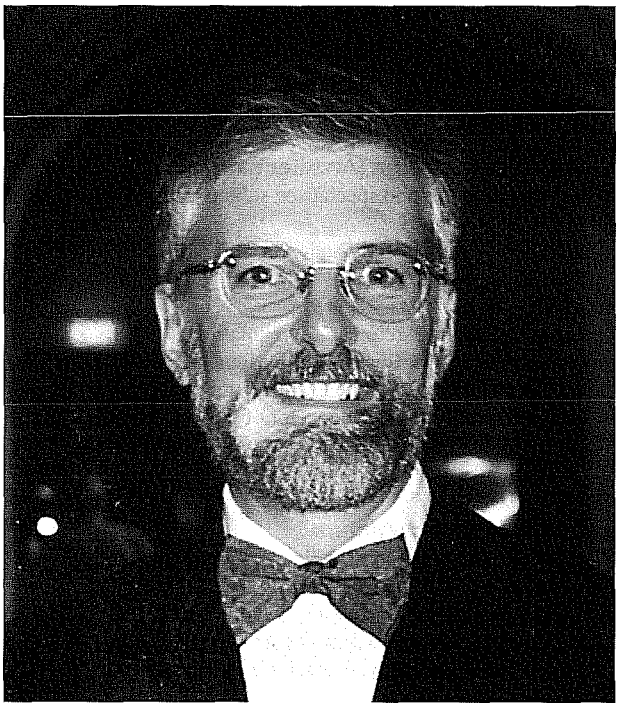
You may also study to become a professional urban designer or urban or regional planner. To do this you may choose the BDes(UrbDes&Plan) stream in Year 2. This will allow you to enter into the Master of Urban Design or Master of Urban & Regional Planning Programs and fast-track your way to a combined Des(UrbDes&Plan)/MUrbDes or MUrbRegPlan graduate degree. Graduates of these programs have become leaders in the urban design and urban planning communities throughout Australia and the Asia Pacific region.

Some students choose the BDes(DigMed) stream primarily to become digital media experts in the architectural, built environment and building industry world or in other design fields. This stream also permits you to move into the Master of Digital Media Program and complete the BDes(DigMed)/ MDesSc(DigMed).

In 2001 we began a new undergraduate degree, the Bachelor of Design Computing, combining studies of the design process with computing. For over twenty-five years we have offered a masters degree in design computing. We are now bringing that expertise and experience to an exciting new undergraduate program. It focuses on developing environments for designing digitally (eg, virtual realities), designing digitally (eg, design computing in architecture and the built environment) and interacting with designs digitally (eg, digital media presentations). Graduates will move into architecture and the built environment professions as design computing experts or into related design computing and virtual architecture fields.

We offer a splendid array of graduate coursework degrees, diplomas and certificates in wide-ranging fields. We also offer the MPhil(Arch) and PhD in five areas of internationally recognised research, including architecture, architectural science, design computing and cognition, environment-behaviour studies, and urban and regional policy and planning. Our students and staff come from around the world to study and work with us. You may select to work in any of these fields, or to work interdisciplinarily in a combination of fields within the Faculty or between the Faculty and the rest of the University. The Faculty includes world-renowned researchers and educators in each of these areas, ready to assist and mentor you in your studies.

In all of our programs, you can also study a variety of related environmental design subjects from architectural history and theory or audio design to building services, energy conservation, facilities management, housing and a variety of other subjects. We are truly a flexible, multidisciplinary faculty focused on design and the built environment.

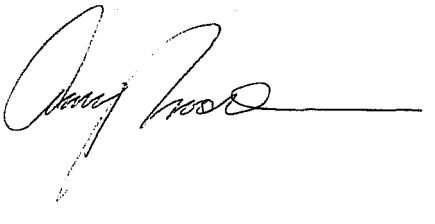


In addition to the Faculty's dedicated design studios (each student has their own workstation for the year), the Art Workshop and Tin Sheds Gallery provide you with the opportunity to work in and exhibit in a range of media under the direction of professional artists. The Architectural and Technical Services Centre includes specialised teaching and research laboratories to delve deeply into audio and acoustics and indoor and natural lighting, and includes a wind tunnel, structures and materials lab, artificial sky and heliodon.

The Faculty has the largest library in architecture, planning and the built environment and the most advanced centre for design computing in the Australasian region - both in the heart of our Wilkinson Building named after Professor Lesley Wilkinson, OBE, the foundation professor of architecture in Australiasia..

Graduates of our Faculty are leaders throughout Australia in architectural design, architectural science, design computing and urban design and planning. Sydney University architecture alumni number well into the thousands, and hold senior professional and academic posts in Australia and around the world. Wherever they are, Sydney graduates are widely recognised, highly sought after and making an impact.

For more information, please read on and visit our Web site at www. arch. usyd. edu. au. If you are in Sydney, please also come into the Faculty to meet us and see how you can be part of an exciting built environment design future with a University of Sydney degree.



Professor Gary T Moore, BArch(Hons) *Calif MA* PhD *Clark,* ARAPI RAIA FAPA, Dean.

1 Guide to the Faculty

The Faculty of Architecture, the first in Australia, was established in 1919 to conduct an undergraduate professional Bachelor of Architecture program. In 1948 the Department of Town and Country Planning was founded within the Faculty and in 1989 was renamed the Department of Urban and Regional Planning. In 1954 a Chair of Architectural Science was created around which the Department of Architectural Science developed. In 1989 the department was renamed the Department of Architectural and Design Science. The Tin Sheds Gallery and Art Studios became part of the Faculty in 1990, having previously been a central academic service unit which developed from resources provided by the Faculty in the 1960s. For 2002 the Faculty has been restructured, with a Faculty-wide School (and newly appointed Head of School) overseeing the disciplinary groups.

Since 1984 the Faculty has been housed under one roof in the purpose-designed Wilkinson Building, which contains the most comprehensive architecture and planning library, the Denis Winston Architecture Library, and the largest and most advanced centre for design computing in Australia. The Faculty also has three research centres: the AHURI Housing and Urban Research Centre, the Ian Buchan Fell Housing Research Centre and the Planning Research Centre.

There are currently in the region of 1, 000 students enrolled in the following degrees, diplomas, and certificates that may be awarded in the Faculty:

- Bachelor of Design (Architecture), BDes(Arch)
- Bachelor of Design Computing, BDesComp
- Bachelor of Science (Architecture) BSc(Arch)
- Bachelor of Architecture, BArch
- Doctor of Philosophy, PhD
- Doctor of Science (Architecture), DSc(Arch)
- Master of Architecture (M Arch)
- Graduate Diploma in Architecture (GradDipArch)
- Graduate Certificate in Architecture (GradCertArch)
- Master of Design Science, MDesSc
- Graduate Diploma in Design Science, GradDipDesSc
- Graduate Certificate in Design Science, GradCertDesSc
- Master of Heritage Conservation, MHeritCons
- Graduate Diploma in Heritage Conservation, GradDipHeritCons
- Graduate Certificate in Heritage Conservation, GradCertHertCons
- Master of Housing Studies, MHS
- Graduate Diploma in Housing Studies, GradDipHS
- Graduate Certificate in Housing Studies, GradCertHS
- Master of Philosophy (Architecture), MPhil(Arch)
- Master of Urban and Regional Planning, MURP
- Graduate Diploma in Urban and Regional Planning, GradDipURP
- Graduate Certificate in Urban and Regional Planning, GradCertURP
- Master of Urban Design, MUrbDes
- Graduate Diploma in Urban Design, GradDipUrbDes
- Graduate Certificate in Urban Design, GradCertUrbDes

■ Staff

A complete list of permanent Faculty of Architecture staff and their contact details can be found on the Web at www. arch. usyd. edu. au/nwfa/people/index. html.

Dean
Professor Gary T Moore, BArch *Calif* MA PhD *Clark,* ARAPI RAIA FAPA Appointed 1997
Pro-Dean
to be appointed
Head of School
Peter Phibbs, BA MSc PhD *UNSW*
Associate Dean (Graduate Studies)
Associate Professor Warren G Julian, BSc BE MSc(Arch) DipBdgSc PhD, LFIES ANZIALD
Associate Dean (Research)
Simon N Hayman, BSc(Arch) MArch PhD DipIllumDes, FRSA MIESANZ
Associate Dean (Teaching and Learning)
Associate Professor A Terrence Purcell, PhD *Macq* BA
Associate Dean (Undergraduate Studies)
Kristine S Sodersten, DipHEd *UNSW* BArch, ARAIA

Undergraduate programs coordinators

Bachelor of Design
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Bachelor of Design Computing
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Bachelor of Architecture
Peter Armstrong, ME*Wasuda* BArch PhD
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Audio Design
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Building
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Estelle Lazer, BA PhD (until 31 December 2002)
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Nancy Ruck, BArch *Auck* PhD MVSWMBdgSc
Hans Schneider, BA *Chilean SU Doctear Bordeaux* (until 31 December 2002)
Adrian Snodgrass, MSc(Arch) PhD (until 31 December 2003)
Neville Thiele, BE, FAES FIREE FIEAust MSMPTE

Administration

Faculty Administration Office

Faculty Manager
Raymond J Patman, MA BEc
Executive Assistant to the Dean
to be appointed
Finance and Resources Manager
Kerry Song, BSc(ApplEcon) *NE Lond Poly*

Academic Support Centre

Administrative Assistants
Anne Christian
Megan Haig
Suzanne Roberts
Sally Yong

Architectural and Technical Services Centre

Manager
Phil Granger
Technical Officers
Linda Fienberg, B A
Rick Moss
Ken Stewart, MDesSc

Audio Visual Centre

Manager
Mark Neill, BA GradDipInformationManagement *UNSW*

Computer Support Centre

Computer Network Systems Manager
David Formosa, BCompSci *WSyd*
Computer User Support Officers
Joseph R Nappa, BE
Bala Sivathash, *BE Madras* MSc(CivilEng) *East London,* DipCompProg *Cantabia Inst (Sri Lanka)*

Continuing Professional Development Centre

Continuing Professional Development Manager
Lesley Vanderkwast

Marketing and Development Centre

Manager
Michaela James, BA GradDip(Professional Art Studies) *UNSW*
Student Admissions Adviser
Lesley Vanderkwast

Student Services Centre

Manager
Liz Buckton, BA(Hons) *EastAnglia*
Student Services Centre Officers
Vasu Kadalayil, BArch *Mangalore*
Charlie Reimer, BSc *Wisconsin*

Tin Sheds Gallery

Manager
Jan Fieldsend, DipEd *Auck* MA *UNSW*

Attendants

John Darcy
Bruce Hyde

The Denis Winston Architecture Library

Librarian
Lise Roberts, BA *Macq* DipLib *UNSW*
Library Assistant
Claire Gordon
General Library Assistants
Michelle Harrison
Margaret Harvey

Research centres

Australian Housing and Urban Research Institute (AHURI)

Director
Associate Professor Peter Phibbs, BA MSc PhD *UNSW*

Ian Buchan Fell Housing Research Centre

Director
Colin L James, AM, MArch *Harv* DipTCP, ASTC(Arch) ARAIA RAPI

Key Centre of Design Computing and Cognition

Co-Directors
Professor John S Gero, BE *UNSWMBdgSc* PhD, FRSAFIEAust FAAAI
Professor Mary Lou Maher, BS *Col* MS PhD *Carnegie-Mellon*
Associate Professor A Terrence Purcell, PhD *Macq* BA

Planning Research Centre

Director
Associate Professor John G Toon, DipArch *Leic* FRAPI MRTPI ARIBAARAIA
Deputy Director
Martin J Payne, MS *Col State*
Associate Director (Research and Development)
Jon Hall, BA *Massey* MTCP

2 Bachelor of Design (Architecture)

The Bachelor of Design (Architecture), (Urban Design and Planning), (Digital Media), (Architecture/Urban Design and Planning), (Architecture/Digital Media) is focused on learning about designing in the built environment. The program is structured around a required core and core extension units of study, with a choice of five streams and a range of elective units of study within and outside the Faculty.

Students in this program can graduate after three years with a

- B achelor of Design (Architecture) *or*
- Bachelor of Design (Architecture/Urban Design and Planning) *or*
- Bachelor of Design (Architecture/Digital Media) *or*
- B achelor of Design (Urban Design and Planning) *or*
- Bachelor of Design (Digital Media)

by selecting the appropriate stream. You may choose to do an additional Honours year and graduate with an Honours degree in your selected stream.

The program is designed to provide you with maximum flexibility to allow you to pursue particular interests while participating in the core of the program with its focus on design in the built environment. Possible pathways and areas of interest include the five streams, particular areas of specialisation offered within the streams and other specialised areas offered as electives within the Faculty.

Opportunities also exist you to take units of study in other Faculties within the University while participating in the built environment core and selected stream.

If your interest is in becoming a professional architect, you can proceed directly to the second undergraduate program in the Faculty, the Bachelor of Architecture. However to gain entry to this program you will have to take a specific set of electives, commencing in third year, that are prerequisites for entry to that program and complete the Architectural Experience Requirement (18 weeks of approved work experience or equivalent).

If you follow a particular interest and specialised stream, you may decide to pursue graduate study in a workplace-linked program by enrolling in a graduate certificate, graduate diploma or master's degree. As a graduate with a broad education as well as a specialised focus, you will be able to work in diverse private and government arenas, as well as in specialised areas as a designer, in architectural practice, in digital media, and with further study, as a planner. Other areas of graduate specialisation within the Faculty include urban design, housing studies, heritage conservation, illumination design, audio design, facilities management.

In summary the program will be concerned with:

- Understanding and practicing design in the built environment
- Providing a broad architectural design education, which is also broad design education, concerned with all aspects of the built environment
- Providing the basis for more specialised study in areas related to the design of the built environment that can be taken as streams or areas of interest within streams.

Philosophy of the Bachelor Design (Architecture): situated, knowledge-based design

The program is underpinned by a strong philosophical approach. This approach is based on design theory, research and practice; educational theory, research and practice and research in areas relevant to design such as to problem solving and the development of expertise.

The key features of this approach are:

Focus on the design process

The design process is the main focus of learning about designing. It is a complex, iterative, interpretive and integrative process that inherently has the potential for innovative and creative responses.

Designing as a situated activity

Designing is a situated activity, that is it can only occur in the specific context established by a particular design problem. It requires the recognition, discovery and use of particular knowledge as it relates to the context established by the design problem. Learning to design involves establishing the physical setting that allows situated learning to occur.

Reflective practice

Reflective practice is central component in the learning and practicing of design. Reflection on and reinterpretation of the many areas involved in designing form the basis for learning and practice. These areas include the representations of physical forms, the knowledge required and used, the processes of designing, and interactions of people involved in that process. Useful reflective practice may take both structured and unstructured forms, and range from immediate to reflective review.

Knowledge-based design

Many types of knowledge are relevant to solving a design problem. These have traditionally been taught as separate units of study in a design education. Often these units of study do not have a direct relationship to activities associated with learning how to design or to the selection of the design problem that forms the basis for these activities. A central aspect of the program involves a reconceptualisation of the various types or domains of knowledge associated with design and how this knowledge relates to the design problems used to learn how to design.

The new program identifies three areas of knowledge relevant to design. These are referred to as Inhabiting the Built Environment, Designing the Built Environment and Constructing the Built Environment. All of the areas of domain knowledge using more conventional terms like structures and materials or user studies can be mapped into these three areas. These areas form the integrated collaborative core of the program and it is this knowledge which is used to develop the design problems to be used as the basis for learning how to design. Core extensions further extend and develop knowledge which is applied in the core.

The following outlines the types of knowledge in each of these areas.

Inhabiting the built environment

This area of knowledge includes knowledge of natural systems and built environments and the way people interact with these as individuals, as a society and as professionals; environmental and contextual issues including psychological considerations in design; planning, urban design, landscape and natural systems; knowledge of society, clients and users; social context; ergonomic and space requirements

Designing the built environment

This area of knowledge includes knowledge of design theories and methods, procedures and systems and the history of design methodology, design precedent, critique and analysis and movements in design theory, movements in aesthetics, design cognition, and design principles; knowledge of historical and cultural precedent, the history and theory of western, non-western, regional and indigenous architecture; awareness of philosophical, cultural and political movements and movements in art, design, music and literature; issues of heritage and conservation in the built environment.

Constructing the built environment

This area of knowledge includes technical knowledge of structure, materials, construction and services systems; awareness of technical documentation, cost control and planning; built environment procurement issues including financial and legal constraints; performance; management; adaptive re-use; aspects of urban design and planning.; codes, regulations and standards for safety and use; introduction to facilities management including brief writing and post-occupancy evaluation.

It is also possible to recognise three types of knowledge within each area. These are conceptual knowledge (knowledge of facts, principles, concepts), precedent knowledge (knowledge of how conceptual knowledge has been used in designed objects), and procedural knowledge (ways of doing, skills).

Collaborative practice

As the activity of designing involves the integration of areas of knowledge it also requires collaboration between experts in these areas. The acquisition of collaborative and team skills forms a further central component of the program.

Progressive use of knowledge

A design education must involve both the development of coherent sets of knowledge and an integrated and progressive sequence of situated learning activities. The ability to integrate and apply complex knowledge in designing is a mark of expertise. To gain this expertise, learning must be developed progressively, integrating previous knowledge and abilities with new knowledge.

Competencies and abilities

The design activity of the program will develop the abilities of students to apply the different types of knowledge in unfamiliar situations, from awareness at a general knowledge level, through competence to excellence and finesse. The core of the program will require demonstration of the ability to apply knowledge at a competent to excellent level, while streams and electives may start with the requirement of a more general ability to demonstrate 'knowing about'.

Objectives

The BDesign (Architecture) will produce graduates at a pre-professional and pre-research level who will:

- understand the broad social, cultural, aesthetic, environmental and technological issues involved in the design of the built environment.
- be able to identify critical knowledge relevant to the design and planning of the built environment.
- be able to carry out competently appropriate design processes which integrate and resolve this knowledge in order to develop design intentions and strategies for small to medium scaled components of the built environment which realise as design representations social, cultural, aesthetic, environmental and technological values.
- be able to reflect competently on and evaluate their design process in order to improve the outcomes of these processes, in both pre-research and pre-professional contexts.
- understand the cultural, social and historical context of their own and others' design processes.
- understand the roles of both practice and research in the design of the built environment and possess the skills and knowledge to make an informed choice on entering a research or practice career path.
- to have an awareness of the issues involved in designing a more sustainable built environment.
- possess a sense of their ethical responsibilities.

■ BDes(Arch) streams and specialised subject areas

Stream	Specialised subject area
Architecture	**Architectural History and Theory** • History and Theory **Environment, Behaviour and Society** • Society & Culture • Experiential Design **Management in Architecture** • Management & Construction **Sustainable and Appropriate Technologies** • Sustainable Technologies **Visual Arts in Architecture** •Visual Arts •Art Studios **Any other approved electives**
Digital Media	
Urban Design and Planning	

i Tables of units of study

The following tables list units of study for the Bachelor of Design (Arch), (DigitalMed), (UrbDesPlan), (Arch/DigitalMed) and (Arch/UrbDesPlan).

Mandatory units of study

Table A1: Core

Unit code	Unit name	Credit points	Sem
DESA1001	Design Practice 1A	12	1
DESA1002	Design Practice IB	12	2
DESA2001	Design Practice 2A	12	1
DESA2002	Design Practice 2B	12	2
DESA3001	Design Practice 3A	12	1
DESA3002	Design Practice 3B	12	2

Table A2: Core - Foundation

Unit code	Unit name	Credit points	Sem.
DESA1101	Design Studies 1A	6	1
DESA1102	Design Studies IB	6	2
DESA2101	Design Studies 2	8	1

Specialised subject areas

Table 1a: Architecture stream

A minimum of any five Senior units from Tables 1b-1g need to be taken to complete the stream.

To progress to the B Arch all three pie-iequisite units from Tables 1b, Id and 1e must be taken.

Architectural history and theory

Table 1b: History and theory

Unit code	Unit name	Credit points	Year	Sem
DES A	2203 Architecture in East Asia	4	2,3	
DESA2305	Australian Modernist Architecture (only 15 places)	4	2,3	
DESA2204	Design Thinking	4	3	
DESA2302	Australian Architecture: 1788-Present (B Arch prerequisite unit)	4	3	

Environment, behaviour and society

Table 1c: Experiential design

Unit code	Unit name	Credit points	Year	Sem
DESA2612	Designing with Surfaces and Light	3	1	2
DESA2610	Designing with Colour 1	4	2,3	1,2
DESA 2611	Designing with Colour 2	4	2,3	1,2
DESA2615	Designing with Colour 3	4	2,3	1,2

Table 1d: Society and culture

Unit code	Unit name	Credit points	Year	Sem
DESA 2211	Architecture, Place and Society	4	2,3	2*
DESA 2212	Social Studies in Architecture	4	2,3	2t
DESA 2213	Housing for Health	4	2	2*
DESA 2214	Housing for Well-Being (prerequisite DESA 2213)	4	3	1

* Semester 2 in 2002; Semester 1 from 2003 onwards.
t Offered from 2003 onwards (not available in 2002).

Management in architecture

Table 1e: Management and construction

Unit code	Unit name	Credit points	Year	Sem
DESA 2205	Innovative Australian Construction	4	2,3	2t
DESA 2206	Innovative Building Structures	4	2,3	2t
DESA 2208	Introduction to Project Management	4	2,3	2*
DESA 2209	Built Environment Project Management (prerequisite DESA 2208)	4	2,3	2t
DESA 2303	Construction, Structures and Management (B Arch prerequisite unit)			

Sustainable and appropriate technologies

Table 1f: Sustainable technologies

Unit code	Unit name	Credit points	Year	Sem
DESA 2201	Design Ecology and SustainabiUty	4	2	1
DESA 2202	Sustainable Interior Environments	4	2	2
DESA 2207	Sustainable Architecture	4	3	1
DESA 2301	Environmental Technologies (B Arch prerequisite unit)	4	3	2

* Semester 2 in 2002; Semester 1 from 2003 onwards.
t Offered from 2003 onwards (not available in 2002)

Visual arts in architecture

Table 1 g: Visual Arts

Unit code	Unit name	Credit points	Year	Sem
DESA 1601	Foundation Art Studio 1 (Introduction to Sketching & Drawing)	3	1	1,2
DESA 1602	Foundation Art Studio 2 Module A or Module B (mixed media - samplers)	3	1	1,2
DESA 2616	Explorations in Mixed Media	4	2	1
DESA 2617	Explorations in Ceramic Forms	4	2	2
DESA 2618	Public Art	4	3	It
DESA 2619	Site Specific Art	4	3	2t
	Any Senior Art Studio elective from Table 1h			

Table 1 h: Art studios

Unit code	Unit name	Credit points	Year	Sem
DESA 2601	Art Studio 1 (Photography, Etching)			
DESA 2602	Art Studio 2 (CeramicsAVheel-throwing, Video, General Drawing)			
DESA 2603	Art Studio 3 (Ceramics/Hand-building, Painting, Sculpture)	4	2,3	1,2
DESA 2604	Art Studio 4 (Graphic Design)			
DESA 2605	Art Studio 5 (Web Art and Design, Life Drawing)			
DESA 2606	Art Studio 6 (Experimental Photography, Ceramics, Oil Painting, Object Design)	4	2,3	1,2
DESA 2608	Advanced Art Studio 1 (Photography, Ceramics, Object design - Furniture, Mixed Media, Drawing, Painting, Screen-printing on Paper and Fabric, Sculpture, Graphic Design, New Media Art, Print Media, Video, Visual Art and Culture)	4	2,3	
DESA 2609	Advanced Art Studio 2 (Photography, Ceramics, Drawing, Painting, Screen-printing on Paper and Fabric, Sculpture, Graphic Design, New Media Art, Video, Visual Art and Culture)			

Table 2: Digital media

Unit code	Unit name	Credit points	Year	Sem
DECO 1001	Digital Image Representation and Design	3		11
DECO2002	Interactive Multimedia Design	4	2	1
DECO 1002	Web-based Design Information Systems	4	2	2
DECO 1003	CAD Modelling	4	2	2
DECO 2001	3D Modelling and Photorealism	4	3	1
DECO 2005	Computer-Supported Collaborative Design	4	3	2

Table 3: Urban design and planning

Unit code	Unit name	Credit points	Year	Sem
DESP 1201	Introductory Urban Design and Planning	3	1	2
DESP 2201	Designing and the Public Domain	4	2	1
DESP 2202	Design and Planning Instruments	4	2	2
DESP 2203	Urban Development and Planning	4	3	**2t**
DESP 2204	Planning for the Built Environment	4	3	**It**
DESP 2205	Planning Sustainable Built Environments	4	3	**2t**

Table 1 h: Electives

Unit code	Unit name	Credit points	Year	Sem
DESA 2620	Elective - General 1	3	1	1,2
DESA 2621	Elective - General 2	3	1	1,2
DESA 2622	Elective - General 3	4	2,3	1,2
DESA 2623	Elective - General 4	4	2,3	1,2
DESA 2624	Elective- General 5	4	2,3	1,2
DESA 2625	Elective - General 6	4	2,3	1,2
DESA 2626	Mathematics in Architecture	3	1	1
DESA 2627	Research Elective 1	3	1	1,2
DESA 2628	Research Elective 2	4	2,3	1,2
ARCF6001	Preparatory Honours Research	4	3	3
	Any other approved Unit from Faculty of Architecture		1,2,3	1,2

* Semester 2 in 2002; Semester 1 from 2003 onwards.
t Offered from 2003 onwards (not available in 2002).

Table E2: Electives

Unit of study	Credit points	Year	Sem
Any other approved unit from University of Sydney- Year 1 only (Junior unit)	3or6	1	1,2
Any other approved unit from University of Sydney- Year 2 and 3 only (Senior unit)	4 or 8	2,3	1,2
Any other approved unit from another institution (Senior unit)	4or8	1,2,3	1,2

■ Requirements for the pass degree

To be eligible for award of the Bachelor of Design a candidate must:

(1) complete successfully units of study giving credit for a total of 144 credit points;
(2) complete successfully all required units of study shown in the Table of units of study for the Bachelor of Design and designated streams, and
(3) complete elective units from the table of units of study for the Bachelor of Design, except that the student may, with the approval of the Dean, substitute instead other units of study.

Specially designated streams

- All students will initially be enrolled in the Bachelor of Design (Architecture) stream.
- A student must complete a stream in order to be awarded the degree.
- A student may remain in the Bachelor of Design (Architecture) stream or may elect another stream prior to completing their second semester.
- The Faculty will provide at least 15 places for entry in each stream.
- If demand for places in a stream is larger than the number of available places, entry will be determined by the Dean on the basis of a portfolio and an interview.
- Students may transfer between streams.

The requirements for award of the designated specialisations in the Bachelor of Design are

(a) for the **Bachelor of Design (Architecture),** 144 credit points comprising:
  - 72 credit points of from Table Al Core - Design units of study;
  - 20 credit points from Table A2 Core - Foundation units of study;
  - not less than 20 senior credit points from Table 1 a and lg - Architecture stream [Note: candidates intending to proceed to the BArch are required to complete the BArch prerequisite units of study];
  - not more than 14 credit points from Table El - electives;
  - not more than 14 credit points from Table E3 - electives;
  - The balance may be taken from Tables 2,3 and E2.

(b) for the **Bachelor of Design (Digital Media),** 144 credit points comprising:
  - 72 credit points of Table Al Core - Design units of study;
  - 20 credit points from Table A2 Core - Foundation units of study;
  - not less than 19 credit points from Table 2 Digital Media stream [Note: candidates intending to proceed to the B Arch are required to complete the B Arch prerequisite units of study];
  - not more than 14 credit points from Table El - electives;
  - not more than 14 credit points from Table E3 - electives;
  - the balance may be taken from Tables 1a-1g, 3 and E2.

(c) for the **Bachelor of Design (Urban Design and Planning),** 144 credit points comprising:
  - 72 credit points of Table Al Core - Design units of study;
  - 20 credit points from Table A2 Core -Foundation extension;
  - not less than 19 credit points from Table 3 Urban Design and Planning stream [Note: candidates intending to proceed to the B Arch are required to the B Arch prerequisite units of study];
  - not more than 14 credit points from Table El - electives;
  - not more than 14 credit points from Table E3 - electives;
  - the balance may be taken from Tables 1a-1g, 2 and E2.

(d) for the **Bachelor of Design (Architecture/Digital Media),** 144 credit points comprising:
  - 72 credit points of Table A1 Core - Design units of study;
  - 20 credit points from Table A2 Core - Foundation units of study;

- not less than 20 senior credit points from Tables 1 a -1 g - Architecture stream [Note: candidates intending to proceed to the B Arch are required to complete the B Arch prerequisite units of study];
- not less than 19 credit points from Table 2 - Digital Media stream;
- not more than 14 credit points from Table E1 - electives;
- not more than 14 credit points from Table E3 - electives;
- the balance may be taken from Tables 1 a-1 g, 2, 3 and E2.

(e) for the **Bachelor of Design (Architecture/Urban Design and Planning),** 144 credit points comprising:

- 72 credit points of Table Al Core - Design units of study;
- 20 credit points from Table A2 Core - Foundation units of study;
- not less than 20 senior credit points from Tables 1 a -1 g - Architecture stream [Note: candidates intending to proceed to the B Arch are required to complete the B Arch prerequisite units of study];
- not less than 19 credit points from Table 3 - Urban Design and Planning stream;
- not more than 14 credit points from Table El - electives;
- not more than 14 credit points from Table E3 - electives;
- the balance may be taken from Tables 1 a-1 g, 2,3 and E2.

■ Bachelor of Design (Architecture) regulations

Senate resolutions: Bachelor of Design

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000 in chapter 8, which sets out the requirements for all undergraduate courses, and the Faculty of Architecture's Resolutions.]

1. Requirements of the Pass Degree

To qualify for the award of the pass degree candidates must:
(1) complete successfully units of study prescribed by the Faculty giving credit for a total of 144 credit points; and
(2) satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

2. Specializations

The degree of Bachelor of Design will be awarded in the following specializations:
(1) (Architecture)
(2) (Digital Media)
(3) (Urban Design and Planning)
(4) (Architecture/Digital Media)
(5) (Architecture/Urban Design and Planning)

3. Requirements for the Honours Degree

To qualify for the award of the honours degree a candidate must complete the honours requirements published in the Faculty resolutions relating to the course.

Faculty resolutions: Bachelor of Design

[These Resolutions must be read in conjunction with the University of Sydney (Undergraduate Courses) Rule 2000]

Division 1 -Admission, course requirements, credit points and assessment

1. Units of study

(1) A candidate for the Bachelor of Design shall complete the units of study prescribed by the Faculty satisfying all requirements with regard to all required units of study and streams.
(2) Except with the special permission of the Dean, the required units of study must be completed in the sequence prescribed.
(3)Units of study may specify assumed knowledge, prerequisite or corequisite units of study.
(4) A student who intends to proceed to the Bachelor of Architecture degree must complete the prerequisite requirements for entry in Table A3 of the B achelor of Design's table of units of study.
(5)The units of study required for the Bachelor of Design are:

Unit code	Unit name	Credit points
BDesign (Architecture)		
Yearl		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
	Option/elective units	6
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
	Option/elective units	6
	Total for Year 1	48
Year 2		
Semester 1		
DESA 2001	Design Practice 2A	12
DESA 2101	Design Studies 2	8
	Option/elective units	4
Semester 2		
DESA 2002	Design Practice 2B	12
	Option/elective units	12
	Total for Year 2	48
Year 3		
Semester 1		
DESA 2003	Design Practice 3A	12
	Option/elective/BArch prerequisite units	12
Semester 2		
DESA 2004	Design Practice 3B	12
	Option/elective/BArch prerequisite units	12
	Total for Year 3	48
BDesign (Digital Media)		
Yearl		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
	Option/elective units	6
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
	Option/elective units	6
	Total for Yearl	48
Year 2		
Semester 1		
DESA 2001	Design Practice 2A	12
DESA 2101	Design Studies 2	8
DECO 2002	Interactive Multimedia Design	4
Semester 2		
DESA 2002	Design Practice 2B	12
DECO 1003	CAD Modelling	4
DECO 1002	Web-based Design Information Systems	4
	Option/elective units	4
	Total for Year 2	48
Year 3		
Semester 1		
DESA 2003	Design Practice 3A	12
DECO 2001	3D Modelling and Photorealism	4
	Option/elective units	8
Semester 2		
DESA 2004	Design Practice 3B	12
DECO 2005	Computer-Supported Collaborative Design	4
	Option/elective units	8
	Total for Year 3	48
BDesign (Urban Design and Planning)		
Yearl		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
	Option/elective units	6
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
	Option/elective units	6
	Total for Year 1	48

Unit code	Unit name	Credit points
Year 2		
Semester 1		
DESA 2001	Design Practice 2A	12
DESA 2101	Design Studies 2	
DESP 2201	Designing and the Public Domain	
Semester 2		
DESA 2002	Design Practice 2B	12
DESP 2202	Design and Planning Instruments	4
DESP 2203	Urban Development and Planning	4
	Option/elective units	4
	Total for Year 2	48
Year 3		
Semester 1		
DESA 2003	Design Practice 3A	12
DESP 2204	Planning for the Built Environment	4
	Option/elective units	
Semester 2		
DESA 2004	Design Practice 3B	12
DESP 2205	Planning Sustainable Built Environments	4
	Option/elective units	
	Total for Year 3	48

BDesign (Architecture/Digital Media)

Yearl		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
	Option/elective units	6
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
	Option/elective units	6
	Total for Year 1	48
Year 2		
Semester 1		
DESA 2001	Design Practice 2A	12
DESA 2101	Design Studies 2	8
DECO 2002	Interactive Multimedia Design	4
Semester 2		
DESA 2002	Design Practice 2B	12
DECO 1003	CAD Modelling	4
DECO 1002	Web-based Design Information Systems	4
	Option/elective units	4
	Total for Year 2	48
Year 3		
Semester 1		
DESA 2003	Design Practice 3A	12
DECO 2001	3D Modelling and Photorealism	4
	Option/elective/BArch prerequisite units	8
Semester 2		
DESA 2004	Design Practice 3B	12
DECO 2005	Computer-Supported Collaborative Design	4
	Option/elective/BArch prerequisite units	
	Total for Year 3	48

BDesign (Architecture/Urban Design and Planning)

Yearl		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
	Option/elective units	6
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
	Option/elective units	6
	Total for Year 1	48
Year 2		
Semester 1		
DESA 2001	Design Practice A	12
DESA 2101	Design Studies 2	8
DESP 2201	Designing and the Public Domain	4
Semester 2		
DESA 2002	Design Practice 2B	12
DESP 2202	Design and Planning Instruments	4
DESP 2203	Urban Development and Planning	4
	Option/elective units	4
	Total for Year 2	48
Year 3		
Semester 1		
DESA 2003	Design Practice 3A	12
DESP 2204	Planning for the Built Environment	4
	Option/elective/BArch prerequisite units	
Semester 2		
DESA 2004	Design Practice 3B	12
DESP 2205	Planning Sustainable Built Environments	4
	Option/elective/BArch prerequisite units	
	Total for Year 3	

*2. Requirements for **the** Pass degree*

To be eligible for award of the Bachelor of Design a candidate must:

(1) complete successfully units of study giving credit for a total of 144 credit points;

(2) complete successfully all required units of study shown in the Table of units of study for the Bachelor of Design and designated streams, and

(3) complete elective units from the table of units of study for the Bachelor of Design, except that the student may, with the approval of the Dean, substitute instead other units of study.

3. Specially designated streams

(1) All students will initially be enrolled in the Bachelor of Design (Architecture) stream.

(2) A student must complete a stream in order to be awarded the degree.

(3) A student may remain in the Bachelor of Design (Architecture) stream or may elect another stream prior to completing their second semester.

(4) (a) The Faculty will provide at least 15 places for entry in each stream.

(b)If demand for places in a stream is larger than the number of available places, entry will be determined by the Dean on the basis of a portfolio and an interview.

(5) Students may transfer between streams.

(6) The requirements for award of the designated specializations in the Bachelor of Design are

(a) for the Bachelor of Design (Architecture), 144 credit points comprising:

- 72 credit points of Core units of study;
- 20 credit points from Table la - Core extension;
- not less than 20 credit points from Table A2 and Table A3 -Architecture stream [Note: candidates intending to proceed to the BArch are required to complete 12 credit points from Table A3];
- not more than 14 credit points from Table lh - electives;
- not more than 14 credit points from Table E3 - electives;
- the balance may be taken from Tables P, M, A2 and E2.

(b)for the Bachelor of Design (Digital Media), 144 credit points comprising:

- 72 credit points of Core units of study;
- 20 credit points from Table Al - Core extension;
- not less than 20 credit points from Table M -Digital Media stream [Note: candidates intending to proceed to the BArch are required to complete 12 credit points from Table A3];
- not more than 14 credit points from Table lh - electives;
- not more than 14 credit points from Table E3 - electives;
- the balance may be taken from Tables M, BDesComp Table, P,A2 and E2.

(c) for the Bachelor of Design (Urban Design and Planning), 144 credit points comprising:

- 72 credit points of Core units of study;
- 20 credit points from Table Al - Core extension;
- 20 credit points from Table P senior units (years 2 + 3 only) - Urban Design and Planning stream [Note: candidates intending to proceed to the BArch are required to complete 12 credit points from Table A3];
- not more than 14 credit points from Table lh - electives;
- not more than 14 credit points from Table E3 - electives;

- the balance may be taken from Tables P, Urban Design and Planning Graduate Tables, M, A2 and E2.

(d)for the Bachelor of Design (Architecture/Digital Media), 144 credit points comprising:

- 72 credit points of Core units of study;
- 20 credit points from Table Al - Core extension; not less than 20 credit points from Tables A2 and A3 - Architecture stream [Note: candidates intending to proceed to the BArch are required to complete 12 credit points from Table A3];
- 20 credit points from Table M - Digital Media stream;
- not more than 14 credit points from Table lh - electives;
- not more than 14 credit points from Table E3 - electives;
- the balance may be taken from Tables P, A2 and E2.

(e) for the Bachelor of Design (Architecture/Urban Design and Planning), 144 credit points comprising:

- 72 credit points of Core units of study;
- 20 credit points from Table Al - Core extension; not less than 20 credit points from Tables A2 and A3 - Architecture stream [Note: candidates intending to proceed to the BArch are required to complete 12 credit points from Table A3];
- 20 credit points from Table P - Urban Design and Planning stream;
- not more than 14 credit points from Table lh - electives;
- not more than 14 credit points from Table E3 - electives;
- the balance may be taken from Tables M, A2 and E2.

4. Details of units of study

The units of study are listed in the Bachelor of Design Table of Units of Study.

5. Assessment

(1) A student's work may be assessed by written and oral examinations, assignments, exercises and practical work or any combination of these.

(2) In the first year of the Bachelor of Design all core and core extension units of study will be graded on a Pass/Fail basis. A Pass will be recorded as R, indicating that the student has fulfilled the requirements of the unit of study.

(3) A student who has been prevented by duly documented illness or misadventure from completing a unit of study may be allowed to complete that unit of study or supplementary work as the Dean shall determine.

(4) When a student is permitted to submit additional work other than on the grounds of illness or misadventure, and the temporary grade INC has been given, the maximum result that may be awarded is 50 Pass.

(5) (a) No first year units of study (core, core extension and junior [3 or 6 credit point] elective units of study) will be included in the weighted average mark (WAM) calculation.
(b) A student's weighted average mark (WAM) shall be calculated using the formula:

$$WAM = \frac{\sum(M \times CP_g)}{\sum(CP_a)}$$

where CP_g is the number of credit points gained by passing a senior (from second or third year only) unit of study; CP_a is the number of credit points attempted including failures (F, AF) and units of study discontinued (DF); M is the mark awarded.

Division 2 - Enrolment

6. Enrolment restrictions

(l)Except with the express permission of the Dean a student may not enrol in units of study with a total value of more than 28 credit points in any one semester.

(2) Except with the express permission of the Dean a student must maintain full-time enrolment.

(3) A student may not enrol in any unit of study from the Faculty's Table of Graduate Units of Study without first obtaining written permission from the lecturer in charge of the unit.

7. Granting of Credit

(1) A student may be granted unspecified credit towards the degree for any units of study completed towards a previous award course or as a non-award student at the University of Sydney or other tertiary institution and that are not listed in the Table of Units of Study for the degree, up to a maximum of 14 credit points. The Dean shall determine the credit point value of that credit.

(2) A student may apply to have credit granted towards the degree on the basis of non-credentialled learning or experience that is equivalent to a unit or units of study in the Table of units of study for the degree. The Dean will determine the method for demonstrating the achievement of the equivalent academic standard.

(3) A student may be granted credit for units of study completed elsewhere that are equivalent in workload and academic standard to units in the Table of units of study for the degree:
(a) with advanced standing, provided that an overall credit average has been achieved; or
(b) for individual units of study provided that a credit grade has been achieved.

(4) Credit granted under sections (1), (2) and (3) above shall be limited to a maximum of 96 credit points.

(5) A student may, with the consent of another Faculty or Board of Studies, complete while enrolled in the Faculty of Architecture a unit or units of study taught in the other Faculty or under a Board of Studies but not listed in the Table of units of study.

8. Restrictions on the granting of Credit

(1) Credit shall not be granted for units of study, non-credentialled learning or experience gained more than 10 years prior to admission or readmission for the degree.

(2) Where credit is granted, the Dean shall determine the maximum period of candidature for the degree, proportionate to the amount of credit granted.

(3) A candidate granted credit for the degree shall not count towards the degree any unit of study subsequently completed within the University of Sydney that overlaps substantially in content with the unit of study upon which the credit is based.

(4) The granting of unspecified credit towards the Bachelor of Design cannot be used for gaining credit towards a subsequent degree enrolment within the Faculty.

(5) Credit shall not be granted for units of study gained with a 'Terminating' or 'Conceded' Pass, or equivalent.

9. Determination of credit granted on the basis of equivalence to units in the table of units of study

(1) A student seeking credit for units of study completed other than at The University of Sydney shall apply on the form provided by the Faculty and supply documentary evidence of the unit of study description and the assessment result. The student shall be available for discussion with appropriate Faculty staff.

(2) A student seeking credit on the basis of non-credentialled learning or experience shall apply on me form provided by the Faculty and shall be available for assessment by the appropriate unit of study coordinator.
Equivalence will be determined by me Dean from the documentary evidence and discussion under (1) and by appropriate assessment of the student under (2) before credit will be granted.

Division 3 - Progression

10. Repeating a unit of study

(1) A student who repeats a unit of study shall:
(a) participate in the learning experiences provided for the unit of study; and
(b) meet all examination, assessment and attendance requirements for the unit of study.
unless granted exemption by the Dean for previous satisfactory completion of components of the unit of study.

(2) A student who has passed a unit of study may not repeat that unit of study and have it counted towards fulfilling the requirements of the degree.

11. Attendance requirements

(1) A student who is absent without leave may be deemed not to have completed a particular unit of study or course.

(2) A student who fails to meet the attendance requirements of a unit of study will be deemed not to have completed that unit of study.

Division 4 - Discontinuation of enrolment and suspension of candidature

12. Discontinuation of enrolment

Except with the approval of the Dean, in exceptional circumstances, a student who withdraws from or discontinues candidature for the degree wimout having successfully completed any units of study shall be required to reapply for admission to the degree.

13. Re-enrolment after an absence

(1) The candidature of a student who has not obtained permission to suspend will be deemed to have lapsed and the student must apply for readmission in accordance with procedures determined by the Dean.

(2) Except where the Dean determines otherwise, a student who re-enrols after an absence or a suspension of candidature for any period shall proceed under the by-laws and resolutions in force at the time of re-enrolment.

14. Satisfactory progress

(1) The Dean may require a student to show good cause as to why he or she should not be excluded from the degree if he or she does not make satisfactory progress. Satisfactory progress cannot be defined in all cases in advance, but, a student who has failed a required unit of study more than once shall normally be presumed not to have made satisfactory progress.

(2) The Dean will permit a student who has shown good cause to re-enrol.

Division 5 - Honours

15. Requirements for the Honours degree

(1) The minimum requirements for admission will be:
(a) a WAM (weighted average mark) of at least 70 for the Pass degree. In exceptional cases the Dean may admit a student with a WAM of 65 or higher.
(b) an approved thesis topic and supervisor. A research topic which is satisfactory in terms of research interests, resources and availability of supervision within the Faculty must be agreed upon between the applicant and the Dean before the student can enrol in the unit of study Thesis.
(c) except with the permission of the Dean, the student shall be of not more than 4 years' standing or the semester equivalent for the Pass degree; and
(d) the student shall have qualified for award of the Pass degree.

(2) (a) A person to whom the Bachelor of Design Pass degree has been awarded may, with the permission of the Dean, be admitted to candidature for the Honours degree provided that he or she satisfies the other requirements of these resolutions for admission to the Honours program.
(b) A student may not graduate with the Pass degree while enrolled in the final year honours course.
(c) On the recommendation of the head of the program concerned, the Dean may permit a student who has been awarded the Pass degree, equivalent to the Bachelor of Design, at another recognized tertiary institution to enrol in the honours course in the Faculty.
(d) Students who fail or discontinue the honours course may not re-enrol in it, except with the approval of the Dean.

(3) The Dean shall appoint a member of the full-time or fractional academic or research staff of the Faculty to act as supervisor of the student. The Dean may also appoint an associate supervisor who may be a member of the academic or research staff of the University, an Honorary Associate or a person with appropriate qualifications in another institution or organization.

16. Form of the Honours thesis

(1) A student undertaking a thesis shall:
(a) lodge with the Faculty two copies of the thesis embodying the results of an original research investigation carried out by the student.
(b) state in the thesis, generally in the preface and specifically in the notes, the sources on which the research was based, the extent to which the student has made use of the work of others and the portion of the thesis which is claimed to be original, and
(c) not lodge as the student's own work any work previously submitted for a degree of The University of Sydney or any other university, but may incorporate such work in the thesis provided that the student indicates the work so incorporated.

(2) A student may lodge the thesis for examination bound in either a temporary or permanent form according to the following conditions:
(a) temporary binding must be able to withstand ordinary handling and postage. The preferred form of binding is the 'Perfect Binding' system.
(b) the cover of a temporarily bound thesis must have a label showing the student's name, name of the degree, title of the thesis and the year of submission.

(3) A student must lodge the final thesis in a permanent form according to the following conditions:
(a) permanent binding must meet the requirements given in the Umversity Calendar: Volume I: Statutes and Regulations under the statutes governing the degree of Doctor of Philosophy.
(b) following examination and emendation if necessary, at least one copy (the Library copy) of the thesis must be bound in a permanent form.
(c) if emendations are required, all copies of the thesis which are to remain available within the University must be amended.

17.Result of Honours candidature

(1) The Dean shall appoint two examiners. The examiners shall report to the Dean.

(2) The Dean shall, on the recommendation of the Board of Undergraduate Studies, award the degree of Bachelor of Design with Honours whenever the following sections (a) or (b) are satisfied together with the following section (c):
(a) the examiners have recommended the degree be awarded without reservation or subject to emendations to all copies of the thesis which are to remain available in the University, or
(b)the Board of Undergraduate Studies unanimously accepts the recommendation of the supervisor that the degree be awarded subject to emendations despite reservations expressed by any examiner; and
(c) the overall performance in accordance with resolution 24(3) below is 70 or greater.

(3) The Dean, on the recommendation of the Board of Undergraduate Studies, will determine the class of Honours, if any, on the overall performance of the candidate in the Bachelor of Design using a mark derived from weighting the mark for the Honours thesis at 70 per cent and the weighted average mark for 2nd and 3rd year units of study of the Pass degree at 30 per cent.

(4) The Dean may recommend that an unsuccessful candidate be permitted to prepare for re-examination if of sufficient merit and the supervisor has so recommended.

Division 6 - Award of the degree

18. Award of the degree

(1) The Bachelor of Design Pass degree in a designated stream shall be awarded to a student who has completed the requirements specified for the designated stream.

(2) The Bachelor of Design with Honours shall be awarded in a designated stream with the following grades:
Honours Class I (with a mark of at least 80)
Honours Class II, Division 1 (with a mark of at least 75)
Honours Class II, Division 2 (with a mark of at least 70)

(3) A student for the Honours program who does not meet the requirements for award of Honours shall be awarded the Bachelor of Design Pass degree in their designated stream.

19. University Medal

Honours students with an outstanding academic record throughout the degree and who have achieved Honours Class I may be eligible for the award of a University Medal, in accordance with Academic Board policy and on nomination by the Dean with the recommendation of the Board of Undergraduate Studies.

20. Testamurs and transcripts

Testamurs will indicate discipline streams as specified in the degree requirements.

Division 7 - Delegation of Authority

21. Delegation

(1) The Dean delegates responsibility for admission to the Bachelor of Design degree to the Bachelor of Design Program Committee.

(2) In these resolutions the Dean delegates responsibility to the Board of Undergraduate Studies and the Associate Dean (Undergraduate Studies) for determination of the following matters, on the recommendation of the head of program where appropriate:
(a) examination procedures and appointment of examiners;
(b) supervision of candidature;
(c) variations of candidature;
(d) extension of candidature;
(e) completion of candidature away from the University; and
(f) any other matters as appropriate within these resolutions.

Tables of units of study: Bachelor of Design (Arch), (DigitalMed), (UrbDesPlan), (Arch/DigitalMed), (Arch/UrbDesPlan)

Core (all streams)

Unit code	Unit name	Credit points	Year	Sem
DESA 1001	Design Practice 1A	12		
DESA 1002	Design Practice 1B	12		
DESA 2001	Design Practice 2A	12		
DESA 2002	Design Practice 2B	12		
DESA 2003	Design Practice 3A	12		
DESA 2004	Design Practice 3B	12		

Table A1: Core extensions

Unit code	Unit name	Credit points	Year	Sem
DESA 1101	Design Studies 1A	6	1	1
DESA 1102	Design Studies 1B	6	1	2
DESA 2101	Design Studies 2	8	2	1

Table A2: Architecture stream

Unit code	Unit name	Credit points	Year	Sem
DESA 2201	Inhabiting the Built Environment A	4	2	2
DESA 2202	Inhabiting the Built Environment B	4	3	1
DESA 2203	Designing the Built Environment A	4	2	2
DESA 2204	Designing the Built Environment B	4	3	1
DESA 2205	Constructing the Built Environment A	4	2	2
DESA 2206	Constructing the Built Environment B	4	3	2

Table A3: Prerequisite units of study for the BArch

Unit code	Unit name	Credit points	Year	Sem
DESA 2301	Inhabiting the Built Environment	4	3	2
DESA 2302	Designing the Built Environment	4	3	2
DESA 2303	Constructing the Built Environment	4	3	1

Table P: Urban Design and Planning stream

Unit code	Unit name	Credit points	Year	Sem
DESP 1201	Introductory Urban Design and Planning	3	~1	2
DESP 2201	Urban Design and Planning 2A	4	2	1
DESP 2202	Urban Design and Planning 2B	4	2	2
DESP 2203	Urban Design and Planning 2C	4	3	2
DESP 2204	Urban Design and Planning 2D	4	3	1
DESP 2205	Urban Design and Planning 2E	4	3	2

Table M: Digital Media stream

Unit code	Unit name	Credit points	Year	Sem
DECO 1001	Digital Image Representation and Design	3		1 1
DECO 2002	Multi Media Design Presentations	4	2	1
DECO 1002	Web-based Design Information Systems	4	2	2
DECO 1003	CAD Modelling	4	2	2
DECO 2001	3D Modelling and Photorealism	4	3	1
DECO 2005	Computer-Supported Collaborative Design	4	3	2

Table 1h: Electives

Unit code	Unit name	Credit points	Year	Sem
DESA 1601	Foundation Art Studio 1 (Introduction to Sketching, Drawing and General Drawing)	3	1	1,2
DESA 1602	Foundation Art Studio 2 Module A or Module B (mixed media - samplers)	3	1	1,2
DESA 2601	Art Studio 1 (Photography, Etching, Form and Content)	4	2,3	1,2
DESA 2602	Art Studio 2 (Ceramics/Wheelthrowing, Video, General Drawing, Art and Design)	4	2,3	1,2
DESA 2603	Art Studio 3 (Ceramics/Handbuilding, Painting, Sculpture)	4	2,3	1,2
DESA 2604	Art Studio 4 (Graphic Design, Screenprinting Paper and Fabric)	4	2,3	1,2
DESA 2605	Art Studio 5 (Mixed Media, Web Art and Design, Life Drawing, Print Media)	4	2,3	1,2
DESA 2606	Art Studio 6 (Experim. Photography, Ceramics, Oil Painting, Object Design - Wood)	4	2,3	1,2
DESA 2608	Advanced Art Studio 1 (Photography, Ceramics, Mixed Media, Drawing, Painting, Screenprinting on Paper and Fabric, Sculpture, Graphic Design, New MediaArt, Print Media, Video, VisualArt and Culture, Object Design, Furniture Design)	4	2,3	1
DESA 2609	Advanced Art Studio 2 (Photography, Ceramics, Mixed Media, Drawing, Painting, Screenprinting on Paper and Fabric, Sculpture, Graphic Design, New MediaArt, PrintMedia, Video, Visual Art and Culture, Object Design)	8	2,3	1

Table E2

Unit code	Unit name	Credit pts	Year	Sem
ARCF6001	Preparatory Honours Research	4	3	3
DESA 2610	Colour Design 1	4	2/3	
DESA 2611	Colour Design 2	4	2/3	
	Any other approved unit from Faculty of Architecture		1,2,3	1,2,3

Table E3

Unit of study	Credit pts	Year	Sem
Any other approved unit from University of Sydney -Year 1 only (Junior unit -Year 1)	3 or 6	1	1,2
Any other approved unit from University of Sydney -Year 2 and 3 only (Senior unit -Years 2 and later)	4 or 8	2,3	1,2
Any other approved unit from another institution (Senior unit - Years 2 and later)	4 or 8	1,2,3	1,2,3

Table E3-Y 1 for Year 1 students

An indicative guide to appropriate 3 and 6 credit point units of study for negotiation with the offering Faculties. Students may, however, undertake any Arts unit subject to satisfying Assumed Knowledge, Prerequisite and/or Corequisite requirements, and subject to any restrictions in the resolutions for the Bachelor of Design.

Table E3-Y 1 for Year 1 students

Unit of study	Credit points	Year

An indicative guide to appropriate 3 and 6 credit point units of study for negotiation with the offering Faculties. Students may, however, undertake any Arts unit subject to satisfying Assumed Knowledge, Prerequisite and/or Corequisite requirements, and subject to any restrictions in the resolutions for the Bachelor of Design.

Note: some units of study are prerequisite for major streams if students are interested in following these.

Note: check the timetable for clashes, check if there is any quota, get permission from this Faculty and the offering Faculty.

Note: some units have assumed knowledge, prerequisites or corequisites, and restrictions. See the relevant faculty handbook for details.

Faculty of Arts

ENGL 1001	English Foundation unit of study	6	1,2
ENGL 1050	Language in Context: Image, Speech, Writing	6	2
ENGL 1002-1006	English units with prerequisites	6	1,2
PHIL 1001	Epistemiology (coreq. PHIL 1002)	3	1
PHIL 1002	Philosophy and Society (coreq. PHIL 1001)	3	1
PHIL 1003-1201	Philosophy units with prerequisites	3	2

MUSC1000 Music in Western Culture 1

Table E3-Y 1 for Year 1 students (continued)

Unit of study		Credit points	Year
MUSC1001	Music in Western Culture 2 (prereq. MUSC 1000)		
MUSC 1002-1007	Music units with prerequisites	3	1&2
FRNC 1101	Introductory French 1	**6**	**1**
FRNC 1701	Modern French Civilisation 1	**3**	**1**
FRNC 1702	Modern French Civilisation 2	**3**	**2**
FRNC 1102-1501	French units with prerequisites	**6**	**1,2**
ITLN 1101	Beginners' Italian 1	**6**	**1,2**
ITLN 1102-1132	Italian units with prerequisites	**6**	**1,2**
JPNS 1111	Introductory Japanese Level 1	**6**	**1**
JPNS 1012	Introduction to Japanese Studies	**6**	**2**
JPNS 1112-1312	Japanese units with prerequisites	**3,6**	**1,2**
MGRK 1101	Basic Modern Greek 1	**6**	**1**
MGRK 1201	Post-HSC Greek: Language Structures A	**3**	**1**
MGRK 1501	Cultural and Historical Survey (Eng)	**3**	**1**
MGRK 1102-1504	Modern Greek units with prerequisites	**3,6**	**1,2**
SCLG 1001	Introduction to Sociology 1 (quota limit)	**6**	**1**
CHNS 1101	Beginning Chinese 1	**6**	**1**
CHNS 1102-1322	Chinese units with prerequisites	**6**	**1,2**
ARHT 1002	Art History and Theory: Modern	**6**	**1**
ARHT 1001	Art History and Theory: The Tradition	**6**	**2**
ANTH 1001 or 1003	Introduction to Anthropology IA or 1B	**6**	**1**
ANTH 1002 or 1004	Introduction to Anthropology IIA or IIB (prerequisites 1A or 1B)	**6**	**1**
ARSC 1001	Introduction to Archaeology	**6**	**2**
ARCL1001	Art and Archaeology of the Classical World	**6**	**1**
ARBC1101	Introductory Arabic	**6**	**1**
ARIS 1001	Arab World, Islam and the Middle East 1	**6**	**2**
ARIS 1002	Arab World, Islam and the Middle East 2 (prerequisite ARIS 1002)	**6**	**2**
ASNS 1001	Modern Asian History and Culture 1	**6**	**1**
ASNS 1002	Modern Asian History and Culture 2	**6**	**2**
ASNS 1101	Introduction to Chinese Civilisation	**6**	**1**
SCLG 1001	Introduction to Sociology 1	**6**	**2**
SCLG 1002	Introduction to Sociology 2 (prereq. SCLG 1001)	**6**	**1**
Faculty of Economics and Business		**6**	**2**
ECOP 1001	Economics as a Social Science	**6**	**1**
ECOP 1002	Structure and Change in Modern Economics	**6**	**2**
ECON 1001	Introductory Microeconomics	**3**	**1**
ECON 1002	Introductory Macroeconomics	**3**	**1**
Faculty of Science		**3**	**2**
PSYC 1001	Psychology 1001	**3**	**2**
PSYC 1002	Psychology 1002	**3,6**	**1,2**
MATH 1001	Differential Calculus		
MATH 1002	Linear Algebra		
MATH 1003	Integral Calculus and Modelling		
MATH 1005	Statistics		
MATH 1004-1905	Mathematics units with prerequisites of restrictions (see relevant handbook)	**6**	**1**
Faculty of Education		**6**	**2**
EDUF 1014	Science Foundations A	**6**	**1**
EDUF 1015	Science Foundations B	**6**	**2**
EDUF 1011	Education 101		
EDUF 1012	Education 102		

■ BDes(Arch) units of study

DESA 1001 Design Practice 1A

12 credit points. Semester: 1. Classes: studio, seminars, lectures, workshop, labs. Assumed knowledge: HSC Mathematics, HSC English Standard. CorequisIte: DESA 1002 DESA 1101 DESA 1102. Assessment: exercises, projects, portfolio.

NB: Core unit of study

Objectives

Design Practice is taught in two parts, as a consecutive sequence over two semesters. On the completion of Design Practice 1A in the March semester, students will be given a UCN or unit of study Continuing result, which will be finalised to a Pass/Fail result on completion of the unit in Design Practice 1B in the following semester.

Designing components of the built environment is a complex process in which all graduates of this program are required to be competent at a pre-professional level. Design processes are complex because a statement of what is to be designed always contains only part of the information needed to produce a design, and also does not specify the attributes of the required physical form of the object to be designed. Designing therefore involves identifying the issues relevant to each specific design setting, and undertaking appropriate design processes that integrate and resolve the knowledge inherent in those issues. Through these processes appropriate design intentions and strategies are developed for the required component in its particular context. Designing, then, involves identifying and using knowledge relevant to a specific design context.

Students are involved in a series of situations through which they begin to learn how to apply and integrate key aspects of knowledge inherent in the issues identified, through the processes of designing simple components of the built environment in selected contexts. The design situations will involve the identification of a slightly greater number of design issues as the unit progresses. This knowledge broadly concerns aspects of inhabiting, designing and constructing the built environment as it relates to the human, environmental, cultural, aesthetic, social and technological contexts that influence the form of the built environment. As the unit progresses, these issues will include both new knowledge and previously introduced knowledge.

The built environment will be studied at the scale of small towns and suburbs, with the focus upon the design of individual elements, such as rooms, small buildings and outdoor places within these towns and suburbs.

In this unit conceptual knowledge will focus upon a small, manageable number of issues, with fewer at the start and slightly more to be considered at the end of the unit in the second semester. Precedent knowledge will be concerned with exploring direct, explicit design precedents showing how similar issues have been addressed in similar situations, and will aim to introduce the students to the use of this in informing their design process. Procedural knowledge will start by introducing basic methods for moving from the design requirement, starting the design process and identifying relevant issues, through basic iterative processes through which students will leam simple means for testing, evaluating, developing and representing their designs. The unit aims to develop the abilities of students to use basic conventions for representing, testing and developing design ideas using manual and digital graphic skills, and physical and computer based modelling techniques. At the beginning of the unit, the value of peer and group learning for feedback and development is introduced. As the unit progresses, and as design outcomes in practice involve collaboration between representatives of various areas, collaborative working within groups is developed.

In the first part of the unit, students are introduced to an awareness of their learning and of their own design processes, and to the value of reflecting on these processes in order to improve their design outcomes. The second part of the unit aims to develop students' ability to reflect on and make basic evaluations of their learning in designing and of their own design processes, and use these reflection to improve their design and learning outcomes.

Learning in this unit will be supported and extended by concurrent study of wider aspects of the knowledge in the core extensions DESA 1101 Design Studies 1A and DESA 1102 Design Studies 1B.

There is a focus on developing students' learning, and feedback forms of assessment will be used throughout to inform students of their progress and help their learning.

Description

A typical session may involve classes focussing on key aspects of conceptual, precedent and procedural knowledge in one or more areas, using seminars, lectures, studio, laboratories, workshops or field studies. This would be followed by a studio exploring the application of this to the particular design situation to which the knowledge relates. In studio and seminar sessions, students work in small groups with an individual tutor, and each student has their own drawing/work table in their group area. Studio work would include developing design studies and representations through the use of discussion, manual and digital drawings, and physical and computer based models.

Outcomes

On the successful completion of both parts of this unit students will be able to:

- reflect on their learning and on their design processes through describing and discussing these, and identify some key ways to improve design outcomes
- reflect upon and evaluate at a level of basic competence their learning about designing and their own design processes through comparison between processes in consecutive designing activities
- use at a level of basic competence direct precedents that relate to specific knowledge issues to inform decision making in design processes
- use at a level of basic competence simple methods for starting the design process, and carry out iterative processes for testing, evaluation and development at a similar level
- identify, explore, apply and integrate, at a level of basic competence, aspects of knowledge about the built environment to elementary design requirements and settings involving a small number of key design issues, including the ability to:

Inhabiting the built environment

- express human requirements and interactions with objects and built and natural environments
- identify and respond appropriately to the natural world as the setting for design
- identify and respond appropriately to the environmental issues and opportunities of a site and its context
- evaluate in a basic way the environmental impact of a building on key aspects of its surroundings

Designing the built environment

- use clear verbal skills, and use appropriate graphic conventions for 2D and 3D representation, and modelling skills, both physical and computer based, to represent designs for:
  testing and development,
  presentation to others
- understand the role of computers, computing and digital media modelling techniques to explore basic designing issues and basic geometries
- use computer based modelling to explore complex forms and projections and digital media representations of designed objects including rendering
- demonstrate the use of appropriate forms of expression of physical components of the built environment

Constructing the built environment

- devise simple structural strategies using loadbearing walls and frames in response to key issues
- develop appropriate component elements of a building, and demonstrate their use to achieve an intended design outcome
- identify and use enclosure of simple materials and construction strategies to achieve an intended form of expression
- develop appropriate simple stable structural system to achieve an intended design outcome
- demonstrate an appreciation of the efficient use of structural elements to achieve an intended design outcome

Practical: field studies

DESA 1002 Design Practice 1B

12 credit points. **Semester:** 2. **Classes:** studio, seminars, lectures, workshop, labs. **Assumed knowledge:** HSC Mathematics and HSC English Standard or equivalent. **Corequisite:** DESA 1001 DESA 1101 DESA 1102. **Assessment:** exercises, projects, portfolio.

NB: Core unit of study

Design Practice is taught in two parts, as a consecutive sequence over two semesters. On completion of Design Practice 1A in March semester students will be given a UCN or unit of study Continuing result, which will be finalised to a Pass/Fail result on completion of the unit Design Practice 1B.

See description for DESA 1001 Design Practice 1 A.

Practical: field studies

DESA 2001 **Design Practice 2A**

12 credit points. **Semester: 1. Classes:** studio, seminars, lectures, workshop, laboratories. **Assumed knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 1001 and DESA 1002. **Corequisite:** DESA 2002 DESA 2101. **Assessment:** Exercises, Projects, Portfolio for feedback and final summative assessment.

NB: Core unit of study

Objectives

This unit is taught in two parts as a consecutive sequence over two semesters. On completion of Design Practice 2A in the March semester students will be given a UCN or unit of study Continuing result, which will be finalised as a mark and grade on completion of the unit Design Practice 2B in the following semester.

Design education involves both the development of coherent sets of knowledge and an integrated and progressive sequence of learning activities. Students must learn that there is always more knowledge than they are aware of, or have used, in a particular design activity and that the knowledge they have used previously cannot be forgotten or ignored in subsequent design activities. Learning to design is therefore progressive and leads to the gradual acquisition of expertise.

This unit of study builds upon the abilities and knowledge previously demonstrated by students, and contributes to the progressive development of design education which commenced in the previous units DESA 1001 Design Practice 1A and DESA 1002 Design Practice 1B.

Both the complexity, in terms of number of key issues dealt with, and the scale, in terms of the physical size, of design settings is increased as well as the level of resolution and the expertise expected of students in dealing with these new design settings. These require students to bring forward and extend the knowledge and basic abilities introduced in the previous unit, and use these with at a level of basic competence.

It includes aspects of the wider knowledge in each area understood in DESA 1101 Design Studies 1A and DESA 1102 Design Studies 1B. Once again, learning in this unit is extended by the concurrent study of new knowledge about inhabiting, designing and constructing the built environment in the unit DESA 2101 Design Studies 2.

This unit aims to study the built environment at the scale of urban forms such as neighbourhoods in their cities, focuses upon the relationships between individual elements such as small groups of buildings, the spaces within them, their relationships with their contexts, from landscapes to streets, includes the issues of landscape design and the connections between interior and exterior spaces.

The application of knowledge about inhabiting the built environment will aim to explore the formulations of simple environmental strategies which enhance the environmental quality of the built environment and the experiences of those who use it. Knowledge about designing the built environment will develop further the concept of precedents to include the use of indirect precedents related to specific design issues. It aims to continue to develop students' abilities in testing, evaluating and developing design processes and the more interpretative techniques for representing these. Critical stages within these processes will be identified. Collaborative working within groups will continue to be developed. The application of knowledge about constructing the built environment will develop students' technical competence in developing structural and constructional strategies which support their design intent within the scale and complexity defined by the nature of the design settings to be explored. The unit will also allow students the opportunity to explore appropriate forms of expressing their design intent and design representations through a formal physical design language which responds to all the key issues which influence a particular design outcome.

The unit aims to develop to a competent level students' abilities to communicate their reflective understanding of their own learning in designing and of their own design processes and the processes of others.

Learning in this unit will be supported by concurrent study of key knowledge in the unit DESA 2101 Design Studies 2.

Formative or feedback assessment will be used throughout the unit to inform students of their progress in learning. The unit will conclude with a final summative assessment task. Formative assessment is feedback assessment, when work may be commented on or graded or marked, but that result does not count as part of the recorded grade for the unit of study. It is a grade to help students see how they are progressing. Summative assessment refers to a final assessment which sums up the results of a student's learning against the criteria of the unit and that result is recorded.

Description

The unit will be taught in a similar way and over a similar time frame as the previous units in Design Practice.

Outcomes

On the successful completion of this unit students will be able to:

- demonstrate a competence in their ability to reflect upon and evaluate their learning, and upon their own design processes, and those of their peers, including how they utilise knowledge in design, and to apply that understanding to improve their own processes
- demonstrate competence in the use of appropriate direct and indirect precedents related to specific design issues
- demonstrate competence and developing expertise in identifying, applying, integrating and representing knowledge about inhabiting, designing and constructing the built environment through competent design processes to more complex design problems involving a larger number of design issues, including the ability to:

Inhabiting the built environment

- demonstrate the social dimensions of precedent and how this impacts on designing
- express an understanding of personal and interpersonal interaction with the built and natural environment
- devise appropriate design intentions and design outcomes which address the experience of the environmental quality of the built environment, and devise appropriate environmental strategies which support the design intent
- devise design intentions and outcomes which address the environmental issues and opportunities of a site and its context, and the environmental impact of a building on its surroundings

Designing the built environment

- devise an appropriate design language of form and character which expresses their design intent, and responds to all the key issues influencing the design outcome
- demonstrate a competent level of representational and interpretative skills for exploring and testing design development including the use of drawings and both physical and digital modelling
- demonstrate a developing level of expertise at producing a variety of design representations of an appropriate type to communicate design intent to others involved in the further development and production of the design outcome, including the ability to articulate a clear verbal presentation and argument in support of a design representation
- demonstrate computer-based competence through the use of graphic and image processing tools, including CAD systems of 3D modelling, animation, advanced 2D drawing, graphic tools

Constructing the built environment

- devise appropriate simple structural strategies and systems which support the design intent
- devise appropriate constructional strategies which support the design intent
- manipulate standard construction systems to achieve design goals for small scale buildings
- demonstrate an ability to respond to key issues in designing and detailing construction at a small scale, including structural efficiency, constructability, protection from climate, durability, ecological concerns of materials selection to achieve required design outcomes

Practical: field studies

DESA 2002 Design Practice 2B

12 credit points. **Semester: 2. Classes:** studio, seminars, lectures, workshop, laboratories. **Assumed knowledge:** DESA 1001 DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 1002. **Corequisite:** DESA 2001 DESA 2101. **Assessment:** exercises, projects, portfolio, for feedback and final summative assessment.

NB: Core unit of study

Design Practice is taught in two parts as a consecutive sequence over two semesters. On completion of Design Practice 2A in the March semester students will be given UCN or unit of study Continuing result, which will be finalised as a mark and grade on completion of the unit Design Practice 2B.

See description for the unit Design Practice 2A.

Practical: field studies

DESA 1101 Design Studies 1A

6 credit points. **Semester:** 1. **Classes:** Lectures, seminars, laboratories, web-based information. **Assumed knowledge:** HSC Mathematics and HSC English Standard or equivalent. **Corequisite:** DESA 1001, DESA 1002 & DESA 1102. **Assessment:** Exercises, Assignments, Quizzes, Examinations as required for feedback and with final Pass/Fail result.

NB: Core extension unit of study

Objectives

Design Studies is taught in two parts, as a consecutive sequence over two semesters. On completion of Design Practice 1A in March semester, students will be given a UCN or unit of study Continuing result, which will be finalised to a Pass/Fail result on completion of the unit in Design Studies 1B in the following semester.

As well as knowing how to apply particular knowledge to a design task, a designer must also know how to locate, interpret and evaluate knowledge. Thus this unit aims to develop abilities in locating sources of knowledge together with the necessary interpretive skills required to evaluate and communicate this knowledge using a variety of manual and computer based tools.

In addition, in order to discharge their ethical, social, cultural and technological responsibilities, well-educated designers must also have an understanding of a breadth of knowledge beyond that which is required for a particular design task, and may develop an interest and ability in a specialised skill or area of knowledge. In-depth understanding of some of this knowledge will also be required. Therefore the unit will also extend the exploration of knowledge beyond that required by the concurrent units DESA 1001 and DESA 1002 Design Practice 1A and 1B.

The unit begins by introducing conceptual, precedent and procedural knowledge about inhabiting, designing and constructing the built environment focussing upon foundation knowledge, developed in following units. For example, major developments in the history of the built environment are surveyed with the aim of establishing a basic comprehension of the cultural context, influences on and historical precedents of our present built environment. This establishes a context in which to explore other cultural 'histories', including architectural movements, at a later stage. Similarly, basic knowledge about the physical and ergonomic relationship between people and the environment is introduced as a necessary prelude to studying environmental cognition and its impact upon spatial experience at a later stage. The unit also introduces a fundamental understanding of the operation of climatic and ecological systems and their impact upon the built environment in order to subsequendy study environmental and ecological sustainability issues related to the design of the built environment. The unit aims to introduce students to a fundamental understanding of how buildings are realised. This includes a study of basic structural systems. It also includes exploring the difference between structure and enclosure in framed and loadbearing systems. The unit surveys the construction of the major elements of buildings (roof, walls, floor etc). It introduces the properties of common structural materials and structural types and provides a basis for assembling structural systems.

The second part of the unit presents more new conceptual, precedent and procedural knowledge about inhabiting, designing and constructing the built environment as well as extending the previously presented knowledge in both depth and breadth. Accessing sources of knowledge is extended to include the development of abilities to summarise and explain existing knowledge.

Outcomes

On the successful completion of this unit students will be able to:

- demonstrate their ability to locate published work and relevant data sources about aspects of inhabiting, designing and constructing the built environment and identify its origins
- demonstrate their ability to summarise knowledge from sources and to explain the underlying concepts therein and apply these to their own understanding of aspects of inhabiting, designing and constructing the built environment, using a variety of methods

- describe basic components of the conceptual and precedent knowledge about inhabiting, designing and constructing the built environment
- demonstrate an understanding of the procedural knowledge presented in the unit

and students will be able to:

Inhabiting the built environment

- demonstrate an understanding of the physical and ergonomic relationship between people and the everyday and designed environment
- demonstrate an understanding of key issues involved with the natural world as a setting for design
- demonstrate an understanding of the operation of fundamental climatic and ecological systems and their impact upon the built environment
- evaluate in a basic way the impact of design actions upon the environmental qualities of enclosed space
- analyse, evaluate and justify the environmental issues of a site and its context, and the environmental impact of a building on its surroundings

Designing the built environment

- demonstrate a basic comprehension of the cultural context, influences on and historical precedents of our present built environment.
- demonstrate an understanding of the major developments of the Western, Asian and other non-Western traditions of architecture, art, urban planning and landscape design in the history of the built environment, and their cultural, social and historical contexts
- demonstrate a critical framework within which to evaluate and analyse precedents

Constructing the built environment

- demonstrate an understanding of the relationship between structure and enclosure in framed and loadbearing construction.
- demonstrate an understanding of the common construction systems and materials of the major building elements for small scale buildings
- demonstrate an understanding of the basic properties of common structural materials
- demonstrate an ability to recognise simple structural types and to be able to assemble them into funtioning structural systems
- demonstrate an understanding of the behaviour of a range of structural elements and types for small scale buildings

Practical: Investigations, field studies

DESA 1102 **Design Studies 1B**

6 credit points. **Semester: 2. Classes:** lectures, seminars, laboratories, web-based information. **Assumed knowledge:** HSC Mathematics and HSC English Standard or equivalent. **Corequisite:** DESA 1001 DESA 1101 DESA 1002. **Assessment:** Exercises, Assignments, Quizzes, Examinations as required for feedback and with final Pass/Fail result.

NB: Core extension unit of study

Design Studies is taught in two parts, as a consecutive sequence over two semesters. On completion of Design Practice 1A in March semester, students will be given a UCN or unit of study Continuing result, which will be finalised to a Pass/Fail result on completion of the unit in Design Studies 1B.

See description for DESA 1101 Design Studies 1A.

Practical: investigations, field studies

DESA 2101 **Design Studies 2**

8 credit points. **Semester: 1. Classes:** Lectures, seminars, labaoratories, web-based information. **Prerequisite:** DESA 1101 and DESA **1**102. **Assessment:** Exercises, Essays, Assignments, Quizzes, Examinations for feedback and final summative result.

NB: Core extension unit of study

Objectives

The learning introduced in Design Studies 1A and 1B is progressed further in this unit which develops the knowledge used in the concurrent unit, Design Practice 2, and extends the exploration of knowledge beyond that required by Design Practice 2.

The unit builds upon the foundation conceptual, precedent and procedural knowledge introduced previously to provide a firm understanding of the key knowledge required by all students prior to progressing into more specialised, in-depth, learning in the various specialisations offered within the degree.

The unit also further extends students' capacities for identifying and utilising sources of knowledge by developing their abilities to interpret and question published sources, and to apply principles to specific problems or learning activities such as the preparation of a scholarly paper on a particular issue relating to inhabiting, designing and constructing the built environment.

Description

The unit will be taught in a similar manner to Design Studies 1B.

Outcomes

On the successful completion of this unit students will be able to:

- demonstrate their ability to interpret sources of existing knowledge and question any underlying assumptions
- demonstrate their ability to apply key concepts from published works to specific concepts of learning related to inhabiting, designing and constructing the built environment, for example, by preparing a structured essay or paper
- demonstrate a firm understanding of the key components of conceptual and precedent knowledge about inhabiting, designing and constructing the built environment presented in the unit and of its contribution to the process of designing the built environment
- demonstrate a command of the procedural knowledge presented in the unit

Inhabiting the built environment

- demonstrate an understanding of environmental perception and cognition and its impact upon spatial experience
- demonstrate an understanding of designing as an ecological activity
- demonstrate an understanding of the concept and principles which address the experience of the environmental quality of the built environment, and related environmental strategies
- demonstrate an understanding of the concept and principles of appropriate, sustainable environmental management strategies applicable to small to medium scale buildings
- demonstrate an understanding at a general level of concepts of culture and difference, and social responsibility
- demonstrate a general level of understanding of social and cultural implications of design

Designing the built environment

- demonstrate an understanding of the influence of the development of the Western, Asian and other non-Western traditions of architecture, art, urban planning and landscape design in the history of the Australian built environment, and its cultural, social and historical context
- demonstrate an appreciation of the rationalist tradition and of the history of ideas in the development of western culture
- demonstrate an understanding of the traditions of landscape architecture and its influences

Constructing the built environment

- demonstrate an understanding of the basic systems of construction and materials of the major building assemblies of small to medium scale buildings, and how each is used in standard practice
- demonstrate an understanding of the behaviour of a range of structural types and assemblies
- identify factors that contribute to the efficiency of structural types and assemblies

Practical: Investigations, Field studies

DESA 2203 **Architecture in East Asia**

4 credit points. Dr Peter Armstrong. **Semester: 2. Assumed knowledge:** DESA 1**1**01 DESA 1102 or equivalent. **Prerequisite:** DESA **2101. Assessment:** Attendance requirements are to 90% minumum of all classes. Assessment will be through an analysis in model or graphic form of an important structure of the student's choice.

NB: Permission required for enrolment. Architecture stream unit of study

Aims

The course provides an introduction to the urban and architectural traditions of East Asia in the pre-industrial era. Beginning with the classical Chinese concept of cosmos, state and society, the course examines the development of these concepts and their architectural expression in time and in the context of the cultures of China, Korea and Japan. The development of cities and the full range of building types is traced, with cultural interaction and patterns of influence shown in terms of both architecture and its social context.

Objectives

On successful co,mpletion of the unit of study, students will be able:

- To give a clear picture of the philosophical and cultural foundations of urbanism and architecture in the dominant cultures of East Asia
- To elucidate the origins and development of urban form from Chinese models in the context of the development of Japanese, Korean &Vietnamese cultural traditions.
- To provide an understanding of the design and construction principles of the principal building types of the region within the broad context of the Chinese cultural base of architecture and applied arts
- To examine and contrast the national characteristics of the major periods of architectural development in each country and,
- To understand the ongoing influence of building traditions in contemporary culture.

Generic Skills

On successful completion of this un it of study, the student will have developed their skills in the following areas: knowledge skills, thinking skills, personal skills, personal attributes and practical skills

Contribution of unit to programs

By providing a focus on the structure of the built environment of the major cultures of East Asia, the students studying in the BDes(Arch) will gain a broad view of the historical and cultural context of architecture and Urban design, and these studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

DESA 2305 Australian Modernist Architecture

4 credit points. Dr. Harry Margalit. **Semester: 2. Classes:** Lectures, tutorial discussions and field trips. Attendance of 90% at least is required for all components collectively. **Assessment:** Attendance 20% of unit mark (full marks for attendance of 90% or more, pro-rata for less). Field trip diary 15% of unit mark. Diary to record all trips in written, drawn and photographic form. Essay (3000 words, student chosen topic drawn from course) 65% of unit mark.

NB: Permission required for enrolment.

Aims

The unit traces the history of Modernist architecture in Australia. On completion, students will be familiar with key architects and works representative of the advent of modernism in the 1930s, its post-war flowering and subsequent fragmentation in the late 1950s. Students will also be familiar with the beliefs and aspirations underpinning the movement, the role of overseas travel in introducing modernism to a generation of Australian architects and the larger issues of transplanting and adapting architectural philosophies from one country and context to another.

Objectives

On the successful completion of the unit of study, students will have demonstrated:

- Imaginative and informed judgement through making historical connections between a chosen essay topic and the material presented in the unit.
- An expanded body of architectural knowledge applicable to both scholarship and practice
- An ability to develop an argument to discuss the attributes of their chosen subject with reference to other buildings, projects, architects or planning schemes presented, through an essay addressing a building, unbuilt project, architect or planning scheme representative of the movement.
- An ability to engage with artifacts from the past, and to tease out the conditions which pertained when they were made. Through this they will have demonstrated insights into the contingent nature of many beliefs and ideals, a sense of self-reflection and an appreciation of the diversity of motives and ideals.
- An ability to record the buildings and sites visited through a field trip diary.

Generic Skills

The unit of study addresses the following generic attributes fostered by the University:

- Knowledge skills: Students will expand their body of architectural knowledge, demonstrate this in written form, using the conventions of scholarly writing.
- Thinking skills: Students will assess the relevance of their topic to the unit subject matter and argue for their choice.
- Personal skills: The research and execution of the essay will be self-directed, and the student will assess and acquire the knowledge to complete the analysis.
- Personal attributes: The students will have developed a sense of self reflection through the tasks.
- Practical skills: The research and field trips skills expected of students will encompass historical research, visual recording and appropriate presentation using computer skills.

Contribution of unit to programs

Students will generally be drawn from the B.Des.Arch and B.Arch programs, and will be working towards undergraduate and professional degrees in architecture. The unit expands knowledge of buildings and architects, increases awareness of architecture as a social art and exposes students to decisions taken by practitioners in the period studied as a way of informing their own design process.

DESA 2204 Design Thinking

4 credit points. Dr Glen Hill. **Semester: 1. Assumed knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Attendance of at least 90% and in-class participation are required. Students will undertake a substantial amount of reading, participate in seminars and carry out a written assignment.

NB: Permission required for enrolment. Architecture stream unit of study

Aims

The unit aims to give students an understanding of what they are doing when they design, and how design activity proceeds. It aims to survey critically some of the more significant theories concerning the nature of the design process, and relate these to design programs rarmlng concurrently with the course. It also aims to introduce students to contemporary thought in a range of disciplines as it relates to design activity.

Finally, it aims to locate design activity within a network of societal and historic interactions.

Objectives

It is expected that on the successful completion of the unit students will have achieved the following:

- A clear understanding of what happens in the design process, and hence an increased confidence in designing.
- An increase in design skill, resulting from greater knowledge of some of the factors involved in the design process.
- A knowledge of the various theories advanced to explain and formalise the design process.
- An acquaintance with the critical appraisals of design methods and design theories.

Generic Skills

It is expected that at the successful completion of the unit students will have developed the following skills:

- Knowledge skills: have a body of knowledge in the design field: be able to apply design theory to practice in familiar and unfamiliar situations; be able to identify, access, organise and communicate this knowledge in both written and oral English; have an appreciation of the requirements and characteristics of scholarship and research.
- Thinking skills: exercise critical judgement; account for their decisions; be creative and imaginative thinkers.
- Personal skills: work with others.
- Personal attributes: acknowledge their personal responsibility for their own value judgements; and their ethical behaviour towards others.
- Practical skills: apply technical skills appropriate to their discipline.

Contribution of unit to programs taken by students

This unit will contribute to architecture students' theoretical and practical knowledge of the wider historical context and theoretical aspects of design activity in the design professions. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

DESA 2302 Australian Architecture: 1788 - Present

4 credit points. **Semester:** 2. **Classes:** Lectures, seminars, labaoratories, web-based information. **Assumed knowledge:** DESA 1101. DESA 1102. DESA 2202 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Research paper.

NB: Permission required for enrolment. Architecture stream unit of study. Prerequisite for the Bachelor of Architecture program.

Objectives

Knowledge developed in Design Studies 2 is progressed further in this unit into investigating the forms of architectural expression through precedent and design at a pre-professional level. The unit will address the development and language of forms of expression in architectural design in high and vernacular traditions, including Western, Asian and other non-

Western, and will take the form of a research investigation followed by an advanced design study.

The unit builds upon the understanding and practice of conceptual, precedent and procedural knowledge about designing the built environment demonstrated previously to develop competence in more specialised, in-depth, learning.

The unit further extends students' capacities for identifying and utilising sources of knowledge by introducing appropriate research methods, and develops their abilities to theorise, generalise and reflect on the data gathered in primary studies as well as from published sources, and to apply principles to specific learning activities which will include the preparation of a scholarly paper on a particular aspect of architectural design, and a design study building on the research.

Outcomes

On the successful completion of this unit of study students will be able to:

- demonstrate a high level of competence in interpreting sources of existing knowledge and questioning any underlying assumptions
- demonstrate a high level of competence to use appropriate research methods in the gathering and interpretation of data and in the application of key concepts from published works to specific concepts
- demonstrate a high level of competence in investigating the precedents of architectural forms of expression in a variety of traditions
- demonstrate a high level of competence in preparing a design study based on research.

Practical: Investigations, Field studies

DESA 2612 Designing with Surfaces and Light

3 credit points. A/Prof Terry Purcell. **Semester: 2. Classes:** The content of each of these areas and the examples that illustrate the content, the Photoshop tutorials and the examples for analysis will all be available in online format. The aim is to provide flexibility for participants in the times at which they interact with the material and to allow participants to plan their time effectively. However the online format also allows participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit is achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Assessment:** At the end of the meeting participants would have to submit online the results of their analysis with the results of these analyses being made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator. There will be two types of assessment in the unit. There will be a final assignment where each student demonstrates their understanding of these areas and their ability to apply this knowledge in analyzing examples. The mark for this assignment will be the final (summative) result for the unit of study. The group work will not be marked but will have to be completed as a part of the unit of study (formative assessment).

Aims

An essential part of designing three dimensional objects and environments is the choice of the materials that will make up the surfaces of the designed artifact. Equally important are the choices made about the natural and artificial light sources that will illuminate these surfaces. However while these are choices about the physical attributes of environments, one of the fundamental reasons for making the choices is to create artifacts that are experienced in particular ways by those who use and interact with the artifact. This unit of study introduces the basic knowledge needed to understand the way surfaces are experienced and the role that light and surface properties play in that experience. In particular the unit deals with the following:

Surface (micro) structure.

The interaction of light and surface structure.

The experience of texture.

Reflection off a surface and effects on perceived surface properties.

Absorption by a surface and perceived colour space and colour systems.

In addition to knowledge about these aspects of the experience of surfaces, the unit introduces ways in which the surface properties of particular examples can be analysed in terms of this knowledge. This is achieved by using the image processing program Photoshop and the unit involves tutorials in using basic aspects of Photoshop. These skills are then used in analyzing examples and it is this analysis that forms the basis for the assessment in the unit.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. In this way you will have demonstrated both their mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in these areas and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a focus on the experience of light and surface, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Assumed knowledge

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the units providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2.

DESA 2610 Designing with Colour 1

4 credit points. A/Prof Terry Purcell. **Semester:** 1,2, Summer. **Classes:** On-line, or on-line with 3 face-to-face workshop/seminars. The content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Prerequisite:** Students must have completed 48 credit points towards their degree. **Assessment:** 2 assignments There will be two types of assessment in the unit. The group work will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be two assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of colour mixing to design four colour schemes for the fagade of a building.. The second assignment explores colour contrast and colour preference through the design of four colour schemes for the facade of a building. The average of the marks for these assignments will be the final (summative) result for the unit of study. Participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Aims

One of the most striking features of vision is our ability to see colours. When a designer chooses materials, these choices inevitably are choices about the colour of the surfaces of the artifact being designed. Colour plays many roles in the way we experience environments - functional, affective and symbolic and so understanding these many aspects of the experience of colour is critical in design. Because of the complexity of our

experience of colour a number of units of study are needed to explore all aspects of this experience.

Designing with Colour 1 aims to build on the knowledge and skills developed in Designing with Surfaces and Light and to explore how a number of basic aspects of the way the visual system works has major implications for using colour in design. Specifically this unit uses knowledge in the following areas -

Basic visual processes with a particular emphasis on the ways in which colour can be produced through additive, subtractive and partitive colour mixing.

The way colours can interact that can result in the perceived colour of a surface being changed by the colour of adjacent or surrounding surfaces, a process referred to as colour contrast.

Advancing and receding colours and colour contrast.

The conditions that create colour pleasantness and preference and the relationship of these affective experiences to colour contrast

An essential part of this unit is the further development and use of skills in image manipulation. This unit develops the Photoshop skills from Designing with Surfaces and Light in relation to assessing colour coordinates of parts of an image using the Colour Picker, filling selections with colour and maintaining colour appearance while making repeated changes to a colour in part of an image.

These image processing skills are used to explore existing colour designs as a way of understanding the knowledge presented about the various areas of colour perception and experience listed above. In addition in this unit of study these skills are used to allow participants to create new colour designs that implement the knowledge about colour perception and experience.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. Participants will also have carried out a number of colour design exercises using both the knowledge presented about colour experience and the image processing skills they have learnt. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a focus on the experience of designing with colour, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Assumed knowledge and prerequisites

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DESA 2611 Designing with Colour 2

4 credit points. A/Prof Terry Purcell. **Semester: 1**, 2, Summer. **Classes:** On-line, or on-line with 3 face-to-face workshop/seminars. As was the case in Designing with Surfaces and Light, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Prerequisite:** DESA 2610; Students must have completed 48 credit points towards their degree. **Assessment:** 2 assignments. There will be two types of assessment in the unit. The group work will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be a number of assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of the four basic dimensions of affective colour experience to design colour schemes for both building interiors and exteriors. The second assignment involves colour designs for interiors and exteriors where the knowledge from previous units of study are integrated with the knowledge from this unit. The average of the marks for these assignments will be the final (summative) result for the unit of study.

Aims

There are many commonly held beliefs about how we experience colours affectively. For example it is thought some colours are warm and others cold, some are exciting and some are calming. There is now a considerable body of knowledge about these aspects of colour experience. This research demonstrates that there are four basic dimensions of affective colour experience: temperature, excitement, evaluation and potency and that these different experiences map very systematically into colour space. The first aim of this unit is to present this knowledge to participants in the unit. In common with the units Designing with Colour 1 and Designing with Surfaces and Light this unit also focuses on the use of this knowledge in analyzing examples and designing new colour schemes and this is the second aim of this unit of study.

In order to carry out these activities the unit also further develops participants image processing skills. Participants work through tutorials on how Photoshop can be used to isolate parts of an image so that the colour of the part can be independently manipulated of the colours present in other parts of the image. A final aim of the unit is integrate the knowledge and skills learnt in earlier units into the analysis and design activities in this unit. In this way a more complete understanding of colour and its use is built up rather than each of the facets being learnt and applied in isolation.

As was the case in Designing with Surfaces and Light and Designing with Colour 1, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. You will have demonstrated an ability to use the knowledge and skills to create colour designs. You will also have demonstrated that you can transfer and use knowledge and skills learnt in earlier units and combine them with the new knowledge and skills presented in this unit. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit, through combining this with knowledge and skills from earlier units and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a developed understanding on the experience of designing with colour, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Attendance, Requirements, Assessment

A. At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Assumed knowledge & prerequisites

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DESA 2615 Designing with Colour 3

4 credit points. A/Prof Terry Purcell. Semester: 1. Classes: As was the case in Designing with Surfaces and Light and Designing with Colour Iand 2, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. Assessment: Participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator. In this unit of study there will be two types of assessment. The group work involved in investigation regularities in environmental colour for example.will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be a number of assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of familiar and typical colours, colour harmony and the effects of variations the number of colours in a colour scheme to design colour schemes for both building interiors and exteriors. The second assignment involves colour designs for interiors and exteriors where the knowledge from previous units of study are integrated with the knowledge from this unit. The average of the marks for these assignments will be the final (summative) result for the unit of study.

Aims

The environment we live in contains systematic sets of colours. These are associated with the natural environment through the colours in, for example, vegetation, rocks and soil. The built environment also contains sets of colour regularities associated with building materials. Because we are exposed to these regularities over extended periods of time we learn about them and this learning goes on without our awareness. These sets of colours then become the familiar and typical colours of a place and form a set of expectations about colours in the environment. The aim of this unit of study is to develop an understanding of these sets of environmental colours and the implications of this for design.

Specifically the unit aims to address the following:

Tacit learning and familiar and typical colours

Mapping environmental colours.

Colour and culture / geographic location and the symbolic use of colour.

Colour harmony and the number of colours in a colour design.

In common with the units Designing with Colour land 2 and Designing with Surfaces and Light this unit also aims to focus on the use of this knowledge in analyzing examples and designing new colour schemes.

In order to achieve these aims participants will have to employ all of the image processing skills developed in the previous units of study. In addition the analysis exercises and colour design assignments will also involve scanning images into digital form and tutorials will be provided to develop these skills.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. You will have demonstrated an ability to use the knowledge and skills to create colour designs. You will also have demonstrated that you can transfer and use knowledge and skills learnt in earlier units and combine them with the new knowledge and skills presented in this unit. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit, through combining this with knowledge and skills from earlier units and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a more deeply developed understanding on the experience of designing with colour, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Attendance, Requirements, Assessment

- At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Assumed knowledge & prerequisites
If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DESA 2211 **Architecture, Place and Society**

4 credit points. A/Prof Anna Rubbo. Semester: 2. Assessment: Attendance and in-class participation are required. Students will undertake a substantial amount of reading, write an essay, and carry out a group fieldwork assignment. Site visits may be included.

Aims
This unit aims to investigate the relationship between habitat and society and assumes that designers will increasingly work in places where cultures are unfamiliar: in Australia, Asia and further afield, and that an ability to understand and interpret diverse cultures is an important area of knowledge for designers. By habitat is meant the broad range of environments where people carry out their daily lives; by society is meant people and their cultural practices which help shape or give meaning to the environment. Social responsibility is discussed in terms of a design praxis which acknowledges and incorporates cultural meaning and difference and the consideration of equity through design.

Through participating in this unit students will:
- Increase their awareness of the relationship between habitat (place) and society (people)
- Enhance their skills and understanding in involving people(society) in the design process(the making of habitats)
- Enhance their ability in recognising and codifying habitat/ society relationships
- Explore issues of social responsibility in relation to the making of architecture.

Objectives
On successful completion of this unit students will be able to demonstrate:
- an ability to better understand and interpret the habitat/society dialectic.
- skills and knowledge in participatory processes necessary for effective communication about environmental design issues
- Increased critical awareness about social responsibility in relation to architecture and the built environment, and an ability to exercise this awareness.

Generic attributes
This unit will provide a range of skills that will enhance employability and knowledge which will contribute to an understanding of the importance of architecture as an embedded social practice with responsibilities requiring knowledge, tMnking, personal and practical skills.

Contribution of unit to programs
This unit will contribute to architecture students' theoretical and practical knowledge of the social aspects of the design professions. It is intended that students in other disciplines will develop critical awareness of the built environment as a form of cultural production, and the possibilities for their participation in its production.

DESA 2212 Social Studies in Architecture

4 credit points. A/Prof Anna Rubbo. Semester: 2. Classes: Students will undertake a substantial amount of reading, write an essay, and carry out a group fieldwork assignment. Site visits will be included. Assessment: Attendance and in-class participation are required.

Aims
This unit aims to investigate the relationship between habitat and society through study of selected building types in different places and or cultures. Such building types might be housing, educational, religious, or community buildings. The aim will be to understand the ways in which cultural and social beliefs as well as local technologies and construction practices influence and shape the form of buildings. A key aim will be to better understand the ways in which architecture meets social needs, wit a view to students developing a better understanding of the 'how 'and the 'why' of building forms, and how social responsibility comes into play in the making of architecture. The unit will require reading and discussion, original research, and the presentation of that research. The unit will aim to provide opportunities for experimenting wit a range of media, including DVD, slides etc.

Through participating in this unit students will:
- Increase their awareness of the relationship between building types and people.
- Enhance their skills and understanding in involving people in the design process
- Enhance their research ability, and be able to recognise and codify ideas which generate specific building types
- Be required to make an assessment with regard to the ways in which social responsibility has been exercised.

Objectives
On successful completion of this unit students will be able to demonstrate:
- an ability to better understand and interpret the form selected buildings have.
- skills and knowledge in making analyses of this type
- Increased critical awareness about social responsibility in relation to specific building types.

Generic skills
This unit will provide a range of skills that will enhance employability and knowledge as a result of a deeper knowledge of the 'how' and 'why;' of specific building types, as well as development of research and presentation skills requiring knowledge, thinking, personal and practical skills.

Contribution of unit to programs
This unit will contribute to architecture students' theoretical and practical knowledge of the social aspects of the design professions. It is intended that students in other disciplines will develop critical awareness of the built environment as a form of cultural production, and the possibilities for their participation in its production.

Assumed knowledge: Habitat ad Society B, or by permission of lecturer.

DESA2213 Housing for Health

4 credit points. Adj Assoc Prof Paul Pholeros, Mr Colin James. Semester: 2. Classes: Intensive mode Wk 4 Friday, 2-5 pm Health-housing theory (Paul Pholeros), Saturday, 8-1 pm Readings reports/discussion (Col James), 2-6 pm House measurement practice (Paul Pholeros) Wk 5/6 Weekends Fieldwork: 3 houses (solo), (Family home + 2 neighbours) Wk 7 Friday 2-6 pmPresent reports + observations/evaluate. Assessment: Assignment 1 Protocol and question form 15%, Assignment 2 Report 75%, Attendance and participation 10%.

Aims
The unit investigates the housing characteristics fundamental to the healthy survival of babies (0-5 years) as a prerequisite for healthy family life. The focus is on nine healthy living practices: washing people; washing clothes; removing waste; improving nutrition; reducing crowding; separating people from animals, vermin or insects; reducing dust; controlling temperature; reducing trauma.

Upon successful completion students will have achieved:
- Recognition of the health implications of housing design.
- Development of skills in the measurement and analysis of design features which have health impacts.
- Capability of documenting house fixing practices to improve health outcomes.
- Capability to report and communicate results and recommendations to householders.

Objectives
Upon successful completion students will demonstrate:
- Evidence of reading recommended texts and reporting on health-housing theory.
- Completion of specific tasks in the measurement performance of household plumbing and electrical services and fittings against stated standards.
- Completion of Healthabitat data sheets and logging into Healthabitat analysis programs to deliver work sheets for licensed plumbers and electricians.
- Comprehension through report writing on the analyses of data, house fixing procedures and independent observations of other health risks, specifically for householders' information requiring regular maintenance and user practices.

DESA2214 Housing forWell-Being

4 credit points. Mr Colin James. **Semester: 1. Classes:** Intensive mode Wk 4, Friday, 2-5 pm, Housing well-being theory (Col James), Saturday, 9-1 pm Readings reports/discussion (Col James), 2-5 pm Housing P.O.E. role play Wk 5/6, Weekends, Fieldwork: 3 houses (solo), (Family home + 2 neighbours) Wk 7, Friday, 2-5 pm, Present executive summaries, submit report. **Assessment:** Assignment 1 Readings report (verbal) 15%, Assignment 2 Report (written) 75%, Attendance and participation 10%.

Aims

This is a companion course to 'Housing for Health' which extends the investigation into housing characteristics fundamental to the well-being of families. The focus is on six well-being living practices: security of tenure; physical security; fire safety; disability access; habitability; affordability. An additional focus on 'the meaning of home' is available for senior students.

Upon successful completion students will have achieved:

- Recognition of well-being implications of housing design.
- Development of skills in preparing a measured drawing of an existing house to scale annotated with some well-being criteria and critical observations about design.
- Development of skills in interviewing householder-clients and preparing an elementary form of post-occupancy-evaluation to measure against the well-being criteria.
- Capability to report and communicate results and recommendations to householder-clients.

Objectives

Upon successful completion students will demonstrate:

- Evidence of reading recommended texts and reporting on housing well-being theory.
- Completion of specific tasks in the production of an annotated measured drawing with photographs (external only) complying with conventional standards.
- Completion of POE interviews and analyses of data concerning house-fixing.
- Comprehension through report writing on all tasks including independent observations of the well-being characteristics for presentation to householder-clients.

DESA 2205 Innovative Australian Construction

4 credit points. **Semester:** 2. **Classes:** Lectures, seminars, laboratories, web-based information. **Assumed knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Exercises, Essays.Assignments, Quizzes, Examinations: for feedback and final summative result.

NB: Permission required for enrolment. Architecture stream unit of study

Objectives

Knowledge developed in Design Studies 2 is progressed further in this unit into more specialised in-depth study of structures in the built environment.

The aim of this unit is to engage students in detailed studies of both innovative structural design and advanced structural modelling techniques. The unit aims firstly to investigate interesting structural design through case studies and explore issues that contribute to innovative structural solutions. The second aim of the unit is to investigate various advanced techniques of modelling, and to carry out computer based and physical modelling of advanced structures.

Outcomes

On the successful completion of this unit students will be able to:

- demonstrate a high level of competence in investigating and presenting case studies on structural design
- identify and evaluate issues that contribute to innovative structural solutions in case studies
- investigate various advanced techniques of modelling
- demonstrate a high level of competence in computer based and physical modelling of advanced structures

Practical: Investigations, Field studies

DESA 2206 Innovative Building Structures

4 credit points. **Semester:** 2. **Classes:** Lectures, seminars, labaoratories, web-based information. **Assumed knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Exercises, Essays, Assignments, Quizzes, Examinations: for feedback and tinal summative result.

NB: Architecture stream unit of study

Objectives

Knowledge developed in Design Studies 2 is progressed further in this unit into more specialised in-depth study of innovative construction and design at small to medium scale buildings.

The unit builds upon the understanding of conceptual, precedent and procedural knowledge about constructing the built environment demonstrated previously to develop competence in more specialised, in-depth, learning in the relationship between construction and its expression in design.

The aim of this unit is to engage students in detailed studies of innovative construction design of small to medium scale buildings and in developing similar approaches. The unit aims to investigate interesting construction and its expression in design through case studies. It will identify innovative construction, including strategies, systems, materials and detailing, and explore in depth the issues that contribute to innovative constructional solutions.

Outcomes

On the successful completion of this unit students will be able to:

- demonstrate a high level of competence in investigating and presenting case studies on innovative construction and design expression
- identify and evaluate at a high level of competence issues that contribute to innovative construction in architectural design
- identify and evaluate at a high level of competence innovative construction strategies, systems, materials and detailing
- propose and develop an aspect of innovative constructional expression

Practical: Investigations, Field studies

DESA 2208 Introduction to Project Management

4 credit points. Prof A. Jaafari, assisted by Mr Ted Tooher. **Semester: 2. Assessment:** At least 90% attendance at all classes is required. The assessment will be via tests and assignment completed and submitted by students in stages. Details will be advised at the commencement of the unit of study.

Aims

This unit of study will introduce students to the underpinning knowledge of project management, covering all 9 areas of project management, viz. integration, communication, human resources management, scope, time and cost management, quality, risk and procurement management;

It will differentiate project life cycles from facility life cycles. In this unit the application of project management principles to the achievement of different deliverables needed in all phases of the facility life cycle will be addressed. The unit will provide practical examples and opportunities to apply the fundamentals to a range of simple projects in architecture, design, building and construction fields (the focus being initiation and planning phases of projects).

Syllabus summary:

Project management fundamentals; management of project functions and areas; including integration, scope, time, cost, communication, human resources, quality, risk and procurement management; application of the 4-phase model to development and execution of facilities and products; facility life cycles; project life cycles, integration of project and facility life cycles; management of simple project; setting and measuring performance against objectives.

Objectives

On the successful completion of this unit students will be able to:

- demonstrate a good knowledge of proj ect management basics
- manage different project management areas, viz. integration, scope, time, cost, communication, human resources, quality, risk and procurement management in the context of simple projects in the built environment
- learn to apply the project management fundamentals to other project types and endeavours

Generic Skills

On successful completion of this un it of study, the student will have developed their skills in the following areas: knowledge skills, thinking skills, personal skills, personal attributes and practical skills

Contribution of unit to programs taken by students

Students will gain an understanding at a beginning level of the practice requirements of managing projects in architecture and urban design, and these studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Textbook:

Turner, Handbook of Project-based Management (McGraw-Hill)

Reference books

PMI, A Guide to the Project Management Body of Knowledge; www.pmi.org

Course presenter and coordinator

DESA 2303 Construction, Structures and Management

4 credit points. **Semester: 2. Classes:** Lectures, seminars, laboratories, web-based information. **Assumed knowledge:** DESA 1101, DESA 1102, DESA 2002 or equivalent. Prerequisite: DESA 2101. **Assessment:** Research paper.

NB: Permission required for enrolment. Architecture stream unit of study. Prerequisite for the Bachelor of Architecture program.

Objectives

Knowledge developed in DESA 2101 Design Studies 2, and in DESA 2001 Design Practice 2A and DESA 2002 Design Practice 2B is progressed further in this unit into more specialised, in-depth study of the construction and structural design of medium-scaled buildings at a pre-professional level.

The unit builds upon the understanding of conceptual, precedent and procedural knowledge about constructing the built environment demonstrated previously to develop competence in more specialised, in-depth, learning in management, building procurement, construction and structures. The unit develops further understanding of the principles and details of construction systems for medium scale buildings at a pre-professional level. It addresses the legal and regulatory environment in which buildings are procured, including the codes of practice. It introduces basic management theory and basic cost planning and control. The unit addresses structural design at a pre-professional level, particularly in relation to structural design and codes of practice.

Outcomes

On the successful completion of this unit students will be able to:

- demonstrate a high level of competence in understanding of the standard constructional systems for medium-scale buildings including structural efficiency, constructability, protection from climate, durability, and ecological concerns of material selection
- demonstrate understanding of the legal and regulatory environments within which buildings are designed and procured, including a basic understanding of he relationship between client and consultants, and between consultants, as well as the nature of building contracts and how they are administered
- demonstrate a basic understanding of management practices
- demonstrate a basic understanding of cost planning and control
- demonstrate a high level of competence in understanding the different stages in the structural design process
- demonstrate a high level of competence in understanding the design philosophies on which the current codes of practice are based
- apply the appropriate design aids and codes of practice at a high level of competence.

Practical: Investigations, Field studies

DESA 2201 Design, Ecology and Sustainability

4 credit points. Dr Richard Lamb. **Semester: 1. Assumed knowledge:** DESA 1101 DESA 1102 DESA 2101 or equivalent. **Corequisite:** DESA 2101. **Assessment:** Assessment for the course consists of two written components and one self and group assessment. They are weighted as follows: Assessment form 1: Short essay assignment: integrated with Design B1-40% Assessment form 2: Shared group research assignment - 40% Assessment form 3: Self and group assessment of contribution to research task - 20%.

NB: Permission required for enrolment. Architecture stream unit of study

Aim

The aim of the unit is that on successful completion you will:

- Be able at an intermediate level, to understand the ecological context of design of the built environment.
- Be introduced to practical and ethical aspects of designing for ecological sustainability.
- Be able to critically examine the role of architects and other designers in the ecological context and understand the implementation of environmental controls that are exercised by the community over the built environment.
- Be able to critically examine, account for and justify your design decisions when considered from an ecological sustainability perspective.
- Be able, at an intermediate level, o creatively and imaginatively develop programs for the sustainable design, planning and control of human environments.

Objectives

On the successful completion of this unit you will demonstrate effective learning outcomes through:

- Showing a working knowledge at an introductory level of the operation of natural systems and their relationship to the form and functions of the built environment.
- Being able to identify the ecological qualities, sustainability capabilities and consequences of the use of commonly specified building materials and construction systems.
- Being able to critically examine the potential environmental impacts of design decisions at an intermediate level.
- Having the ability to critically examine the potential ecological impacts of environmental policies such as urban consolidation, urban villages and higher density living.
- Demonstrating an introductory level of knowledge of the NSW planning system as it applies to policies for the control of the environment.
- Having an introductory level of knowledge of why and how settlements form, grow and change in response to environmental constraints and opportunities.
- Demonstrating, through critical reflection on your own design work, an ability to exercise independent and creative thought leading to sustainable design outcomes.

Generic Skills

The unit links the above objectives and outcomes to the generic skills expected of all students of the university by:

- Providing a body of knowledge in the field of ecological sustainabilty.
- Requiring critical thinking and writing on practical and theoretical aspects of the field of knowledge.
- Requiring critical judgement, personal reflection, realistic evaluation and creative and imaginative engagement on your own work as well as that of others.
- Acknowledging the need to work with others and develop a personal ethical position relative to the ecological context of design.
- Fostering individual skill development in the application of practical and technical aspects of knowledge at a level relevant to your personal development in second year.

Contribution of unit to programs taken by students

The unit fits into the overall structure of the degree by examining the natural environment as an intellectual. Philosophical and physical context for design, looking at the way nature and culture interact in the making of the urban environment. Environments, communities and their settlements interact and architects and planners are agents of change in environment. As such they have special need to understand how nature is conceptualised in design terms, how designs become nature, how designers affect and respond to the environment and how the community translates designed nature into sanctions and controls that reflect human needs. As well as the more practical applications of technological solutions, sustainable design is a generic skill demand of all designers in the built environment in our contemporary society.

The unit is an individual elective for BDes(Arch) students that integrates knowledge and skills with Design Practice 2A and 2B and also builds on introductory information that is provided in Design Practice 1B and Design Studies 1B, concerning the way in which settlements develop and respond to natural and historical constraints. The unit is also introductory to the Sustainability stream in the BDes(Arch) degree, which in turn provides access to graduate degree programs in Energy Conservative Design. It introduces themes that are developed in more detail in Sustainable Architecture.

Attendance:

The unit will be conducted over seven weeks, with classes of either two or three hours individual duration. Classes will consist of conventional lectures and also of group-presented seminars on research topics. Individual assessment will be by means of a short written assignment, shared assessment of a group research task and a self and group assessment of contribution to the group work on the research task.

DESA 2202 Sustainable Interior Environments

4 credit points. Semester: 2. Classes: Lectures, seminars, laboratories, web-based information. Assumed knowledge: DESA 1101 DESA 1102 or equivalent. Prerequisite: DESA 2101. Assessment: Research paper.

NB: Permission required for enrolment. Architecture stream unit of study

Objectives
Knowledge developed in Design Studies 2 is progressed further in this unit to investigate aspects of designing interior environments. The unit builds upon the understanding of conceptual, precedent and procedural knowledge about inhabiting the built environment demonstrated previously to develop competence in more specialised, in-depth, learning in relation to the principles and issues of designing interior environments. The student develops further understanding of concepts and then chooses particular area to study. Detailed knowledge in this area can be further developed through the elective units DESA 2610 Colour Design 1 and DESA 2611 Colour Design 2. The concepts extended and developed in detail in this unit can also be applied in the core units of study DESA 2003 Design Practice 3A and DESA 2004 Design Practice 3B.

The unit aims to further develop the students' understanding of the principles of environmental perception and cognition, and their application and evaluation in the design of interior spaces and surfaces. The unit also aims to develop the student's understanding of the principles of thermal services, artificial lighting and room acoustics, and their application and evaluation in the design of interiors.

The unit further extends students' capacities for identifying and utilising sources of knowledge by introducing appropriate research methods, and students are required to appiy key principles to a specific project involving designing and evaluating an architectural interior using aspects of the knowledge, and preparing a scholarly paper.

Outcomes
On the successful completion of this unit students will be able to:

- demonstrate a high level of competence in interpreting sources of existing knowledge and question any underlying assumptions on environmental cognition and the design of interior spaces
- demonstrate a high level of competence in interpreting sources of existing knowledge and question any underlying assumptions on environmental controls and the design of interior spaces
- demonstrate their ability to use appropriate research methods in the gathering and interpretation of data
- demonstrate a high level of competence in the application of key concepts in a selected design situation
- demonstrate a high level of competence in evaluating the design situation
- demonstrate a high level of competence in writing a scholarly study

Practical: Investigations, Field studies

DESA 2207 **Sustainable Architecture**

4 credit points. Mr Bruce Forwood. **Semester: 1. Assessment:** Attendance requirements are to 90% minumum of all classes. Assessment will be through a piece of scholarly research on a selected aspect of sustainability of the student's choice.

Aims
This units aims to build on knowledge developed in Design Studies, progressing it further into the specialised field of ecologialty sustainable design in architecture

The unit will further extend your capacity for identifying and utilising sources of knowledge by introducing appropriate research methods, and develops your ability to theorise, generalise and reflect on the data gathered in primary studies as well as from published sources, and to apply principles to specific problems or learning activities such as the preparation of a scholarly paper on a particular aspect of sustainability. The aim of the unit is to address a variety of issues which critically relate the issues of ecological sustainability to architecture. These include developing a critical understanding of assessment of appropriate building methods and materials. The unit also aims to include a critical investigation of the application of these issues to form-making and space-making in relation to contemporary architectural ideas.

Objectives
On successful completion of the unit of study, you will be able to:

- demonstrate a high level of competence in interpreting sources of existing knowledge and question any underlying assumptions.
- demonstrate your ability to use appropriate research methods in the gathering and interpretation of data and in the application of key concepts from published works to architectural sustainability
- demonstrate a high level of competence of applying ESD principles to evaluating a design proposal for a building
- demonstrate a high level of competence in investigating and communicating an understanding of ecologically sustainable design (ESD) form-making and space-making in relation to contemporary architectural thought
- demonstrate an ability to prepare a piece of scholarly research on a selected aspect of sustainability

Generic Skills
On successful completion of this un it of study, the student will have developed their skills in the following areas: knowledge skills, thinking skills, personal skills, personal attributes and practical skills

Contribution of unit to programs
By providing a focus on sustainable design and construction practice, students studying in the BDes(Arch) and BArch programs will gain abroad view of environmentally sustainable design in the context of architecture, and these studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

DESA 2301 **Environmental Technologies**

4 credit points. **Semester: 2. Classes:** lectures, seminars, laboratories, web-based information. **Assumed knowledge:** DESA 1101, DESA 1102, DESA 2002 or equivalent. **Prerequisite: DESA 2101. Assessment:** Research Paper.

NB: Permission required for enrolment. Architecture stream unit of study. Prerequisite unit for the Bachelor of Architecture program.

Objectives
Knowledge developed in Design Studies 2 is progressed further in this unit into specialised environmental and technological design knowledge at a pre-professional and pre-research level. The unit aims to study the detailed design and evaluation of the building fabric to realise environmental management strategies and environmental controls.

The unit builds upon the understanding of conceptual, precedent and procedural knowledge about inhabiting the built environment demonstrated previously to develop competence in investigating, and applying specialised, in-depth, learning in principles and issues. These will include management systems and strategies for controlling building performance, specifically in relation to the design of the building fabric, principles of thermal services, artificial lighting and room acoustics and fire in buildings. It will also address the regulatory environment in relation to these.

The unit further extends students' capacities for identifying and utilising sources of knowledge, and for applying principles to specific problems.

Outcomes
On the successful completion of this unit students will be able to:

- demonstrate an understanding of the principles and behaviour of building fabric which influences environmental performance and its management
- demonstrate a high level of competence in interpreting sources of existing knowledge and questioning any underlying assumptions, and in the application of key concepts from published works to specific concepts in environmental management and controls
- demonstrate an ability to apply the principles of environmental control including thermal, acoustic and lighting environments
- demonstrate a high level of competence in devising appropriate design intentions for and developing a building fabric which enhances the environmental quality of the building interior spaces
- evaluate and justify environmental management strategies which support design intentions and recognise the principles of ecological and environmental sustainability

Practical: investigations, field studies

DESA 1601 **Foundation Art Studio 1**

3 credit points. Ms Jan Fieldsend. **Semester: 1, 2. Classes:** Practical studio work. **Assessment:** Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment.

Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure aplace.
Students choose to attend one of the following modules:

General Drawing

Objectives

This module aims to provide students with the knowledge and aptitude required to use a wide range of fundamental drawing skills and media to make drawings based on observation of the physical world and to experiment with imaginative expression.

Description

The module begins with a discussion of motives for drawing supported by a slide lecture, introduction to a range of drawing materials, instruction on a range of mark-making techniques, methods of tonal range, use of perspective and an understanding of composition.

Outcomes

Students will gain familiarity with a range of drawing media, mostly dry, as well as watercolour and gouache as ground or backwash. They will also be able to use imaginative approaches to observing and recording the visible world using a variety of techniques and combinations of drawing media.

Introduction to Sketching and Drawing

Objectives

This module aims to provide students with some means of sketching from objects, nature and life, and to consider some of the ways of sketching and drawing used by artists and architects.

Description

A series of twelve studio and outdoor sketching and drawing classes introducing materials, methods and characteristics of sketching. Drawing from objects, trees, buildings, urban settings and the imagination. Classes will be based on a series of practical demonstrations and propositions regarding sketching. Reference will be made to drawings by both 20th century arts and older masters, including biographies of artists and architects and works by painters consulted as the students require.

Outcomes

An increased ability to sketch from things seen.

A broader range of skills and techniques, an understanding of sketching as the basis of designing.

Practical: Studio practice. Consumables fee applicable.

DESA 1602 **Foundation Art Studio 2**

3 credit points. Various lecturers. **Semester:** 1,2. **Classes:** Practical studio work. **Assessment:** Attendance, Work practice and Practical studio work.

NB: Permission required for enrolment.
Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure aplace.

Objectives

This unit of study will introduce students to basic practical skills in a variety of art media, provide an awareness of visual arts in general and give an understanding of how a particular medium affects the meaning and form of art.

Description

Students complete their choice of Module A or Module B. Both modules offer students the opportunity to work in 2 or 3 art workshops within one semester. For example, Module A may offer experience in ceramics, plaster and wood; Module B etching, lino block and mono printing. These modules assume little or no experience and provide an introductory basis from which students may continue at a higher level in following years. The particular combination of art workshops will be published prior to enrolment.

Outcomes

Students will have gained a basic level of practical skills in several art media, an awareness of visual arts and an understanding of how various media have specific qualities which then affect the artwork.

Practical: Studio practice. Consumables fee applicable.

DESA 2616 **Explorations in Mixed Media**

4 credit points. Ms Jan Fieldsend. **Semester: 1. Assessment:** Attendance 10%, Participation (may include an oral presentation, research journal, crit sessions) 30%, Portfolio of works 60%.

Aims

In the twentieth century mixed media profoundly changed the form and content of visual arts. This medium came about through investigations into the nature of painting and sculpture by artists such as Picasso and Braque. From this early period mixed media/ collage has found expression in, and indeed been the basis of, many art movements. Mixed media /collage techniques were often employed to disrupt previous notions of art practice and representation as well as commenting on political and social values. Today, in the twenty-first century, mixed media continues to be an innovative art form.

Explorations in Mixed Media examines these developments through practical classes, slide lectures and discussion. Collage, assemblage, montage, photocopy art and the more traditional disciplines of drawing and printmaking are included in mixed media.

This unit of study presents students with a wide range of art materials, techniques and concepts.

It aims to develop skill in and knowledge of various formal considerations in art practice: scale, line, texture, colour, space, shape etc. as well as understanding the conceptual bases of art work. Through a set of preparatory exercises and finished artworks students can explore and develop creative expression, technical abilities and knowledge of materials. An awareness of art history/theory in relation to mixed media will be presented and discussed to inform the student's own approach to image making.

Objectives

On the successful completion of this unit you will demonstrate the learning objectives through:

- exploring and using a variety of media, techniques and knowledge about the visual arts.
- taking this knowledge, learnt in preparatory exercises and developing it into finished art works that then form a substantial portfolio of works.
- using an awareness of art history and theory, in particular the use of mixed media during the twentieth century, to inform decision making in your creative process.
- reflecting on your art practice through a weekly journal, class and tutor crit. sessions and from this point realistically evaluating your own work.

Generic Skills

Through this unit of study a student will

- have a body of knowledge in the field of visual arts, specifically mixed media and an awareness of contemporary art practice.
- be able to exercise critical judgement, realistic self evaluation and imaginative thinking as outlined in the learning objectives.
- be able to apply technical skills as appropriate to art practice and furthermore apply these to new situations.
- develop the ability to plan and achieve a goal through a self directed final project.

Contribution of unit to programs

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) and Bachelor of Design,(Computing) and as such then contributes to the to the student then continuing on to Masters Programs such as Urban Design, Museum Studies etc.

DESA 2617 **Explorations in Ceramic Forms**

4 credit points. Mr Mark Jones. **Semester: 2. Assessment:** Attendance & participation: 10%, technical development/workshop practice:40%, visual diary:10%, final work(s):40%.

Aims

This unit aims to introduce students to aspects of 3D design and construction in ceramics. Students will be encouraged to investigate various methods of ceramic art and design and apply these skills and techniques to set projects which may include mixed media. One of the set projects will utilise the 3D Rapid Proto-typer(A 3D model producing machine) using a computer modeling system.

Objectives

On the successful completion of this unit you will demonstrate the learning objectives through:

- exploring and utilising convergent media in 3d art and design.
- using this knowledge and developing it into finished works.
- reflecting on your art and design practice and evaluating your work through a weekly journal in conjunction with tutor and class crit sessions.

Generic Skills

Through this unit of study students will:

- Knowledge skills: gain the beginning ofabody of knowledge in ceramics and 3D design methods and begin to apply theory to practice in 3D practical work
- Thinking skills: begin to be able to account for decisions; begin to be realistic self-evaluators; begin to adopt a problem-solving approach; become creative and imaginative thinkers
- Personal skills: develop the capacity to continue to learn; develop the ability to plan and achieve goals; develop the ability to work with others
- Personal attributes: begin to acknowledge personal responsibility
- Practical skills: begin to develop solid practical skills which may include digital applications

Contribution to Different Programs of study

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) Bachelor of Design(Computing) and as such then contributes the the student continuing on to Masters Programs such as Urban Design, Museum Studies etc.

Assumed knowledge

To able to build a 3d model in computer aided design.

DESA 2618 **Public Art**

4 credit points. Ms Jan Fieidsend. Semester: 1. Assessment: Attendance 10%, Participation (may include an oral presentation, research, crit sessions) 40%, Essay 50%. Classes: lectures, field trips and art studio practice.

Aims

The field of public art is rapidly growing and as such has generated much debate and interest. What exactly is public art? This question will be looked at in detail by first asking the question what does public mean and then what happens when the word art is connected to it. How is the visual and tactile environment affected by the production of public art?

The aim of this unit is to provide students with a broad overview of the issues that influence and inform the production of art in the public sphere: history and theory of public art, policy and management, conservation, community response and evaluation, current local and international practice. It aims to develop each student's ability to critically analyse and be able to enter into debate (both written and spoken) on public art issues, especially its relationship to architecture. Field trips, artist/ commissioner talks, case studies, (such as the Vietnam Memorial in Washington and the Sydney Olympic Public Art Projects)and slide lectures will complement the theoretical content of Public Art.

Objectives

On the successful completion of this unit a student will demonstrate the learning objectives through:

- being familiar with a wide range of issues about the public art field and from this point be able to enter into an informed debate about this field. This may occur through group discussion, seminar presentation and essay writing.
- investigating and developing a critical analysis of a specific area of public art.

Generic Skills

Through this unit of study a student will:

- have a body of knowledge in the field of visual arts, specifically public art.
- be able to exercise critical judgement, realistic self evaluation and imaginative thinking as outlined in the learning objectives
- develop the ability to plan and achieve a goal by researching and writing an essay/seminar

Contribution to Different Programs of study

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) and Bachelor of Design,(Computing) and as such then contributes to the student then continuing on to Masters Programs such as Urban Design, Museum Studies etc.

DESA 2619 **Site Specific Art**

4 credit points. Ms Jan Fieidsend. Semester: 2. Classes: Art Studios, Slide lectures, Field Trips. Assessment: Attendance 10%, Participation(may include an oral presentation, research journal, crit sessions) 30%, Exercises 30% Final project 30%.

Aims

Over the past thirty years the relationship of art to site has been a major concern to contemporary artists. Art that is contextualised by place and space has taken the form of installation/sculpture, performance art, earthworks, public art, political and ephemeral artwork.

This practical unit of study enables students to explore visual art that is conceptualised and made for a particular place and space - public, interior, exterior, industrial, urban, rural, corporate, domestic - amongst many others. Students will use a range of traditional and non-traditional materials and techniques in a set of preparatory exercises (including collaborative assignments) and two finished projects. One project focuses on an interior space and the second is sited in an external environment. Written exhibition proposal and documentation skills are an integral part of the course. The relationship of site-specific art to architecture will be discussed throughout the course and highlighted in a field trip.

The unit looks at a wide variety of site-specfic art practices as a way of informing a student's own approach and extends the theoretical and management issues raised in the Public Art unit of study.

Objectives

On the successful completion of this unit a student will demonstrate the learning objectives through:

- exploring and using materials and techniques to create artworks that are particular to a site.
- taking this knowledge, learnt in preparatory exercises and developing it into finished art works.
- using an understanding of site specific art history and theory to inform decision making in your creative process as well as entering into thoughtful debate.
- reflecting on your art practice through a weekly journal, class and tutor crit sessions and from this point realistically evaluating your own work.

Generic Skills

Through this unit of study a student will

- have a body of knowledge in the field of site specific art practice.
- be able to exercise critical judgement, realistic self evaluation and imaginative thinking. This unit of study encourages a problem solving approach through its assignments where students will need to integrate various elements(often experimental) into a finished work.
- be able to apply technical skills as appropriate to site specific art practice and furthermore apply these to new situations.
- develop the ability to plan and achieve a goal through a self directed final project.

Contribution of unit to programs

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) and Bachelor of Design Computing and as such then contributes to the student then continuing on to Masters Programs such as Urban Design, Museum Studies etc.

DESA 2601 **Art Studio 1**

4 credit points. Ms Virginia Ross, Ms Paola Talbert (Photography), Seraphina Martin (Etching). Semester: 1,2, Summer. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Photography

Objectives

This module combines practical camera and darkroom work with discussion and analysis of how photography functions as a contemporary visual medium.

Description

The module covers use of a 35mm SLR camera and assumes that students have little or no prior photography experience. Technical skills developed include camera operation, composition, use of studio lighting, film developing, printing photographs and experimental techniques. Photographs of a wide range of subjects such as buildings and building details, landscapes, portraits and still lifes are produced. Practical work includes darkroom and studio work and gallery visits.

Outcomes

Students should understand and be able to demonstrate the principles and practice of camera operations and of the production of high quality black and white negatives and prints. They should also develop an understanding of the role of photographic practices as a contemporary visual medium, including its historical development and its different applications in such areas as the visual arts, architectural photography and mass media.

Etching

Objectives

This module aims to develop various levels of image making, while extending technical skills and exploring etching as an artistic medium. Students will understand the fundamentals of how a print is manipulated, produced and printed. Solar etching is a contemporary, safe alternative to traditional etching, using ultra violet light to etch the image rather than nitric acids.

Description

The module introduces students to a wide range of mark-making techniques relevant to the etching process. Students will acquire a broad understanding of how an etching is made. Emphasis will be placed on skills, process and conceptual awareness relevant to developing their own personal vision.

Outcomes

At the conclusion of this module students will have gained a broad understanding of the techniques required to produce an etching and have a working understanding of chemicals, equipment and materials used in the studio. Students will build on their experience using a combination of textures, photographs, found objects and computer images as a means to creating their original prints. Architecture students may wish to incorporate architectural references within their work.

Practical: Studio practice. Consumables fee applicable.

DESA 2602 **Art Studio 2**

4 credit points. Mr Mark Jones (Ceramics), Mr Akhim Dev (Video), Ms Sue Pedley (General Drawing). Semester: 1, 2. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Ceramics - Wheel Throwing

Objectives

The aim of this module is to produce a set of wheel-thrown ceramics with emphasis on design, form and function.

Description

The module introduces varied techniques of throwing on the wheel to produce vessels and designed forms with an emphasis on the art and craft of this age-old method of construction. There will be an investigation of this practice at both historical and contemporary levels. Various techniques will be introduced including combination throwing and handbuilding, turning, glazing and brushwork with slips and underglazes.

Outcomes

At the end of this module students should:

- be technically proficient at centering, throwing, turning, and applying handles to ceramic vessels;
- have developed brushwork designs using slips and underglazes for a predetermined breakfast set;
- have a basic understanding of technical issues associated with ceramic production such as drying, firing and handling; including firing schedules - ie, bisque and glaze.
- have an awareness of historical and contemporary approaches to wheel made ceramics.

Digital Video

Objectives

This module will explore the language(s) of moving images, conventions of framing, movement and editing; develop an understanding of the fundamental technical aspects of pre-production, production and post-production; and generate independent and cooperative production using a variety of media.

Description

In this video module, VHS and digital video systems with Premiere editing software will be used. Emphasis is placed on skills' development, process and conceptual awareness. The module is divided into units exploring approaches to lighting, shooting, editing, sound production and concept development for film and video.

Outcomes

Students will gain technical proficiency in the diverse areas of pre-production, production and post-production; understand conventions of classical continuity and main visual styles; and produce a moving image piece using videotape or mixed media. Students are assessed in the context of theoretical understanding and technical aptitude in the various aspects of moving image production.

General Drawing

Objectives

This course aims to provide students with the knowledge and aptitude required to use a wide range of fundamental drawing skills and media to make drawings based on observation of the physical world and to experiment with imaginative expression.

Description

The module begins with a discussion of motives for drawing supported by a slide lecture, introduction to a range of drawing materials, instruction on a range of mark-making techniques, methods of tonal range, use of perspective and an understanding of composition, through structured projects students learn to use these materials and techniques to express individual responses based on observation in creative and imaginative ways.

Outcomes

Students will gain familiarity with a range of drawing media, mostly dry, including charcoal, graphite, pencil, conte, pen and ink, brush and ink, as well as watercolour and gouache as ground or backwash. They will also be able to use imaginative approaches to observing and recording the visible world using a variety of techniques and combinations of drawing media.

Practical: Studio practice. Consumables fee applicable.

DESA 2603 **Art Studio 3**

4 credit points. Mr Geoff Levitus (Painting), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture). Semester: 1, 2. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Painting (Acrylic)

Objectives

This module aims to provide the student with the knowledge, skills and aptitude required to use a range of fundamental painting skills to make paintings based on observation of the physical world, and to experiment with imaginative applications of acrylic media based on observational skills.

Description

The module shows students who have little or no experience with painting how to prepare canvas and grounds, mix colours, then undertake practical work in observational painting (still-life painting form, modelling and shading techniques), anatomy (painting with a live model, self-portraiture), perspective and ideas and images (style and appropriation, the decorative, words and text, collage and abstraction).

Outcomes

On successful completion the student should have gained familiarity with acrylic media; be able to apply basic colour theory, to mix secondary and tertiary colours, and to create a tonal range; and be able to use imaginative approaches to observing and painting the visible world based on sketches and studies.

Ceramics - Hand Building

Objectives

The aim of this module is to introduce the many and varied techniques of hand building clay as well as the processes of firing and glazing.

Description

The module involves an exploration of the plastic properties of clay to create a wide variety of constructions that will be fired and glazed. There will be an investigation of hand built ceramics at both historical and contemporary levels. Set projects will enable students to discover their own means of expression and design of sculptural forms. Projects include slab and coil construction and combinations of coil, slab and pinch construction. Various surface finishes such as brushwork, glazing and sculptural rehef applications will be introduced including coloured underglazes, slips and glazes.

Outcomes

At the end of this module students should:

- have an understanding of pinch, slab and coil construction techniques with an awareness of historical and contemporary approaches to hand built ceramics;

- have an understanding of brush work and coloured glaze and underglaze applications;
- have the ability to plan and complete projects as well as development of a critical approach to form making including the use of the wheel for large coil constructions;
- have a basic understanding of technical issues associated with ceramic production such as drying, firing and handling,
- understand firing schedules - ie, bisque and glaze.

Sculpture

Objectives

This module provides students with knowledge, skills and confidence to use a range of materials and techniques necessary for three-dimensional sculpture. They will be introduced to the conceptual and theoretical aspects of sculpture.

Description

This is an introductory module for students with little or no previous experience in sculpture. A number of traditional sculptural techniques such as clay modelling, plaster mould making, casting in cement, soldering and welding will be taught and used to explore elementary aspects of three-dimensional form. The student will be required to complete two projects: to make a traditional portrait as well as a more conceptually based work.

Outcomes

The student should become aware of the inter-relationships between the technical, personal and conceptual concerns in sculpture making.

Practical: Studio practice. Consumables fee applicable.

DESA 2604 Art Studio 4

4 credit points. Ms Jan Fieldsend (Screen Printing), MsTeena Clerke (Graphic Design). **Semester: 1, 2. Classes:** Practical studio work. **Assessment:** Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Screen Printing - Paper

Objectives

This module will introduce the student to a range of screen printing techniques as well as developing creative and design skills. It will provide basic awareness of the history of screen printing in the graphic and the fine arts.

Description

This beginners' module covers design development, the preparation of hand-cut, wax, and photo-emulsion stencils, colour mixing, image registration and editioning. Artist quality, water-based non-toxic inks are used. An awareness of historical and contemporary screen prints is also taught. Students will produce an edition of multi-coloured screen prints or a series of experimental works. A critical approach to production and construction of images will be encouraged. Architecture students may wish to use screen printing techniques to enhance their design presentation.

Outcomes

On successful completion the student should have gained a knowledge of a range of design techniques for screen printing and be familiar with screen printing stencils, including photo stencils, ink technology, image registration and editioning as well as experimental techniques, they should also have a basic understanding of colour and appreciation of screen printing in its graphic, industrial and fine arts applications.

Screen Printing - Fabric

Objectives

The purposes of this module are to provide students with the knowledge and skills to design for and print on textiles; for students to gain an appreciation of textile design, both clothing and furnishing applications; and to experiment with various techniques and to develop finished textile prints that exhibit an imaginative understanding of colour and design as well as technical proficiency.

Description

This beginners' module investigates the teaches hand painting, paper, wax and photostencils, mixing and fixing of inks, design and colour exercises as related to suitable fabrics; scatter printing, over printing, repeat pattern and multi-colour printing. Projects may include collaboration with Object Design students to produce a work combining both textile and wood/metal - eg, furniture.

Outcomes

On successful completion of this module the students should have gained a knowledge of a range of stencils (wax emulsion, photostencils and paper); be familiar with ink technology and its relation to various fabrics; have an appreciation of textile design; be aware of design in its application to textiles; and have completed a finished print and a journal of design process.

Graphic Design

Objectives

This module aims to develop visual literacy with graphic techniques involving a variety of media; encourage students to value visual experimentation and initial research as a process for personalised creative problem solving; initiate group and self-assessment methods for evaluating and analysing receiver engagement and communication effectiveness of a design solution; and to introduce the importance of hand skills and project management in the refining and detailing of processing, production and presentation of design solutions.

Description

This module introduces students to the basic skills, concepts and materials of graphic design, undertaking preliminary exercises in layout, use of type, illustration techniques and paper engineering. A set of exercises integrates and develops the range of skills explored in the preliminary exercises by concentration on set themes. This course does not use computers but emphasises essential skills that provide the foundations of all graphic design.

Outcomes

Students will gain the ability to maximise the graphic qualities and physical form of media and apply them to static and dynamic design solutions, and to understand the criteria by which communication effectiveness can be evaluated along with receiver engagement.

Practical: Studio practice. Consumables fee applicable.

DESA 2605 Art Studio 5

4 credit points. Mr Ryszard Dabek (Web Art and Design), Mr Geoff Levitus and Mr Frank Littler (Life Drawing). **Semester: 1, 2. Classes:** Practical studio work. **Assessment:** Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

*Web **Art and Design***

Objectives

This module combines practical computer program and Internet work with discussion and analysis of how Web design functions as a contemporary visual art medium.

Description

The Web design workshop is aimed at students who wish to learn the basics of Web design and Internet page creation. At this level, no previous computer experience is needed. The module encourages students to look beyond the more obvious uses of the Internet (commence, reference etc.) and engage with the net in terms of its creative potential and cultural relevance. The program will examine uses of the Internet by contemporary artists in such diverse areas as media arts, architecture, hypertext writing and other emerging forms of net.art that engage with the very form of the Internet itself.

Outcomes

Starting from a basic introduction students will gain the skills necessary to design, build and publish their own Internet site on the World Wide Web. In addition to using the latest Internet browsers (Netscape 4.x), students will learn to create Web sites using Dreamweaver 1.2 and Photoshop 5.x and publish them using an FTP program such as Fetch. Students will have an understanding of the complex place and construction Web art.

*Life **Drawing***

Objectives

This module aims to increase the students' level of skill in all three areas of drawing: representational, interpretative and expressive; to develop dynamic approaches to drawing the human body; to use a wide range of media and techniques, to focus on such areas as weight, movement, and direction as well as the formal aspects of composition, anatomy and foreshortening.

Description
This module provides students with the opportunity to combine sound observational skills with imaginative and experimental techniques in order to encourage a personal vision and style and a commitment to the practice of drawing as a discipline in its own right.
Outcomes
Students will build on previous drawing experience and be able to use a range of approaches to depict the human body. Students should have enough experience at the end of the module to be able to criticize and select from their own work for their final portfolio or exhibition.
Practical: Studio practice. Consumables fee applicable.

DESA 2606 Art Studio 6

4 credit points. Mr Mark Jones (Ceramics), Ms Virginia Ross and Ms Paola Talbert (Photography), Mr Geoff Levitus (Oil Painting), Ms Linda Fienberg (Object Design). Semester: 1,2, Summer. Classes: Demonstrations, Practical studio work, Slide lectures, Gallery visit and Group discussions. Prerequisite: for subject area Ceramics * Art and Design, prereq Ceramics Hand Building or Ceramics Wheel Throwing subject area; for subject area Experimental Photography, prereq Photography subject area; for subject area Oil Painting, prereq Drawing or Painting subject areas. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.
NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

***Ceramics - Art and** Design*
Objectives
This module aims to produce a number of individually designed ceramic works that develop and extend techniques learnt in Ceramics - Hand Building or Wheel Throwing.
Description
Larger and more advanced forms will be attempted with combinations of coil, hard slab and throwing techniques. Students will be introduced to plaster moulds for large constructions and relief decorations. An individual approach to vessel and sculptural construction will be informed by contemporary ceramic practices. In addition, experimental surface treatments will be explored. Architecture students will be able to use this module to explore architectural forms using ceramic and mixed media.
Outcomes
At the end of the module students should:
- be able to construct more technically difficult forms than in their previous Studio,
- have the ability to design work from concept to finished object,
- have developed self-initiated projects,
- have explored various advanced surface treatments.

Experimental Photography
Objectives
This module builds on the skills learned in Photography Art Studio and incorporates advanced camera work and printing with development of conceptual and experimental photography skills.
Description
Students learn to combine advanced photography techniques such as pushing film, photomontage, copy-stand work and experimental techniques such as sandwiching negatives and hand-colouring with development of appropriate conceptualisation of the ideas behind the photographic work. There is emphasis on development of further technical skills combined with advancement and consolidation of their understanding of the role of photographic practices as a contemporary visual medium. Students will research a number of different genres in photographic history, bringing this to bear on their work for the module. A critical attitude to the production and construction of images will be encouraged.
Outcomes
Students should understand and be able to demonstrate advanced principles and practice of camera operations, the manipulation of negatives, and printing of high quality, large-scale prints.

Oil Painting
Objectives
The purpose of this module is to provide the student with the knowledge and skills required to use a range of painting techniques in oil and to develop an awareness of contemporary art as it relates to the traditional medium of oil painting.
Outcomes
Students will know how to:
- prepare canvas and grounds and mix colours;
- produce a series of preparatory exercises and finished works that investigate observational painting (still life), anatomy (painting with live model, self-portraiture), perspective, ideas and images (style, appropriation, the decorative, words and text, abstraction);
- to experiment with imaginative applications of oil media based on observational skills;
- have an awareness of contemporary art.

Object Design - Wood
Objectives
This unit aims to develop students' understanding of wood - properties, different species, and sources of timber. Students will develop woodworking and machining skills suitable for producing small objects and models and a greater appreciation of high quality workmanship in timber detailing. Students will also acquire skills in communicating concepts in 3 dimensions.
Description
The unit introduces students to workshop tools and machinery through a series of tutorials, demonstrations, experiments, discussions and woodworking exercises. As the unit progresses students will develop their ability to select and work with different types of timber and also increase their understanding of workshop, machining and production processes used in joinery and furniture workshops.

Students will be required to produce an original design for and make a small 'special' object, sourcing their own timber and researching the origin and timber species for a presentation. Discussions will include debates about sustainability, the value of rare and exotic timber species and occupational health and safety issues.
Outcomes
On completion of the unit students will have
- experience and confidence in using woodworking equipment
- an understanding of the techniques and practices used in furniture and joinery workshops
- an appreciation of timber and its qualities
- an improved ability to design well with timber and think and work in 3 dimensions
- knowledge of different sources of timber.

Practical: Studio practice. Consumables fee applicable

DESA 2608 Advanced Art Studio 1

4 credit points. Ms Virginia Ross (Photography), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture), Ms Linda Fienberg (Object Design). Semester: 1, 2. Classes: Practical studio work, lectures, development of ideas through group discussions, gallery visit, exhibition, group critique of artwork. Prerequisite: Art Studio in the same medium with a result of at least 65 per cent. Assessment: Attendance and participation, Studio assessment for technical development, Visual research journal, Final artwork. A process diary and an artwork for exhibition are the final projects. Attendance, Application and participation, Development of technical skills, Completed coursework.
NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.
Objectives
This unit allows the student to extend and develop skills and knowledge gained in the Art Studio workshops. Through an advanced use of the media, art theory lectures and seminars, the production of a visual research journal and a final exhibition project students should be able to integrate their skills and knowledge in the creation of an artwork. A critical and conceptual approach to image and object making will be further developed around a set theme. The theme changes each year and will be published prior to enrolment.
Description
The following studios are offered at advanced art level: ceramics, photography, painting, drawing, mixed media, sculpture, screenprinting on paper and fabric, video, graphic design, printmedia, visual art and culture, new media arts, object design.

Please note that some studios may not be offered every year.
Outcomes
Students should understand and be able to demonstrate advanced principles and practice in the studio they are participating in as

well as a highly developed conceptual approach to the production of their artwork.

Through discussion, writing and practice, students develop their ability to define and refine initial ideas into a cohesive work of contemporary visual art. A critical attitude to the production and construction of images is encouraged.

Students will gain experience in presenting and installing their artwork into an exhibition environment and contributing to a catalogue of the exhibition.

Practical: Studio practice, Gallery visits, Exhibition installations. Consumables fee applicable.

DESA 2609 **Advanced Art Studio 2**

8 credit points. Ms Virginia Ross (Photography), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture), Ms Linda Fienberg (Object Design). Semester: 1. Classes: Practical studio work, lectures, development of ideas through group discussions, gallery visit, exhibition, group critique of artwork. Prerequisite: Art Studio in the same medium, with a result of at least 65 per cent. Assessment: Attendance and participation, studio assessment for technical development, visual research journal, final artwork. A process diary and an artwork for exhibition are the final projects. A 2000 word research paper/essay and presentation of a seminar is required. Attendance, application and participation development of technical skills, seminar, completed coursework.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place,

Objectives

This unit allows the student to extend and develop skills and knowledge gained in the Art Studio workshops as well as completing theoretical work. Through an advanced use of the media, art/architectural theory lectures and seminars, the production of a visual research journal and a final exhibition project students should be able to integrate their skills and knowledge in the creation of an artwork. A critical and conceptual approach to image and object making will be further developed around a set theme. The theme changes each year and will be published prior to enrolment. Students will write a 2000 word essay and present a seminar in addition to practical work.

Description

The following studios are offered at advanced art level: ceramics, photography, painting, drawing, mixed media, sculpture, screenprinting on paper and fabric, video, graphic design, printmedia, visual art and culture, new media arts, object design.

Please note that some studios may not be offered every year.

Outcomes

Students should understand and be able to demonstrate advanced principles and practice in the studio they are participating in as well as a highly developed conceptual approach to the production of their artwork.

Students will gain skills in researching and writing a theoretically -based essay on a topic related to the year's theme, and in presenting a seminar based on a set reading.

Through discussion, writing and practice, students develop their ability to define and refine initial ideas into a cohesive work of contemporary visual art. A critical attitude to the production and construction of images is encouraged.

Students will gain experience in presenting and installing their artwork into an exhibition environment and contributing to a catalogue of the exhibition.

Practical Studio practice, gallery visits, exhibition installation. Consumables fee applicable.

Practical: Studio practice, Gallery visits, Exhibition installation. Consumables fee applicable.

DECO 1001 **Digital Image Representation and Design**

3 credit points. Prof Mary Lou Maher. Semester: 1. Classes: Lectures and tutorials. Assessment: 1. Scanned and modified image 2. Personal image portfolio 3. Group project of images to promote a physical product.

NB: Permission required for enrolment.

Objectives

- To introduce the representation of digital images.
- To develop digital images for design.
- To develop an understanding of software for digital image design.

Description

Digital images are the basis for the visualisation of digital representation of designs on computer screens and paper. This unit of study introduces the concepts of pixel representation through an understanding of image quality and resolution. The sources of images from photographs, sketches, 3D models, or drawing software are considered. Software for creating, editing, managing and printing digital images in the context of a project is introduced.

Outcomes

- understanding of the different representations, formats and file types for digital images.
- skills in using digital image software such as Photoshop.
- a portfolio of images presented as printed media, Web pages, and slides.

DECO 2002 **Interactive Multimedia Design**

4 credit points. Prof Mary Lou Maher. Semester: 1. Classes: Lectures and tutorials. Assessment: 1. Tutorial exercise 2. Personal multimedia presentation 3. Group multimedia project.

Objectives

- To develop an understanding of multimedia development methodologies.
- To introduce concepts of interactivity and navigation through multimedia content.
- To develop skills in multimedia authoring software.

Description

Multimedia content is the basis for the presentation of a design or family of design products and is also a product of design. This unit of study considers the methodologies for designing a multimedia product and applies them to the use of multimedia content in an interactive environment. The unit of study develops skills in the use of software such as Flash and Macromedia Director.

Outcomes

- An understanding of the concepts of designing interactive multimedia presentations.
- Skills in designing, developing, and implementing a CD-ROM product.

DECO 1002 **Web-based Design Information Systems**

4 credit points. Prof Mary Lou Maher. Semester: 2. Classes: Lectures and tutorials. Assumed knowledge: DECO 1001 Digital Image Representation and Design or equivalent. Assessment: 1. Home page design 2. Personal design portfolio 3. Group Web design project.

NB: Permission required for enrolment.

Objectives

- To introduce the software and languages of Web pages.
- To develop an understanding of effective navigation, layout, colour contrast, and styles for Web sites.
- To introduce various media types and their formats on the WWW.
- To develop skills in creating Web pages with images, CAD files, 3D models, and animation.

Description

Web pages are becoming as essential part of the representation of design information, project data, and marketing information. This unit of study introduces the basics for creating Web pages, and develops them further for Web site design. Design information is stored in various formats and media types. In a project Web site, all media types can be made available on an intranet or the Internet. In this unit of study, a web-based design information system will be developed in the context of a design project.

Outcomes

- an understanding of the Internet protocols and languages and file formats for the WWW.
- skills in creating effective Web sites through the consideration of style, navigation, and use of different media.
- skills in using software such as Dreamweaver, and in publishing on the WWW.

DECO 1003 **CAD Modelling**

4 credit points. Semester: 2. Classes: Lectures and tutorials. Assessment: 1. CAD tutorial 2. Personal modelling project 3. Group-developed CAD model.

NB: Permission required for enrolment.

Objectives

- To introduce the basic concepts of CAD modelling and presentation.
- To develop skills in creating 3D models, 2D sections and plans, and animations from CAD models.

Description

CAD is now an established media for the representation and presentation of design products. The use of CAD as a design environment as well as a documentation tool is a challenge for

CAD users. The unit of study presents the basics of drawing and modelling in 2D and 3D for the development and documentation of design products.

Outcomes

- an understanding of how 3D objects are represented in CAD models.
- skills in using a CAD system.
- a portfolio of design presentations and documentation.

DECO 2001 **3D Modelling and Photorealism**

4 credit points. Prof Mary Lou Maher. Semester: 1. **Classes:** Lectures and tutorials. **Assessment:** 1 .Tutorial exercise 2. Personal 3D modelling project 3. Group modelling project.

Objective

- To develop an understanding of the representation of 3D digital models.
- To develop an understanding of the algorithms and properties for creating photorealistic images of 3D digital models.
- To develop skills in creating and modifying 3D models with material properties and light sources.

Description

3D modelling is the basis of most CAD models, 3D animation, and the development of photorealistic images of designs before construction or manufacture. This unit of study considers the underlying representation of 3D objects in 3D modelling software. Various algorithms and their assumptions for photorealism are presented. The benefits of a 3D model with textures, material properties and light sources are explored through a design project. This unit of study develops skills in the use of 3D modelling software.

Outcomes

- an understanding of the concepts underlying 3D modelling software.
- skills in creating photorealistic images from 3D models.
- a portfolio of 3D models.

DECO 2005 **Computer-Supported Collaborative Design**

4 credit points. Prof Mary Lou Maher. **Semester: 2. Classes:** lectures and tutorials. **Assessment:** 1. Analysis of design communication 2. Case study of computer-mediated collaboration in a design firm 3. Collaborative design project.

Objectives

- to introduce synchronous and asynchronous communication technologies.
- to develop an understanding of communication and representation of design data in a computer-mediated collaborative design project.
- to develop skills in using collaborative technologies.

Description

Most design projects require collaboration of people from different professions and different physical locations. The effective use of computer-supported collaboration tools and environments requires an understanding of their roles and advantages. This unit of study considers the concepts behind computer-mediated collaborative design and develops an understanding of these concepts through a design project.

Outcomes

- an understanding of the similarities and differences of computer-mediated and face to face communication.
- Skills in the use of collaborative tools such as email, shared whiteboards, bulletin boards, video conferences, and shared modelling environments.
- a design product developed through computer-supported collaboration.

DESP 1201 **Introductory Urban Design and Planning**

3 credit points. **Semester: 2. Classes:** lectures and seminars. **Assessment:** written assignments.

NB: Urban Design and Planning stream unit of study

Objectives

Students will have knowledge and understanding of key ideas, and be able to appreciate the context relevant to designing for the built environment.

Description

The unit will cover the following topics:

- The roles of government in planning, designing, managing and constructing the built environment
- Evolving concerns for the urban environment
- Planning and design instruments
- Components of the public domain
- Types of public infrastructure
- Infrastructure and urban form
- Key urban design ideas
- Innovative urban development
- Basic planning and development control procedures
- Environmental sustainability and its challenges
- Current major issues (affordable housing, reduced travel demand, denser and better designed built form, increasing complexity with life styles and accessibility requirements)

DESP 2201 **Designing and the Public Domain**

4 credit points. Semester: 1. Classes: lectures, workshops and studio. **Assessment:** Proposals and reports on projects.

NB: Permission required for enrolment. Urban Design and Planning stream unit of study

Objectives

Students will be able to:

- undertake background studies to inform designing for various elements of the public domain (streets and roads, open space and public places, car parks and pedestrian networks, centres)
- formulate and respond to complex problems
  Prepare and present simple proposals
- use basic terms, concepts and methods in practical urban design and planning situations

Description

Topics covered in this unit include:

- Components of the public domain
- Roles of government and private agencies in shaping the public domain
- Complex areas and competing uses
- Observing and interpreting public spaces
- Planning procedures and management of the public domain
- Types of plans
- Understanding context (physical, procedural, social);
- Preparing and presenting proposals
- Case studies

Teaching is based on a set of group projects that will require each student to prepare design drawings, plans and supporting studies. These projects will be considered in workshops, with discussion of relevant literature and cases.

DESP 2202 **Design and Planning Instruments**

4 credit points. **Semester: 2. Classes:** lectures, workshops and studio. **Assessment:** proposals and reports on projects.

NB: Permission required for enrolment. Urban Design and Planning stream unit of study

Objectives

Students will be able to:

- prepare local area studies and site plans
- formulate design problems and outline briefs; and prepare design responses including basic masterplans, design guidelines and planning instruments

Description

Topics include:

- Preparing and implementing masterplans
- Purposes and components of masterplans
- Types of planning instruments and design guidelines
- Preparing background studies
- Formulating design problems and briefs
- Site planning
- Preparing masterplans and supporting instruments

Teaching is based on set of group projects, which will require each student to prepare design drawings, plans and supporting studies. These projects will be considered in workshops, with discussion of relevant literature and cases.

DESP 2203 **Urban Development and Planning**

4 credit points. **Semester: 2. Classes:** lectures, workshops and seminars. **Assessment:** assignments on literature and cases.

NB: Permission required for enrolment. Urban Design and Planning stream unit of study

Objectives

Students will develop understanding of environmental issues arising from urban development, and be able to propose designs, plans and other measures that are sensitive to potential impacts.

Description

Topics covered include:

- History of urban planning and environmental issues
- Roles of government in managing the built environment

- Environmental legislation, planning instruments, design guidelines and development control Urban growth and metropolitan planning
- Relations between land-use and transportation planning Infrastructure and urban form
- Innovative forms of transport and supportive development
- Types of design and planning instruments
- Environmental impact assessment, auditing and reporting
- Measures to engender environmental sustainability
- Exemplary cases of environmentally sensitive urban design
- Urban design and sustainable environments.

Teaching is based on set of group projects, which will require each student to prepare design drawings, plans and supporting studies. These projects will be considered in workshops, with discussion of relevant literature and cases.

DESP 2204 Planning for the Built Environment

4 credit points. **Semester: 1. Classes:** lectures, workshops and seminars. **Assessment:** assignments and reports on cases.

NB: Permission required for enrolment. Urban Design and Planning stream unit of study

Objectives

Students will be able to investigate and report on a range of issues relevant to the design of urban development projects comprising buildings and public places.

Description

Areas covered include:

- Reviewing and interpreting design guidelines, planning instruments and other relevant documents
- Requirements enforced through conditions of development consent (energy efficiency, waste management, reducing runoff etc)
- Background studies and reporting
- Statements of environmental effects
- Integrating different scales of considerations
- Key ideas relating to local areas (accessibility, permeability, connectivity, networks, precincts, variety, interest, mixed uses, scales and forms of buildings and spaces, etc)
- Metropolitan form (development corridors, centres and transit oriented development, compact and adaptable urban form, better-structured cities etc)

Teaching is based on lectures and group discussions on literature and case studies. Students will be required to consider background studies required to properly inform the preparation of design and planning responses to projects. These projects will be considered in workshops, with discussion of relevant literature and cases.

DESP 2205 Planning Sustainable Built Environments

4 credit points. **Semester: 2. Classes:** lectures, workshops and studio. **Assessment:** assignments and reports on projects.

NB: Permission required for enrolment. Urban Design and Planning stream unit of study

Objectives

Students will be able to appreciate design problems in regard to potential impacts and opportunities for sustainable design; design with regard to environmental sustainability; prepare urban design and planning proposals for achieving sustainable built environments.

Description

Areas covered include:

- Principles of sustainable design (natural ventilation and lighting, energy efficiency, recycling of materials and waste, drains and managing run-off etc)
- Transit oriented development and 'better-structured' cities
- Implementation of sustainable design with planning instruments, design guidelines, development conditions

Teaching is based on set of group projects, which will require each student to prepare design drawings, plans and supporting studies. These projects will be considered in workshops, with discussion of relevant literature and cases.

DESA 2620 Elective - General 1

3 credit points. **Semester: 1**.

DESA 2621 Elective - General 2

3 credit points. **Semester: 1**, 2.

DESA 2622 Elective - General 3

4 credit points. **Semester:** 1, 2.

DESA 2623 Elective - General 4

4 credit points. **Semester: 1**, 2.

DESA 2624 Elective - General 5

4 credit **points. Semester: 1,2.**

DESA 2625 Elective - General 6

4 credit points. **Semester: 1,2.**

DESA 2626 Mathematics in Architecture

3 credit points. Dr Simon Hayman. **Semester: 1. Assessment:** Attendance requirements are to 90% minimum of all classes. Assessment will be through an assignment.

Aims

The unit provides an introduction to the role of mathematics in architecture from a practical and theoretical perspective. An understanding of both of these facets is required to see how they have played, and continue to play, important roles in quantitative as well as qualitative aspects of architecture. To this end, it aims to provide essential background mathematical knowledge and skills for for further mandatory and elective units of study study and design practice.

Objectives

On successful completion of the unit of study, students will:

- B e aware of the rational tradition of mathematics in architecture;
- Be aware of the range of mathematical skills required for further areas of study;
- Have demonstrated an ability to analyse problems systematically, document arguments accurately and justify arguments rationally.

Generic Skills

On successful completion of this unit of study, the student will have developed their skills in the following areas: knowledge, skills, thinking skills, personal skills and practical skills

Contribution of unit to programs

Mathematical skills covered in this unit will provide foundation for assumed knowledge in other areas of further study in the BDes(Arch), such as construction, structures and environmental sciences, and practice. In addition it will assist in providing a broader view of the historical and cultural context of architecture.

DESA 2627 Elective - Research 1

3 credit points. **Semester:** 1,2.

DESA 2628 Elective - Research 2

4 credit points. **Semester: 1**, 2.

ARCF 6001 Preparatory Honours Research

4 credit points. Prof Gary Moore, Dr Glen Hill and staff. **Semester: 2. Classes:** lectures. **Assessment:** A developed research proposal that provides a rationale for the research, articulated research question, review of relevant literature, and detailed statement of research design, methods of information collection and data analysis.

Objectives

The unit aims to equip students with the research, scholarly and writing skills needed to prepare an honours thesis or similar research and scholarly documents. It will provide an introductory overview of basic research and scholarship techniques; basic methodological skills; information search, storage and retrieval techniques; and organisation and writing skills for completing a scholarly research document.

Description

The unit is divided into two parts. The first will cover the following basic issues that are involved in an honours thesis: deciding on a research topic; research design; searching for and analysing or interpreting information; managing a research project; writing a research proposal. The second part will involve each participant working with the instructor, other members of the seminar and his or her supervisor to produce an accepted research proposal.

Outcomes

At the completion of the unit, students will be expected to have acquired the skills necessary for the successful completion of an honours thesis or equivalent scholarly research document.

3 Bachelor of Architecture

Aims of the BArch degree

The basic aims of the professional BArch program are to provide the knowledge, skills and experience that will equip the graduate to be an architect. The practice of architecture today is, however, extraordinarily diverse and complex and no course could provide training in depth for all areas of practice. It is therefore essential that students obtain from the course a firm grounding in fundamentals, an ability to think creatively and logically, and a capacity to explore for themselves those areas they wish to pursue in detail.

Objectives of the BArch

Each architecture program has a particular bias or emphasis, within the guidelines for professional accreditation, based on the interests and strengths of the staff and departments and their vision for the future.

The program will enable:

- the student to gain the necessary knowledge and skills to become an architect, noting the increasing complexity and diversity of the architect's role.
- the satisfaction, where possible, of the demands of the professional and statutory bodies for entry to the professional institute and to qualify for registration, with minimal additional examination, in the context of academic independence in the judgements it makes on the education it provides.
- the student to experience a range of attitudes and philosophies relating to architecture.
- the student to be exposed to and acquire a range of knowledge which is expected to result in graduates who can provide the community with the highest quality of architecture, including to be able to think clearly and be able to make reasoned judgements by having:
  (i) an understanding of and experience in architectural design;
  (ii) a knowledge of the history of architecture;
  (iii) a knowledge of theories of architecture;
  (iv) a knowledge of the materials, construction practices and production methods which are essential to architecture;
  (v) the ability to absorb and interpret the needs of society and its peoples in relation to the built environment;
  (vi) a basic understanding of those technical fields which contribute to architecture;
  (vii) an understanding of the legal and professional responsibilities of practice as an architect;
  (viii) the ability to communicate clearly by oral, written and graphic means, and to organise and manage those aspects of the design and construction of a building which are the responsibilities of the architect.

Requirements for the BArch

A minimum of 96 credit points is required to satisfy the requirements for the BArch including the completion of certain mandatory units of study.

The 96 credit points required for the degree are obtained over two years of full-time study when the 70 mandatory credit points will be completed and at least 26 credit points of electives.

Honours degree

Honours are determined by the Board of Undergraduate Studies based on the student's performance in the 96 credit points of the degree. The weighted average mark is used as the basis for assessment. To be eligible for the award of honours a student must complete the unit Advanced Study Report wherein the student demonstrates an ability to undertake individual research and its documentation. Honours are awarded in two classes, Class I and Class II (with Divisions 1 and 2).

Table of Mandatory units of study: Bachelor of Architecture

Unit of study	Credit pts	Sem
Architectural Design		
ARCH 2106 Open Architectural Design Studio 1	8	1
ARCH 2107 Integrated Architectural Design Studio 1	8	2
ARCH 3104 Open Architectural Design Studio 2	8	1
ARCH 3105 Integrated Architectural Design Studio 2	8	2
ARCH 3102 Applications of Technology in Architectural Design	6	2
History and Theory of Architecture		
ARCH 2102 Theory of Architecture	3	2
ARCH 2104 Architecture in the Twentieth Century	5	1
Building Technology and Economics		
ARCH 2103 Advanced Construction	5	1
Building Services and Environmental Controls		
DESC2101 Building Services Systems	3	2
Architectural Structures and Materials		
DESC2102 Architectural Structures and Materials	5	2
Management		
ARCH 2105 Contract Documentation	5	1
ARCH 3106 Professional Practice	3	1
ARCH 3107 Practice Management	3	2

■ Guide to enrolment in the Bachelor of Architecture

Students may commence study in the BArch program in either March or July semester. To be eligible for award of BArch Honours the requirements for award of the degree must be completed in four semesters, including completion of an Advanced Study Report. In order to enable students to plan their own program of study, many of the mandatory unit requirements are 'floating', that is, they may be taken in either first or second year. The Integrated Design Studios require concurrent enrolment in other mandatory units of study.

Unit code	Unit name
Semester 1 mandatory units	
ARCH 2106	Open Architectural Design Studio 1
DESC 2101	Building Services Systems (Floating)
ARCH 2104	Architecture in the Twentieth Century (Floating)
ARCH 2105	Contract Documentation (Floating)
ARCH 3106	Professional Practice (Floating)
ARCH 3104	Open Architectural Design Studio 2 (prerequisite: Open Studio 1)
Semester 2 mandatory units	
ARCH 2107*	Integrated Architectural Design Studio 1
DESC 2102*	Architectural Structures and Materials
ARCH2103*	Advanced Construction
ARCH 2102	Theory of Architecture (Floating)
ARCH 3107	Practice Management (prerequisite: Professional Practice) (Floating)
ARCH 3102f	Applications of Technology in Architectural Design (prerequisite: DESC 2102, ARCH 2103, DESC 2101)
ARCH 3105f	Integrated Architectural Design Studio 2 (prerequisite: Integ. Studio 1)

* Integrated units - corequisites, enrol together
t Integrated units - corequisites, enrol together

Figure 3.1: BArch program structure

Subject area	Semester 1	Semester 2	Semester 3	Semester 4	Floating	
					Semester 1 or 3	Semester 2 or 4
Design 32 credit points 33% of BArch 46% of mandatory credit points	Open Architectural Design Studio 1 (8 credit points) together with Open Architectural Design Studio 2 60-65	Integrated Architectural Design Studio 1 (8 credit points) integrated with Architectural Structures and Materials, Advanced Construction 60-65	Open Architectural Design Studio 2 (8 credit points) together with Open Architectural Design Studio 1 65-70	Integrated Architectural Design Studio 2 (8 credit points) (Integrated Architectural Design Studio 1 is prerequisite) 65-70		
Architectural Science and Technology 19 credit points 20% of BArch 27% of mandatory credit points		Architectural Structures and Materials (5 credit points) Integrated with Architectural Design Studio 1 Advanced Construction (5 credit points)		Applications of Technology in Architectural Design (6 credit points) Integrated with Architectural Design Studio 2	Building Services Systems (3 credit points)	
Cultural Studies 8 credit points 8% of BArch 11% of mandatory credit points					Architecture in the 20th Century (5 credit points)	Theory of Architecture (3 credit points)
Professional Practice 11 credit points 11% of BArch 16% of mandatory credit points					Professional Practice (3 credit points) Contract Documentation (5 credit points)	Practice Management (3 credit points) Professional Practice is prerequisite
Mandatory credit points	8	18	8	14		
Electives 26 credit points See the BArch tables of units of study for further details of the electives available	Summer Art Studio Intensives Advanced Study Report	Advanced Study Report preparation				

■ Bachelor of Architecture regulations

Senate resolutions: Bachelor of Architecture

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000 in chapter 8, which sets out the requirements for all undergraduate courses, and the Faculty of Architecture's Resolutions.]

1. Requirements of the Pass degree

To qualify for the award of the pass degree candidates must:

(1) complete successfully units of study prescribed by the Faculty giving credit for a total of 96 credit points; and

(2) satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

2. Requirements for the Honours degree

To qualify for the award of the honours degree a candidate must complete the honours requirements published in the Faculty resolutions relating to the course.

Total credit points required for BArch degree: 96 (mandatory unit credit points: 70; elective unit credit points: 26)

Faculty resolutions: Bachelor of Architecture

[These Resolutions must be read in conjunction with the University of Sydney (Undergraduate Courses Rule 2000]

Division 1 -Admission, Course Requirements, Credit Points and Assessment

1. Admission

(1) An applicant for admission to candidature for the degree of Bachelor of Architecture shall have:
(a) completed all the requirements for the degree of Bachelor of Science (Architecture) or Bachelor of Design in the University of Sydney with a weighted average mark in the degree of at least 50, or such other degree of the University of Sydney as the Faculty of Architecture may approve, or possess such equivalent standing as may be approved by the Dean;
(b) completed the units of study shown as prerequisites for the Bachelor of Architecture in the Table of Units of Study for the Bachelor of Science (Architecture) or Bachelor of Design degree, if proceeding to candidature from the Bachelor of Science (Architecture) or the Bachelor of Design, provided that in special circumstances a candidate may be exempted from these requirements with the approval of the Dean; and
(c) satisfied the Architectural Experience Requirement or equivalent as may be approved by the Dean.

(2) Pursuant to (l)(c) above, an applicant for admission to the Bachelor of Architecture may satisfy the Architectural Experience Requirement by completing either the requirements for award of the degree of Bachelor of Science (Architecture) or Bachelor of Design with Honours or, by the date of enrolment, showing evidence of completion of one or more of the following:
(a) professional work experience as an employee in architecture (minimum of 18 weeks recorded in the Architects Accreditation Council of Australia (AACA) Log Book);
(b) field study in relation to architecture (including, but not limited to, international field study);
(c) professional work experience in a related industry (minimum of 18 weeks appropriately recorded);
(d) study at an Australia or overseas tertiary institution in a relevant discipline; or
(e) a combination of methods (a)-(d) above.

(3) A candidate proceeding from the Bachelor of Science (Architecture) or the Bachelor of Design to the Bachelor of Architecture shall commence candidature for the Bachelor of Architecture within six years of completing the Bachelor of Science (Architecture) or Bachelor of Design, or shall be required to apply for admission for the degree.

2. Units of study

(1) A candidate for the Bachelor of Architecture shall complete the units of study prescribed by the Faculty satisfying all requirements with regard to mandatory units of study.

(2) Units of study may specify assumed knowledge, prerequisite or corequisite units of study.

(3) The units of study prescribed for the Bachelor of Architecture are:

BArchitecture

Unit code	Unit name	Credit points
Year 1		
Semester 1		
ARCH 2106	Open Architectural Design Studio 1	8
DESC 2101*	Building Services Systems	3
ARCH 2105*	Contract Documentation	5
ARCH 2104*	Architecture in the Twentieth Century	5
	Elective units	3
Semester 2		
ARCH 3105	Integrated Architectural Design Studio 1	8
DESC 2102	Architectural Structures and Materials	5
ARCH 2103	Advanced Construction	5
	Elective units	6
	Total for Year 1	48
Year 2		
Semester 1		
ARCH 2107	Open Architectural Design Studio 2	8
ARCH 3106*	Professional Practice	3
	Elective units	13
Semester 2		
ARCH 3105	Integrated Architectural Design Studio 2	8
ARCH 3102	Applications of Technology in Arch. Design	6
ARCH 3107*	Practice Management	3
ARCH 2102*	Theory of Architecture	3
	Elective units	4
	Total for Year 2	48

* These units are 'floating' and can be taken in semesters 1 or 3 and 2 or 4

3. Requirements for the Pass degree

To be eligible for award of the Bachelor of Architecture a candidate must:

(1) complete successfully units of study giving credit for a total of 96 credit points;

(2) complete successfully all mandatory units of study shown in the Table of units of study for the Bachelor of Architecture, and

(3) complete elective units from the table of units of study for the Bachelor of Architecture, except that the student may, with the approval of the Dean, substitute instead other units of study.

4. Details of units of study

The units of study are listed in the Bachelor of Architecture table of units of study.

5. *Assessment*

(1) A student's work may be assessed by written and oral examinations, assignments, exercises and practical work or any combination of these.

(2) A student who has been prevented by duly documented illness or misadventure from completing a unit of study may be allowed to complete that unit of study or supplementary work as the Dean shall determine.

(3) When a student is permitted to submit additional work other than on the grounds of illness or misadventure, and the temporary grade INC has been given, the maximum result that may be awarded is 50 Pass.

(4) A student's weighted average mark (WAM) shall be calculated using the formula:

$$WAM = \frac{\sum(M \times CP_g)}{\sum(CP_a)}$$

where CP_g is the number of credit points gained by passing a unit of study; CP_a is the number of credit points attempted including failures (F, AF) and units of study discontinued (DF); M is the mark awarded.

Division 2 - Enrolment

6. Enrolment restrictions

(l)Except with the express permission of the Dean a student may not enrol in units of study with a total value of more than 28 credit points in any one semester.

(2) A student may not enrol in any unit of study from the Faculty's Table of Graduate Units of Study without first obtaining written permission from the lecturer in charge of the unit.

(3) A student may be granted not more than 12 credit points of credit towards a Master's degree or Graduate Diploma in the Faculty of Architecture for graduate units undertaken towards the Bachelor of Architecture.

7. *Granting of Credit*

(1) A student may be granted unspecified credit towards the degree for any units of study completed towards a previous award course or as a non-award student at the University of Sydney or other tertiary institution and that are not listed in the Table of Units of Study for the degree, up to a maximum of 26 credit points. The Dean shall determine the credit point value of that credit.

(2) A student may apply to have credit granted towards the degree on the basis of non-credentialled learning or experience that is equivalent to a unit or units of study in the Table of Units of Study for the degree. The Dean will determine the method for demonstrating the achievement of the equivalent academic standard.

(3) A student may be granted credit for units of study completed elsewhere that are equivalent in workload and academic standard to units in the Table of Units of Study for the degree.

(4) Credit granted under sections (1), (2) and (3) above shall be limited to a maximum of 47 credit points.

(5) A student may, with the consent of another Faculty or Board of Studies, complete while enrolled in the Faculty of Architecture a unit or units of study taught in the other Faculty or under a Board of Studies but not listed in the Table of Units of Study.

8. Restrictions on the Granting of Credit

(1) Credit shall not be granted for units of study, non-credentialled learning or experience gained more than 10 years prior to admission or readmission for the degree.

(2) Where credit is granted, the Dean shall determine the maximum period of candidature for the degree, proportionate to the amount of credit granted.

(3) A candidate granted credit for the degree shall not count towards the degree any unit of study subsequently completed within the University of Sydney that overlaps substantially in content with the unit of study upon which the credit is based.

(4) Students proceeding from the Bachelor of Design or the Bachelor of Science (Architecture) degrees may not be granted unspecified credit for units completed towards candidature for any other degree candidature at the University of Sydney or other institution.

(5) Credit shall not be granted for units of study gained with a 'Terminating' or 'Conceded' Pass, or equivalent.

9. Determination of credit granted on the basis of equivalence to units in the Table of Units of Study

(1) A student seeking credit for units of study completed other than at the University of Sydney shall apply on the form provided by the Faculty and supply documentary evidence of the unit of study description and the assessment result. The student shall be available for discussion with appropriate Faculty staff.

(2) A student seeking credit on the basis of non-credentialled learning or experience shall apply on the form provided by the Faculty and shall be available for assessment by the appropriate unit of study coordinator.
Equivalence will be determined by the Dean from the documentary evidence and discussion under (1) and by appropriate assessment of the student under (2) before credit will be granted.

Division 3 - Progression

10. Repeating a unit of study

(1) A student who repeats a unit of study shall:
(a) participate in the learning experiences provided for the unit of study; and
(b)meet all examination, assessment and attendance requirements for the unit of study.
unless granted exemption by the Dean for previous satisfactory completion of components of the unit of study.

(2) A student who has passed a unit of study may not repeat that unit of study and have it counted towards fulfilling the requirements of the degree.

11. Attendance requirements

(1) A student who is absent without leave may be deemed not to have completed a particular unit of study or course.

(2) A student who fails to meet the attendance requirements of a unit of study will be deemed not to have completed that unit of study.

Division 4 - Discontinuation of enrolment and suspension of candidature

12. Discontinuation of enrolment

Except with the approval of the Dean, a student who withdraws from or discontinues candidature for the degree without having successfully completed a majority of units of study shall be required to reapply for admission to the degree.

13. Re-enrolment after an absence

Except where the Dean determines otherwise, a student who re-enrols after an absence or a suspension of candidature for any period shall proceed under the by-laws and resolutions in force at the time of re-enrolment.

14. Satisfactory progress

(1) The Dean may require a student to show good cause as to why he or she should not be excluded from the degree if he or she does not make satisfactory progress. Satisfactory progress cannot be defined in all cases in advance, but, a candidate who has failed a required unit of study more than once shall normally be presumed not to have made satisfactory progress.

(2) The Dean will permit a student who has shown good cause to re-enrol.

Division 5 - Honours

15. Requirements for the Honours Degree

(1) To be eligible for the award of Honours a candidate must complete the unit of study Advanced Study Report.

(2) The Dean shall appoint a member of the full-time or fractional academic or research staff of the Faculty to act as supervisor of the student whilst undertaking the unit Advanced Study Report. The Dean may also appoint an associate supervisor who may be a member of the academic or research staff of the University, an Honorary Associate or a person with appropriate qualifications in another institution or organization.

16. Form of the Advanced Study Report

(1) A student undertaking an Advanced Study Report shall:
(a) lodge with the Faculty two copies of the Advanced Study Report embodying the results of an original research investigation carried out by the student.
(b) state in the Advanced Study Report, generally in the preface and specifically in the notes, the sources on which the research was based, the extent to which the student has made use of the work of others and the portion of the Advanced Study Report which is claimed to be original, and
(c) not lodge as the student's own work any work previously submitted for a degree of the University of Sydney or any other university, but may incorporate such work in the Advanced Study Report provided that the student indicates the work so incorporated.

(2) A student may lodge the Advanced Study Report for examination bound in either a temporary or permanent form according to the following conditions:
(a) temporary binding must be able to withstand ordinary handling and postage. The preferred form of binding is the 'Perfect Binding' system.
(b) the cover of a temporarily bound Advanced Study Report must have a label showing the student's name, name of the degree, title of the thesis and the year of submission.

(3) A student must lodge the final thesis in a permanent form according to the following conditions:
(a) permanent binding must meet the requirements given in the University *Calendar: Volume I: Statutes and Regulations* under the statutes governing the degree of Doctor of Philosophy.
(b) following examination and emendation if necessary, at least one copy (the Library copy) of the Advanced Study Report must be bound in a permanent form.
(c) if emendations are required, all copies of the Advanced Study Report which are to remain available within the University must be amended.

17. Result of Honours candidature

(1) The Dean shall appoint two examiners. The examiners shall report to the Dean.

(2) The Dean shall, on the recommendation of the Board of Undergraduate studies, award of the degree of Bachelor of Architecture with Honours when either of the following sections (a) or (b) are satisfied together with the following section (c):
(a) the examiners have recommended the degree be awarded without reservation or subject to emendations to all copies of the Advanced Study Report which are to remain available in the University, or
(b) the Board of Undergraduate Studies unanimously accepts the recommendation of the supervisor that the degree be awarded subject to emendations despite reservations expressed by any examiner; and
(c) the overall performance in accordance with resolution 6(3) below is 70 or greater.

(3) The Dean will determine the class of Honours, if any, on the weighted average mark achieved for the degree including the mandatory Advanced Study Report.

(4) The Dean may recommend that an unsuccessful candidate be permitted to prepare for re-examination sufficient merit and the supervisor has so recommended.

(5) Except with the permission of the Dean, no student who is of more than four semesters' standing as a candidate for the degree shall be awarded Honours at graduation.

(6) A student wishing to undertake a joint degree, overseas study, or a specialisation of professional value may be eligible for consideration. Any request must be submitted in writing.

Division 6 - Award of the degree

18. Award of the degree

(1) The Bachelor of Architecture Pass degree shall be awarded to a student who has completed the requirements specified for the degree.

(2) The Bachelor of Architecture with Honours shall be awarded with the following grades:
Honours Class I (with a mark of at least 75)
Honours Class II, Division 1 (with a mark of at least 73)
Honours Class II, Division 2 (with a mark of at least 70)

(3) A candidate for the Honours program who does not meet the requirements for award of Honours shall be awarded the Bachelor of Architecture Pass degree.

19. University Medal

Honours students with an outstanding academic record throughout the degree and who have achieved Honours Class I may be eligible for the award of a University Medal, in accordance with Academic Board policy and on nomination by the Dean with the recommendation of the Board of Undergraduate Studies.

Division 7 - Delegation of Authority

20. Delegation of Authority

(1) The Dean delegates responsibility for admission to the Bachelor of Architecture degree to the Bachelor of Architecture Program Committee.

(2) In these resolutions the Dean delegates responsibility to the Board of Undergraduate Studies and the Associate Dean (Undergraduate Studies) for determination of the following matters, on the recommendation of the head of program where appropriate:
(a) examination procedures and appointment of examiners;
(b) supervision of candidature;
(c) variations of candidature;
(d) extension of candidature;
(e) completion of candidature away from the University; and
(f) any other matters as appropriate within these resolutions.

Tables of units of study: Bachelor of Architecture

Architectural Design

Unit code	Unit name	Credit points	Sem
Mandatory			
ARCH 2106	Open Architectural Design Studio 1	8	1
ARCH 2107	Integrated Architectural Design Studio 1	8	2
ARCH 3104	Open Architectural Design Studio 2	8	1
ARCH 3105	Integrated Architectural Design Studio 2	8	2
ARCH 3102	Applications of Technology in Architectural Design	6	2

Architectural History and Theory

Unit code	Unit name	Credit points	Sem
Mandatory			
ARCH 2102	Theory of Architecture	3	2
ARCH 2104	Architecture in the Twentieth Century	5	1
Elective			
DESA 2203	Architecture in East Asia	4	2
DESA 2305	Australian Modernist Architecture	4	2

Sustainable and Appropriate Technologies

Unit code	Unit name	Credit points	Sem
Mandatory			
ARCH 2103	Advanced Construction	5	2
DESC 2101	Building Services Systems	3	1
DESC 2102	Architectural Structures and Materials	5	2
Elective			
ARCH 6096	Studies in Advanced Construction	4	1
DESA 2201	Design Ecology and Sustainability	4	1
DESA 2205	Innovative Architectural Construction	4	2
DESA 2207	Sustainable Architecture	4	2
DESA 2206	Innovative Building Structures	4	2

Management in Architecture

Unit code	Unit name	Credit points	Sem
Mandatory			
ARCH 2105	Contract Documentation	5	1
ARCH 3106	Professional Practice	3	1
ARCH 3107	Practice Management	3	2
DESA 2208	Introduction to Project Management	4	2
DESA 2209	Built Environment Project Management (Prerequisite DESA 2208)	4	2

Environment Behaviour and Society

Unit code	Unit name	Credit points	Sem
Elective			
DESA 2213	Housing for Health	4	2
DESA 2214	Housing for Weil-Being (prerequisite DESA 2213 Housing for Health)	4	1
DESA 2215	Social Studies in Architecture	4	2
ARCH 6024	Architecture in a Globalising World	4	2
DESA 2610	Designing with Colour 1	4	1
DESA2611	Designing with Colour 2	4	1,2
DESA 2615	Designing with Colour 3	4	1

Design Computing

Unit code	Unit name	Credit points	Sem
Elective			
DECO 1002	Web-based Design Information Systems	4	2
DECO 1003	CAD Modelling	4	2
DECO 2001	3D Modelling and Photorealism	4	1
DECO 2002	Interactive Multimedia Design	4	1

Urban Design and Planning

Unit code	Unit name	Credit points	Sem
Elective			
DESP 2201	Designing and the Public Domain	4	1
DESP 2202	Design and Planning Instruments	4	2
DESP 2203	Urban Development and Planning	4	2
DESP 2204	Planning for the Built Environment	4	1
DESP 2205	Planning Sustainable Built Environments	4	2

Visual Arts; in Architecture

Unit code	Unit name	Credit points	Sem
Elective			
DESA 2616	Explorations in Mixed Media	4	1
DESA 2617	Explorations in Ceramic Forms	4	2
DESA 2618	Public Art	4	*1***
DESA 2619	Site Specific Art	4	*2***
DESA 2601	Art Studio 1 (Photography, Etching)	4	1,2
DESA 2602	Art Studio 2 (Ceramics/Wheel-throwing, Video, General Drawing)	4	1,2
DESA 2603	Art Studio 3 (Ceramics/Hand-building, Painting, Sculpture)	4	1,2
DESA 2604	Art Studio 4 (Graphic Design)	4	1,2
DESA 2605	Art Studio 5 (Web Art and Design, Life Drawing)	4	1,2
DESA 2606	Art Studio 6 (Experimental Photography, Ceramics, Oil Painting, Object Design)	4	1,2
DESA 2607	Art Studio B Arch Elective (any medium)	4	1,2
DESA 2608	Advanced Art Studio 1 (Photography, Ceramics, Drawing, Painting, Screen-printing on Paper and Fabric$_T$ Sculpture, Graphic Design, New Media Art, Video, Visual Art and Culture, Object Design - Furniture)	4	1
DESA 2609	Advanced Art Studio 2 (Photography, Ceramics, Mixed Media, Drawing, Painting, Screen-printing on Paper and Fabric, Sculpture, Graphic Design, New Media Art, Print Media, Video, Visual Art and Culture, Object Design - Furniture)	8	1

Advanced Study

Unit code	Unit name	Credit points	Sem
Elective			
ARCF 6002	Preparatory Advanced Study Report	4	2
ARCF 6003	Advanced Study Report	12	1,2
ARCH 6087	Elective Advanced 1	4	1,2
ARCH 6088	Elective Advanced 2	4	1,2
ARCH 6089	Elective Advanced 3	4	1,2
ARCH 6090	Elective Advanced 4	4	1,2

■ BArch units of study

Architectural Design

An important aspect of becoming an architect is the cultivation of the imagination and independent thought combined with competence in action. The design units take this into account and these units are intended to emphasise the importance of people, purpose, place, environment and expression in the design of the built environment.

The design units take into account the growing importance of the city, as a place of home and work, and the need to reinterpret the metropolis in the context of globalisation and environmental issues. The design of civic as well as institutional and commercial buildings and spaces, understanding and interpreting place in the city fabric, as well as the way people in this region might live in the future, are significant design issues. The BArch program recognises that students need to develop their own ethical position, and provides opportunities through the units of study to do so.

Students are required to take four semesters of design in the BArch Units offered in the March semester are vertically integrated so that fourth and fifth year students have the opportunity to work with, and learn from, each other. These units will provide choice of project and teacher, and a range of design issues for exploration. Units offered in the July semester have a professional orientation, and will be integrated with technical units. In this way the constraints and challenges of practice are

replicated, and learning is facilitated by case study and problem based learning. These units will help develop professional skills, knowledge and understanding. The open studios in the March semester will focus more on the development of creative thinking, design ideas and philosophies, but will at all times offer options that deal with clients, communities, and professional issues. In all design units it is assumed that precedent is studied so as to better establish an understanding of building types and their users.

ARCH 2106 Open Architectural Design Studio 1

8 credit points. To be decided. **Semester: 1. Classes:** Studio and lectures. **Assessment:** Each project submission will be assessed in relation to the objectives of the unit and the specific aims of the project.

Objectives

Through projects offered by Faculty staff and visiting design practitioners, this unit of study will provide students with an opportunity to work on projects of their choice. Projects will seek to explore a range of design issues and ideas, drawing on contemporary thinking in theory and practice. When appropriate, national and international competitions will be offered. Interdisciplinary approaches to design will be encouraged, as will the exploration of diverse modes of communication. The emphasis in the Open studio will be on exploring architectural ideas and propositions, and the development of design philosophies in relation to the activity of design. Cultural and environmental sustainability, as well a reflective mode of teaching and learning, will provide a context within which all projects will be framed. It is assumed that sound technical judgement will inform the projects explored in the unit of study.

Outcomes

At the successful completion of this unit students will have:

- extended their ability to develop creative responses to a design brief or situation
- extended their capacity to articulate the nexus between a design philosophy or theory and the activity of design
- extended their understanding of the cultural and environmental framework of design
- applied these understandings, and demonstrated good architectural judgement, and
- communicated the design ideas effectively through: drawings, models, CAD etc.

ARCH 2107 Integrated Architectural Design Studio 1

8 credit points. To be decided. **Semester: 2. Classes:** Studio and lectures. **Corequisite:** Advanced Construction; Architectural Structures and Materials. **Assessment:** Each project submission will be assessed in relation to the objectives of the unit and the specific aims of the project.

Objectives

Through integration with Contract Documentation and Architectural Structures and Materials, this unit will provide students with the opportunity to approach the design of a building in a holistic way. Projects will seek to explore the design of building types, and their context, where an appropriate level of investigation in the preparation of contract documents and the resolution of structures can be achieved. Cultural and environmental sustainability, as well a reflective mode of teaching and learning, will provide a context within which all projects will be framed. It is assumed that a sound design philosophy will inform the projects explored in the unit of study.

Outcomes

At the successful completion of this unit students will have:

- proposed projects which successfully integrate technical requirements
- enhanced their professional attitude to design
- extended their understanding of the cultural and environmental framework of design
- applied these understandings, and demonstrated good architectural judgement, and
- communicated the design ideas effectively through: drawings, models, CAD etc.

ARCH 3104 Open Architectural Design Studio 2

8 credit points. To be decided. **Semester: 1. Classes:** Studio and lectures. **Prerequisite:** ARCH 2106. **Assessment:** Each project submission will be assessed in relation to the objectives of the unit and the specific aims of the project.

Objectives

Through projects offered by Faculty staff and visiting design practitioners, this unit will provide students with an opportunity to work on projects of their choice. Projects will seek to explore a range of design issues and ideas, drawing on contemporary thinking in theory and practice. When appropriate, national and international competitions will be offered. Interdisciplinary approaches to design will be encouraged, as will the exploration of diverse modes of communication. The emphasis in this studio will be on exploring architectural ideas and propositions, and the development of design philosophies in relation to the activity of design. Cultural and environmental sustainability, as well a reflective mode of teaching and learning, will provide a context within which all projects will be framed. It is assumed that sound technical judgement will inform the projects explored in the unit of study.

Outcomes

At the successful completion of this unit students will have:

- extended their ability to develop creative responses to a design brief or situation
- extended their capacity to articulate the nexus between a design philosophy or theory and the activity of design
- extended their understanding of the cultural and environmental framework of design
- applied these understandings, and demonstrated good architectural judgement, and
- communicated the design ideas effectively through: drawings, models, CAD etc.

ARCH 3105 Integrated Architectural Design Studio 2

8 credit points. To be decided. **Semester: 2. Classes:** Studio and lectures. **Prerequisite:** ARCH 2107. **Corequisite: ARCH 3102. Assessment:** Each project submission will be assessed in relation to the objectives of the unit and the specific aims of the project.

Objectives

Through integration with Applications of Technology in Architectural Design, this unit will provide students with the opportunity to approach the design of a building in a holistic way. This semester long project will seek to explore the design of a building type, and its context, so that an appropriate level of resolution of architectural issues and technical systems can be achieved. Cultural and environmental sustainability, as well a reflective mode of teaching and learning, will provide a context within which all projects will be framed. It is assumed that a sound design philosophy will inform the projects explored in the unit of study. For most students this studio will be the graduation project, and students will be expected to demonstrate a clear grasp of the design process in its technical and professional context, and to produce work of a standard expected by the profession of graduating students.

Outcomes

At the successful completion of this unit students will have:

- proposed a project which successfully integrates technical requirements
- enhanced their professional attitude to design
- extended their understanding of the cultural and environmental framework of design
- applied these understandings, and demonstrated good architectural judgement.
- communicated the design ideas effectively through: drawings, models, CAD etc.
  and
- demonstrated a capacity to produce work of the standard of a professional.

ARCH 3102 Applications of Technlgy in Arch Design

6 credit points. A/Prof Warren Julian. **Semester: 2. Classes:** Building visits, seminars and studio classes. **Prerequisite:** Building Services Systems, Advanced Construction, Architectural Structures and Materials, Integrated Architectural Design Studio **1**. **Corequisite: ARCH 3102. Assessment:** Assignments (80%) and building construction or engineering drawings of the BArch major project (20%).

Objectives

The unit aims to develop knowledge and skills in advanced construction, building service systems, architectural structures, materials and environmental modification.

Outcomes

The expected outcomes are the resolution of construction and structural issues (tectonics) and the integration and coordination of building services and environmental control.Marking of assignments and the major project is informed by the required outcomes.

The unit involves the considered resolution of construction, structure and materials in relation to the major design project, in short: the tectonic resolution of the design; the application of building service systems; the application of a range of chmate modification systems and the strategic consideration of electrical

systems, lifts and hydraulic services; and the strategic and detailed consideration of an ecologically sustainable building.
Practical: Studio classes, site visits

DESA 2203 **Architecture in East Asia**

4 credit points. Dr Peter Armstrong. **Semester: 2. Assumed knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Attendance requirements are to 90% minimum of all classes. Assessment will be through an analysis in model or graphic form of an important structure of the student's choice.

NB: Permission required for enrolment. Architecture stream unit of study

Aims

The course provides an introduction to the urban and architectural traditions of East Asia in the pre-industrial era. Beginning with the classical Chinese concept of cosmos, state and society, the course examines the development of these concepts and their architectural expression in time and in the context of the cultures of China, Korea and Japan. The development of cities and the full range of building types is traced, with cultural interaction and patterns of influence shown in terms of both architecture and its social context.

Objectives

On successful co,mpletion of the unit of study, students will be able:

- To give a clear picture of the philosophical and cultural foundations of urbanism and architecture in the dominant cultures of East Asia
- To elucidate the origins and development of urban form from Chinese models in the context of the development of Japanese, Korean & Vietnamese cultural traditions.
- To provide an understanding of the design and construction principles of the principal building types of the region within the broad context of the Chinese cultural base of architecture and applied arts
- To examine and contrast the national characteristics of the major periods of architectural development in each country and,
- To understand the ongoing influence of building traditions in contemporary culture.

Generic Skills

On successful completion of this un it of study, the student will have developed their skills in the following areas: knowledge skills, thinking skills, personal skills, personal attributes and practical skills

Contribution of unit to programs

By providing a focus on the structure of the built environment of the major cultures of East Asia, the students studying in the BDes(Arch) will gain a broad view of the historical and cultural context of architecture and Urban design, and these studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

DESA 2305 **Australian Modernist Architecture**

4 credit points. Dr. Harry Margalit. **Semester: 2. Classes:** Lectures, tutorial discussions and field trips. Attendance of 90% at least is required for all components collectively. Assessment: Attendance 20% of unit mark (full marks for attendance of 90% or more, pro-rata for less). Field trip diary 15% of unit mark. Diary to record all trips in written, drawn and photographic form. Essay (3000 words, student chosen topic drawn from course) 65% of unit mark.

NB: Permission required for enrolment.

Aims

The unit traces the history of Modernist architecture in Australia. On completion, students will be familiar with key architects and works representative of the advent of modernism in the 1930s, its post-war flowering and subsequent fragmentation in the late 1950s. Students will also be familiar with the beliefs and aspirations underpinning the movement, the role of overseas travel in introducing modernism to a generation of Australian architects and the larger issues of transplanting and adapting architectural philosophies from one country and context to another.

Objectives

On the successful completion of the unit of study, students will have demonstrated:

- Imaginative and informed judgement through making historical connections between a chosen essay topic and the material presented in the unit.
- An expanded body of architectural knowledge applicable to both scholarship and practice
- An ability to develop an argument to discuss the attributes of their chosen subject with reference to other buildings, projects, architects or planning schemes presented, through an essay addressing a building, unbuilt project, architect or planning scheme representative of the movement.
- An ability to engage with artifacts from the past, and to tease out the conditions which pertained when they were made. Through this they will have demonstrated insights into the contingent nature of many beliefs and ideals, a sense of self-reflection and an appreciation of the diversity of motives and ideals.
- An ability to record the buildings and sites visited through a field trip diary.

Generic Skills

The unit of study addresses the following generic attributes fostered by the University:

- Knowledge skills: Students will expand their body of architectural knowledge, demonstrate this in written form, using the conventions of scholarly writing.
- Thinking skills: Students will assess the relevance of their topic to the unit subject matter and argue for their choice.
- Personal skills: The research and execution of the essay will be self-directed, and the student will assess and acquire the knowledge to complete the analysis.
- Personal attributes: The students will have developed a sense of self reflection through the tasks.
- Practical skills: The research and field trips skills expected of students will encompass historical research, visual recording and appropriate presentation using computer skills.

Contribution of unit to programs

Students will generally be drawn from the B.Des.Arch and B.Arch programs, and will be working towards undergraduate and professional degrees in architecture. The unit expands knowledge of buildings and architects, increases awareness of architecture as a social art and exposes students to decisions taken by practitioners in the period studied as a way of informing their own design process.

ARCH 2103 **Advanced Construction**

5 credit points. **Semester: 2. Classes:** Lectures, tutorials and site visits. **Corequisite:** Integrated Architectural Design Studio 1. **Assessment:** Three assignments. Two are linked to design projects and have two parts - the first explores issues and options arising from performance criteria and the impact of the Building Code of Australia; the second shows and explains initial design and construction decisions, including responses to the BCA. The third requires a number of drawings of construction layouts and details of the finalised design.

Objectives

The unit aims to:

- examine the construction of the primary elements of the fabric of large buildings;
- further develop the principles of the performance of structure, materials and construction;
- develop the application of the requirements of the BCA and relevant Australia Standards;
- develop the primacy of detailing, skills in accurate drafting for contract documents, and the design principles of advanced construction materials in relation to structural and environmental concerns.

Outcomes

On successful completion of this unit students will have:

- a working knowledge of construction methods for large/ complex buildings
- a decision making ability for the selection of materials, detailing of assemblies and their relation to other parts of a building
- and a working knowledge of the BCA for large buildings, the relationships between construction detailing and structural and environmental concerns, and the production of construction details for contract documents.

Each assignment is structured to exercise the learning and develop the ability of each student for one or more of the above outcomes within the context of large buildings.

The unit covers the essential design elements and controls for construction design issues; buildability; programming and equipment; building elements, foundations and basements; cores, frames and floors; external walls; roofs; internal walls and ceilings.

Practical: Site visits

DESC 2101 **Building Services Systems**

3 credit points. Mr Bailey Nelson. Semester: 1. Classes: Lectures, tutorials and site visits. Assessment: Two assignments in conjunction with design projects (25%, 50%), report on building under construction (25%).

Objectives

To provide students with sufficient knowledge of the principles of operation of the various services systems in buildings of larger than domestic scale in order to be able to contribute competently to the decisions that have to be made about these systems, and to be aware of the implications of these decisions upon building design.

Outcomes

At the completion of this unit the student is expected to:

- understand the principles involved in the functioning of the systems (these principles should remain relevant in the future even if the technology changes)
- know about the technology currently available, and understand the issues involved in deciding between competing solutions (not necessarily to make a final choice, but to contribute competently to a discussion about that choice)
- be aware of the implications the system has on the planning of the building. This usually means the space occupied, the need for access for maintenance, and the effect on floors below and above. In the case of lifts, escalators and stairs, the pedestrian traffic patterns created should be considered.

Topics covered include: strategic planning for services; air conditioning and ventilating systems; lifts and escalators; hydraulics systems; fire services; electrical services, lighting, security systems.

Practical: Site visits

DESC 2102 **Architectural Structures and Materials**

5 credit points. Dr David Gunaratnam. Semester: 2. Classes: Lectures, tutorials and site visits. Corequisite: Integrated Architectural Design Studio 1. Assessment: Two design projects (30% each), two case studies (10% each) and a study of a building under construction (20%).

Objectives

- To introduce students to the different structural and foundation systems available for advanced structures;
- to explore structural design issues and strategies for synthesising these structures;
- to provide design information for the synthesis and selection of appropriate structural systems within the context of a building design;
- to introduce students to approximate behavioural models for understanding and predicting the behaviour of these structures;
- to familiarise students with the properties, processes and applications of materials such as glass, concrete and polymers; and
- to introduce students to the different factors influencing corrosion in materials, particularly in metals, and methods of controlling corrosion in buildings.

Outcomes

At the completion of this unit each student is expected to:

- be familiar with the different structural strategies used in the synthesis of wide-span and tall building structures
- be familiar with the different structural and foundation systems available, for Wide-span and tall buildings, and the context in which they are used
- be able to collect appropriate information and formulate the structural design requirements for wide-span and tall building structures
- be able to generate and evaluate a number of alternative structural systems that satisfy the design requirements
- be able to select suitable design parameters for the structural system using available design information, and to extract appropriate behavioural models for the approximate sizing of some of the major elements in the system
- have an appreciation of the relationships between design parameters, structural form, structural efficiency and cost
- be cognisant of the properties, production methods and architectural applications of materials such as glass, concrete, polymers, sealants and metal, and be able to use this information for making decisions relating to material selection and use.

The above unit outcomes provide the basis for the different assessment tasks.

The unit focuses on structural design issues applicable to advanced structures that fall within the categories of wide-span and tall building structures, and provides the knowledge required for their synthesis and preliminary design. It provides experience in making structural decisions within the context of building designs that exploit these classes of structures. It also provides information on the properties, processes and applications of a selected group of building materials.

Practical: Site visits

ARCH 6096 **Studies in Innovative Construction**

4 credit points. Dr Peter Armstrong. Semester: 1. Assessment: An analysis in model form of an important structure of the student's choice.

NB: Permission required for enrolment.

Aims

Studies in Advance Construction is a series of investigations which elucidate the origins of buildings of iconic status, examining the intent of the architect in the context of prevailing technologies, social and economic determinants and cultural background. Buildings by famous architects will analysed in terms of construction systems, materials and details, revealing the inner structure of the architecture and the foundations of built form.

The course is a series of studies of pivotal buildings and their architects, examining the relationship between the design intent of a project and its realisation in terms of materials, construction and detail.

In the studies, exploration of the nature of the intellectual framework of the architect's conceptual process and the means of realisation will give a clear understanding of the complex relationship between concept, actualisation and construction

The context of each building is looked at in terms of time, location, technology and cultural milieu, and in terms of the impact of context on fabric and detail.

While dealing principally with the modern period, influential buildings of earlier periods will be included where significant patterns of influence have extended into the twentieth century.

Change in technology and its impact on the relationship between form and detail will be studied with a view to understanding the materials and construction techniques expressed in building detail. Similarly, the influence of prevailing labour practices and cost on form and materials will be explored.

The studies will generally centre on the works of famous architects, using their writings, sketches, detailed drawings and illustrations of the completed buildings. The examples include both contemporary and historical examples with examples drawn from both the broad streams of the European and American traditions and substantial material drawn from Eastern Asian design and practice.

Objectives

The following are objectives of these studies:

- To understand the nature of built form and fabric in terms of time and place.
- To examine in detail the relationship between design outcomes and the process of construction
- To examine the impact of technological change on design
- To understand the conceptual processes of famous architects in terms of the social, technical and cultural constraints within which they worked.
- To examine and contrast the national characteristics of the major periods of architectural development in each country and,
- To understand the ongoing influence of building traditions in contemporary culture.

Outcomes

- A clearer understanding of the physical fabric of famous buildings, leading to greater awareness of:
- The interdependence of concept and the means of its realisation
- Materials and materiality in architecture
- Performance in time and location
- Relationship between detail and fabric
- Greater executive control over the realisation of design intent as architecture
- The development of a solid foundation for further study or research in both professional and scholarly contexts.

DESA 2201 **Design, Ecology and Sustainability**

4 credit points. Dr Richard Lamb. Semester: 1. Assumed knowledge: DESA1101 DESA 1102 DESA 2101 or equivalent. Corequisite: DESA 2101. Assessment: Assessment for the course consists of two written components and one self and group assessment. They are weighted as

follows: Assessment form 1: Short essay assignment: integrated with Design B1-40% Assessment form 2: Shared group research assignment - 40% Assessment form 3: Self and group assessment of contribution to research task - 20%.

NB: Permission required for enrolment. Architecture stream unit of study

Aim

The aim of the unit is that on successful completion you will:

- Be able at an intermediate level, to understand the ecological context of design of the built environment.
- Be introduced to practical and ethical aspects of designing for ecological sustainability.
- Be able to critically examine the role of architects and other designers in the ecological context and understand the implementation of environmental controls that are exercised by the community over the built environment.
- Be able to critically examine, account for and justify your design decisions when considered from an ecological sustainability perspective.
- Be able, at an intermediate level, o creatively and imaginatively develop programs for the sustainable design, planning and control of human environments.

Objectives

On the successful completion of this unit you will demonstrate effective learning outcomes through:

- Showing a working knowledge at an introductory level of the operation of natural systems and their relationship to the form and functions of the built environment.
- Being able to identify the ecological qualities, sustainability capabilities and consequences of the use of commonly specified building materials and construction systems.
- Being able to critically examine the potential environmental impacts of design decisions at an intermediate level.
- Having the abihty to critically examine the potential ecological impacts of environmental policies such as urban consolidation, urban villages and higher density living.
- Demonstrating an introductory level of knowledge of the NSW planning system as it applies to policies for the control of the environment.
- Having an introductory level of knowledge of why and how settlements form, grow- and change in response to environmental constraints and opportunities.
- Demonstrating, through critical reflection on your own design work, an ability to exercise independent and creative thought leading to sustainable design outcomes.

Generic Skills

The unit links the above objectives and outcomes to the generic skills expected of all students of the university by:

- Providing a body of knowledge in the field of ecological sustainabilty.
- Requiring critical thinking and writing on practical and theoretical aspects of the field of knowledge.
- Requiring critical judgement, personal reflection, realistic evaluation and creative and imaginative engagement on your own work as well as that of others.
- Acknowledging the need to work with others and develop a personal ethical position relative to the ecological context of design.
- Fostering individual skill development in the application of practical and technical aspects of knowledge at a level relevant to your personal development in second year.

Contribution of unit to programs taken by students

The unit fits into the overall structure of the degree by examining the natural environment as an intellectual. Philosophical and physical context for design, looking at the way nature and culture interact in the making of the urban environment. Environments, communities and their settlements interact and architects and planners are agents of change in environment. As such they have special need to understand how nature is conceptualised in design terms, how designs become nature, how designers affect and respond to the environment and how the community translates designed nature into sanctions and controls that reflect human needs. As well as the more practical applications of technological solutions, sustainable design is a generic skill demand of all designers in the built environment in our contemporary society.

The unit is an individual elective for BDes(Arch) students that integrates knowledge and skills with Design Practice 2A and 2B and also builds on introductory information that is provided in Design Practice 1B and Design Studies 1B, concerning the way in which settlements develop and respond to natural and historical constraints. The unit is also introductory to the Sustainability stream in the BDes(Arch) degree, which in turn provides access to graduate degree programs in Energy Conservative Design. It introduces themes that are developed in more detail in Sustainable Architecture.

Attendance:

The unit will be conducted over seven weeks, with classes of either two Or three hours individual duration. Classes will consist of conventional lectures and also of group-presented seminars on research topics. Individual assessment will be by means of a short written assignment, shared assessment of a group research task and a self and group assessment of contribution to the group work on the research task.

DESA 2205 Innovative Australian Construction

4 credit points. **Semester: 2. Classes:** Lectures, seminars, laboratories, web-based information. **Assumed knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Exercises, Essays, Assignments, Quizzes, Examinations: for feedback and final summative result.

NB: Permission required for enrolment. Architecture stream unit of study

Objectives

Knowledge developed in Design Studies 2 is progressed further in this unit into more specialised in-depth study of structures in the built environment.

The aim of this unit is to engage students in detailed studies of both innovative structural design and advanced structural modelling techniques. The unit aims firstly to investigate interesting structural design through case studies and explore issues that contribute to innovative structural solutions. The second aim of the unit is to investigate various advanced techniques of modelling, and to carry out computer based and physical modelling of advanced structures.

Outcomes

On the successful completion of this unit students will be able to:

- demonstrate a high level of competence in investigating and presenting case studies on structural design
- identify and evaluate issues that contribute to innovative structural solutions in case studies
- investigate various advanced techniques of modelling
- demonstrate a high level of competence in computer based and physical modelling of advanced structures

Practical: Investigations, Field studies

DESA 2207 Sustainable Architecture

4 credit points. Mr Bruce Forwood. **Semester: 1. Assessment:** Attendance requirements are to 90% minumum of all classes. Assessment will be through a piece of scholarly research on a selected aspect of sustainability of the student's choice.

Aims

This units aims to build on knowledge developed in Design Studies, progressing it further into the specialised field of ecologially sustainable design in architecture

The unit will further extend your capacity for identifying and utilising sources of knowledge by introducing appropriate research methods, and develops your abihty to theorise, generalise and reflect on the data gathered in primary studies as well as from published sources, and to apply principles to specific problems or learning activities such as the preparation of a scholarly paper on a particular aspect of sustainability. The aim of the unit is to address a variety of issues which critically relate the issues of ecological sustainability to architecture. These include developing a critical understanding of assessment of appropriate building methods and materials. The unit also aims to include a critical investigation of the application of these issues to form-making and space-making in relation to contemporary architectural ideas.

Objectives

On successful completion of the unit of study, you will be able to:

- demonstrate a high level of competence in interpreting sources of existing knowledge and question any underlying assumptions.
- demonstrate your ability to use appropriate research methods in the gathering and interpretation of data and in the application of key concepts from published works to architectural sustainability
- demonstrate a high level of competence of applying ESD principles to evaluating a design proposal for a building
- demonstrate a high level of competence in investigating and communicating an understanding of ecologically sustainable

design (ESD) form-making and space-making in relation to contemporary architectural thought
- demonstrate an ability to prepare a piece of scholarly research on a selected aspect of sustainability

Generic Skills

On successful completion of this un it of study, the student will have developed their skills in the following areas: knowledge skills, thinking skills, personal skills, personal attributes and practical skills

Contribution of unit to programs

By providing a focus on sustainable design and construction practice, students studying in the BDes(Arch) and BArch programs will gain a broad view of environmentally sustainable design in the context of architecture, and these studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

DESA 2206 Innovative Building Structures

4 credit points. **Semester: 2. Classes:** Lectures, seminars, labaoratories, web-based information. **Assumed knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite: DESA 2101. Assessment:** Exercises, Essays, Assignments, Quizzes, Examinations: for feedback and tinal summative result.

NB: Architecture stream unit of study

Objectives

Knowledge developed in Design Studies 2 is progressed further in this unit into more specialised in-depth study of innovative construction and design at small to medium scale buildings.

The unit builds upon the understanding of conceptual, precedent and procedural knowledge about constructing the built environment demonstrated previously to develop competence in more specialised, in-depth, learning in the relationship between construction and its expression in design.

The aim of this unit is to engage students in detailed studies of innovative construction design of small to medium scale buildings and in developing similar approaches. The unit aims to investigate interesting construction and its expression in design through case studies. It will identify innovative construction, including strategies, systems, materials and detailing, and explore in depth the issues that contribute to innovative constructional solutions.

Outcomes

On the successful completion of this unit students will be able to:
- demonstrate a high level of competence in investigating and presenting case studies on innovative construction and design expression
- identify and evaluate at a high level of competence issues that contribute to innovative construction in architectural design
- identify and evaluate at a high level of competence innovative construction strategies, systems, materials and detailing
- propose and develop an aspect of innovative constructional expression

Practical: Investigations, Field studies

ARCH 2105 Contract Documentation

5 credit points. **Semester: 1. Classes:** Lectures, seminars and studio. **Assessment:** Preparation of a set of basic working drawings and specifications; contract law quiz.

Objectives

The unit aims to provide some knowledge of basic contract law and building contracts; as well as information about, and skills in, the production of working drawings, specifications and opinions of probable construction costs, as commonly prepared by an architect.

Outcomes

At the completion of this unit each student will be expected to demonstrate competence in the production of working drawings, specifications and cost control for the building designed during the Integrated Architectural Design Studio 1, so that clients, statutory authorities, consultants, tenderers, contractors and sub-contractors understand what is required to be built.

The introduction to contract law and building contracts will enable students to understand the significance of contract documents in contracts, the relationship between contract documents and relevant law, and provide a context for understanding the full examination of commonly used building contracts in the Professional Practice unit of study.

The unit provides instruction in aspects of contract law and building contracts generally, the making of working drawings and specifications, the coordination of these documents into contact documents, the role of consultants with specific reference to cost control, and the management of the process.

ARCH 3106 Professional Practice

3 credit points. **Semester:** 1. **Classes:** Lectures and tutorials. **Prerequisite:** ARCH 2105. **Assessment:** A series of individual written exercises in the form of letters or opinions on topics covered during the lectures and individual contributions to tutorials.

Objectives

This unit provides information on the practice of architecture with particular emphasis on the obligations and responsibilities of architects to clients, builders, consultants and the community and to the administration of contracts commonly used in the procurement of buildings.

Outcomes

Students are expected to demonstrate a knowledge of: an architect's responsibilities, the management of architectural practices, the manner in which architects are involved in contract administration, and commonly used procurement methods within the building industry.

The unit provides instruction in: the regulation of the architectural profession; roles of consultants and their selection, engagement, coordination and responsibilities; modes of practice, conditions of engagement for architects; fee structures; meeting procedures; precontract management; contract selection and administration; alternative procurement methods and the relationship of these factors in completing a building project.

ARCH 3107 Practice Management

3 credit points. **Semester:** 2. **Classes:** Lectures and seminars. **Prerequisite:** ARCH 3106. **Assessment:** Students work in pairs to prepare and present seminar papers on topics selected from case studies. Topics include the comparison of commonly used building contrats, the management and administration of building contracts, andthe management of an architectural practice.

Objectives

Students are expected to demonstrate a capacity to identify specific issues and articulate methods of resolving related problems with specific reference to the links between the contacts, their administration, the architect's responsibility to the contracted parties, and how these issues can impact on the design and construction of a buildiing project.

Outcomes

The unit enables students to apply, in a moot format, the informtion and knowledge acquired in the unit Professional Practice with particular emphasis on administration of standard forms of building contracts, and the resolution of issues commonly arising in the management of a n architectural practice.

DESA 2208 Introduction to Project Management

4 credit points. Prof A. Jaafari, assisted by Mr Ted Tooher. **Semester: 2. Assessment:** At least 90% attendance at all classes is required. The assessment will be via tests and assignment completed and submitted by students in stages. Details will be advised at the commencement of the unit of study.

Aims

This unit of study will introduce students to the underpinning knowledge of project management, covering all 9 areas of project management, viz. integration, communication, human resources management, scope, time and cost management, quality, risk and procurement management;

It will differentiate project life cycles from facility life cycles. In this unit the application of project management principles to the achievement of different deliverables needed in all phases of the facility life cycle will be addressed. The unit will provide practical examples and opportunities to apply the fundamentals to a range of simple projects in architecture, design, building and construction fields (the focus being initiation and planning phases of projects).

Syllabus summary:

Project management fundamentals; management of project functions and areas; including integration, scope, time, cost, communication, human resources, quality, risk and procurement management; application of the 4-phase model to development and execution of facilities and products; facility life cycles; project life cycles, integration of project and facility life cycles; management of simple project; setting and measuring performance against objectives.

Objectives

On the successful completion of this unit students will be able to:
• demonstrate a good knowledge of project management basics

- manage different project management areas, viz. integration, scope, time, cost, communication, human resources, quality, risk and procurement management in the context of simple projects in the built environment
- learn to apply the project management fundamentals to other project types and endeavours

Generic Skills

On successful completion of this un it of study, the student will have developed their skills in the following areas: knowledge skills, thinking skills, personal skills, personal attributes and practical skills

Contribution of unit to programs taken by students

Students will gain an understanding at a beginning level of the practice requirements of managing projects in architecture and urban design, and these studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Textbook:

Turner, Handbook of Project-based Management (McGraw-Hill)

Reference books

PMI, A Guide to the Project Management Body of Knowledge; www.pmi.org

Course presenter and coordinator

DESA 2213 Housing for Health

4 credit points. Adj Assoc Prof Paul Pholeros, Mr Colin James. **Semester: 2. Classes:** Intensive mode Wk 4 Friday, 2-5 pm Health-housing theory (Paul Pholeros), Saturday, 8-1 pm Readings reports/discussion (Col James), 2-6 pm House measurement practice (Paul Pholeros) Wk 5/6 Weekends Fieldwork: 3 houses (solo), (Family home + 2 neighbours) Wk 7 Friday 2-6 pmPresent reports + observations/evaluate. **Assessment:** Assignment 1 Protocol and question form 15%, Assignment 2 Report 75%, Attendance and participation 10%.

Aims

The unit investigates the housing characteristics fundamental to the healthy survival of babies (0-5 years) as a prerequisite for healthy family life. The focus is on nine healthy living practices: washing people; washing clothes; removing waste; improving nutrition; reducing crowding; separating people from animals, vermin or insects; reducing dust; controlling temperature; reducing trauma.

Upon successful completion students will have achieved:

- Recognition of the health implications of housing design.
- Development of skills in the measurement and analysis of design features which have health impacts.
- Capability of documenting house fixing practices to improve health outcomes.
- Capability to report and communicate results and recommendations to householders.

Objectives

Upon successful completion students will demonstrate:

- Evidence of reading recommended texts and reporting on health-housing theory.
- Completion of specific tasks in the measurement performance of household plumbing and electrical services and fittings against stated standards.
- Completion of Healthabitat data sheets and logging into Healthabitat analysis programs to deliver work sheets for licensed plumbers and electricians.
- Comprehension through report writing on the analyses of data, house fixing procedures and independent observations of other health risks, specifically for householders' information requiring regular maintenance and user practices.

DESA 2214 Housing for Weil-Being

4 credit points. Mr Colin James. **Semester: 1 .Classes:** Intensive mode Wk 4, Friday, 2-5 pm, Housing well-being theory (Col James), Saturday, 9-1 pm Readings reports/discussion (Col James), 2-5 pm Housing P.O.E. role play Wk 5/6, Weekends, Fieldwork: 3 houses (solo), (Family home + 2 neighbours) Wk 7, Friday, 2-5 pm, Present executive summaries, submit report. **Assessment:** Assignment 1 Readings report (verbal) 15%, Assignment 2 Report (written) 75%, Attendance and participation 10%.

Aims

This is a companion course to 'Housing for Health' which extends the investigation into housing characteristics fundamental to the well-being of families. The focus is on six well-being living practices: security of tenure; physical security; fire safety; disability access; habitability; affordability. An additional focus on 'the meaning of home' is available for senior students.

Upon successful completion students will have achieved:

- Recognition of well-being implications of housing design.
- Development of skills in preparing a measured drawing of an existing house to scale annotated with some well-being criteria and critical observations about design.
- Development of skills in interviewing householder-clients and preparing an elementary form of post-occupancy-evaluation to measure against the well-being criteria.
- Capability to report and communicate results and recommendations to householder-clients.

Objectives

Upon successful completion students will demonstrate:

- Evidence of reading recommended texts and reporting on housing well-being theory.
- Completion of specific tasks in the production of an annotated measured drawing with photographs (external only) complying with conventional standards.
- Completion of POE interviews and analyses of data concerning house-fixing.
- Comprehension through report writing on all tasks including independent observations of the well-being characteristics for presentation to householder-clients.

DESA 2610 Designing with Colour 1

4 credit points. A/Prof Terry Purcell. **Semester:** 1, 2, Summer. **Classes:** On-line, or on-line with 3 face-to-face workshop/seminars. The content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Prerequisite:** Students must have completed 48 credit points towards their degree. **Assessment:** 2 assignments There will be two types of assessment in the unit. The group work will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be two assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of colour mixing to design four colour schemes for the fagade of a building.. The second assignment explores colour contrast and colour preference through the design of four colour schemes for the fagade of a building. The average of the marks for these assignments will be the final (summative) result for the unit of study. Participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Aims

One of the most striking features of vision is our ability to see colours. When a designer chooses materials, these choices inevitably are choices about the colour of the surfaces of the artifact being designed. Colour plays many roles in the way we experience environments - functional, affective and symbolic and so understanding these many aspects of the experience of colour is. critical in design. Because of the complexity of our experience of colour a number of units of study are needed to explore all aspects of this experience.

Designing with Colour 1 aims to build on the knowledge and skills developed in Designing with Surfaces and Light and to explore how a number of basic aspects of the way the visual system works has major implications for using colour in design. Specifically this unit uses knowledge in the following areas -

Basic visual processes with a particular emphasis on the ways in which colour can be produced through additive, subtractive and partitive colour mixing.

The way colours can interact that can result in the perceived colour of a surface being changed by the colour of adjacent or surrounding surfaces, a process referred to as colour contrast.

Advancing and receding colours and colour contrast.

The conditions that create colour pleasantness and preference and the relationship of these affective experiences to colour contrast

An essential part of this unit is the further development and use of skills in image manipulation. This unit develops the Photoshop skills from Designing with Surfaces and Light in relation to assessing colour coordinates of parts of an image using the Colour Picker, filling selections with colour and maintaining colour appearance while making repeated changes to a colour in part of an image.

These image processing skills are used to explore existing colour designs as a way of understanding the knowledge

presented about the various areas of colour perception and experience listed above. In addition in this unit of study these skills are used to allow participants to create new colour designs that implement the knowledge about colour perception and experience.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. Participants will also have carried out a number of colour design exercises using both the knowledge presented about colour experience and the image processing skills they have learnt. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a focus on the experience of designing with colour, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Assumed knowledge and prerequisites

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DESA 2611 Designing with Colour 2

4 credit points. A/Prof Terry Purcell. **Semester:** 1,2, Summer. **Classes:** On-line, or on-line with 3 face-to-face workshop/seminars. As was the case in Designing with Surfaces and Light, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Prerequisite:** DESA 2610; Students must have completed 48 credit points towards their degree. **Assessment:** 2 assignments. There will be two types of assessment in the unit. The group work will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be a number of assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of the four basic dimensions of affective colour experience to design colour schemes for both building interiors and exteriors. The second assignment involves colour designs for interiors and exteriors where the knowledge from previous units of study are integrated with the knowledge from this unit. The average of the marks for these assignments will be the final (summative) result for the unit of study.

Aims

There are many commonly held beliefs about how we experience colours affectively. For example it is thought some colours are warm and others cold, some are exciting and some are calming. There is now a considerable body of knowledge about these aspects of colour experience. This research demonstrates that there are four basic dimensions of affective colour experience: temperature, excitement, evaluation and potency and that these different experiences map very systematically into colour space. The first aim of this unit is to present this knowledge to participants in the unit. In common with the units Designing with Colour 1 and Designing with Surfaces and Light this unit also focuses on the use of this knowledge in analyzing examples and designing new colour schemes and this is the second aim of this unit of study.

In order to carry out these activities the unit also further develops participants image processing skills. Participants work through tutorials on how Photoshop can be used to isolate parts of an image so that the colour of the part can be independently manipulated of the colours present in other parts of the image. A final aim of the unit is integrate the knowledge and skills learnt in earlier units into the analysis and design activities in this unit. In this way a more complete understanding of colour and its use is built up rather than each of the facets being learnt and applied in isolation.

As was the case in Designing with Surfaces and Light and Designing with Colour 1, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. You will have demonstrated an ability to use the knowledge and skills to create colour designs. You will also have demonstrated that you can transfer and use knowledge and skills learnt in earlier units and combine them with the new knowledge and skills presented in this unit. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit, through combining this with knowledge and skills from earlier units and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a developed understanding on the experience of designing with colour, students both in the BDesign (Arch), the

BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Attendance, Requirements, Assessment

A. At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Assumed knowledge & prerequisites

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DESA2615 Designing with Colour 3

4 credit points. A/Prof Terry Purcell. **Semester:** 1. **Classes:** As was the case in Designing with Surfaces and Light and Designing with Colour 1 and 2, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Assessment:** Participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator. In this unit of study there will be two types of assessment. The group work involved in investigation regularities in environmental colour for example,will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be a number of assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of familiar and typical colours, colour harmony and the effects of variations the number of colours in a colour scheme to design colour schemes for both building interiors and exteriors. The second assignment involves colour designs for interiors and exteriors where the knowledge from previous units of study are integrated with the knowledge from this unit. The average of the marks for these assignments will be the final (summative) result for the unit of study.

Aims

The environment we live in contains systematic sets of colours. These are associated with the natural environment through the colours in, for example, vegetation, rocks and soil. The built environment also contains sets of colour regularities associated with building materials. Because we are exposed to these regularities over extended periods of time we learn about them and this learning goes on without our awareness. These sets of colours then become the familiar and typical colours of a place and form a set of expectations about colours in the environment. The aim of this unit of study is to develop an understanding of these sets of environmental colours and the implications of this for design.

Specifically the unit aims to address the following:

Tacit learning and familiar and typical colours

Mapping environmental colours.

Colour and culture / geographic location and the symbolic use of colour.

Colour harmony and the number of colours in a colour design.

In common with the units Designing with Colour land 2 and Designing with Surfaces and Light this unit also aims to focus on the use of this knowledge in analyzing examples and designing new colour schemes.

In order to achieve these aims participants will have to employ all of the image processing skills developed in the previous units of study. In addition the analysis exercises and colour design assignments will also involve scanning images into digital form and tutorials will be provided to develop these skills.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. You will have demonstrated an ability to use the knowledge and skills to create colour designs. You will also have demonstrated that you can transfer and use knowledge and skills learnt in earlier units and combine them with the new knowledge and skills presented in this unit. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit, through combining this with knowledge and skills from earlier units and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a more deeply developed understanding on the experience of designing with colour, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Attendance, Requirements, Assessment

- At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Assumed knowledge & prerequisites

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DECO 1002 Web-based Design Information Systems

4 credit points. Prof Mary Lou Maher. **Semester:** 2. **Classes:** Lectures and tutorials. **Assumed knowledge:** DECO 1001 Digital Image Representation and Design or equivalent. **Assessment:** 1. Home page design 2. Personal design portfolio 3. Group Web design project.

NB: Permission required for enrolment.

Objectives

- To introduce the software and languages of Web pages.

- To develop an understanding of effective navigation, layout, colour contrast, and styles for Web sites.
- To introduce various media types and their formats on the WWW.
- To develop skills in creating Web pages with images, CAD files, 3D models, and animation.

Description

Web pages are becoming as essential part of the representation of design information, project data, and marketing information. This unit of study introduces the basics for creating Web pages, and develops them further for Web site design. Design information is stored in various formats and media types. In a project Web site, all media types can be made available on an intranet or the Internet. In this unit of study, a web-based design information system will be developed in the context of a design project.

Outcomes

- an understanding of the Internet protocols and languages and file formats for the WWW.
- skills in creating effective Web sites through the consideration of style, navigation, and use of different media.
- skills in using software such as Dreamweaver, and in publishing on the WWW.

DECO 1003 **CAD Modelling**

4 credit points. Semester: 2. Classes: Lectures and tutorials. Assessment: 1. CAD tutorial 2. Personal modelling project 3. Group-developed CAD model.

NB: Permission required for enrolment.

Objectives

- To introduce the basic concepts of CAD modelling and presentation.
- To develop skills in creating 3D models, 2D sections and plans, and animations from CAD models.

Description

CAD is now an established media for the representation and presentation of design products. The use of CAD as a design environment as well as a documentation tool is a challenge for CAD users. The unit of study presents the basics of drawing and modelling in 2D and 3D for the development and documentation of design products.

Outcomes

- an understanding of how 3D objects are represented in CAD models.
- skills in using a CAD system.
- a portfolio of design presentations and documentation.

DECO 2001 **3D Modelling and Photorealism**

4 credit points. Prof Mary Lou Maher. **Semester: 1. Classes:** Lectures and tutorials. **Assessment:** 1. Tutorial exercise 2. Personal 3D modelling project 3. Group modelling project.

Objective

- To develop an understanding of the representation of 3D digital models.
- To develop an understanding of the algorithms and properties for creating photorealistic images of 3D digital models.
- To develop skills in creating and modifying 3D models with material properties and light sources.

Description

3D modelling is the basis of most CAD models, 3D animation, and the development of photorealistic images of designs before construction or manufacture. This unit of study considers the underlying representation of 3D objects in 3D modelling software. Various algorithms and their assumptions for photorealism are presented. The benefits of a 3D model with textures, material properties and light sources are explored through a design project. This unit of study develops skills in the use of 3D modelling software.

Outcomes

- an understanding of the concepts underlying 3D modelling software.
- skills in creating photorealistic images from 3D models.
- a portfolio of 3D models.

DECO 2002 **Interactive Multimedia Design**

4 credit points. Prof Mary Lou Maher. **Semester: 1. Classes:** Lectures and tutorials. **Assessment:** 1 .Tutorial exercise 2. Personal multimedia presentation 3. Group multimedia project.

Objectives

- To develop an understanding of multimedia development methodologies.
- To introduce concepts of interactivity and navigation through multimedia content.
- To develop skills in multimedia authoring software.

Description

Multimedia content is the basis for the presentation of a design or family of design products and is also a product of design. This unit of study considers the methodologies for designing a multimedia product and applies them to the use of multimedia content in an interactive environment. The unit of study develops skills in the use of software such as Flash and Macromedia Director.

Outcomes

- An understanding of the concepts of designing interactive multimedia presentations.
- Skills in designing, developing, and implementing a CD-ROM product.

DESP 2201 **Designing and the Public Domain**

4 credit points. **Semester: 1. Classes:** lectures, workshops and studio. **Assessment:** Proposals and reports on projects.

NB: Permission required for enrolment. Urban Design and Planning stream unit of study

Objectives

Students will be able to:

- undertake background studies to inform designing for various elements of the public domain (streets and roads, open space and public places, car parks and pedestrian networks, centres)
- formulate and respond to complex problems
  Prepare and present simple proposals
- use basic terms, concepts and methods in practical urban design and planning situations

Description

Topics covered in this unit include:

- Components of the public domain
- Roles of government and private agencies in shaping the public domain
- Complex areas and competing uses
- Observing and interpreting public spaces
- Planning procedures and management of the public domain
- Types of plans
- Understanding context (physical, procedural, social);
- Preparing and presenting proposals
- Case studies

Teaching is based on a set of group projects that will require each student to prepare design drawings, plans and supporting studies. These projects will be considered in workshops, with discussion of relevant literature and cases.

DESP 2202 **Design and Planning Instruments**

4 credit points. **Semester:** 2. **Classes:** lectures, workshops and studio. **Assessment:** proposals and reports on projects.

NB: Permission required for enrolment. Urban Design and Planning stream unit of study

Objectives

Students will be able to:

- prepare local area studies and site plans
- formulate design problems and outline briefs; and prepare design responses including basic masterplans, design guidelines and planning instruments

Description

Topics include:

- Preparing and implementing masterplans
- Purposes and components of masterplans
- Types of planning instruments and design guidelines
- Preparing background studies
- Formulating design problems and briefs
- Site planning
- Preparing masterplans and supporting instruments

Teaching is based on set of group projects, which will require each student to prepare design drawings, plans and supporting studies. These projects will be considered in workshops, with discussion of relevant literature and cases.

DESP 2203 **Urban Development and Planning**

4 credit points. Semester: 2. Classes: lectures, workshops and seminars. Assessment: assignments on literature and cases.

NB: Permission required for enrolment. Urban Design and Planning stream unit of study

4 Bachelor of Design Computing

Design computing is broadly defined to be the use and development of computational models of design processes and digital media to assist and/or automate various aspects of the design process with the goal of producing higher quality and new design forms. In the Faculty of Architecture, we have a particular focus on computational models of form and function with an emphasis on the built environment. During the years design computing has evolved from a small research area in applied computer science and neighbouring disciplines into a separate interdisciplinary professional field, ready to produce its own specialists. Design computing involves profound understanding and effective application of digital media, communication and networking technologies, computer visualisation and graphics, data modelling, automation and integration in design. Design computing also provides a basis for studying formal methods of designing and their computational support. The future of design computing includes the design of cyberspace as an environment for professional collaboration, bringing the application of design computing from the design of physical objects to the design of virtual places. This new degree recognises the need for another kind of professional in the design professions: the design computing specialist.

The Bachelor of Design Computing provides undergraduate students with the opportunity to understand the various components of design computing, including digital design representations, computational modelling of design processes, computer programming, and computer-mediated collaborative design, and their integration in a design studio environment. This emphasis is unique in the University of Sydney. Graduates from the Bachelor of Design Computing would be sought after by: design firms developing digital models and presentations, and design firms managing the integration of design information in distributed design organisations, consultants and start up companies developing the future virtual environments with an architectural perspective, and other design and architecture practices which use advanced computer support in their work.

Philosophy of the Bachelor of Design Computing

The world around us is increasingly being changed by design. Designers are the change agents of this world. At the same time the border of the world where we can design has been rapidly moving beyond what we call the *physical* world, or world of atomic structures, into what we label as the *virtual* world, or the world of *digital* structures. Digital computing provides both new concepts and technology that on the one hand is one of the drivers and facilitators of these changes, and, on the other hand, bridges the gap between these worlds.

Design Computing is the field that brings designing and computing together in a synergistic manner to allow new forms of designing and design to occur and to allow new designs to be produced. Design Computing provides the theoretical and practical support for designing in both the physical and virtual worlds.

The philosophy of this degree is to bring together three core concepts in design computing, united by the keyword 'digital', allowing a student to specialise in one while being knowledgeable about the other two. These core concepts are:

- Developing environments for designing digitally
- Designing digitally
- Interacting with designs digitally.

Developing environments for designing digitally involves a conceptual and practical understanding of current digital technology for design and can lead to the development of new methods and techniques for designing, including languages of designing. Designing digitally requires knowledge of the various ways in which designs can be represented and generated. Interacting with designs digitally is a new area that involves knowledge of computer-mediated collaboration and how designers interact with and via different digital media. The concept of virtual architecture as either a simulation of the physical world or as a functional virtual world, brings these three core concepts together.

There are four knowledge areas of design computing that provide the basis for developing our philosophy of design computing:

Design Media and Representation

Considering the basics of different representations of design information from the perspective of computer modelling and manipulation. Topics include:

- Digital Image Representation and Design
- CAD Modelling and Electronic Design Documentation
- 3D Modelling and Photorealism
- Design Database Management
- Web-based Design Information Systems
- Interactive Multimedia Design.

Computer Programming

Providing basic and advanced programming knowledge and skills for use in developing new applications and in augmenting existing applications. Topics include:

- Introduction to Programming
- User Interfaces for Designing
- Graphics Programming
- Systems Analysis and Design.

Computational Models

Providing an understanding of the variety of computational models of design knowledge and design processes. Topics include:

- Understanding Design
- Knowledge Based Design
- Design Grammars
- Evolutionary Design
- Product Modelling
- Computer Supported Collaborative Design
- Virtual Architecture.

Design

Providing experience and an understanding of the design process in a studio environment.

- Design Studio
- Design Computing Studio
- Virtual Design Studios.

Progression

The Bachelor of Design Computing is a 3 year degree with the opportunity for a fourth year for a Bachelor of Design Computing (Honours). The first year introduces the concept of design, CAD, web page design, and programming. These units form the basic knowledge needed for a broad range of design computing topics in second year, and the integrated design computing studio in the third year. The electives allow the student to develop additional skills and knowledge in design computing, computer science, architectural design, or engineering.

■ Bachelor of Design Computing regulations

Senate resolutions: Bachelor of Design Computing

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000 in chapter 8, which sets out the requirements for all undergraduate courses, and the Faculty of Architecture's Resolutions.]

1. Requirements of the Pass degree

To qualify for the award of the pass degree candidates must:

(1) complete successfully units of study prescribed by the Faculty giving credit for a total of 144 credit points; and

- reflecting on your art and design practice and evaluating your work through a weekly journal in conjunction with tutor and class crit sessions.

Generic Skills

Through this unit of study students will:

- Knowledge skills: gain the beginning of a body of knowledge in ceramics and 3D design methods and begin to apply theory to practice in 3D practical work
- Thinking skills: begin to be able to account for decisions; begin to be realistic self-evaluators; begin to adopt a problem-solving approach; become creative and imaginative thinkers
- Personal skills: develop the capacity to continue to learn; develop the ability to plan and achieve goals; develop the ability to work with others
- Personal attributes: begin to acknowledge personal responsibility
- Practical skills: begin to develop solid practical skills which may include digital applications

Contribution to Different Programs of study

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) Bachelor of Design(Computing) and as such then contributes the the student continuing on to Masters Programs such as Urban Design, Museum Studies etc.

Assumed knowledge

To able to build a 3d model in computer aided design.

DESA 2618 **Public Art**

4 credit points. Ms Jan Fieldsend. Semester: 1. Assessment: Attendance 10%, Participation (may include an oral presentation, research, crit sessions) 40%, Essay 50%. Classes: lectures, field trips and art studio practice.

Aims

The field of public art is rapidly growing and as such has generated much debate and interest. What exactly is public art? This question will be looked at in detail by first asking the question what does public mean and then what happens when the word art is connected to it. How is the visual and tactile environment affected by the production of public art?

The aim of this unit is to provide students with a broad overview of the issues that influence and inform the production of art in the public sphere: history and theory of public art, policy and management, conservation, community response and evaluation, current local and international practice. It aims to develop each student's ability to critically analyse and be able to enter into debate (both written and spoken) on public art issues, especially its relationship to architecture. Field trips, artist/ commissioner talks, case studies, (such as the Vietnam Memorial in Washington and the Sydney Olympic Public Art Projects)and slide lectures will complement the theoretical content of Public Art.

Objectives

On the successful completion of this unit a student will demonstrate the learning objectives through:

- being familiar with a wide range of issues about the public art field and from this point be able to enter into an informed debate about this field. This may occur through group discussion, seminar presentation and essay writing.
- investigating and developing a critical analysis of a specific area of public art.

Generic Skills

Through this unit of study a student will:

- have a body of knowledge in the field of visual arts, specifically public art.
- be able to exercise critical judgement, realistic self evaluation and imaginative thinking as outlined in the learning objectives
- develop the ability to plan and achieve a goal by researching and writing an essay/seminar

Contribution to Different Programs of study

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) and Bachelor of Design,(Computing) and as such then contributes to the student then continuing on to Masters Programs such as Urban Design, Museum Studies etc.

DESA 2619 **Site Specific Art**

4 credit points. Ms Jan Fieldsend. Semester: 2. Classes: Art Studios, Slide lectures, Field Trips. Assessment: Attendance 10%, Participation(may include an oral presentation, research journal, crit sessions) 30%, Exercises 30% Final project 30%.

Aims

Over the past thirty years the relationship of art to site has been a major concern to contemporary artists. Art that is contextualised by place and space has taken the form of installation/sculpture, performance art, earthworks, public art, political and ephemeral artwork.

This practical unit of study enables students to explore visual art that is conceptualised and made for a particular place and space - public, interior, exterior, industrial, urban, rural, corporate, domestic - amongst many others. Students will use a range of traditional and non-traditional materials and techniques in a set of preparatory exercises (including collaborative assignments) and two finished projects. One project focuses on an interior space and the second is sited in an external environment. Written exhibition proposal and documentation skills are an integral part of the course. The relationship of site-specific art to architecture will be discussed throughout the course and highlighted in a field trip.

The unit looks at a wide variety of site-specfic art practices as a way of informing a student's own approach and extends the theoretical and management issues raised in the Public Art unit of study.

Objectives

On the successful completion of this unit a student will demonstrate the learning objectives through:

- exploring and using materials and techniques to create artworks that are particular to a site.
- taking this knowledge, learnt in preparatory exercises and developing it into finished art works.
- using an understanding of site specific' art history and theory to inform decision making in your creative process as well as entering into thoughtful debate.
- reflecting on your art practice through a weekly journal, class and tutor crit sessions and from this point realistically evaluating your own work.

Generic Skills

Through this unit of study a student will

- have a body of knowledge in the field of site specific art practice.
- be able to exercise critical judgement, realistic self evaluation and imaginative thinking. This unit of study encourages a problem solving approach through its assignments where students will need to integrate various elements(often experimental) into a finished work.
- be able to apply technical skills as appropriate to site specific art practice and furthermore apply these to new situations.
- develop the ability to plan and achieve a goal through a self directed final project.

Contribution of unit to programs

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) and Bachelor of Design Computing and as such then contributes to the student then continuing on to Masters Programs such as Urban Design, Museum Studies etc.

DESA 2601 **Art Studio 1**

4 credit points. Ms Virginia Ross, Ms Paola Talbert (Photography), Seraphina Martin (Etching). Semester: 1,2, Summer. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Photography

Objectives

This module combines practical camera and darkroom work with discussion and analysis of how photography functions as a contemporary visual medium.

Description

The module covers use of a 35mm SLR camera and assumes that students have little or no prior photography experience. Technical skills developed include camera operation, composition, use of studio lighting, film developing, printing photographs and experimental techniques. Photographs of a wide range of subjects such as buildings and building details, landscapes, portraits and still lifes are produced. Practical work includes darkroom and studio work and gallery visits.

Outcomes

Students should understand and be able to demonstrate the principles and practice of camera operations and of the production of high quality black and white negatives and prints. They should also develop an understanding of the role of

photographic practices as a contemporary visual medium, including its historical development and its different applications in such areas as the visual arts, architectural photography and mass media.

Etching

Objectives

This module aims to develop various levels of image making, while extending technical skills and exploring etching as an artistic medium. Students will understand the fundamentals of how a print is manipulated, produced and printed. Solar etching is a contemporary, safe alternative to traditional etching, using ultra violet light to etch the image rather than nitric acids.

Description

The module introduces students to a wide range of mark-making techniques relevant to the etching process. Students will acquire a broad understanding of how an etching is made. Emphasis will be placed on skills, process and conceptual awareness relevant to developing their own personal vision.

Outcomes

At the conclusion of this module students will have gained a broad understanding of the techniques required to produce an etching and have a working understanding of chemicals, equipment and materials used in the studio. Students will build on their experience using a combination of textures, photographs, found objects and computer images as a means to creating their original prints. Architecture students may wish to incorporate architectural references within their work.

Practical: Studio practice. Consumables fee applicable.

DESA 2602 **Art Studio 2**

4 credit points. Mr Mark Jones (Ceramics), Mr Akhim Dev (Video), Ms Sue Pediey (General Drawing). Semester: 1, 2. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Ceramics - Wheel Throwing

Objectives

The aim of this module is to produce a set of wheel-thrown ceramics with emphasis on design, form and function.

Description

The module introduces varied techniques of throwing on the wheel to produce vessels and designed forms with an emphasis on the art and craft of this age-old method of construction. There will be an investigation of this practice at both historical and contemporary levels. Various techniques will be introduced including combination throwing and handbuilding, turning, glazing and brushwork with slips and underglazes.

Outcomes

At the end of this module students should:

- be technically proficient at centering, throwing, turning, and applying handles to ceramic vessels;
- have developed brushwork designs using slips and underglazes for a predetermined breakfast set;
- have a basic understanding of technical issues associated with ceramic production such as drying, firing and handling; including firing schedules - ie, bisque and glaze.
- have an awareness of historical and contemporary approaches to wheel made ceramics.

Digital Video

Objectives

This module will explore the language(s) of moving images, conventions of framing, movement and editing; develop an understanding of the fundamental technical aspects of pre-production, production and post-production; and generate independent and cooperative production using a variety of media.

Description

In this video module, VHS and digital video systems with Premiere editing software will be used. Emphasis is placed on skills' development, process and conceptual awareness. The module is divided into units exploring approaches to lighting, shooting, editing, sound production and concept development for film and video.

Outcomes

Students will gain technical proficiency in the diverse areas of pre-production, production and post-production; understand conventions of classical continuity and main visual styles; and produce a moving image piece using videotape or mixed media. Students are assessed in the context of theoretical understanding and technical aptitude in the various aspects of moving image production.

General Drawing

Objectives

This course aims to provide students with the knowledge and aptitude required to use a wide range of fundamental drawing skills and media to make drawings based on observation of the physical world and to experiment with imaginative expression.

Description

The module begins with a discussion of motives for drawing supported by a slide lecture, introduction to a range of drawing materials, instruction on a range of mark-making techniques, methods of tonal range, use of perspective and an understanding of composition, through structured projects students learn to use these materials and techniques to express individual responses based on observation in creative and imaginative ways.

Outcomes

Students will gain familiarity with a range of drawing media, mostly dry, including charcoal, graphite, pencil, conte, pen and ink, brush and ink, as well as watercolour and gouache as ground or backwash. They will also be able to use imaginative approaches to observing and recording the visible world using a variety of techniques and combinations of drawing media.

Practical: Studio practice. Consumables fee applicable.

DESA 2603 **Art Studio 3**

4 credit points. Mr Geoff Levitus (Painting), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture). Semester: 1, 2. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Painting (Acrylic)

Objectives

This module aims to provide the student with the knowledge, skills and aptitude required to use a range of fundamental painting skills to make paintings based on observation of the physical world, and to experiment with imaginative applications of acrylic media based on observational skills.

Description

The module shows students who have little or no experience with painting how to prepare canvas and grounds, mix colours, then undertake practical work in observational painting (still-life painting form, modelling and shading techniques), anatomy (painting with a live model, self-portraiture), perspective and ideas and images (style and appropriation, the decorative, words and text, collage and abstraction).

Outcomes

On successful completion the student should have gained familiarity with acrylic media; be able to apply basic colour theory, to mix secondary and tertiary colours, and to create a tonal range; and be able to use imaginative approaches to observing and painting the visible world based on sketches and studies.

Ceramics - Hand Building

Objectives

The aim of this module is to introduce the many and varied techniques of hand building clay as well as the processes of firing and glazing.

Description

The module involves an exploration of the plastic properties of clay to create a wide variety of constructions that will be fired and glazed. There will be an investigation of hand built ceramics at both historical and contemporary levels. Set projects will enable students to discover their own means of expression and design of sculptural forms. Projects include slab and coil construction and combinations of coil, slab and pinch construction. Various surface finishes such as brushwork, glazing and sculptural relief applications will be introduced including coloured underglazes, slips and glazes.

Outcomes
At the end of this module students should:
- have an understanding of pinch, slab and coil construction techniques with an awareness of historical and contemporary approaches to hand built ceramics;
- have an understanding of brush work and coloured glaze and underglaze applications;
- have the ability to plan and complete projects as well as development of a critical approach to form making including the use of the wheel for large coil constructions;
- have a basic understanding of technical issues associated with ceramic production such as drying, firing and handling,
- understand firing schedules - ie, bisque and glaze.

Sculpture
Objectives
This module provides students with knowledge, skills and confidence to use a range of materials and techniques necessary for three-dimensional sculpture. They will be introduced to the conceptual and theoretical aspects of sculpture.
Description
This is an introductory module for students with little or no previous experience in sculpture. A number of traditional sculptural techniques such as clay modelling, plaster mould making, casting in cement, soldering and welding will be taught and used to explore elementary aspects of three-dimensional form. The student will be required to complete two projects: to make a traditional portrait as well as a more conceptually based work.
Outcomes
The student should become aware of the inter-relationships between the technical, personal and conceptual concerns in sculpture making.
Practical: Studio practice. Consumables fee applicable.

DESA 2604 **Art Studio 4**
4 credit points. Ms Jan Fieldsend (Screen Printing), Ms Teena Clerke (Graphic Design). Semester: 1, 2. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.
NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.
Students choose to attend one of the following modules:
Screen Printing - Paper
Objectives
This module will introduce the student to a range of screen printing techniques as well as developing creative and design skills. It will provide basic awareness of the history of screen printing in the graphic and the fine arts.
Description
This beginners' module covers design development, the preparation of hand-cut, wax, and photo-emulsion stencils, colour mixing, image registration and editioning. Artist quality, water-based non-toxic inks are used. An awareness of historical and contemporary screen prints is also taught. Students will produce an edition of multi-coloured screen prints or a series of experimental works. A critical approach to production and construction of images will be encouraged. Architecture students may wish to use screen printing techniques to enhance their design presentation.
Outcomes
On successful completion the student should have gained a knowledge of a range of design techniques for screen printing and be familiar with screen printing stencils, including photo stencils, ink technology, image registration and editioning as well as experimental techniques, they should also have a basic understanding of colour and appreciation of screen printing in its graphic, industrial and fine arts applications.
Screen Printing - Fabric
Objectives
The purposes of this module are to provide students with the knowledge and skills to design for and print on textiles; for students to gain an appreciation of textile design, both clothing and furnishing applications; and to experiment with various techniques and to develop finished textile prints that exhibit an imaginative understanding of colour and design as well as technical proficiency.
Description
This beginners' module investigates the teaches hand painting, paper, wax and photostencils, mixing and fixing of inks, design and colour exercises as related to suitable fabrics; scatter printing, over printing, repeat pattern and multi-colour printing. Projects may include collaboration with Object Design students to produce a work combining both textile and wood/metal - eg, furniture.
Outcomes
On successful completion of this module the students should have gained a knowledge of a range of stencils (wax emulsion, photostencils and paper); be familiar with ink technology and its relation to various fabrics; have an appreciation of textile design; be aware of design in its application to textiles; and have completed a finished print and a journal of design process.
Graphic Design
Objectives
This module aims to develop visual literacy with graphic techniques involving a variety of media; encourage students to value visual experimentation and initial research as a process for personalised creative problem solving; initiate group and self-assessment methods for evaluating and analysing receiver engagement and communication effectiveness of a design solution; and to introduce the importance of hand skills and project management in the refining and detailing of processing, production and presentation of design solutions.
Description
This module introduces students to the basic skills, concepts and materials of graphic design, undertaking prehminary exercises in layout, use of type, illustration techniques and paper engineering. A set of exercises integrates and develops the range of skills explored in the preliminary exercises by concentration on set themes. This course does not use computers but emphasises essential skills that provide the foundations of all graphic design.
Outcomes
Students will gain the ability to maximise the graphic qualities and physical form of media and apply them to static and dynamic design solutions, and to understand the criteria by which communication effectiveness can be evaluated along with receiver engagement.
Practical: Studio practice. Consumables fee applicable.

DESA 2605 **Art Studio 5**
4 credit points. Mr Ryszard Dabek (Web Art and Design), Mr Geoff Levitus and Mr Frank Littler (Life Drawing). Semester: 1,2. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.
NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.
Students choose to attend one of the following modules:
Web Art and Design
Objectives
This module combines practical computer program and Internet work with discussion and analysis of how Web design functions as a contemporary visual art medium.
Description
The Web design workshop is aimed at students who wish to learn the basics of Web design and Internet page creation. At this level, no previous computer experience is needed. The module encourages students to look beyond the more obvious uses of the Internet (commence, reference etc.) and engage with the net in terms of its creative potential and cultural relevance. The program will examine uses of the Internet by contemporary artists in such diverse areas as media arts, architecture, hypertext writing and other emerging forms of net.art that engage with the very form of the Internet itself.
Outcomes
Starting from a basic introduction students will gain the skills necessary to design, build and publish their own Internet site on the World Wide Web. In addition to using the latest Internet browsers (Netscape 4.x), students will learn to create Web sites using Dreamweaver 1.2 and Photoshop 5.x and publish them using an FTP program such as Fetch. Students will have an understanding of the complex place and construction Web art.

Life Drawing

Objectives

This module aims to increase the students' level of skill in all three areas of drawing: representational, interpretative and expressive; to develop dynamic approaches to drawing the human body; to use a wide range of media and techniques, to focus on such areas as weight, movement, and direction as well as the formal aspects of composition, anatomy and foreshortening.

Description

This module provides students with the opportunity to combine sound observational skills with imaginative and experimental techniques in order to encourage a personal vision and style and a commitment to the practice of drawing as a discipline in its own right.

Outcomes

Students will build on previous drawing experience and be able to use a range of approaches to depict the human body. Students should have enough experience at the end of the module to be able to criticize and select from their own work for their final portfolio or exhibition.

Practical: Studio practice. Consumables fee applicable.

DESA 2606 Art Studio 6

4 credit points. Mr Mark Jones (Ceramics), Ms Virginia Ross and Ms Paola Talbert (Photography), Mr Geoff Levitus (Oil Painting), Ms Linda Fienberg (Object Design). **Semester: 1**,2, Summer. Classes: Demonstrations, Practical studio work, Slide lectures, Gallery visit and Group discussions. **Prerequisite:** for subject area Ceramics # Art and Design, prereq Ceramics Hand Building or Ceramics Wheel Throwing subject area; for subject area Experimental Photography, prereq Photography subject area; for subject area Oil Painting, prereq Drawing or Painting subject areas. **Assessment:** Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Ceramics - Art and Design

Objectives

This module aims to produce a number of individually designed ceramic works that develop and extend techniques learnt in Ceramics - Hand Building or Wheel Throwing.

Description

Larger and more advanced forms will be attempted with combinations of coil, hard slab and throwing techniques. Students will be introduced to plaster moulds for large constructions and relief decorations. An individual approach to vessel and sculptural construction will be informed by contemporary ceramic practices. In addition, experimental surface treatments will be explored. Architecture students will be able to use this module to explore architectural forms using ceramic and mixed media.

Outcomes

At the end of the module students should:

- be able to construct more technically difficult forms than in their previous Studio,
- have the ability to design work from concept to finished object,
- have developed self-initiated projects,
- have explored various advanced surface treatments.

Experimental Photography

Objectives

This module builds on the skills learned in Photography Art Studio and incorporates advanced camera work and printing with development of conceptual and experimental photography skills.

Description

Students learn to combine advanced photography techniques such as pushing film, photomontage, copy-stand work and experimental techniques such as sandwiching negatives and hand-colouring with development of appropriate conceptualisation of the ideas behind the photographic work. There is emphasis on development of further technical skills combined with advancement and consolidation of their understanding of the role of photographic practices as a contemporary visual medium. Students will research a number of different genres in photographic history, bringing this to bear on their work for the module. A critical attitude to the production and construction of images will be encouraged.

Outcomes

Students should understand and be able to demonstrate advanced principles and practice of camera operations, the manipulation of negatives, and printing of high quality, large-scale prints.

Oil Painting

Objectives

The purpose of this module is to provide the student with the knowledge and skills required to use a range of painting techniques in oil and to develop an awareness of contemporary art as it relates to the traditional medium of oil painting.

Outcomes

Students will know how to:

- prepare canvas and grounds and mix colours;
- produce a series of preparatory exercises and finished works that investigate observational painting (still life), anatomy (painting with live model, self-portraiture), perspective, ideas and images (style, appropriation, the decorative, words and text, abstraction);
- to experiment with imaginative applications of oil media based on observational skills;
- have an awareness of contemporary art.

Object Design - Wood

Objectives

This unit aims to develop students' understanding of wood - properties, different species, and sources of timber. Students will develop woodworking and machining skills suitable for producing small objects and models and a greater appreciation of high quality workmanship in timber detailing. Students will also acquire skills in communicating concepts in 3 dimensions.

Description

The unit introduces students to workshop tools and machinery through a series of tutorials, demonstrations, experiments, discussions and woodworking exercises. As the unit progresses students will develop their ability to select and work with different types of timber and also increase their understanding of workshop, machining and production processes used in joinery and furniture workshops.

Students will be required to produce an original design for and make a small 'special' object, sourcing their own timber and researching the origin and timber species for a presentation. Discussions will include debates about sustainability, the value of rare and exotic timber species and occupational health and safety issues.

Outcomes

On completion of the unit students will have

- experience and confidence in using woodworking equipment
- an understanding of the techniques and practices used in furniture and joinery workshops
- an appreciation of timber and its qualities
- an improved ability to design well with timber and think and work in 3 dimensions
- knowledge of different sources of timber.

Practical: Studio practice. Consumables fee applicable

DESA 2607 Art Studio 7

4 credit points. Various lecturers. **Semester:** 1,2. **Classes:** See details for Art Studios 1-6. **Assessment:** See details for Art Studios 1-6.

NB: Available in BArch only

Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Description

This unit is reserved exclusively for Bachelor of Architecture students to enable them to undertake a studio in any medium not previously completed, which is in an Art Studio group that has already been undertaken. Refer to Art Studios 1-6 for unit descriptions.

Practical: studio practice. Consumables fee applicable

DESA 2608 Advanced Art Studio 1

4 credit points. Ms Virginia Ross (Photography), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture), Ms Linda Fienberg (Object Design). **Semester: 1,2. Classes:** Practical studio work, lectures, development of ideas through group discussions, gallery visit, exhibition, group critique of artwork. **Prerequisite:** Art Studio in the same medium with a result of at least 65 per cent. **Assessment:** Attendance and participation, Studio assessment for technical development, Visual research journal, Final artwork. A process diary and an artwork for exhibition are the final projects. Attendance, Application and participation, Development of technical skills, Completed coursework.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Objectives

This unit allows the student to extend and develop skills and knowledge gained in the Art Studio workshops. Through an advanced use of the media, art theory lectures and seminars, the production of a visual research journal and a final exhibition project students should be able to integrate their skills and knowledge in the creation of an artwork. A critical and conceptual approach to image and object making will be further developed around a set theme. The theme changes each year and will be published prior to enrolment.

Description

The following studios are offered at advanced art level: ceramics, photography, painting, drawing, mixed media, sculpture, screenprinting on paper and fabric, video, graphic design, printmedia, visual art and culture, new media arts, object design.

Please note that some studios may not be offered every year.

Outcomes

Students should understand and be able to demonstrate advanced principles and practice in the studio they are participating in as well as a highly developed conceptual approach to the production of their artwork.

Through discussion, writing and practice, students develop their ability to define and refine initial ideas into a cohesive work of contemporary visual art. A critical attitude to the production and construction of images is encouraged.

Students will gain experience in presenting and installing their artwork into an exhibition environment and contributing to a catalogue of the exhibition.

Practical: Studio practice, Gallery visits, Exhibition installations. Consumables fee applicable.

DESA 2609 **Advanced Art Studio 2**

8 credit points. Ms Virginia Ross (Photography), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture), Ms Linda Fienberg (Object Design). **Semester: 1. Classes:** Practical studio work, lectures, development of ideas through group discussions, gallery visit, exhibition, group critique of artwork. **Prerequisite:** Art Studio in the same medium, with a result of at least 65 per cent. **Assessment:** Attendance and participation, studio assessment for technical development, visual research journal, final artwork. A process diary and an artwork for exhibition are the final projects. A 2000 word research paper/essay and presentation of a seminar is required. Attendance, application and participation development of technical skills, seminar, completed coursework.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Objectives

This unit allows the student to extend and develop skills and knowledge gained in the Art Studio workshops as well as completing theoretical work. Through an advanced use of the media, art/architectural theory lectures and seminars, the production of a visual research journal and a final exhibition project students should be able to integrate their skills and knowledge in the creation of an artwork. A critical and conceptual approach to image and object making will be further developed around a set theme. The theme changes each year and will be published prior to enrolment. Students will write a 2000 word essay and present a seminar in addition to practical work.

Description

The following studios are offered at advanced art level: ceramics, photography, painting, drawing, mixed media, sculpture, screenprinting on paper and fabric, video, graphic design, printmedia, visual art and culture, new media arts, object design.

Please note that some studios may not be offered every year.

Outcomes

Students should understand and be able to demonstrate advanced principles and practice in the studio they are participating in as well as a highly developed conceptual approach to the production of their artwork.

Students will gain skills in researching and writing a theoretically -based essay on a topic related to the year's theme, and in presenting a seminar based on a set reading.

Through discussion, writing and practice, students develop their ability to define and refine initial ideas into a cohesive work of contemporary visual art. A critical attitude to the production and construction of images is encouraged.

Students will gain experience in presenting and installing their artwork into an exhibition environment and contributing to a catalogue of the exhibition.

Practical Studio practice, gallery visits, exhibition installation. Consumables fee applicable.

Practical: Studio practice, Gallery visits, Exhibition installation. Consumables fee applicable.

ARCF 6002 **Preparatory Advanced Study Report**

4 credit points. Dr Glen Hill, Prof Gary Moore and staff. **Semester:** 2. **Classes:** lectures. **Assessment:** A developed research proposal that provides a rationale for the research, articulated research question, review of relevant literature, and detailed statement of research design, methods of information collection and data analysis.

Objectives

The unit aims to equip students with the research, scholarly and writing skills needed to prepare an Advanced Study Report or similar research and scholarly documents. It will provide an introductory overview of basic research and scholarship techniques; basic methodological skills; information search, storage and retrieval techniques; organisation and writing skills for completing a scholarly research document.

Description

The unit is divided into two parts. The first will cover the following basic issues that are involved in an ASR: deciding on a research topic; research design; searching for and analysing or interpreting information; managing a research project; writing a research proposal. The second part will involve each participant working with the instructor, other members of the seminar and his or her supervisor to produce an accepted research proposal.

Outcomes

At the completion of the unit, students will be expected to have acquired the skills necessary for the successful completion of an Advanced Study Report or equivalent scholarly research document.

ARCF 6003 **Advanced Study Report**

12 credit points. **Semester: 1**,2. **Prerequisite:** ARCF 6002.

Compulsory unit for BArch Honours

Objectives

The Advanced Study Report allows the candidate to explore and research an area of architectural study in depth, by private study under the direction of a supervisor and to produce a document reporting on the research. The objectives of the unit are to conduct research or scholarship to explore an area relevant to the study of architecture.

Outcomes

At the completion of the semester, the candidate is expected to be able to:

- conduct research from an initial proposal using research and scholarly methods as appropriate;
- carry out appropriate research methodology, modifying it in the light of findings as it proceeds;
- draw conclusions from the research, and relate those conclusions to the original proposition; and
- write up and produce a formal scholarly research report.

4 Bachelor of Design Computing

Design computing is broadly defined to be the use and development of computational models of design processes and digital media to assist and/or automate various aspects of the design process with the goal of producing higher quality and new design forms. In the Faculty of Architecture, we have a particular focus on computational models of form and function with an emphasis on the built environment. During the years design computing has evolved from a small research area in applied computer science and neighbouring disciplines into a separate interdisciplinary professional field, ready to produce its own specialists. Design computing involves profound understanding and effective application of digital media, communication and networking technologies, computer visualisation and graphics, data modelling, automation and integration in design. Design computing also provides a basis for studying formal methods of designing and their computational support. The future of design computing includes the design of cyberspace as an environment for professional collaboration, bringing the application of design computing from the design of physical objects to the design of virtual places. This new degree recognises the need for another kind of professional in the design professions: the design computing specialist.

The Bachelor of Design Computing provides undergraduate students with the opportunity to understand the various components of design computing, including digital design representations, computational modelling of design processes, computer programming, and computer-mediated collaborative design, and their integration in a design studio environment. This emphasis is unique in the University of Sydney. Graduates from the Bachelor of Design Computing would be sought after by: design firms developing digital models and presentations, and design firms managing the integration of design information in distributed design organisations, consultants and start up companies developing the future virtual environments with an architectural perspective, and other design and architecture practices which use advanced computer support in their work.

Philosophy of the Bachelor of Design Computing

The world around us is increasingly being changed by design. Designers are the change agents of this world. At the same time the border of the world where we can design has been rapidly moving beyond what we call the *physical* world, or world of atomic structures, into what we label as the *virtual* world, or the world of *digital* structures. Digital computing provides both new concepts and technology that on the one hand is one of the drivers and facilitators of these changes, and, on the other hand, bridges the gap between these worlds.

Design Computing is the field that brings designing and computing together in a synergistic manner to allow new forms of designing and design to occur and to allow new designs to be produced. Design Computing provides the theoretical and practical support for designing in both the physical and virtual worlds.

The philosophy of this degree is to bring together three core concepts in design computing, united by the keyword 'digital', allowing a student to specialise in one while being knowledgeable about the other two. These core concepts are:

- Developing environments for designing digitally
- Designing digitally
- Interacting with designs digitally.

Developing environments for designing digitally involves a conceptual and practical understanding of current digital technology for design and can lead to the development of new methods and techniques for designing, including languages of designing. Designing digitally requires knowledge of the various ways in which designs can be represented and generated. Interacting with designs digitally is a new area that involves knowledge of computer-mediated collaboration and how designers interact with and via different digital media. The concept of virtual architecture as either a simulation of the physical world or as a functional virtual world, brings these three core concepts together.

There are four knowledge areas of design computing that provide the basis for developing our philosophy of design computing:

Design Media and Representation

Considering the basics of different representations of design information from the perspective of computer modelling and manipulation. Topics include:

- Digital Image Representation and Design
- CAD Modelling and Electronic Design Documentation
- 3D Modelling and Photorealism
- Design Database Management
- Web-based Design Information Systems
- Interactive Multimedia Design.

Computer Programming

Providing basic and advanced programming knowledge and skills for use in developing new applications and in augmenting existing applications. Topics include:

- Introduction to Programming
- User Interfaces for Designing
- Graphics Programming
- Systems Analysis and Design.

Computational Models

Providing an understanding of the variety of computational models of design knowledge and design processes. Topics include:

- Understanding Design
- Knowledge Based Design
- Design Grammars
- Evolutionary Design
- Product Modelling
- Computer Supported Collaborative Design
- Virtual Architecture.

Design

Providing experience and an understanding of the design process in a studio environment.

- Design Studio
- Design Computing Studio
- Virtual Design Studios.

Progression

The Bachelor of Design Computing is a 3 year degree with the opportunity for a fourth year for a Bachelor of Design Computing (Honours). The first year introduces the concept of design, CAD, web page design, and programming. These units form the basic knowledge needed for a broad range of design computing topics in second year, and the integrated design computing studio in the third year. The electives allow the student to develop additional skills and knowledge in design computing, computer science, architectural design, or engineering.

■ Bachelor of Design Computing regulations

Senate resolutions: Bachelor of Design Computing

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000 in chapter 8, which sets out the requirements for all undergraduate courses, and the Faculty of Architecture's Resolutions.]

1. Requirements of the Pass degree

To qualify for the award of the pass degree candidates must:

(1) complete successfully units of study prescribed by the Faculty giving credit for a total of 144 credit points; and

(2) satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

2. Requirements for the Honours degree

To qualify for the award of the honours degree a candidate must complete the honours requirements published in the Faculty resolutions relating to the course.

Faculty resolutions: Bachelor of Design Computing

[These Resolutions must be read in conjunction with the University of Sydney (Undergraduate Courses) Rule 2000]

Division 1 - Admission, Course Requirements, credit points and Assessment

1. Units of study

(1) A candidate for the Bachelor of Design Computing shall complete the units of study prescribed by the Faculty satisfying all requirements with regard to mandatory units of study.

(2) Except with the special permission of the Faculty, the mandatory core units of study must be completed in the sequence prescribed.

(3) A student must complete at least 36 credit points of elective units from the Bachelor of Design Computing table of units of study.

(4) Units of study may specify assumed knowledge, prerequisite or corequisite units of study.

(5) See the table for units of study required for the Bachelor of Design Computing.

2. Requirements for the Pass degree

To be eligible for award of the Bachelor of Design Computing a candidate must:

(1) complete successfully units of study giving credit for a total of 144 credit points;

(2) complete successfully all mandatory units of study shown in the Table of units of study for the Bachelor of Design Computing, and

(3) complete elective units from the table of units of study for the Bachelor of Design Computing, except that the candidate may, with the approval of the Faculty, substitute instead other units of study.

3. Details of units of study

The units of study are listed in the Bachelor of Design Computing table of units of study.

4. Assessment

(1) A student's work may be assessed by written and oral examinations, assignments, exercises and practical work or any combination of these.

(2) A student who has been prevented by duly documented illness or misadventure from completing a unit of study may be allowed to complete that unit of study or supplementary work as the Dean shall determine.

(3) When a student is permitted to submit additional work other than on the grounds of illness or misadventure, and the temporary grade INC has been given, the maximum result that may be awarded is 50 Pass.

(4) (a) The first year core units of study DECO 1010 and DECO 1020 will not be included in the WAM calculation.
(b) A student's weighted average mark (WAM) shall be calculated using the formula:

where CP_g is the number of credit points gained by passing a unit of study; CP_a is the number of credit points attempted including failures (F, AF) and units of study discontinued (DF); M is the mark awarded.

Division 2 - Enrolment

5. Enrolment restrictions

(1) Except with the express permission of the Dean a student may not enrol in units of study with a total value of more than 28 credit points in any one semester.

(2) A student may not enrol in any unit of study from the Faculty's Table of Graduate units of study without first obtaining written permission from the lecturer in charge of the unit.

6. Granting of Credit

(1) A student may be granted unspecified credit towards the degree for any units of study completed towards a previous award course or as a non-award student at The University of Sydney or other tertiary institution and that are not listed in the Table of units of study for the degree, up to a maximum of 12 credit points. The Dean shall determine the credit point value of that credit.

(2) A student may apply to have credit granted towards the degree on the basis of non-credentialled learning or experience that is equivalent to a unit or units of study in the Table of units of study for the degree. The Dean will determine the method for demonstrating the achievement of the equivalent academic standard.

(3) A student may be granted credit for units of study completed elsewhere that are equivalent in workload and academic standard to units in the Table of units of study for the degree:
(a) with advanced standing, provided that an overall credit average has been achieved; or
(b)for individual units of study provided that a credit grade has been achieved.

(4)Credit granted under sections (1), (2) and (3) above shall be limited to a maximum of 96 credit points.

(5) A student may, with the consent of another Faculty or Board of Studies, complete while enrolled in the Faculty of Architecture a unit or units of study taught in the other Faculty or under a Board of Studies but not listed in the Table of units of study.

7. Restrictions on the Granting of Credit

(1) Credit shall not be granted for units of study, non-credentialled learning or experience gained more than 10 years prior to admission or readmission for the degree.

(2) Where credit is granted, the Dean shall determine the maximum period of candidature for the degree, proportionate to the amount of credit granted.

(3) A candidate granted credit for the degree shall not count towards the degree any unit of study subsequently completed within The University of Sydney that overlaps substantially in content with the unit of study upon which the credit is based.

(4) The granting of unspecified credit towards the Bachelor of Design Computing cannot be used for gaining credit towards a subsequent degree enrolment within the Faculty.

(5) Credit shall not be granted for units of study gained with a 'Terminating' or 'Conceded' Pass, or equivalent.

8. Determination of credit granted on the basis of equivalence to units in the Table of units of study

(1) A student seeking credit for units of study completed other than at The University of Sydney shall apply on the form provided by the Faculty and supply documentary evidence of the unit of study description and the assessment result. The student shall be available for discussion with appropriate Faculty staff.

(2) A student seeking credit on the basis of non-credentialled learning or experience shall apply on the form provided by the Faculty and shall be available for assessment by the appropriate unit of study coordinator.
Equivalence will be determined by the Dean from the documentary evidence and discussion under (1) and by appropriate assessment of the student under (2) before credit will be granted.

Division 3 - Progression

9. Repeating a unit of study

(1) A student who repeats a unit of study shall:
(a) participate in the learning experiences provided for the unit of study; and
(b)meet all examination, assessment and attendance requirements for the unit of study.
unless granted exemption by the Dean for previous satisfactory completion of components of the unit of study.

(2) A student who has passed a unit of study may not repeat that unit of study and have it counted towards fulfilling the requirements of the degree.

lO.Attendance requirements

(1) A student who is absent without leave may be deemed not to have completed a particular unit of study or course.

(2) A student who fails to meet the attendance requirements of a unit of study will be deemed not to have completed that unit of study.

Division 4 - Discontinuation of enrolment and suspension of candidature

11.Discontinuation of enrolment

Except with the approval of the Dean, in exceptional circumstances, a student who withdraws from or discontinues candidature for the degree without having successfully completed any units of study shall be required to reapply for admission to the degree.

12.Re-enrolment after an absence

(1)The candidature of a student who has not obtained permission to suspend will be deemed to have lapsed and the student must apply for readmission in accordance with procedures determined by the Dean.

(2)Except where the Dean determines otherwise, a student who re-enrols after an absence or a suspension of candidature for any period shall proceed under the by-laws and resolutions in force at the time of re-enrolment.

13. Satisfactory progress

(1)The Faculty may require a student to show good cause as to why he or she should not be excluded from the degree if he or she does not make satisfactory progress. A student who has failed a required unit of study more than once shall normally be presumed not to have made satisfactory progress.

(2) The Dean will permit a student who has shown good cause to re-enrol.

Division 5 - Honours

14.Requirements for the Honours Degree

(1)The minimum requirements for admission will be:
(a) a WAM (weighted average mark) of at least 70 for the Pass degree. In exceptional cases the Dean may admit a student with a WAM of 65 or higher.
(b) an approved thesis topic and supervisor. A research topic which is satisfactory in terms of research interests, resources and availability of supervision within the Faculty must be agreed upon between the applicant and the Dean before the student can enrol in me unit of study Thesis.
(c) except with the permission of the Dean, the student shall be of not more than 4 years' standing or the semester equivalent for the Pass degree; and
(d)the student shall have qualified for award of the Pass degree.

(2) (a) A person to whom the Bachelor of Design Computing Pass degree has been awarded may, with the permission of the Faculty, be admitted to candidature for the Honours degree provided that he or she satisfies the other requirements of these resolutions for admission to the Honours program.
(b) a student may not graduate with the Pass degree while enrolled in the final year honours course.
(c) On the recommendation of the head of the program concerned, the Dean may permit a student who has been awarded the Pass degree, equivalent to the Bachelor of Design Computing, at another recognized tertiary institution to enrol in the honours course in the Faculty.
(d) Students who fail or discontinue the honours course may not re-enrol in it, except with the approval of the Dean.

(3) The Dean shall appoint a member of the full-time or fractional academic or research staff of the Faculty to act as supervisor of the student. The Dean may also appoint an associate supervisor who may be a member of the academic or research staff of the University, an Honorary Associate or a person with appropriate qualifications in another institution or organization.

15.Form of the Honours Thesis

(1) A student undertaking a thesis shall:
(a) lodge with the Faculty two copies of the thesis embodying the results of an original research investigation carried out by the student.
(b) state in the thesis, generally in the preface and specifically in the notes, the sources on which the research was based, the extent to which the student has made use of the work of others and the portion of the thesis which is claimed to be original, and
(c) not lodge as the student's own work any work previously submitted for a degree of The University of Sydney or any other university, but may incorporate such work in the thesis provided that the student indicates the work so incorporated.

(2) A student may lodge the thesis for examination bound in either a temporary or permanent form according to the following conditions:
(a) temporary binding must be able to withstand ordinary handling and postage. The preferred form of binding is the 'Perfect Binding' system.
(b)the cover of a temporarily bound thesis must have a label showing the student's name, name of the degree, title of the thesis and the year of submission.

(3) A student must lodge the final thesis in a permanent form according to the following conditions:
(a) permanent binding must meet the requirements given in the University Calendar: Volume I: Statutes and Regulations under the statutes governing the degree of Doctor of Philosophy.
(b) following examination and emendation if necessary, at least one copy (the Library copy) of the thesis must be bound in a permanent form.
(c) if emendations are required, all copies of the thesis which are to remain available within the University must be amended.

16.Result of Honours candidature

(1)The Dean shall appoint two examiners. The examiners shall report to the Dean.

(2)The Dean shall, on the recommendation of the Board of Undergraduate Studies, award the degree of Bachelor of Design Computing with Honours whenever the following sections (a) or (b) are satisfied together with the following section (c):
(a) the examiners have recommended the degree be awarded without reservation or subject to emendations to all copies of the thesis which are to remain available in the University, or
(b)the Board of Undergraduate Studies unanimously accepts the recommendation of the supervisor that the degree be awarded subject to emendations despite reservations expressed by any examiner; and
(c) the overall performance in accordance with resolution 23(3) below is 70 or greater.

(3) The Dean, on the recommendation of the Board of Undergraduate Studies, will determine the class of Honours, if any, on the overall performance of the candidate in the Bachelor of Design Computing using a mark derived from weighting the mark for the Honours thesis at 70 per cent and the weighted average mark for the all units of study of the Pass degree at 30 per cent.

(4) The Dean may recommend that an unsuccessful candidate be permitted to prepare for re-examination if of sufficient merit and the supervisor has so recommended.

Division 6 - Award of the degree

17. Award of the degree

(1)The Bachelor of Design Computing Pass degree shall be awarded to a student who has completed the requirements for the degree.

(2) The B achelor of Design Computing with Honours shall be awarded with the following grades:
Honours Class I (with a mark of at least 80)
Honours Class n, Division 1 (with a mark of at least 75)
Honours Class II, Division 2 (with a mark of at least 70)

(3) A student for the Honours program who does not meet the requirements for award of Honours shall be awarded the Bachelor of Design Computing Pass degree.

18.Vniversity Medal

Honours students with an outstanding academic record throughout the degree and who have achieved Honours Class I may be eligible for the award of a University Medal, in accordance with Academic Board policy and on nomination by the Dean with the recommendation of the Board of Undergraduate Studies.

Division 6 - Delegation of Authority

19.Delegation

(1)The Dean delegates responsibility for admission to the Bachelor of Design Computing degree to the Bachelor of Design Computing Program Committee.

(2) In these resolutions the Dean delegates responsibility to the School of Undergraduate Studies and the Associate Dean (Undergraduate Studies) for determination of the following matters, on the recommendation of the head of program where appropriate:
(a) examination procedures and appointment of examiners;
(b) supervision of candidature;
(c) variations of candidature;

(d) extension of candidature;
(e) completion of candidature away from the University; and
(f) any other matters as appropriate within these resolutions.

Tables of units of study: Bachelor of Design Computing

Core units

Unit code	Unit name	Credit points	Year	Sem
DECO 1011	Design Computing Studio 1A	10		
DECO 1004	Understanding Design	3		
DECO 1001	Digital Image Representation and Design	3		
DECO 2002	Interactive Multimedia Design	4		
DESA 2604	Art Studio 4-GraphicDesign	4		
DECO 1021	Design Computing Studio 1B	10		
DECO 1002	Web-based Design Information Systems	4		
DECO 1003	CAD Modelling	4		
SOFT 1001	Introduction to Software Development 1	6		
DECO 2001	3D Modelling and Photorealism	4		
DECO 2003	Knowledge-Based Design	4		
INFO 2000	Systems Analysis and Design	4		
DECO 2004	Product Modelling	4		
INFO 2005	Database Tools (corequisite DECO 2004)	4		
DECO 2005	Computer-Supported Collaborative Design			
DECO 3001	Life Cycle Integrated Design Computing Studio	12		
DECO 3002	Advanced Technology Integrated Design Computing Studio	12		

Design Computing electives

Unit code	Unit name	Credit points	Year	Sem
DECO 2006	Elective-Design Computing 1	4	2/3	1,2
DECO 2007	Elective-Design Computing 2	4	2/3	1,2
DECO 2008	Elective-Design Computing 3	6	2/3	1,2
DECO 2009	Elective-Design Computing 4	6	2/3	1,2
DESA 2612	Designing with Surfaces and Light	3		1 2
DESA 2610	Designing with Colour 1	4	2,3	1,2
DESA 2611	Designing with Colour 2	4	2,3	1,2
DESA 2615	Designing with Colour 3	4	2,3	1,2
DECO 2601	Design Grammars	4	2,3	2
DECO 2602	Evolutionary Design	4	2,3	2
DECO 2603	Agents in Design	4	2,3	2
ARCF 6001	Preparatory Honours Research	4	3	1

Computer Science electives

Unit code	Unit name	Credit points	Year	Sem
SOFT 1002	Introduction to Software Development 2		2,3	
SOFT 3101	Object-Oriented Software Design		2,3	
SOFT 3102	User Interface Design		2,3	
ISYS 2006	Information Systems in Organisations		2,3	
ISYS3012	Project Management and Practice		2,3	
INFO 2007	Distributed Information Systems		2,3	
INFO 3005	Organisational Database Systems		2,3	
MULT 3018	Multimedia Computing and Systems		2,3	
MULT 3027	Object-Oriented Techniques in Multimedia		2,3	
MULT 4029	Multimedia Agents and CSCW Technology		2,3	

Bachelor of Design electives

Unit code	Unit name	Credit points	Year	Sem
DESA1101	Design Studies 1A		1	
DESA1102	Design Studies 1B		1	
DESA 2101	Design Studies 2 (prerequisite DESA1102)		2	
DESA 2203	Architecture in East Asia		2/3	
DESA 2204	Design Thinking		2/3	
DESA 2302	Australian Architecture: 1788-Present		3	
DESA 2305	Australian Modernist Architecture		2/3	
DESA 2206	Innovative Building Structures		2/3	
DESA 2208	Introduction to Project Management		2/3	
DESA 2209	Built Environment Project Management (prerequisite DESA 2208)		2/3	
DESA 2211	Architecture, Place and Society		2/3	2
DESA 2212	Social Studies in Architecture		2/3	2
DESA 2213	Housing for Health		2	2
DESA 2214	Housing for Well-Being (prerequisite DESA 2213 Housing for Health)		3	1
DESA 2201	Design Ecology and Sustainability		2	1
DESA 2202	Sustainable Interior Environments		2	2
DESA 2207	Sustainable Architecture		3	1
DESP 1201	Introductory Uiban Design and Planning		1	2
DESP 2201	Designing and the Public Domain		2	1

Art Studio electives

Unit code	Unit name	Credit points	Year	Sem
DESA 2616	Explorations in Mixed Media	4	2,3	1
DESA 2617	Explorations in Ceramic Forms	4	2,3	2
DESA 2618	Public Art	4	2,3	1
DESA 2619	Site Specific Art	4	2,3	2
DESA 2601	Art Studio 1 (Photography, Etching)	4	2,3	1,2
DESA2602	Art Studio 2 (Ceramics/Wheel-thiowrng, Video, General Drawing)	4	2,3	1,2
DESA 2603	Art Studio 3 (Ceramics/Hand-building, Painting, Sculpture)	4	2,3	1,2
DESA 2605	Art Studio 5 (Web Art and Design, Life Drawing)	4	2,3	1,2
DESA 2606	Art Studio 6 (Experimental Photography, Ceramics, Oil Painting, Object Design)	4	2,3	1,2
DESA2607	Art Studio B Arch Elective (any medium)	4		1,2
DESA 2608	Advanced Art Studio 1 (Photography, Ceramics, Drawing, Painting? Screen-printing on Paper and Fabric, Sculpture, Graphic Design, New Media Art, Video, Visual Art and Culture, Object Design - Furniture)	4		1
DESA 2609	Advanced Art Studio 2 (Photography, Ceramics, Mixed Media, Drawing, Painting, Screen-printing on Paper and Fabric, Sculpture, Graphic Design, New MediaArt, PrintMedia, Video, VisualArt and Culture, Object Design - Furniture)	8		1

Engineering electives

Unit code	Unit name	Credit points	Year	Sem
MECH 1540	Introductory Mechanical Engineering	5	2,3	1
MECH 1820	Introduction to Computing	6	2,3	1
MECH 2400	Mechanical Design 1	6	2,3	2
CIVL 1001	Civil Engineering 1	4	2,3	1
CIVL 1051	Dynamics	5	2,3	2
CIVL 1052	Statics	5	2,3	1
CIVL 2201	Structural Mechanics	6	2,3	1
CIVL 2203	Structural Design	4	2,3	2

Recommended electives from other programs

Students may take elective units from other programs in the Faculty of Architecture or any other Faculty in the University. Electives recommended for BDesComp students are listed below. Students should note, however, that some units have Assumed Knowledge, Pre-requisites or Co-requisites, and Restrictions (see the relevant Faculty Handbook for details) and students must comply with these requirements.

Note: some units of study are prerequisite for major streams if students are interested in following these.

Note: check the timetable for clashes, check if any there is any quota, get permission from this Faculty and the offering Faculty.

■ BDesComp units of study

DECO1011 Design Computing Studio 1A

10 credit points. Dr. Rabee M. Reffat. **Semester: 1. Assessment:** A minimum of 90% attendance is required to be eligible for marking your assignments. Assessment of attendance is 15% of unit mark. In this unit of study there will be two types of assessment: formative and summative. Formative assignments will not be marked but have to be completed to satisfy the requirements of this unit of study. Submission of summative assignments will be accepted up to 14 days late with the following penalties applied: up to 7 days late: the mark awarded is reduced by 10 per cent; up to 14 days late: the mark awarded is reduced by 30 per cent; and more than 14 days late: not accepted.

Aims

- This unit aims to involve students in a series of situations through which they learn how to apply and integrate key aspects of knowledge inherent in the issues identified, through the processes of designing simple components of the built environment in selected contexts. This knowledge broadly concerns aspects of inhabiting, designing and constructing the built environment as it relates to the human, environmental, cultural, social and technological contexts which influence the form of the built environment.
- The units aims to introduce students to an awareness of their learning and of their own design processes, and to the value of reflecting on these processes in order to improve their design outcomes.
- The unit aims to develop the abilities of students to use basic conventions for representing, testing and developing design ideas using manual and computer based techniques. There will be a focus on computer based and digital media modelling and representation.

Description

Design processes are complex because a statement of what is to be designed always contains only part of the information needed to produce a design, and also does not specify the attributes of the required physical form of the object to be designed. Designing therefore involves identifying the issues relevant to each specific design setting, and undertaking appropriate design processes which integrate and resolve the knowledge inherent in those issues. Through these processes appropriate design intentions and strategies are developed for the required component in its particular context. Designing, then, involves identifying and using knowledge relevant to a specific design context.

Precedent knowledge will be concerned with exploring direct, explicit design precedents showing how similar issues have been addressed in similar situations, and will aim to introduce the students to the use of this in informing their design process. Procedural knowledge aims to introduce basic methods for moving from the design requirement, starting the design process and identifying relevant issues, through basic iterative processes through which students will learn simple means for testing, evaluating, developing and representing their designs.

Objectives

On the successful completion of this unit students will be able to:

- Use computer-based tools, modelling and representations in design processes and presentations
- Reflect on their learning and on their design processes through describing and discussing these, and identify some key ways to improve design outcomes
- Use at a basic level direct precedents that relate to specific knowledge issues to inform decision making in design processes
- Use at a basic level simple methods for starting the design process, and carry out basic iterative processes for testing, evaluating and developing their designs
- Identify, explore and apply at a basic level aspects of knowledge of the built environment to elementary design requirements and settings involving a small number of key design issues, including the ability to:

Inhabiting the built environment:

- Reflect human requirements and interaction with objects and environments
- Identify and respond to the immediate design context of the natural world as the setting for design, including key aspects of basic environmental issues and opportunities of a site and its context
- Identify the impact of designed objects including buildings on their physical context

Designing the built environment

- Use basic verbal skills, basic conventions for manual graphics, and appropriate computer graphic and modelling tools to represent designs for:
- starting the design the process, iterative processes for testing and development
- presentation to others
- use basic forms of expression of physical components of the built environment (eg, shadow, scale, texture)

Constructing the built environment

- develop an appropriate simple structural system
- demonstrate the appropriateness of the component elements of a building
- identify and use simple enclosure materials and construction strategies

Generic Skills

In this unit of, it is expected that you develop the following skills that will help you by the time of graduation to be more employable and more able to cope with the changes in the work environment. These generic skills are not only applicable and useful to this unit of study or to your Degree but rather to all aspects of your life.

Knowledge skills

- learn a body of knowledge and apply it to practice at different situations

Thinking skills

- be able to account for your decisions
- be a realistic self-evaluator
- adopt a problem-solving approach
- become a creative and imaginative thinker

Personal skills

- develop the capacity to continue to learn
- develop the ability to plan and achieve goals
- develop the ability to work with others

Personal attributes

- acknowledge personal responsibility

Practical skills

- develop and apply technical skills to your field of study

Contribution of unit to the BDesComp Program

Designing is the key to function, aesthetics and economic competitiveness and the fundamental precursor to manufacturing. Its results are shaped by our understanding of designing as a process. This unit of study aims to provide you with basic concepts, skills and experiences of the process of designing using computational tools to design objects of the built environment.

DECO1004 Understanding Design

3 credit points. Dr Michael Rosenman. **Semester:** 1. **Classes:** lectures. **Assessment:** 3 essays (1 x 40 per cent, 2 x 30 per cent).

Objectives

This unit of study aims to give the student an understanding of design as a general activity in its own right, comparative to other activities such as science and art. It aims to stress the importance of design (and its consequences) as an activity concerned with changing the state of the existing environment through a set of conscious and purposeful actions. It aims to demonstrate that the study of the design process can be undertaken in a general manner independent of any discipline through the study of design methodology and design cognition.

Description

Design will be presented from both the designer's and the user's viewpoints, emphasising the nature of design as a collaborative activity.

The unit will include the following general subject matter:

- the nature of design
- design methodology
- cognitive models
- user-centred design
- human interfaces
- team and collaborative design

Outcomes

Students are expected to acquire an appreciation of: design as an important activity; its purpose and consequences; the nature of design; the processes and the participants involved. They should subsequently be able to apply this understanding to their particular area of design.

Students will demonstrate their understanding of design and design processes through the completion of three assignmnents which will test various aspects of the unit.

DECO1001 **Digital Image Representation and Design**

3 credit points. Prof Mary Lou Maher. **Semester: 1. Classes:** Lectures and tutorials. **Assessment: 1**. Scanned and modified image 2. Personal image portfolio 3. Group project of Images to promote a physical product. *NB: Permission required for enrolment.*

Objectives

- To introduce the representation of digital images.
- To develop digital images for design.
- To develop an understanding of software for digital image design.

Description

Digital images are the basis for the visualisation of digital representation of designs on computer screens and paper. This unit of study introduces the concepts of pixel representation through an understanding of image quality and resolution. The sources of images from photographs, sketches, 3D models, or drawing software are considered. Software for creating, editing, managing and printing digital images in the context of a project is introduced.

Outcomes

- understanding of the different representations, formats and file types for digital images.
- skills in using digital image software such as Photoshop.
- a portfolio of images presented as printed media, Web pages, and slides.

DECO 2002 **Interactive Multimedia Design**

4 credit points. Prof Mary Lou Maher. **Semester:** 1. Classes: Lectures and tutorials. **Assessment: 1**. Tutorial exercise 2. Personal multimedia presentation 3. Group multimedia project.

Objectives

- To develop an understanding of multimedia development methodologies.
- To introduce concepts of interactivity and navigation through multimedia content.
- To develop skills in multimedia authoring software.

Description

Multimedia content is the basis for the presentation of a design or family of design products and is also a product of design. This unit of study considers the methodologies for designing a multimedia product and applies them to the use of multimedia content in an interactive environment. The unit of study develops skills in the use of software such as Flash and Macromedia Director.

Outcomes

- An understanding of the concepts of designing interactive multimedia presentations.
- Skills in designing, developing, and implementing a CD-ROM product.

DESA 2604 **Art Studio 4**

4 credit points. Ms Jan Fieldsend (Screen Printing), Ms Teena Clerke (Graphic Design). **Semester:** 1, 2. **Classes:** Practical studio work. **Assessment:** Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Screen Printing - Paper

Objectives

This module will introduce the student to a range of screen printing techniques as well as developing creative and design skills. It will provide basic awareness of the history of screen printing in the graphic and the fine arts.

Description

This beginners' module covers design development, the preparation of hand-cut, wax, and photo-emulsion stencils, colour mixing, image registration and editioning. Artist quality, water-based non-toxic inks are used. An awareness of historical and contemporary screen prints is also taught. Students will produce an edition of multi-coloured screen prints or a series of experimental works. A critical approach to production and construction of images will be encouraged. Architecture students may wish to use screen printing techniques to enhance their design presentation.

Outcomes

On successful completion the student should have gained a knowledge of a range of design techniques for screen printing and be familiar with screen printing stencils, including photo stencils, ink technology, image registration and editioning as well as experimental techniques, they should also have a basic understanding of colour and appreciation of screen printing in its graphic, industrial and fine arts applications.

Screen Printing - Fabric

Objectives

The purposes of this module are to provide students with the knowledge and skills to design for and print on textiles; for students to gain an appreciation of textile design, both clothing and furnishing applications; and to experiment with various techniques and to develop finished textile prints that exhibit an imaginative understanding of colour and design as well as technical proficiency.

Description

This beginners' module investigates the teaches hand painting, paper, wax and photostencils, mixing and fixing of inks, design and colour exercises as related to suitable fabrics; scatter printing, over printing, repeat pattern and multi-colour printing. Projects may include collaboration with Object Design students to produce a work combining both textile and wood/metal - eg, furniture.

Outcomes

On successful completion of this module the students should have gained a knowledge of a range of stencils (wax emulsion, photostencils and paper); be familiar with ink technology and its relation to various fabrics; have an appreciation of textile design; be aware of design in its application to textiles; and have completed a finished print and a journal of design process.

Graphic Design

Objectives

This module aims to develop visual literacy with graphic techniques involving a variety of media; encourage students to value visual experimentation and initial research as a process for personalised creative problem solving; initiate group and self-assessment methods for evaluating and analysing receiver engagement and communication effectiveness of a design solution; and to introduce the importance of hand skills and project management in the refining and detailing of processing, production and presentation of design solutions.

Description

This module introduces students to the basic skills, concepts and materials of graphic design, undertaking preliminary exercises in layout, use of type, illustration techniques and paper engineering. A set of exercises integrates and develops the range of skills explored in the preliminary exercises by concentration on set themes. This course does hot use computers but emphasises essential skills that provide the foundations of all graphic design.

Outcomes

Students will gain the ability to maximise the graphic qualities and physical form of media and apply them to static and dynamic design solutions, and to understand the criteria by which communication effectiveness can be evaluated along with receiver engagement.

Practical: Studio practice. Consumables fee applicable.

DECO 1021 **Design Computing Studio 1B**

10 credit points. Dr. Rabee M. Reffat. **Semester:** 2. **Assessment:** A minimum of 90% attendance is required to be eligible for marking your assignments. Assessment of attendance is 15% of unit mark. In this unit of study there will be two types of assessment: formative and summative. Formative assignments will not be marked but have to be completed to satisfy the requirements of this unit of study. Submission of summative assignments will be accepted up to 14 days late with the following penalties applied: up to 7 days late: the mark awarded is reduced by 10 per cent; up to 14 days late: the mark awarded is reduced by 30 per cent; and more than 14 days late: not accepted.

Aims

- To develop and extend student's experience in designing artefacts of the built environment into designing a virtual world and objects in the virtual world.
- To develop an understanding of formulating and analysing the requirements of designing built environment providing access to virtual worlds
- To develop an understanding of the concepts in designing a virtual world
- To develop an understanding of various representations of objects in a virtual world
- To develop the basic skills to construct a virtual world and objects in the virtual world

- To develop an understanding of the integration between physical and virtual worlds

Description

This unit of study builds upon the basic capabilities and knowledge developed in Design Computing Studio 1 A. Design processes aim to explore the use of verbal, graphical and modelling means of developing designs for both physical and virtual worlds. The creation of 'virtual worlds' has emerged as a new design field, a rapidly expanding area of study, and possibly even a new profession. The design of a virtual world can be, and should be, almost as intricate as real architectural design.

The unit of study addresses the following issues: What are the requirements for designing a virtual world? What are the preconditions for successful virtuality? What prompts the sense of presence, of directness, of engagement? The unit of study considers the importance of developing various representations in designing a virtual world. Graphic design as a problem-solving approach to visual communication is explored. Concepts and skills in object and interior design in virtual worlds are developed. The unit of study develops concepts and skills of designing and visualising objects in virtual world and explores and facilitates a platform for designing a virtual world.

The unit of study progresses in three stages: inhibiting the virtual world, designing the virtual world and constructing the virtual world. The tasks exercised in this unit of study tie together aspects of a surprisingly wide range of disciplines, including computer science, architectural design, construction, interior design, and graphic design and visual art. Formative assessments will be used throughout the unit to inform you of your progress in learning; to boost your motivation; to help you in overcoming any difficulty you may have with your work; and to achieve the expected outcomes.

Objectives

Generic outcomes:

On successful completion of this unit of study you should be able to:

- Use computer-based tools, modelling and representations at a level of basic competence in design processes and presentations
- Reflect upon and evaluate at a level of basic competence your learning about designing and your own design processes through comparison between processes in consecutive designing activities
- Use at a level of basic competence direct precedents that relate to specific knowledge issues to inform decision making in design processes
- Use at a level of basic competence further simple methods for starting the design process, and carrying out iterative processes for testing, evaluation and development at a similar level

Specific outcomes:

On successful completion of this unit of study you should be able to:

- Draw analysis between designing physical and virtual worlds
- Explore various approaches in designing objects in virtual worlds
- Apply concepts of designing physical object/world into designing virtual object/world
- Develop conceptual and computer skills in designing and implementing virtual worlds
- Understand the role of designing virtual worlds and its possible integration with the physical world

Generic Skills

In this unit of, it is expected that you develop the following skills that will help you by the time of graduation to be more employable and more able to cope with the changes in the work environment. These generic skills are not only applicable and useful to this unit of study or to your Degree but rather to all aspects of your life.

Knowledge skills

- learn a body of knowledge and apply it to practice at different situations

Thinking skills

- be able to account for your decisions
- be a realistic self-evaluator
- adopt a problem-solving approach
- become a creative and imaginative thinker

Personal skills

- develop the capacity to continue to learn
- develop the ability to plan and achieve goals
- develop the ability to work with others

Personal attributes

- acknowledge personal responsibility

Practical skills

- develop and apply technical skills to your field of study

Contribution of unit to the BDesComp Program

Virtual Worlds are the fastest growing new technology in construction, computing and engineering. This unit of study aims to provide you with basic concepts and skills to become a virtual reality designer in construction multimedia, graphics and design companies.

DECO 1002 **Web-based Design Information Systems**

4 credit points. Prof Mary Lou Maher. Semester: 2. Classes: Lectures and tutorials. Assumed knowledge: DECO 1001 Digital Image Representation and Design or equivalent. Assessment: 1. Home page design 2. Personal design portfolio 3. Group Web design project.

NB: Permission required for enrolment.

Objectives

- To introduce the software and languages of Web pages.
- To develop an understanding of effective navigation, layout, colour contrast, and styles for Web sites.
- To introduce various media types and their formats on the WWW.
- To develop skills in creating Web pages with images, CAD files, 3D models, and animation.

Description

Web pages are becoming as essential part of the representation of design information, project data, and marketing information. This unit of study introduces the basics for creating Web pages, and develops them further for Web site design. Design information is stored in various formats and media types. In a project Web site, all media types can be made available on an intranet or the Internet. In this unit of study, a web-based design information system will be developed in the context of a design project.

Outcomes

- an understanding of the Internet protocols and languages and file formats for the WWW.
- skills in creating effective Web sites through the consideration of style, navigation, and use of different media.
- skills in using software such as Dreamweaver, and in publishing on the WWW.

DECO 1003 **CAD Modelling**

4 credit points. Semester: 2. Classes: Lectures and tutorials. Assessment: 1. CAD tutorial 2. Personal modelling project 3. Group-developed CAD model.

NB: Permission required for enrolment.

Objectives

- To introduce the basic concepts of CAD modelling and presentation.
- To develop skills in creating 3D models, 2D sections and plans, and animations from CAD models.

Description

CAD is now an established media for the representation and presentation of design products. The use of CAD as a design environment as well as a documentation tool is a challenge for CAD users. The unit of study presents the basics of drawing and modelling in 2D and 3D for the development and documentation of design products.

Outcomes

- an understanding of how 3D objects are represented in CAD models.
- skills in using a CAD system.
- a portfolio of design presentations and documentation.

SOFT 1001 **Software Development 1**

6 credit points. Semester: 1,2. Classes: 1 lee, 2 tut & 3 lab/wk. Assumed knowledge: HSC Mathematics Extension 1. Prohibition: May not be counted with SOFT 1901 or COMP (1001 or 1901).

Computers are highly versatile: the same machine can be used to manage the payroll for an enterprise, or play multi-user games, or predict changing weather activity. The reason is that people can write software that causes the machine to behave in very different ways. This unit is the first in a long sequence that build students' skills in software development. For many students these skills are the key to their employment as IT professionals. The unit introduces object-oriented software development with design-by-contract, which is the state-of-the-art in industry. Java is the programming language used. Students work in small groups, so

they experience many of the issues of team interaction that are important in practice. Also, students take responsibility to plan their own learning to meet required objectives, so they will develop skills to learn from resources including reference materials and examples, just as happens in the profession.

DECO 2001 **3D Modelling and Photorealism**

4 credit points. Prof Mary Lou Maher. **Semester:** 1. **Classes:** Lectures and tutorials. **Assessment:** 1. Tutorial exercise 2. Personal 3D modelling project 3. Group modelling project.

Objective

- To develop an understanding of the representation of 3D digital models.
- To develop an understanding of the algorithms and properties for creating photorealistic images of 3D digital models.
- To develop skills in creating and modifying 3D models with material properties and light sources.

Description

3D modelling is the basis of most CAD models, 3D animation, and the development of photorealistic images of designs before construction or manufacture. This unit of study considers the underlying representation of 3D objects in 3D modelling software. Various algorithms and their assumptions for photorealism are presented. The benefits of a 3D model with textures, material properties and light sources are explored through a design project. This unit of study develops skills in the use of 3D modelling software.

Outcomes

- an understanding of the concepts underlying 3D modelling software.
- skills in creating photorealistic images from 3D models.
- a portfolio of 3D models.

DECO 2003 **Knowledge-Based Design**

4 credit points. Prof John Gero. **Semester: 1. Classes:** lectures and tutorials. **Assumed knowledge:** COMP 1001 Introductory Programming or equivalent. **Assessment:** 1 .Tutorial exercise 2. Generative design expert system 3. Group project for knowledge-based design evaluation.

Objectives

- To introduce the concepts of design knowledge representation.
- To introduce basic mechanisms for reasoning in knowledge-based systems.
- To develop an understanding of generative and evaluative design knowledge-based systems

Description

Knowledge based systems are becoming an important subset of the tools available for complex design projects. Languages for building knowledge-based systems provide the basis for developing these tools. This unit of study considers the representation of design knowledge and reasoning models for generative and evaluative knowledge based systems.

Outcomes

- An understanding of knowledge-based design representation and reasoning.
- Familiarity with languages such as prolog.
- Skills in developing a generative and an evaluative knowledge-based system.

INFO 2000 **System Analysis and Design**

4 credit points. Semester: 1, Summer. Classes: 2 lee and 1 tut or 1 prac/ wk; 1 unscheduled lab work with a CASE tool. Qualifying: INF01000 or ISYS 1003 or SOFT (1001 or 1901) or COMP (1001 or 1901 or 1002 or 1902). Assessment: Written and practical assignments + written exam.

The syllabus covers data-centred, process-oriented and object-centred methodologies for requirements analysis and system description to address organisational needs, including the gathering of facts, diagnosis of problems, recommendation of appropriate and feasible solutions. A CASE tool will be used to develop practical skills.

DECO 2004 **Product Modelling**

4 credit points. Dr Michael Rosenman. **Semester:** 2. **Classes:** lectures and tutorials. **Assumed knowledge:** INFO 2005 Personal Database Tools or equivalent. **Assessment:** 1. Feature model of a single object 2. Translation from CAD model to product model 3. Group project.

Objectives

- To develop an understanding the role and structure of product models in the design process.
- To introduce standard product models and their languages.
- To develop skills in interoperability through product models.

Description

The development of product models supports the integration of disparate design software through interoperability translations. This unit of study presents the roles and structures for product models through the use of standard product models in a design project.

Outcomes

- Understanding of product model databases and languages.
- Skills in using product models in a design project.

INFO 2005 **Personal Database Tools**

4 credit points. **Semester: 2. Classes:** 2 iec, 1 tut/wk; 1 unscheduled lab work. **Qualifying:** INFO 1000 or ISYS 1003 or SOFT (1001 or 1901) or COMP (1001 or 1901 or 1002 or 1902). **Prohibition:** May not be counted with COMP 3005 or 3905. Assessment: Written and practical assignments + written exam.

The syllabus covers use of databases through forms and through SQL language; data representation and basic interfaces; good design of tables through normalisation. Use of a variety of data modelling techniques. A commercial strength PC based database system will be used to develop practical skills.

DECO 2005 **Computer-Supported Collaborative Design**

4 credit points. Prof Mary Lou Maher. **Semester: 2. Classes:** lectures and tutorials. **Assessment:** 1. Analysis of design communication 2. Case study of computer-mediated collaboration in a design firm 3. Collaborative design project.

Objectives

- to introduce synchronous and asynchronous communication technologies.
- to develop an understanding of communication and representation of design data in a computer-mediated collaborative design project.
- to develop skills in using collaborative technologies.

Description

Most design projects require collaboration of people from different professions and different physical locations. The effective use of computer-supported collaboration tools and environments requires an understanding of their roles and advantages. This unit of study considers the concepts behind computer-mediated collaborative design and develops an understanding of these concepts through a design project.

Outcomes

- an understanding of the similarities and differences of computer-mediated and face to face communication.
- Skills in the use of collaborative tools such as email, shared whiteboards, bulletin boards, video conferences, and shared modelling environments.
- a design product developed through computer-supported collaboration.

DECO 3001 **Life-Cycle Integrated Design Comp Studio**

12 credit points. Prof John Gero. **Semester: 1. Classes:** Studio and supporting lectures. **Assumed knowledge:** COMP 1001 or SOFT 1001 INFO 2005 Personal Database Tools DECO 2004 Product Modelling DECO 2003 Knowledge-based Design DECO 1003 CAD Modelling DECO 1002 Web-based Design Information Systems or equivalent. **Assessment:** Design project.

NB: Permission required for enrolment.

Objectives

The objective of this unit of study is to develop a computer-based design system by considering the integration of the formulation, representation, various processes of synthesis and analysis, and documentation through the life cycle of a design project.

Description

Life cycle integrated design directly addresses the use of a variety of software products across the life cycle of a design project through the development of standards and translators. This unit of study considers the various approaches to integration of data and processes using technologies such as product modelling, interoperability, data management, agents, and shrink wrap software modules. Students will participate in a design project that requires the integration of various software packages and will develop a systems approach to integration.

Outcomes

On completion of this unit of study students will have developed experience in applying both design and computing concepts to the integration problems raised in a specific design project.

DECO 3002 **Advanced Technology Integrated Design Co**

12 credit points. Prof Mary Lou Maher. **Semester: 2. Classes:** Studio and supporting lectures. **Assumed knowledge:** COMP 1001 or SOFT 1001 DECO 2001 3D Modelling and Photorealism DECO 1002 Web-based Design Information Systems DECO 2005 Computer-Supported Collaborative Design or equivalent. **Assessment:** Design project.

NB: Permission required for enrolment.

Objectives

The objective of this unit of study is develop the knowledge a particular advanced design computing technology and to implement the technology to support designing virtually.

Description

New technologies in design computing have the potential to not only improve the quality of designs, but to change the way we design and the kinds of design we create. This unit of study considers the implications of an advanced technology, such as virtual reality, constraint-based animation, mega-broadband communications, on the development of an environment for designing virtually. The knowledge of the advanced technology is applied to a specific design project.

Outcomes

On completion of this unit of study students will have demonstrated the capacity to investigate and integrate advanced technology in virtual design environment.

DECO 2006 **Elective - Design Computing 1**

4 credit points. **Semester: 1,** 2.

DECO 2007 **Elective - Design Computing 2**

4 credit points. **Semester: 1, 2.**

DECO 2008 **Elective - Design Computing 3**

6 credit points. **Semester:** 1,2.

DECO 2009 **Elective - Design Computing 4**

6 credit points. **Semester:** 1,2.

DESA 2612 **Designing with Surfaces and Light**

3 credit points. A/Prof Terry Purcell. **Semester:** 2. **Classes:** The content of each of these areas and the examples that illustrate the content, the Photoshop tutorials and the examples for analysis will all be available in online format. The aim is to provide flexibility for participants in the times at which they interact with the material and to allow participants to plan their time effectively. However the online format also allows participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit is achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Assessment:** At the end of the meeting participants would have to submit online the results of their analysis with the results of these analyses being made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator. There will be two types of assessment in the unit. There will be a final assignment where each student demonstrates their understanding of these areas and their ability to apply this knowledge in analyzing examples. The mark for this assignment will be the final (summative) result for the unit of study. The group work will not be marked but will have to be completed as a part of the unit of study (formative assessment).

Aims

An essential part of designing three dimensional objects and environments is the choice of the materials that will make up the surfaces of the designed artifact. Equally important are the choices made about the natural and artificial light sources that will illuminate these surfaces. However while these are choices about the physical attributes of environments, one of the fundamental reasons for making the choices is to create artifacts that are experienced in particular ways by those who use and interact with the artifact. This unit of study introduces the basic knowledge needed to understand the way surfaces are experienced and the role that light and surface properties play in that experience. In particular the unit deals with the following:

Surface (micro)stracture.

The interaction of light and surface structure.

The experience of texture.

Reflection off a surface and effects on perceived surface properties.

Absorption by a surface and perceived colour space and colour systems.

In addition to knowledge about these aspects of the experience of surfaces, the unit introduces ways in which the surface properties of particular examples can be analysed in terms of this knowledge. This is achieved by using the image processing program Photoshop and the unit involves tutorials in using basic aspects of Photoshop. These skills are then used in analyzing examples and it is this analysis that forms the basis for the assessment in the unit.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. In this way you will have demonstrated both their mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in these areas and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a focus on the experience of light and surface, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Assumed knowledge

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the units providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2.

DESA 2610 **Designing with Colour 1**

4 credit points. A/Prof Terry Purcell. **Semester:** 1, 2, Summer. **Classes:** On-line, or on-line with 3 face-to-face workshop/seminars. The content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Prerequisite:** Students must have completed 48 credit points towards their degree. **Assessment:** 2 assignments There will be two types of assessment in the unit. The group work will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be two assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of colour mixing to design four colour schemes for the fagade of a building.. The second assignment explores colour contrast and colour preference through the design of four colour schemes for the facade of a building. The average of the marks for these assignments will be the final (summative) result for the unit of study. Participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Aims

One of the most striking features of vision is our ability to see colours. When a designer chooses materials, these choices inevitably are choices about the colour of the surfaces of the

artifact being designed. Colour plays many roles in the way we experience environments - functional, affective and symbolic and so understanding these many aspects of the experience of colour is critical in design. Because of the complexity of our experience of colour a number of units of study are needed to explore all aspects of this experience.

Designing with Colour 1 aims to build on the knowledge and skills developed in Designing with Surfaces and Light and to explore how a number of basic aspects of the way the visual system works has major implications for using colour in design. Specifically this unit uses knowledge in the following areas -

Basic visual processes with a particular emphasis on the ways in which colour can be produced through additive, subtractive and partitive colour mixing.

The way colours can interact that can result in the perceived colour of a surface being changed by the colour of adjacent or surrounding surfaces, a process referred to as colour contrast.

Advancing and receding colours and colour contrast.

The conditions that create colour pleasantness and preference and the relationship of these affective experiences to colour contrast

An essential part of this unit is the further development and use of skills in image manipulation. This unit develops the Photoshop skills from Designing with Surfaces and Light in relation to assessing colour coordinates of parts of an image using the Colour Picker, filling selections with colour and maintaining colour appearance while making repeated changes to a colour in part of an image.

These image processing skills are used to explore existing colour designs as a way of understanding the knowledge presented about the various areas of colour perception and experience listed above. In addition in this unit of study these skills are used to allow participants to create new colour designs that implement the knowledge about colour perception and experience.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. Participants will also have carried out a number of colour design exercises using both the knowledge presented about colour experience and the image processing skills they have learnt. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a focus on the experience of designing with colour, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Assumed knowledge and prerequisites

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DESA 2611 Designing with Colour 2

4 credit points. A/Prof Terry Purcell. **Semester:** 1,2, Summer. **Classes:** On-line, or on-line with 3 face-to-face workshop/seminars. As was the case in Designing with Surfaces and Light, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done.This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Prerequisite:** DESA 2610; Students must have completed 48 credit points towards their degree. **Assessment:** 2 assignments. There will be two types of assessment in the unit. The group work will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be a number of assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of the four basic dimensions of affective colour experience to design colour schemes for both building interiors and exteriors. The second assignment involves colour designs for interiors and exteriors where the knowledge from previous units of study are integrated with the knowledge from this unit. The average of the marks for these assignments will be the final (summative) result for the unit of study.

Aims

There are many commonly held beliefs about how we experience colours affectively. For example it is thought some colours are warm and others cold, some are exciting and some are calming. There is now a considerable body of knowledge about these aspects of colour experience. This research demonstrates that there are four basic dimensions of affective colour experience: temperature, excitement, evaluation and potency and that these different experiences map very systematically into colour space. The first aim of this unit is to present this knowledge to participants in the unit. In common with the units Designing with Colour 1 and Designing with Surfaces and Light this unit also focuses on the use of this knowledge in analyzing examples and designing new colour schemes and this is the second aim of this unit of study.

In order to carry out these activities the unit also further develops participants image processing skills. Participants work through tutorials on how Photoshop can be used to isolate parts of an image so that the colour of the part can be independently manipulated of the colours present in other parts of the image. A final aim of the unit is integrate the knowledge and skills learnt in earlier units into the analysis and design activities in this unit. In this way a more complete understanding of colour and its use is built up rather than each of the facets being learnt and applied in isolation.

As was the case in Designing with Surfaces and Light and Designing with Colour 1, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. You will have demonstrated an ability to use the knowledge and skills to create colour designs. You will also have demonstrated that you can transfer and use knowledge

and skills learnt in earlier units and combine them with the new knowledge and skills presented in this unit. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit, through combining this with knowledge and skills from earlier units and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a developed understanding on the experience of designing with colour, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Attendance, Requirements, Assessment

A. At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Assumed knowledge & prerequisites

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DESA 2615 Designing with Colour 3

4 credit points. A/Prof Terry Purcell. **Semester: 1. Classes:** As was the case in Designing with Surfaces and Light and Designing with Colour 1 and 2, the content of each of these knowledge areas, the Photoshop tutorials and the examples for analysis and use in the design exercises will all be available in online format. Similarly the online format will be used to allow participants to learn from the work of others by critically analyzing what others have done. This aspect of the unit will again be achieved by participants being formed into small groups who meet and analyze a set of examples of others work that they are provided with. These meetings would occur face to face for one hour, three times during the semester. **Assessment:** Participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator. In this unit of study there will be two types of assessment. The group work involved in investigation regularities in environmental colour for example.will not be marked but will have to be completed as a part of the unit of study (formative assessment). There will be a number of assignments where each student demonstrates their understanding of these areas and their ability to apply this knowledge in design. Specifically students will have to use their knowledge of familiar and typical colours, colour harmony and the effects of variations the number of colours in a colour scheme to design colour schemes for both building interiors and exteriors. The second assignment involves colour designs for interiors and exteriors where the knowledge from previous units of study are integrated with the knowledge from this unit. The average of the marks for these assignments will be the final (summative) result for the unit of study.

Aims

The environment we live in contains systematic sets of colours. These are associated with the natural environment through the colours in, for example, vegetation, rocks and soil. The built environment also contains sets of colour regularities associated with building materials. Because we are exposed to these regularities over extended periods of time we learn about them and this learning goes on without our awareness. These sets of colours then become the familiar and typical colours of a place and form a set of expectations about colours in the environment. The aim of this unit of study is to develop an understanding of these sets of environmental colours and the implications of this for design.

Specifically the unit aims to address the following:

Tacit learning and familiar and typical colours

Mapping environmental colours.

Colour and culture / geographic location and the symbolic use of colour.

Colour harmony and the number of colours in a colour design.

In common with the units Designing with Colour land 2 and Designing with Surfaces and Light this unit also aims to focus on the use of this knowledge in analyzing examples and designing new colour schemes.

In order to achieve these aims participants will have to employ all of the image processing skills developed in the previous units of study. In addition the analysis exercises and colour design assignments will also involve scanning images into digital form and tutorials will be provided to develop these skills.

Objectives

On completing this unit of study successfully you will have demonstrated your ability to take the knowledge presented in each of the above areas and apply it in analyzing specific environmental examples. You will have demonstrated an ability to use the knowledge and skills to create colour designs. You will also have demonstrated that you can transfer and use knowledge and skills learnt in earlier units and combine them with the new knowledge and skills presented in this unit. In this way you will have demonstrated both your mastery of the knowledge in each area and your ability to use that knowledge.

Generic Skills

Through successfully completing this unit of study you will further develop the following generic skills that are required attributes of graduates of the University of Sydney:

- Your knowledge skills through an increase in the depth and extent of your knowledge in the areas introduced in the unit, through combining this with knowledge and skills from earlier units and your ability to apply this knowledge in specific contexts.
- Your thinking skills through the cognitive processes and skills required to bring the knowledge and the examples into alignment and to implement this knowledge in specific design situations.
- Your personal skills through developing your ability to plan and achieve personal goals in an online environment and through developing your ability to work with others to achieve common goals.
- Your personal attributes particularly through taking responsibility for your own learning through the planning necessary to take advantage of the flexibility offered by online learning.
- Your practical skills in the field of study

Contribution of unit to programs

By providing a more deeply developed understanding on the experience of designing with colour, students both in the BDesign (Arch), the BArch. BDesComp and other programs in the University will gain a detailed understanding of these issues, which will contribute to their ability to understand the experience of designed artifacts. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Attendance, Requirements, Assessment

- At the end of the meeting participants would have to submit online the results of their analysis. The results of these analyses would in then also be made available to all other

participants in the unit. Both the identity of those who produced the examples that were analyzed and the identity of those in the groups who carried out the analysis would only be known to the unit coordinator.

Assumed knowledge & prerequisites

If you intend to participate in this unit of study as part of the stream in Experiential Design then you will have to take this unit of study followed by Designing with Colour 1 and 2 in that sequence followed by at least one of the other units of study in the stream. If you want to take these units of study as electives you can choose any of the unit providing you have the requisite skills in using the Photoshop program. The Photoshop skills required can be found in the description of each unit of study. I you do not have any Photoshop skills you would need to start with Designing with Surfaces and Light and if you wished to do further units in the area move to Designing with Colour 1 and 2. If you have some Photoshop skills and are willing to do extra work to bring your skills up to the level required in a unit you want to enroll in, access will be provided to the relevant tutorials from earlier units.

DECO 2601 **Design Grammars**

4 credit points. Dr Scott Chase. **Semester:** 2. **Classes:** Lectures and tutorials. **Assumed knowledge:** DECO 2003 and either COMP 1001 or SOFT 1001. **Assessment:** 1. Introductory exercises 2. Design grammar project.

NB: Permission required for enrolment.

Objectives

The objectives of this unit of study are to introduce the concept of design grammars as rule systems and to develop an understanding of the generative application of grammars through a design project.

Description

Design grammars are rule systems that can be the basis for the synthesis of new designs within a class of design styles. Grammars can characterise the style of a particular designer, or generate new designs that satisfy certain formal composition rules. This unit of study explores the development, implementation, and use of design grammars in the context of a specific design problem.

Outcomes

The student will have knowledge of range of design grammars and will have implemented their own grammar.

DECO 2602 **Evolutionary Design**

4 credit points. Prof Mary Lou Maher. **Semester:** 2. **Classes:** lectures and tutorials. **Assumed knowledge:** COMP 1001 or SOFT 1001. **Assessment:** 1. Tutorial exercise, 2. Individual evolutionary design project, 3. Group evolutionary design project.

NB: Permission required for enrolment.

Objectives

The objectives of this unit of study are to develop an understanding of evolutionary models of design and to develop a representation of a specific design project so that new designs can evolve from previous designs.

Description

Evolutionary models of design can be used to explain changes in design styles and technologies. Evolutionary models can also be used to generate new designs from previous designs. The concept of evolution as a process of changes over time is introduced. Advanced concepts of evolution drawing on genetic algorithms and genetic programming are introduced as the basis for automating the synthesis of new designs.

Outcomes

On completion of this unit of study students will have an understanding of the fundamental concepts of evolutionary systems in design. They will have a knowledge of how to formulate design problems as evolutionary systems.

DECO 2603 **Agents in Design**

4 credit points. Prof John Gero. **Semester:** 1. **Classes:** lectures and tutorials. **Assumed knowledge:** COMP 1001 or SOFT 1001. Assessment: 1. Tutorial exercise, 2. Individual design agents project, 3. Group design agents project.

NB: Permission required for enrolment.

Objectives

The objectives of this unit of study are to introduce and develop the notions and technology of agents and to demonstrate their applicability in designing.

Description

Agents are software modules that respond to their environment and to sensory data. Agents in design can be used to automatically update a design when changes are made, to search for information on the network, to respond to interaction with users. This unit of study introduces the software approaches to implementing agents and considers their use in the context of a specific design project.

Outcomes

On completion of this unit of study students will have an understanding of the fundamental concepts of agent-based technology. They will have a knowledge of how to construct agents.

ARCF 6001 Preparatory Honours Research

4 credit points. Prof Gary Moore, Dr Glen Hill and staff. **Semester: 2. Classes:** lectures. **Assessment: A** developed research proposal that provides a rationale for the research, articulated research question, review of relevant literature, and detailed statement of research design, methods of information collection and data analysis.

Objectives

The unit aims to equip students with the research, scholarly and writing skills needed to prepare an honours diesis or similar research and scholarly documents. It will provide an introductory overview of basic research and scholarship techniques; basic methodological skills; information search, storage and retrieval techniques; and organisation and writing skills for completing a scholarly research document.

Description

The unit is divided into two parts. The first will cover the following basic issues that are involved in an honours thesis: deciding on a research topic; research design; searching for and analysing or interpreting information; managing a research project; writing a research proposal. The second part will involve each participant working with the instructor, other members of the seminar and his or her supervisor to produce an accepted research proposal.

Outcomes

At the completion of the unit, students will be expected to have acquired the skills necessary for the successful completion of an honours thesis or equivalent scholarly research document.

SOFT 1002 Software Development 2

6 credit points. Semester: 1,2. Classes: 1 lec, 2 tut & 3 lab/wk. Qualifying: SOFT (1001 or 1901) or COMP (1001 or 1901). Prohibition: May not be counted with SOFT 1902 or COMP (1002 or 1902).

This unit extends the students' software development skills in several important directions. It covers a number of advanced features of Java programming such as inheritance and recursion. It deals with important issues in using library classes to manage collections of similar objects. It also provides students with experience in design; that is, in choosing which classes to write to respond to a user's demands. Design in group work raises special issues of dealing with conflict and misunderstanding between group members.

ISYS 2006 Information Systems in Organisations

4 credit points. Semester: 1. Classes: 2 lee & 1 tut/wk. Assumed knowledge: Use of basic PC tools such as spreadsheets, Internet, email and word processing software. Qualifying: INFO 1000 or ISYS 1003 or SOFT (1001 or 1901) or COMP (1001 or 1901 or 1002 or 1902). Assessment: One 2hr examination, written assignments.

NB: Enrolment Restriction: Entry is restricted to students who have a credit or better in at least one of the qualifying units

The syllabus provides a critical review of the enabling impact of information systems on business processes. The use of telecommunications and data communications and their applications to distributed information systems, and the management of change due to information technology are discussed in some detail. A key element of this unit is the development of critical analysis and communication skills by students.

ISYS 3012 **Project Management and Practice**

4 credit points. **Semester: 1. Classes:** 2hr lee, 1 prac & 1 hr independent study/wk. **Qualifying:** INFO 2000. **Assessment:** One 2hr examination, written assignments.

This unit of study covers the factors necessary for successful management of system development or enhancement projects. Both technical and behavioural aspects of project management are discussed with a focus on management of development for enterprise-level systems. Major topics include managing the system life cycle, system and database integration issues,

- Knowledge skills: have a body of knowledge in the design field: be able to apply design theory to practice in familiar and unfamiliar situations; be able to identify, access, organise and communicate this knowledge in both written and oral English; have an appreciation of the requirements and characteristics of scholarship and research.
- Thinking skills: exercise critical judgement; account for their decisions; be creative and imaginative thinkers.
- Personal skills: work with others.
- Personal attributes: acknowledge their personal responsibility for their own value judgements; and their ethical behaviour towards others.
- Practical skills: apply technical skills appropriate to their discipline.

Contribution of unit to programs taken by students
This unit will contribute to architecture students' theoretical and practical knowledge of the wider historical context and theoretical aspects of design activity in the design professions. These studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

DESA 2302 Australian Architecture: 1788 - Present

4 credit points. **Semester:** 2. **Classes:** Lectures, seminars, labaoratories, web-based information. **Assumed knowledge:** DESA 1101. DESA 1102. DESA 2202 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Research paper.

NB: Permission required for enrolment. Architecture stream unit of study. Prerequisite for the Bachelor of Architecture program.
Objectives
Knowledge developed in Design Studies 2 is progressed further in this unit into investigating the forms of architectural expression through precedent and design at a pre-professional level. The unit will address the development and language of forms of expression in architectural design in high and vernacular traditions, including Western, Asian and other non-Western, and will take the form of a research investigation followed by an advanced design study.

The unit builds upon the understanding and practice of conceptual, precedent and procedural knowledge about designing the built environment demonstrated previously to develop competence in more specialised, in-depth, learning.

The unit further extends students' capacities for identifying and utilising sources of knowledge by introducing appropriate research methods, and develops their abilities to theorise, generalise and reflect on the data gathered in primary studies as well as from published sources, and to apply principles to specific learning activities which will include the preparation of a scholarly paper on a particular aspect of architectural design, and a design study building on the research.
Outcomes
On the successful completion of this unit of study students will be able to:
- demonstrate a high level of competence in interpreting sources of existing knowledge and questioning any underlying assumptions
- demonstrate a high level of competence to use appropriate research methods in the gathering and interpretation of data and in the application of key concepts from published works to specific concepts
- demonstrate a high level of competence in investigating the precedents of architectural forms of expression in a variety of traditions
- demonstrate a high level of competence in preparing a design study based on research.

Practical: Investigations, Field studies

DESA 2305 Australian Modernist Architecture

4 credit points. Dr. Harry Margalit. **Semester:** 2. **Classes:** Lectures, tutorial discussions and field trips. Attendance of 90% at least is required for all components collectively. **Assessment:** Attendance 20% of unit mark (full marks for attendance of 90% or more, pro-rata for less). Field trip diary 15% of unit mark. Diary to record all trips in written, drawn and photographic form. Essay (3000 words, student chosen topic drawn from course) 65% of unit mark.

NB: Permission required for enrolment.
Aims
The unit traces the history of Modernist architecture in Australia. On completion, students will be familiar with key architects and works representative of the advent of modernism in the 1930s, its post-war flowering and subsequent fragmentation in the late 1950s. Students will also be familiar with the beliefs and aspirations underpinning the movement, the role of overseas travel in introducing modernism to a generation of Australian architects and the larger issues of transplanting and adapting architectural philosophies from one country and context to another.
Objectives
On the successful completion of the unit of study, students will have demonstrated:
- Imaginative and informed judgement through making historical connections between a chosen essay topic and the material presented in the unit.
- An expanded body of architectural knowledge applicable to both scholarship and practice
- An ability to develop an argument to discuss the attributes of their chosen subject with reference to other buildings, projects, architects or planning schemes presented, through an essay addressing a building, unbuilt project, architect or planning scheme representative of the movement.
- An ability to engage with artifacts from the past, and to tease out the conditions which pertained when they were made. Through this they will have demonstrated insights into the contingent nature of many beliefs and ideals, a sense of self-reflection and an appreciation of the diversity of motives and ideals.
- An ability to record the buildings and sites visited through a field trip diary.

Generic Skills
The unit of study addresses the following generic attributes fostered by the University:
- Knowledge skills: Students will expand their body of architectural knowledge, demonstrate this in written form, using the conventions of scholarly writing.
- Thinking skills: Students will assess the relevance of their topic to the unit subject matter and argue for their choice.
- Personal skills: The research and execution of the essay will be self-directed, and the student will assess and acquire the knowledge to complete the analysis.
- Personal attributes: The students will have developed a sense of self reflection through the tasks.
- Practical skills: The research and field trips skills expected of students will encompass historical research, visual recording and appropriate presentation using computer skills.

Contribution of unit to programs
Students will generally be drawn from the B.Des.Arch and B.Arch programs, and will be working towards undergraduate and professional degrees in architecture. The unit expands knowledge of buildings and architects, increases awareness of architecture as a social art and exposes students to decisions taken by practitioners in the period studied as a way of informing their own design process.

DESA 2206 Innovative Building Structures

4 credit points. **Semester:** 2. Classes: Lectures, seminars, labaoratories, web-based information. Assumed **knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Exercises, Essays, Assignments, Quizzes, Examinations: for feedback and tinal summative result.

NB: Architecture stream unit of study
Objectives
Knowledge developed in Design Studies 2 is progressed further in this unit into more specialised in-depth study of innovative construction and design at small to medium scale buildings.

The unit builds upon the understanding of conceptual, precedent and procedural knowledge about constructing the built environment demonstrated previously to develop competence in more specialised, in-depth, learning in the relationship between construction and its expression in design.

The aim of this unit is to engage students in detailed studies of innovative construction design of small to medium scale buildings and in developing similar approaches. The unit aims to investigate interesting construction and its expression in design through case studies. It will identify innovative construction, including strategies, systems, materials and detailing, and explore in depth the issues that contribute to innovative constructional solutions.
Outcomes
On the successful completion of this unit students will be able to:
- demonstrate a high level of competence in investigating and presenting case studies on innovative construction and design expression
- identify and evaluate at a high level of competence issues that contribute to innovative construction in architectural design

- identify and evaluate at a high level of competence innovative construction strategies, systems, materials and detailing
- propose and develop an aspect of innovative constructional expression

Practical: Investigations, Field studies

DESA 2208 Introduction to Project Management

4 credit points. Prof A. Jaafari, assisted by MrTed Tooher. **Semester:** 2. Assessment: At least 90% attendance at all classes is required. The assessment will be via tests and assignment completed and submitted by students in stages. Details will be advised at the commencement of the unit of study.

Aims

This unit of study will introduce students to the underpinning knowledge of project management, covering all 9 areas of project management, viz. integration, communication, human resources management, scope, time and cost management, quality, risk and procurement management;

It will differentiate project life cycles from facility life cycles. In this unit the application of project management principles to the achievement of different deliverables needed in all phases of the facility life cycle will be addressed. The unit will provide practical examples and opportunities to apply the fundamentals to a range of simple projects in architecture, design, building and construction fields (the focus being initiation and planning phases of projects).

Syllabus summary:

Project management fundamentals; management of project functions and areas; including integration, scope, time, cost, communication, human resources, quality, risk and procurement management; application of the 4-phase model to development and execution of facilities and products; facility life cycles; project life cycles, integration of project and facility life cycles; management of simple project; setting and measuring performance against objectives.

Objectives

On the successful completion of this unit students will be able to:

- demonstrate a good knowledge of project management basics
- manage different project management areas, viz. integration, scope, time, cost, communication, human resources, quality, risk and procurement management in the context of simple projects in the built environment
- learn to apply the project management fundamentals to other project types and endeavours

Generic Skills

On successful completion of this un it of study, the student will have developed their skills in the following areas: knowledge skills, thinking skills, personal skills, personal attributes and practical skills

Contribution of unit to programs taken by students

Students will gain an understanding at a beginning level of the practice requirements of managing projects in architecture and urban design, and these studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

Textbook:

Turner, Handbook of Project-based Management (McGraw-Hill)

Reference books

PMI, A Guide to the Project Management Body of Knowledge; www.pmi.org

Course presenter and coordinator

DESA 2211 Architecture, Place and Society

4 credit points. A/Prof Anna Rubbo. **Semester: 2. Assessment:** Attendance and in-class participation are required. Students will undertake a substantial amount of reading, write an essay, and carry out a group fieldwork assignment. Site visits may be included.

Aims

This unit aims to investigate the relationship between habitat and society and assumes that designers will increasingly work in places where cultures are unfamiliar: in Australia, Asia and further afield, and that an ability to understand and interpret diverse cultures is an important area of knowledge for designers. By habitat is meant the broad range of environments where people carry out their daily Uves; by society is meant people and their cultural practices which help shape or give meaning to the environment. Social responsibility is discussed in terms of a design praxis which acknowledges and incorporates cultural meaning and difference and the consideration of equity through design.

Through participating in this unit students will:

- Increase their awareness of the relationship between habitat (place) and society (people)
- Enhance their skills and understanding in involving people(society) in the design process(the making of habitats)
- Enhance their ability in recognising and codifying habitat/ society relationships
- Explore issues of social responsibility in relation to the making of architecture.

Objectives

On successful completion of this unit students will be able to demonstrate:

- an ability to better understand and interpret the habitat/society dialectic.
- skills and knowledge in participatory processes necessary for effective communication about environmental design issues
- Increased critical awareness about social responsibility in relation to architecture and the built environment, and an ability to exercise this awareness.

Generic attributes

This unit will provide a range of skills that will enhance employability and knowledge which will contribute to an understanding of the importance of architecture as an embedded social practice with responsibilities requiring knowledge, thinking, personal and practical skills.

Contribution of unit to programs

This unit will contribute to architecture students' theoretical and practical knowledge of the social aspects of the design professions. It is intended that students in other disciplines will develop critical awareness of the built environment as a form of cultural production, and the possibilities for their participation in its production.

DESA 2212 Social Studies in Architecture

4 credit points. A/Prof Anna Rubbo. **Semester: 2. Classes:** Students will undertake a substantial amount of reading, write an essay, and carry out a group fieldwork assignment. Site visits will be included. **Assessment:** Attendance and in-class participation are required.

Aims

This unit aims to investigate the relationship between habitat and society through study of selected building types in different places and or cultures. Such building types might be housing, educational, religious, or community buildings. The aim will be to understand the ways in which cultural and social beliefs as well as local technologies and construction practices influence and shape the form of buildings. A key aim will be to better understand the ways in which architecture meets social needs, wit a view to students developing a better understanding of the 'how 'and the 'why' of building forms, and how social responsibility comes into play in the making of architecture. The unit will require reading and discussion, original research, and the presentation of that research. The unit will aim to provide opportunities for experimenting wit a range of media, including DVD, slides etc.

Through participating in this unit students will:

- Increase their awareness of the relationship between building types and people.
- Enhance their skills and understanding in involving people in the design process
- Enhance their research ability, and be able to recognise and codify ideas which generate specific building types
- Be required to make an assessment with regard to the ways in which social responsibility has been exercised.

Objectives

On successful completion of this unit students will be able to demonstrate:

- an ability to better understand and interpret the form selected buildings have.
- skills and knowledge in making analyses of this type
- Increased critical awareness about social responsibility in relation to specific building types.

Generic skills

This unit will provide a range of skills that will enhance employability and knowledge as a result of a deeper knowledge of the 'how' and 'why;' of specific building types, as well as development of research and presentation skills requiring knowledge, thinking, personal and practical skills.

Contribution of unit to programs

This unit will contribute to architecture students' theoretical and practical knowledge of the social aspects of the design professions. It is intended that students in other disciplines will

develop critical awareness of the built environment as a form of cultural production, and the possibilities for their participation in its production.

Assumed knowledge: Habitat ad Society B, or by permission of lecturer.

DESA 2213 Housing for Health

4 credit points. Adj Assoc Prof Paul Pholeros, Mr Colin James. Semester: 2. Classes: Intensive mode Wk 4 Friday, 2-5 pm Health-housing theory (Paul Pholeros), Saturday, 8-1 pm Readings reports/discussion (Col James), 2-6 pm House measurement practice (Paul Pholeros) Wk 5/6 Weekends Fieldwork: 3 houses (solo), (Family home + 2 neighbours) Wk 7 Friday 2-6 pmPresent reports + observations/evaluate. Assessment: Assignment 1 Protocol and question form 15%, Assignment 2 Report 75%, Attendance and participation 10%.

Aims

The unit investigates the housing characteristics fundamental to the healthy survival of babies (0-5 years) as a prerequisite for healthy family life. The focus is on nine healthy living practices: washing people; washing clothes; removing waste; improving nutrition; reducing crowding; separating people from animals, vermin or insects; reducing dust; controlling temperature; reducing trauma.

Upon successful completion students will have achieved:

- Recognition of the health implications of housing design.
- Development of skills in the measurement and analysis of design features which have health impacts.
- Capability of documenting house fixing practices to improve health outcomes.
- Capability to report and communicate results and recommendations to householders.

Objectives

Upon successful completion students will demonstrate:

- Evidence of reading recommended texts and reporting on health-housing theory.
- Completion of specific tasks in the measurement performance of household plumbing and electrical services and fittings against stated standards.
- Completion of Healthabitat data sheets and logging into Healthabitat analysis programs to deliver work sheets for licensed plumbers and electricians.
- Comprehension through report writing on the analyses of data, house fixing procedures and independent observations of other health risks, specifically for householders' information requiring regular maintenance and user practices.

DESA2214 **Housing for Well-Being**

4 credit points. Mr Colin James. Semester: 1. Classes: Intensive mode Wk 4, Friday, 2-5 pm, Housing well-being theory (Col James), Saturday, 9-1 pm Readings reports/discussion (Col James), 2-5 pm Housing P.O.E. role play Wk 5/6, Weekends, Fieldwork: 3 houses (solo), (Family home + 2 neighbours) Wk 7, Friday, 2-5 pm, Present executive summaries, submit report. Assessment: Assignment 1 Readings report (verbal) 15%, Assignment 2 Report (written) 75%, Attendance and participation 10%.

Aims

This is a companion course to 'Housing for Health' which extends the investigation into housing characteristics fundamental to the well-being of families. The focus is on six well-being living practices: security of tenure; physical security; fire safety; disability access; habitability; affordability. An additional focus on 'the meaning of home' is available for senior students.

Upon successful completion students will have achieved:

- Recognition of well-being implications of housing design.
- Development of skills in preparing a measured drawing of an existing house to scale annotated with some well-being criteria and critical observations about design.
- Development of skills in interviewing householder-clients and preparing an elementary form of post-occupancy-evaluation to measure against the well-being criteria.
- Capability to report and communicate results and recommendations to householder-clients.

Objectives

Upon successful completion students will demonstrate:

- Evidence of reading recommended texts and reporting on housing well-being theory.
- Completion of specific tasks in the production of an annotated measured drawing with photographs (external only) complying with conventional standards.
- Completion of POE interviews and analyses of data concerning house-fixing.
- Comprehension through report writing on all tasks including independent observations of the well-being characteristics for presentation to householder-clients.

DESA 2201 Design, Ecology and Sustainability

4 credit points. Dr Richard Lamb. Semester: 1. Assumed knowledge: DESA1101 DESA 1102 DESA 2101 or equivalent. Corequisite: DESA 2101. Assessment: Assessment for the course consists of two written components and one self and group assessment. They are weighted as follows: Assessment form 1: Short essay assignment: integrated with Design B1-40% Assessment form 2: Shared group research assignment - 40% Assessment form 3: Self and group assessment of contribution to research task - 20%.

NB: Permission required for enrolment. Architecture stream unit of study

Aim

The aim of the unit is that on successful completion you will:

- Be able at an intermediate level, to understand the ecological context of design of the built environment.
- Be introduced to practical and ethical aspects of designing for ecological sustainability.
- Be able to critically examine the role of architects and other designers in the ecological context and understand the implementation of environmental controls that are exercised by the community over the built environment.
- Be able to critically examine, account for and justify your design decisions when considered from an ecological sustainability perspective.
- Be able, at an intermediate level, o creatively and imaginatively develop programs for the sustainable design, planning and control of human environments.

Objectives

On the successful completion of this unit you will demonstrate effective learning outcomes through:

- Showing a working knowledge at an introductory level of the operation of natural systems and their relationship to the form and functions of the built environment.
- Being able to identify the ecological qualities, sustainability capabilities and consequences of the use of commonly specified building materials and construction systems.
- Being able to critically examine the potential environmental impacts of design decisions at an intermediate level.
- Having the ability to critically examine the potential ecological impacts of environmental policies such as urban consolidation, urban villages and higher density living.
- Demonstrating an introductory level of knowledge of the NSW planning system as it applies to policies for the control of the environment.
- Having an introductory level of knowledge of why and how settlements form, grow and change in response to environmental constraints and opportunities.
- Demonstrating, through critical reflection on your own design work, an ability to exercise independent and creative thought leading to sustainable design outcomes.

Generic Skills

The unit links the above objectives and outcomes to the generic skills expected of all students of the university by:

- Providing a body of knowledge in the field of ecological sustainabilty.
- Requiring critical thinking and writing on practical and theoretical aspects of the field of knowledge.
- Requiring critical judgement, personal reflection, realistic evaluation and creative and imaginative engagement on your own work as well as that of others.
- Acknowledging the need to work with others and develop a personal ethical position relative to the ecological context of design.
- Fostering individual skill development in the application of practical and technical aspects of knowledge at a level relevant to your personal development in second year.

Contribution of unit to programs taken by students

The unit fits into the overall structure of the degree by examining the natural environment as an intellectual. Philosophical and physical context for design, looking at the way nature and culture interact in the making of the urban environment. Environments, communities and their settlements interact and architects and planners are agents of change in environment. As such they have special need to understand how nature is conceptualised in design terms, how designs become nature, how designers affect and respond to the environment and how the community translates designed nature into sanctions and controls that reflect

human needs. As well as the more practical applications of technological solutions, sustainable design is a generic skill demand of all designers in the built environment in our contemporary society.

The unit is an individual elective for BDes(Arch) students that integrates knowledge and skills with Design Practice 2A and 2B and also builds on introductory information that is provided in Design Practice 1B and Design Studies 1B, concerning the way in which settlements develop and respond to natural and historical constraints. The unit is also introductory to the Sustainability stream in the BDes(Arch) degree, which in turn provides access to graduate degree programs in Energy Conservative Design. It introduces themes that are developed in more detail in Sustainable Architecture.

Attendance:

The unit will be conducted over seven weeks, with classes of either two or three hours individual duration. Classes will consist of conventional lectures and also of group-presented seminars on research topics. Individual assessment will be by means of a short written assignment, shared assessment of a group research task and a self and group assessment of contribution to the group work on the research task.

DESA 2202 **Sustainable Interior Environments**

4 credit points. **Semester:** 2. **Classes:** Lectures, seminars, laboratories, web-based information. **Assumed knowledge:** DESA 1101 DESA 1102 or equivalent. **Prerequisite:** DESA 2101. **Assessment:** Research paper.
NB: Permission required for enrolment. Architecture stream unit of study
Objectives

Knowledge developed in Design Studies 2 is progressed further in this unit to investigate aspects of designing interior environments. The unit builds upon the understanding of conceptual, precedent and procedural knowledge about inhabiting.the built environment demonstrated previously to develop competence in more specialised, in-depth, learning in relation to the principles and issues of designing interior environments. The student develops further understanding of concepts and then chooses particular area to study. Detailed knowledge in this area can be further developed through the elective units DESA 2610 Colour Design 1 and DESA 2611 Colour Design 2. The concepts extended and developed in detail in this unit can also be applied in the core units of study DESA 2003 Design Practice 3A and DESA 2004 Design Practice 3B.

The unit aims to further develop the students' understanding of the principles of environmental perception and cognition, and their application and evaluation in the design of interior spaces and surfaces. The unit also aims to develop the student's understanding of the principles of thermal services, artificial lighting and room acoustics, and their application and evaluation in the design of interiors.

The unit further extends students' capacities for identifying and utilising sources of knowledge by introducing appropriate research methods, and students are required to apply key principles to a specific project involving designing and evaluating an architectural interior using aspects of the knowledge, and preparing a scholarly paper.

Outcomes

On the successful completion of this unit students will be able to:

- demonstrate a high level of competence in interpreting sources of existing knowledge and question any underlying assumptions on environmental cognition and the design of interior spaces
- demonstrate a high level of competence in interpreting sources of existing knowledge and question any underlying assumptions on environmental controls and the design of interior spaces
- demonstrate their ability to use appropriate research methods in the gathering and interpretation of data
- demonstrate a high level of competence in the application of key concepts in a selected design situation
- demonstrate a high level of competence in evaluating the design situation
- demonstrate a high level of competence in writing a scholarly study

Practical: Investigations, Field studies

DESA 2207 **Sustainable Architecture**

4 credit points. Mr Bruce Forwood. **Semester: 1. Assessment:** Attendance requirements are to 90% minumum of all classes. Assessment will be through a piece of scholarly research on a selected aspect of sustainability of the student's choice.

Aims

This units aims to build on knowledge developed in Design Studies, progressing it further into the specialised field of ecologially sustainable design in architecture

The unit will further extend your capacity for identifying and utilising sources of knowledge by introducing appropriate research methods, and develops your ability to theorise, generalise and reflect on the data gathered in primary studies as well as from published sources, and to apply principles to specific problems or learning activities such as the preparation of a scholarly paper on a particular aspect of sustainability. The aim of the unit is to address a variety of issues which critically relate the issues of ecological sustainability to architecture. These include developing a critical understanding of assessment of appropriate building methods and materials. The unit also aims to include a critical investigation of the application of these issues to form-making and space-making in relation to contemporary architectural ideas.

Objectives

On successful completion of the unit of study, you will be able to:

- demonstrate a high level of competence in interpreting sources of existing knowledge and question any underlying assumptions.
- demonstrate your ability to use appropriate research methods in the gathering and interpretation of data and in the application of key concepts from published works to architectural sustainability
- demonstrate a high level of competence of applying ESD principles to evaluating a design proposal for a building
- demonstrate a high level of competence in investigating and communicating an understanding of ecologically sustainable design (ESD) form-making and space-making in relation to contemporary architectural thought
- demonstrate an ability to prepare a piece of scholarly research on a selected aspect of sustainability

Generic Skills

On successful completion of this un it of study, the student will have developed their skills in the following areas: knowledge skills, thinking skills, personal skills, personal attributes and practical skills

Contribution of unit to programs

By providing a focus on sustainable design and construction practice, students studying in the BDes(Arch) and BArch programs will gain a broad view of environmentally sustainable design in the context of architecture, and these studies will also provide a solid foundation for further study or research in both professional and scholarly contexts.

DESP 1201 **Introductory Urban Design and Planning**

3 credit points. **Semester:** 2. **Classes:** lectures and seminars. **Assessment:** written assignments.
NB: Urban Design and Planning stream unit of study
Objectives

Students will have knowledge and understanding of key ideas, and be able to appreciate the context relevant to designing for the built environment.

Description

The unit will cover the following topics:

- The roles of government in planning, designing, managing and constructing the built environment
- Evolving concerns for the urban environment
- Planning and design instruments
- Components of the public domain
- Types of public infrastructure
- Infrastructure and urban form
- Key urban design ideas
- Innovative urban development
- Basic planning and development control procedures
- Environmental sustainability and its challenges
- Current major issues (affordable housing, reduced travel demand, denser and better designed built form, increasing complexity with life styles and accessibility requirements)

DESP 2201 **Designing and the Public Domain**

4 credit points. **Semester: 1. Classes:** lectures, workshops and studio. **Assessment:** Proposals and reports on projects.
NB: Permission required for enrolment. Urban Design and Planning stream unit of study
Objectives

Students will be able to:

- undertake background studies to inform designing for various elements of the public domain (streets and roads, open space and public places, car parks and pedestrian networks, centres)
- formulate and respond to complex problems
  Prepare and present simple proposals
- use basic terms, concepts and methods in practical urban design and planning situations

Description

Topics covered in this unit include:

- Components of the public domain
- Roles of government and private agencies in shaping the public domain
- Complex areas and competing uses
- Observing and interpreting public spaces
- Planning procedures and management of the public domain
- Types of plans
- Understanding context (physical, procedural, social);
- Preparing and presenting proposals
- Case studies

Teaching is based on a set of group projects that will require each student to prepare design drawings, plans and supporting studies. These projects will be considered in workshops, with discussion of relevant literature and cases.

DESA 2616 Explorations in Mixed Media

4 credit points. Ms Jan Fieldsend. **Semester: 1. Assessment:** Attendance 10%, Participation (may include an oral presentation, research journal, crit sessions) 30%, Portfolio of works 60%.

Aims

In the twentieth century mixed media profoundly changed the form and content of visual arts. This medium came about through investigations into the nature of painting and sculpture by artists such as Picasso and Braque. From this early period mixed media/ collage has found expression in, and indeed been the basis of, many art movements. Mixed media /collage techniques were often employed to disrupt previous notions of art practice and representation as well as commenting on political and social values. Today, in the twenty-first century, mixed media continues to be an innovative art form.

Explorations in Mixed Media examines these developments through practical classes, slide lectures and discussion. Collage, assemblage, montage, photocopy art and the more traditional disciplines of drawing and printmaking are included in mixed media.

This unit of study presents students with a wide range of art materials, techniques and concepts.

It aims to develop skill in and knowledge of various formal considerations in art practice: scale, line, texture, colour, space, shape etc. as well as understanding the conceptual bases of art work. Through a set of preparatory exercises and finished artworks students can explore and develop creative expression, technical abilities and knowledge of materials. An awareness of art history/theory in relation to mixed media will be presented and discussed to inform the student's own approach to image making.

Objectives

On the successful completion of this unit you will demonstrate the learning objectives through:

- exploring and using a variety of media, techniques and knowledge about the visual arts.
- taking this knowledge, learnt in preparatory exercises and developing it into finished art works that then form a substantial portfolio of works.
- using an awareness of art history and theory, in particular the use of mixed media during the twentieth century, to inform decision making in your creative process.
- reflecting on your art practice through a weekly journal, class and tutor crit. sessions and from this point realistically evaluating your own work.

Generic Skills

Through this unit of study a student will

- have a body of knowledge in the field of visual arts, specifically mixed media and an awareness of contemporary art practice.
- be able to exercise critical judgement, realistic self evaluation and imaginative thinking as outlined in the learning objectives.
- be able to apply technical skills as appropriate to art practice and furthermore apply these to new situations.
- develop the ability to plan and achieve a goal through a self directed final project.

Contribution of unit to programs

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) and Bachelor of Design,(Computing) and as such then contributes to the to the student then continuing on to Masters Programs such as Urban Design, Museum Studies etc.

DESA 2617 Explorations in Ceramic Forms

4 credit points. Mr Mark Jones. **Semester: 2. Assessment:** Attendance & participation: 10%, technical development/workshop practice:40%, visual diary:10%, final work(s):40%.

Aims

This unit aims to introduce students to aspects of 3D design and construction in ceramics. Students will be encouraged to investigate various methods of ceramic art and design and apply these skills and techniques to set projects which may include mixed media. One of the set projects will utilise the 3D Rapid Proto-typer(A 3D model producing machine) using a computer modeling system.

Objectives

On the successful completion of this unit you will demonstrate the learning objectives through:

- exploring and utilising convergent media in 3d art and design.
- using this knowledge and developing it into finished works.
- reflecting on your art and design practice and evaluating your work through a weekly journal in conjunction with tutor and class crit sessions.

Generic Skills

Through this unit of study students will:

- Knowledge skills: gain the beginning of a body of knowledge in ceramics and 3D design methods and begin to apply theory to practice in 3D practical work
- Thinking skills: begin to be able to account for decisions; begin to be realistic self-evaluators; begin to adopt a problem-solving approach; become creative and imaginative thinkers
- Personal skills: develop the capacity to continue to learn; develop the ability to plan and achieve goals; develop the ability to work with others
- Personal attributes: begin to acknowledge personal responsibility
- Practical skills: begin to develop solid practical skills which may include digital applications

Contribution to Different Programs of study

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) Bachelor of Design(Computing) and as such then contributes the the student continuing on to Masters Programs such as Urban Design, Museum Studies etc.

Assumed knowledge

To able to build a 3d model in computer aided design.

DESA 2618 Public Art

4 credit points. Ms Jan Fieldsend. **Semester: 1. Assessment:** Attendance 10%, Participation (may include an oral presentation, research, crit sessions) 40%, Essay 50%. Classes: lectures, field trips and art studio practice.

Aims

The field of public art is rapidly growing and as such has generated much debate and interest. What exactly is public art? This question will be looked at in detail by first asking the question what does public mean and then what happens when the word art is connected to it. How is the visual and tactile environment affected by the production of public art?

The aim of this unit is to provide students with a broad overview of the issues that influence and inform the production of art in the public sphere: history and theory of public art, policy and management, conservation, community response and evaluation, current local and international practice. It aims to develop each student's ability to critically analyse and be able to enter into debate (both written and spoken) on public art issues, especially its relationship to architecture. Field trips, artist/ commissioner talks, case studies, (such as the Vietnam Memorial in Washington and the Sydney Olympic Public Art Projects)and slide lectures will complement the theoretical content of Public Art.

Objectives

On the successful completion of this unit a student will demonstrate the learning objectives through:

- being familiar with a wide range of issues about the public art field and from this point be able to enter into an informed debate about this field. This may occur through group discussion, seminar presentation and essay writing.

- investigating and developing a critical analysis of a specific area of public art.

Generic Skills

Through this unit of study a student will:

- have a body of knowledge in the field of visual arts, specifically public art.
- be able to exercise critical judgement, realistic self evaluation and imaginative thinking as outlined in the learning objectives
- develop the ability to plan and achieve a goal by researching and writing an essay/seminar

Contribution to Different Programs of study

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) and Bachelor of Design,(Computing) and as such then contributes to the student then continuing on to Masters Programs such as Urban Design, Museum Studies etc.

DESA 2619 **Site Specific Art**

4 credit points. Ms Jan Fieldsend. Semester: 2. Classes: Art Studios, Slide lectures, Field Trips. Assessment: Attendance 10%, Participation (may include an oral presentation, research journal, crit sessions) 30%, Exercises 30% Final project 30%.

Aims

Over the past thirty years the relationship of art to site has been a major concern to contemporary artists. Art that is contextualised by place and space has taken the form of installation/sculpture, performance art, earthworks, public art, political and ephemeral artwork.

This practical unit of study enables students to explore visual art that is conceptualised and made for a particular place and space - public, interior, exterior, industrial, urban, rural, corporate, domestic - amongst many others. Students will use a range of traditional and non-traditional materials and techniques in a set of preparatory exercises (including collaborative assignments) and two finished projects. One project focuses on an interior space and the second is sited in an external environment. Written exhibition proposal and documentation skills are an integral part of the course. The relationship of site-specific art to architecture will be discussed throughout the course and highlighted in a field trip.

The unit looks at a wide variety of site-specfic art practices as a way of informing a student's own approach and extends the theoretical and management issues raised in the Public Art unit of study.

Objectives

On the successful completion of this unit a student will demonstrate the learning objectives through:

- exploring and using materials and techniques to create artworks that are particular to a site.
- taking this knowledge, learnt in preparatory exercises and developing it into finished art works.
- using an understanding of site specific art history and theory to inform decision making in your creative process as well as entering into thoughtful debate.
- reflecting on your art practice through a weekly journal, class and tutor crit sessions and from this point realistically evaluating your own work.

Generic Skills

Through this unit of study a student will

- have a body of knowledge in the field of site specific art practice.
- be able to exercise critical judgement, realistic self evaluation and imaginative thinking. This unit of study encourages a problem solving approach through its assignments where students will need to integrate various elements (often experimental) into a finished work.
- be able to apply technical skills as appropriate to site specific art practice and furthermore apply these to new situations.
- develop the ability to plan and achieve a goal through a self directed final project.

Contribution of unit to programs

This unit of study offers a relevant specialisation in the Bachelor of Design(Architecture) and Bachelor of Design Computing and as such then contributes to the student then continuing on to Masters Programs such as Urban Design, Museum Studies etc.

DESA 2601 **Art Studio 1**

4 credit points. Ms Virginia Ross, Ms Paola Talbert (Photography), Seraphina Martin (Etching). Semester: 1,2, Summer. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Photography

Objectives

This module combines practical camera and darkroom work with discussion and analysis of how photography functions as a contemporary visual medium.

Description

The module covers use of a 35mm SLR camera and assumes that students have little or no prior photography experience. Technical skills developed include camera operation, composition, use of studio lighting, film developing, printing photographs and experimental techniques. Photographs of a wide range of subjects such as buildings and building details, landscapes, portraits and still lifes are produced. Practical work includes darkroom and studio work and gallery visits.

Outcomes

Students should understand and be able to demonstrate the principles and practice of camera operations and of the production of high quality black and white negatives and prints. They should also develop an understanding of the role of photographic practices as a contemporary visual medium, including its historical development and its different applications in such areas as the visual arts, architectural photography and mass media.

Etching

Objectives

This module aims to develop various levels of image making, while extending technical skills and exploring etching as an artistic medium. Students will understand the fundamentals of how a print is manipulated, produced and printed. Solar etching is a contemporary, safe alternative to traditional etching, using ultra violet light to etch the image rather than nitric acids.

Description

The module introduces students to a wide range of mark-making techniques relevant to the etching process. Students will acquire a broad understanding of how an etching is made. Emphasis will be placed on skills, process and conceptual awareness relevant to developing their own personal vision.

Outcomes

At the conclusion of this module students will have gained a broad understanding of the techniques required to produce an etching and have a working understanding of chemicals, equipment and materials used in the studio. Students will build on their experience using a combination of textures, photographs, found objects and computer images as a means to creating their original prints. Architecture students may wish to incorporate architectural references within their work.

Practical: Studio practice. Consumables fee applicable.

DESA 2602 **Art Studio 2**

4 credit points. Mr Mark Jones (Ceramics), Mr Akhim Dev (Video), Ms Sue Pedley (General Drawing). Semester: 1,2. Classes: Practical studio work. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Ceramics - Wheel Throwing

Objectives

The aim of this module is to produce a set of wheel-thrown ceramics with emphasis on design, form and function.

Description

The module introduces varied techniques of throwing on the wheel to produce vessels and designed forms with an emphasis on the art and craft of this age-old method of construction. There will be an investigation of this practice at both historical and contemporary levels. Various techniques will be introduced including combination throwing and handbuilding, turning, glazing and brushwork with slips and underglazes.

Outcomes

At the end of this module students should:

- be technically proficient at centering, throwing, turning, and applying handles to ceramic vessels;

- have developed brushwork designs using slips and underglazes for a predetermined breakfast set;
- have a basic understanding of technical issues associated with ceramic production such as drying, firing and handling; including firing schedules - ie, bisque and glaze.
- have an awareness of historical and contemporary approaches to wheel made ceramics.

Digital Video

Objectives

This module will explore the language(s) of moving images, conventions of framing, movement and editing; develop an understanding of the fundamental technical aspects of pre-production, production and post-production; and generate independent and cooperative production using a variety of media.

Description

In this video module, VHS and digital video systems with Premiere editing software will be used. Emphasis is placed on skills' development, process and conceptual awareness. The module is divided into units exploring approaches to lighting, shooting, editing, sound production and concept development for film and video.

Outcomes

Students will gain technical proficiency in the diverse areas of pre-production, production and post-production; understand conventions of classical continuity and main visual styles; and produce a moving image piece using videotape or mixed media. Students are assessed in the context of theoretical understanding and technical aptitude in the various aspects of moving image production.

General Drawing

Objectives

This course aims to provide students with the knowledge and aptitude required to use a wide range of fundamental drawing skills and media to make drawings based on observation of the physical world and to experiment with imaginative expression.

Description

The module begins with a discussion of motives for drawing supported by a slide lecture, introduction to a range of drawing materials, instruction on a range of mark-making techniques, methods of tonal range, use of perspective and an understanding of composition, through structured projects students learn to use these materials and techniques to express individual responses based on observation in creative and imaginative ways.

Outcomes

Students will gain familiarity with a range of drawing media, mostly dry, including charcoal, graphite, pencil, conte, pen and ink, brush and ink, as well as watercolour and gouache as ground or backwash. They will also be able to use imaginative approaches to observing and recording the visible world using a variety of techniques and combinations of drawing media.

Practical: Studio practice. Consumables fee applicable.

DESA 2603 Art Studio 3

4 credit points. Mr Geoff Levitus (Painting), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture). **Semester: 1, 2. Classes:** Practical studio work. **Assessment:** Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Painting (Acrylic)

Objectives

This module aims to provide the student with the knowledge, skills and aptitude required to use a range of fundamental painting skills to make paintings based on observation of the physical world, and to experiment with imaginative applications of acrylic media based on observational skills.

Description

The module shows students who have little or no experience with painting how to prepare canvas and grounds, mix colours, then undertake practical work in observational painting (still-life painting form, modelling and shading techniques), anatomy (painting with a live model, self-portraiture), perspective and ideas and images (style and appropriation, the decorative, words and text, collage and abstraction).

Outcomes

On successful completion the student should have gained familiarity with acrylic media; be able to apply basic colour theory, to mix secondary and tertiary colours, and to create a tonal range; and be able to use imaginative approaches to observing and painting the visible world based on sketches and studies.

Ceramics - Hand Building

Objectives

The aim of this module is to introduce the many and varied techniques of hand building clay as well as the processes of firing and glazing.

Description

The module involves an exploration of the plastic properties of clay to create a wide variety of constructions that will be fired and glazed. There will be an investigation of hand built ceramics at both historical and contemporary levels. Set projects will enable students to discover their own means of expression and design of sculptural forms. Projects include slab and coil construction and combinations of coil, slab and pinch construction. Various surface finishes such as brushwork, glazing and sculptural relief applications will be introduced including coloured underglazes, slips and glazes.

Outcomes

At the end of this module students should:

- have an understanding of pinch, slab and coil construction techniques with an awareness of historical and contemporary approaches to hand built ceramics;
- have an understanding of brushwork and coloured glaze and underglaze applications;
- have the ability to plan and complete projects as well as development of a critical approach to form making including the use of the wheel for large coil constructions;
- have a basic understanding of technical issues associated with ceramic production such as drying, firing and handling,
- understand firing schedules - ie, bisque and glaze.

Sculpture

Objectives

This module provides students with knowledge, skills and confidence to use a range of materials and techniques necessary for three-dimensional sculpture. They will be introduced to the conceptual and theoretical aspects of sculpture.

Description

This is an introductory module for students with little or no previous experience in sculpture. A number of traditional sculptural techniques such as clay modelling, plaster mould making, casting in cement, soldering and welding will be taught and used to explore elementary aspects of three-dimensional form. The student will be required to complete two projects: to make a traditional portrait as well as a more conceptually based work.

Outcomes

The student should become aware of the inter-relationships between the technical, personal and conceptual concerns in sculpture making.

Practical: Studio practice. Consumables fee applicable.

DESA 2605 Art Studio 5

4 credit points. Mr Ryszard Dabek (Web Art and Design), Mr Geoff Levitus and Mr Frank Littler (Life Drawing). **Semester: 1,2. Classes:** Practical studio work. **Assessment:** Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Web ***Art and Design***

Objectives

This module combines practical computer program and Internet work with discussion and analysis of how Web design functions as a contemporary visual art medium.

Description

The Web design workshop is aimed at students who wish to learn the basics of Web design and Internet page creation. At this level, no previous computer experience is needed. The module encourages students to look beyond the more obvious uses of the Internet (commence, reference etc.) and engage with the net in terms of its creative potential and cultural relevance. The

program will examine uses of the Internet by contemporary artists in such diverse areas as media arts, architecture, hypertext writing and other emerging forms of net.art that engage with the very form of the Internet itself.

Outcomes

Starting from a basic introduction students will gain the skills necessary to design, build and publish their own Internet site on the World Wide Web. In addition to using the latest Internet browsers (Netscape 4.x), students will learn to create Web sites using Dreamweaver 1.2 and Photoshop 5.x and publish them using an FTP program such as Fetch. Students will have an understanding of the complex place and construction Web art.

Life Drawing

Objectives

This module aims to increase the students' level of skill in all three areas of drawing: representational, interpretative and expressive; to develop dynamic approaches to drawing the human body; to use a wide range of media and techniques, to focus on such areas as weight, movement, and direction as well as the formal aspects of composition, anatomy and foreshortening.

Description

This module provides students with the opportunity to combine sound observational skills with imaginative and experimental techniques in order to encourage a personal vision and style and a commitment to the practice of drawing as a discipline in its own right.

Outcomes

Students will build on previous drawing experience and be able to use a range of approaches to depict the human body. Students should have enough experience at the end of the module to be able to criticize and select from their own work for their final portfolio or exhibition.

Practical: Studio practice. Consumables fee applicable.

DESA 2606 **Art Studio 6**

4 credit points. Mr Mark Jones (Ceramics), Ms Virginia Ross and Ms Paola Talbert (Photography), Mr Geoff Levitus (Oil Painting), Ms Linda Fienberg (Object Design). Semester: 1,2, Summer. Classes: Demonstrations, Practical studio work, Slide lectures, Gallery visit and Group discussions. Prerequisite: for subject area Ceramics * Art and Design, prereq Ceramics Hand Building or Ceramics Wheel Throwing subject area; for subject area Experimental Photography, prereq Photography subject area; for subject area Oil Painting, prereq Drawing or Painting subject areas. Assessment: Attendance, Studio skills and technique, Studio work, Portfolio and Completed projects.

NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Students choose to attend one of the following modules:

Ceramics -Art and Design

Objectives

This module aims to produce a number of individually designed ceramic works that develop and extend techniques learnt in Ceramics - Hand Building or Wheel Throwing.

Description

Larger and more advanced forms will be attempted with combinations of coil, hard slab and throwing techniques. Students will be introduced to plaster moulds for large constructions and relief decorations. An individual approach to vessel and sculptural construction will be informed by contemporary ceramic practices. In addition, experimental surface treatments will be explored. Architecture students will be able to use this module to explore architectural forms using ceramic and mixed media.

Outcomes

At the end of the module students should:

- be able to construct more technically difficult forms than in their previous Studio,
- have the ability to design work from concept to finished object,
- have developed self-initiated projects,
- have explored various advanced surface treatments.

Experimental Photography

Objectives

This module builds on the skills learned in Photography Art Studio and incorporates advanced camera work and printing with development of conceptual and experimental photography skills.

Description

Students learn to combine advanced photography techniques such as pushing film, photomontage, copy-stand work and experimental techniques such as sandwiching negatives and hand-colouring with development of appropriate conceptualisation of the ideas behind the photographic "work. There is emphasis on development of further technical skills combined with advancement and consolidation of their understanding of the role of photographic practices as a contemporary visual medium. Students will research a number of different genres in photographic history, bringing this to bear on their work for the module. A critical attitude to the production and construction of images will be encouraged.

Outcomes

Students should understand and be able to demonstrate advanced principles and practice of camera operations, the manipulation of negatives, and printing of high quality, large-scale prints.

Oil Painting

Objectives

The purpose of this module is to provide the student with the knowledge and skills required to use a range of painting techniques in oil and to develop an awareness of contemporary art as it relates to the traditional medium of oil painting.

Outcomes

Students will know how to:

- prepare canvas and grounds and mix colours;
- produce a series of preparatory exercises and finished works that investigate observational painting (still life), anatomy (painting with live model, self-portraiture), perspective, ideas and images (style, appropriation, the decorative, words and text, abstraction);
- to experiment with imaginative applications of oil media based on observational skills;
- have an awareness of contemporary art.

Object Design - Wood

Objectives

This unit aims to develop students' understanding of wood - properties, different species, and sources of timber. Students will develop woodworking and machining skills suitable for producing small objects and models and a greater appreciation of high quality workmanship in timber detailing. Students will also acquire skills in communicating concepts in 3 dimensions.

Description

The unit introduces students to workshop tools and machinery through a series of tutorials, demonstrations, experiments, discussions and woodworking exercises. As the unit progresses students will develop their ability to select and work with different types of timber and also increase their understanding of workshop, machining and production processes used in joinery and furniture workshops.

Students will be required to produce an original design for and make a small 'special' object, sourcing their own timber and researching the origin and timber species for a presentation. Discussions will include debates about sustainability, the value of rare and exotic timber species and occupational health and safety issues.

Outcomes

On completion of the unit students will have

- experience and confidence in using woodworking equipment
- an understanding of the techniques and practices used in furniture and joinery workshops
- an appreciation of timber and its qualities
- an improved ability to design well with timber and think and work in 3 dimensions
- knowledge of different sources of timber.

Practical: Studio practice. Consumables fee applicable

DESA 2607 **Art Studio 7**

4 credit points. Various lecturers. Semester: 1, 2. Classes: See details for Art Studios 1-6. Assessment: See details for Art Studios 1-6.

NB: Available in BArch only

Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.

Description

This unit is reserved exclusively for Bachelor of Architecture students to enable them to undertake a studio in any medium not previously completed, which is in an Art Studio group that has

already been undertaken. Refer to Art Studios 1-6 for unit descriptions.
Practical: studio practice. Consumables fee applicable

DESA 2608 **Advanced Art** Studio 1

4 credit points. Ms Virginia Ross (Photography), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture), Ms Linda Renberg (Object Design). Semester: 1,2. Classes: Practical studio work, lectures, development of ideas through group discussions, gallery visit, exhibition, group critique of artwork. Prerequisite: Art Studio in the same medium with a result of at least 65 per cent. Assessment: Attendance and participation, Studio assessment for technical development, Visual research journal, Final artwork. A process diary and an artwork for exhibition are the final projects. Attendance, Application and participation, Development of technical skills, Completed coursework.
NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.
Objectives
This unit allows the student to extend and develop skills and knowledge gained in the Art Studio workshops. Through an advanced use of the media, art theory lectures and seminars, the production of a visual research journal and a final exhibition project students should be able to integrate their skills and knowledge in the creation of an artwork. A critical and conceptual approach to image and object making will be further developed around a set theme. The theme changes each year and will be published prior to enrolment.
Description
The following studios are offered at advanced art level: ceramics, photography, painting, drawing, mixed media, sculpture, screenprinting on paper and fabric, video, graphic design, printmedia, visual art and culture, new media arts, object design.

Please note that some studios may not be offered every year.

Outcomes
Students should understand and be able to demonstrate advanced principles and practice in the studio they are participating in as well as a highly developed conceptual approach to the production of their artwork.

Through discussion, writing and practice, students develop their ability to define and refine initial ideas into a cohesive work of contemporary visual art. A critical attitude to the production and construction of images is encouraged.

Students will gain experience in presenting and installing their artwork into an exhibition environment and contributing to a catalogue of the exhibition.
Practical: Studio practice, Gallery visits, Exhibition installations. Consumables fee applicable.

DESA 2609 **Advanced Art Studio 2**

8 credit points. Ms Virginia Ross (Photography), Mr Mark Jones (Ceramics), Mr Ari Purhonen (Sculpture), Ms Linda Fienberg (Object Design). Semester: 1. Classes: Practical studio work, lectures, development of ideas through group discussions, gallery visit, exhibition, group critique of artwork. Prerequisite: Art Studio in the same medium, with a result of at least 65 per cent. Assessment: Attendance and participation, studio assessment for technical development, visual research journal, final artwork. A process diary and an artwork for exhibition are the final projects. A 2000 word research paper/essay and presentation of a seminar is required. Attendance, application and participation development of technical skills, seminar, completed coursework.
NB: Permission required for enrolment. Classes in the Art Workshop are limited by equipment and/or space constraints therefore students must register with the Art Workshop before enrolment to secure a place.
Objectives
This unit allows the student to extend and develop skills and knowledge gained in the Art Studio workshops as well as completing theoretical work. Through an advanced use of the media, art/architectural theory lectures and seminars, the production of a visual research journal and a final exhibition project students should be able to integrate their skills and knowledge in the creation of an artwork. A critical and conceptual approach to image and object making will be further developed around a set theme. The theme changes each year and will be published prior to enrolment. Students will write a 2000 word essay and present a seminar in addition to practical work.
Description
The following studios are offered at advanced art level: ceramics, photography, painting, drawing, mixed media, sculpture, screenprinting on paper and fabric, video, graphic design, printmedia, visual art and culture, new media arts, object design.

Please note that some studios may not be offered every year.

Outcomes
Students should understand and be able to demonstrate advanced principles and practice in the studio they are participating in as well as a highly developed conceptual approach to the production of their artwork.

Students will gain skills in researching and writing a theoretically -based essay on a topic related to the year's theme, and in presenting a seminar based on a set reading.

Through discussion, writing and practice, students develop their ability to define and refine initial ideas into a cohesive work of contemporary visual art. A critical attitude to the production and construction of images is encouraged.

Students will gain experience in presenting and installing their artwork into an exhibition environment and contributing to a catalogue of the exhibition.

Practical Studio practice, gallery visits, exhibition installation. Consumables fee applicable.
Practical: Studio practice, Gallery visits, Exhibition installation. Consumables fee applicable.

5 Graduate coursework degrees

■ Introduction

This section contains information that you may find useful during your studies.

Further information on graduate coursework programs can be found via the Faculty's Web site at www.arch.usyd.edu.au.

Requirement for students starting the course in 2002

Master's degree: 72 credit points selected from the Faculty's Table of Graduate Units of Study, including at least 48 credit points comprising at least 24 credit points of core units of study and a selection of option units of study from the relevant program.

Graduate Diploma: 48 credit points from the Faculty's Table of Graduate Units of Study, including at least 24 credit points selected from the core units of study and the option units of study from the relevant program.

Graduate Certificate: 24 credit points from the relevant program in the Faculty's Table of Graduate Units of Study, including at least 16 credit points selected from the core units of study.

Credit for previous study

Candidates may receive credit for coursework previously completed in relevant fields of study and/or on the basis of non-credentialled learning or experience to the limits (shown below) provided that the credit is specified as equivalent to existing units of study in the table of Graduate units of study for the relevant course.

Credit will not be granted for units of study completed more than nine years before admission to the candidature for the course concerned.

Applications must show the unit for which credit is sought and its equivalent completed elsewhere. A transcript and description of the equivalent units must be attached. The forms must be approved by your course coordinator before submitting to the Faculty Student Services Centre.

Postgraduate Education Loans Scheme (PELS)

This is an interest-free loan facility for eligible students who are enrolled in fee-paying, postgraduate non-research courses. It is similar to the deferred payment arrangements available under HECS (the Higher Education Contribution Scheme). 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. It is available for both commencing and continuing students.

The Commonwealth pays the amount of the loan directly to your institution and you repay this loan through the taxation system once your income reaches the minimum threshold for compulsory repayment (this is set by the Government).

For more information on the scheme, you can either access the PELS Web site at www.hecs.gov.au/pels.htm or pick up a leaflet and form from the Student Centre, Carslaw Building (or email skimber@records.usyd.edu.au). We regret that the form you need is NOT available from the Faculty of Architecture.

Your completed PELS form must be returned to the Carslaw Student Centre by **Thursday 28 March 2002.**

■ Master's degrees, Graduate Diplomas and Graduate Certificates

Resolutions of the Senate

1. Admission requirements

An applicant for admission to candidature for the degree of master or a graduate diploma or a graduate certificate in the Faculty shall -

(1) (a) for the Master's degree and Graduate Diploma: be a graduate of the University of Sydney or hold qualifications deemed by the Dean to be equivalent; and
(b)for the Graduate Certificate: be a graduate of the University of Sydney or hold qualifications deemed by the Dean to be equivalent or furnish evidence which satisfies the Dean that he or she is qualified to enter upon the prescribed units of study.
(c) have completed any additional requirements at a standard acceptable to the Dean as set out in the Resolutions of the Faculty.

2. Coursework requirements

(1) To qualify for the award of the Master's degree a candidate must complete 72 credit points selected from the Faculty's Table of Graduate units of study, including a minimum of 24 credit points from the core units of study (unless a higher minimum number is specified for a particular program) from the relevant program.
(2) To qualify for the award of the Graduate Diploma a candidate must complete 48 credit points selected from the Faculty's Table of Graduate units of study, including at least 24 credit points from the core units of study (unless a higher minimum number is specified for a particular program) from the relevant program.
(3) To qualify for the award of the Graduate Certificate a candidate must complete 24 credit points from the relevant program in the Faculty's Table of Graduate units of study, including at least 16 credit points selected from the core units of study.
(4) To qualify for the award of the Master of Urban and Regional Planning a candidate must complete 72 credit points selected from the Faculty's Table of Graduate units of study, including all core units of study from the specific Urban and Regional Planning program.

3. Time limits

A candidate for the master's degree, graduate diploma or graduate certificate may proceed either full- or part-time.
(1) All candidates shall complete the requirements for the master's degree, graduate diploma or graduate certificate no later than at the end of the 8th semester of candidature.
(2) All candidates must complete the requirements for the master's degree, graduate diploma or graduate certificate within 6 calendar years of first enrolment.

4. Award of the Master's degree, graduate diploma or graduate certificate

(1)The following master's degrees shall be awarded in the pass grade except where a candidate fulfils the requirements for award of the degree of master with honours.
Master of Architecture
Master of Design Science
Master of Heritage Conservation
Master of Housing Studies
Master of Urban Design
Master of Urban and Regional Planning
(2) The following graduate diplomas shall be awarded in the pass grade only.
Graduate Diploma in Architecture
Graduate Diploma in Design Science
Graduate Diploma in Heritage Conservation
Graduate Diploma in Housing Studies
Graduate Diploma in Urban Design
Graduate Diploma in Urban and Regional Planning
(3)The following graduate certificates shall be awarded in the pass grade only.
Graduate Certificate in Architecture
Graduate Certificate in Design Science
Graduate Certificate in Heritage Conservation
Graduate Certificate in Housing Studies
Graduate Certificate in Urban Design
Graduate Certificate in Urban and Regional Planning

(4) Specialisation
(a) The Master of Design Science, the Graduate Diploma in Design Science and the Graduate Certificate in Design Science may be taken in the following subject areas, and the subject area shall be specified on the testamur:
audio design
building
building services
design computing
digital media
energy conservation
facilities management
film and digital video
illumination design.
(b)The Master of Urban and Regional Planning may be taken without specialisation or may be taken in the following subject areas, and if taken with specialization the subject area shall be specified on the testamur:
heritage conservation
housing studies
urban design.
(c) The Master of Architecture, Graduate Diploma in Architecture and Graduate Certificate in Architecture may be taken in the following subject areas, and the subject area shall be specified on the testamur:
architectural history, theory and criticism
architectural design.

Faculty resolutions

Master's degrees by coursework, Graduate Diplomas and Graduate Certificates

These resolutions must be read in conjunction with the University of Sydney (Coursework) Rule 2000 and the relevant Faculty Resolutions.

[In exceptional circumstances these resolutions may be waived subject to the approval of the Associate Dean (Graduate Studies) on the advice of the coursework adviser.]

Section 1

1. Admission to candidature

(1) The Dean may admit to candidature for the master's degree by coursework a person:
(a) qualified for award of the graduate certificate who has achieved a weighted average mark of at least 65 in the required units of study; or
(b) qualified for award of the graduate diploma.
(2)The Dean may admit to candidature for the graduate diploma a person qualified for award of the graduate certificate who has achieved a weighted average mark of at least 65 in the required units of study.

2. Units of study

(1) A candidate progressing by coursework shall complete the units of study prescribed by the Faculty for the relevant degree, graduate diploma or graduate certificate satisfying all requirements with regard to core units of study and areas of study.
(2) Coursework shall consist of lectures and seminars together with such tutorial instruction, essays, exercises, practical work and assignments as may be prescribed by the Faculty.
(3) Units of study are in some cases designated as options and may be grouped to form areas of study.
(4) Units of study may specify assumed knowledge.
(5) See the Table for Graduate units of study

3. Requirements for the Master's degree, Graduate Diploma and Graduate Certificate

(1)To qualify for the award of the Master's degree a candidate must complete 72 credit points selected from the Faculty's Table of Graduate units of study, including a minimum of 24 credit points from the core units of study (unless a higher minimum number is specified for a particular program) from the relevant program.
(2) To qualify for the award of the Graduate Diploma a candidate must complete 48 credit points from the Faculty's Table of Graduate units of study, including at 24 credit points from the core units of study (unless a higher minimum number is specified for a particular program) from the relevant program.
(3)To qualify for the award of the Graduate Certificate a candidate must complete 24 credit points from the relevant program in the Faculty's Table of Graduate units of study, including at least 16 credit points selected from the core units of study.
(4) To qualify for the award of the Master of Urban and Regional Planning a candidate must complete 72 credit points selected from the Faculty's Table of Graduate units of study, including all core units of study from the specific Urban and Regional Planning program.

4. Award of the Master's degree with honours

(1)The Master's degrees by coursework may be awarded with Honours to a candidate who completes the Dissertation (24 credit points) with a grade of at least a distinction.
(2) Enrolment in the unit of study Dissertation (24 credit points) is available only to candidates for Master's degrees by coursework who achieve a weighted average mark of at least 65 in all other coursework required to be completed towards award of the degree.

Section 2

5. *Availability*

(1)The number of students admitted and the programs and the units of study available may be limited and will be determined by:
(a) the availability of resources, including space, library, equipment and computing facilities;
(b) availability of adequate and appropriate supervision, and
(c) availability of staff resources for the conduct of units of study.
(2) Units of study may be offered on a weekly lecture basis or as intensive block courses which may include weekends.

6. Appointment of adviser

The Dean shall appoint the program coordinator or a designated member of the full-time or fractional academic staff to act as adviser to a candidate for a coursework master's degree, graduate diploma or graduate certificate.

7. Granting of credit

(1) Credit is granted for coursework on the basis of credit points being gained for successfully completing units of study.
(2) On the recommendation of the Associate Dean (Graduate Studies) the Dean has resolved that in satisfying the requirements of section 3 above:
(a) candidates may receive credit for coursework previously completed in relevant fields of study and/or on the basis of prior non-credentialled learning or experience to the limits shown in the Table of Credits and Substitutions for graduate units of study provided that the credit is specified as equivalent to existing units of study in the Table of Graduate units of study (except general electives and dissertation) for the degree, graduate diploma or graduate certificate;
(b) candidates may substitute units of study from outside the Faculty's Table of Graduate units of study to the limits shown;
(c) all applications for credit must be made on the form available from the Faculty's Student Services Centre and must include sufficient information to allow the assessment of the claim and in the case of subsection (1) the candidate must be available, as required, for assessment by the relevant program coordinator;
(d)The Dean may deem time spent on another coursework master's degree, graduate diploma or graduate certificate of The University of Sydney, or other university, as time spent on a coursework master's degree, graduate diploma or graduate certificate in the Faculty.
(3) In addition to clause 7.1, a candidate for a master's degree, graduate diploma or graduate certificate may be given credit for units of study from the Faculty's Tables of Graduate units of study undertaken prior to commencement of their candidature, to a maximum of 18 credit points for a master's degree or graduate diploma and 12 credit points for a graduate certificate, and provided that no more than five years have lapsed since they were undertaken.
(4) A candidate for a coursework master's degree or graduate diploma may receive full credit for coursework completed during a previous candidature in the Faculty in the same program, for which there was an award of graduate diploma or graduate certificate, provided that no more than five years have lapsed since the award.

8. Assessment

(1) A candidate's work may be assessed by written and oral examinations, assignments, exercises, and practical work or any combination of these.
(2) A candidate who completes a unit of study at a standard higher than that required for a Pass may be awarded High Distinction, Distinction or Credit.
(3) When a student is permitted to submit additional work other than on the grounds of illness or misadventure, and the temporary grade INC has been given, the maximum result that may be awarded is 50 Pass.

9. Satisfactory progress

The Dean may require a candidate proceeding by coursework:
(1) to show good cause why he or she should be allowed to re-enrol in a unit of study which has been failed or discontinued twice;
(2) to show good cause why he or she should be allowed to re-enrol in the Faculty if in any two successive years of attendance he or she fails to gain at least 50 per cent of the credit points attempted.

lO.Suspension of candidature

(l)Unless suspension of candidature has been approved by the Dean, a candidate is required to re-enrol each calendar year.
(2) Except with approval of the Dean, a candidate in the Faculty may only suspend candidature for periods totalling no more than the equivalent of two semesters full-time.
(3)Except where the Dean determines otherwise in any particular case, a candidate who re-enrols after a suspension of candidature for any period shall proceed under the by-laws and resolutions in force at the time of re-enrolment.

Table of credits and substitutions for graduate units of study

Award course	Maximum credit points Credit	Substitution
Master of Architecture	18*	12
Graduate Diploma in Architecture	18*	12
Graduate Certificate in Architecture	12t	-
Master of Design Science	18*	12
Graduate Diploma in Design Science	18*	12
Graduate Certificate in Design Science	12t	-
Master of Heritage Conservation	18	12
Graduate Diploma in Heritage Conservation	18	12
Graduate Certificate in Heritage Conservation	12t	
Master of Housing Studies	18	12
Graduate Diploma in Housing Studies	18	12
Graduate Certificate in Housing Studies	12t	-
Master of Urban and Regional Planning	18	12
Graduate Diploma in Urban and Regional Planning	18	12
Graduate Certificate in Urban and Regional Planning	12t	
Master of Urban Design	18	12
Graduate Diploma in Urban Design	18	12
Graduate Certificate in Urban Design	12t	

* Not more than 12 credit points of which can be credited towards the core and option unit requirement.
t Credit will be granted only for units from the Faculty's table of Graduate units of study completed prior to commencement of candidature.
Credit cannot be granted for coursework completed more than 5 years previously.

■ Degree specialisations

Architecture

Globalization of capital and the information industry is impacting on both architectural education and practice. Metropolitan cities like Berlin, New York and Sydney are hosting competitions and projects designed by architects who have firms based in various cities of Europe and America. Students who pursue ambitious future careers in architecture are motivated to work for prominent local and international firms and thus have to compete with other young architects educated in different schools of architecture in this global village.

Sydney is the major metropolitan city in Australia and now recognized as a world centre with many multinational corporations with head or regional head offices. This program is unique in integrating theory with practice. The core units of study cover architectural history, theory and criticism, and architectural design. These units map the contemporaneity of architecture within the discourse of globalization, architecture and the city and the impact of telecommunication technologies.

The program in Architectural History, Theory and Criticism consists of advanced study in contemporary and recent theories of architecture using historical inquiry. It can prepare the student for a deeper understanding of architectural history, theory and criticism, for careers in architectural history or journalism and for further PhD studies in the discipline.

The Architectural Design program consists of advanced studio training, founded on inquiry into architecture as a discipline and a practice. The emphasis will be on contemporary problems of design and practice and will allow an in-depth study into the design problems of Australian, Asian Pacific and Pacific Rim cities and the role of infrastructure in the contemporary city will be the priority.

Design Science

Audio Design

The program offers a unique balance of studio-based production subjects and laboratory-based theoretical and investigative subjects. It aims to extend students' existing skills to a high level of proficiency and professionalism in the various disciplines that contribute to the audio field. The program suits people with an academic and/or professional track record in audio or related areas, wishing to extend the breadth and level of their expertise.

Much of the work in the Audio Design program takes place in the Faculty of Architecture's sound studio or acoustical laboratory. The sound studio is equipped for both recording and production, utilising current digital sound and video resources. The acoustical laboratory has an anechoic room and a reverberant room, and is equipped with state-of-the-art acoustical measurement and analysis tools.

A student in the Audio Design program has the opportunity to develop a sophisticated understanding of, and skills in, audio production and its application to new media, audio system and component design, audio and architectural acoustics, digital audio systems and electronics, and music as it relates to audio design. Students are exposed to world-class research activity, and have the opportunity to do research projects of their own. The program is currently developing in the areas of new media, subjective acoustics, spatial audio (virtual sound space), and music technology.

The core units of study in this program are listed in the Table of Graduate Studies. There is flexibility to study areas of specific interest to each student. Options are available in other related programs offered by the Faculty (eg, Design Computing, Digital Media, Film and Digital Media) and elective units may be taken from any other program in the Faculty or from other relevant programs at The University of Sydney.

Building

This program provides an opportunity for people involved in the building industry to receive a broad education/professional development in key aspects of the industry today and in the future. Provides an overview of building science and allows you to specialise in areas such as acoustics, building aerodynamics, CAD, structures, building services, and environmental science. The units of study are aimed at architects, building designers and engineers who require a greater understanding of the science and technology of building design and construction, and provide a range of knowledge and skills for educators in the building science area.

Building Services

This program aims to accelerate the acquisition of knowledge and skills for professionals currently employed in the building services industry, to provide continuing professional development for those in the related fields of architecture and the building industry or to provide vocational training for those intending to transfer into this industry.

The core units of study in this program are listed in the table of Graduate Studies. There is flexibility to study areas of specific interest to each student. Options are available in other related programs offered by the Faculty (eg, Building Services, Design Computing, Energy Conservation, Facilities Management, Illumination Design) and elective units may be taken from any other program in the Faculty or from other relevant programs at The University of Sydney.

Design Computing

Design computing has assumed a prominent role in design practice. This change has been partly brought about by economic pressures to improve the efficiency of design practice, but there has also been a desire to aid the design process in order to produce better designs. This program provides a broad exposure to the various aspects of design computing, giving the design professional and the computing consultant a comprehensive and strategic view of the applications of computing to design. Graduates from the design computing program are sought by architectural, engineering, and design firms that require strategic developments in their use of computing. Many students enrol in this program or in individual units of study while continuing full-time employment in a computer-related field to gain knowledge of the latest techniques available to the design profession.

Please note that some units have quotas. This may affect progression in your program and limit the places offered each year.

Digital Media

This program addresses and presents current and emerging paradigms of information technology and computing in the realm of digital media. It is aimed specifically at developing a broad technical and aesthetic awareness of the issues and skills relating to the production of interactive digital media for both off-line (CD-ROM) and on-line (Internet) applications. Teaching within the course imparts both a general and specialist understanding of digital media - its strengths and limitations and how the technology can be realised effectively in the design professions. This involves the development of knowledge and skills in 3D modelling, multimedia, Web design, digital media production, and sound design. At the end of the course, students will have an electronic portfolio of design presentations that demonstrate the effective use of multimedia, animation, and sound modelling.

The core units of study in this program are listed in the Table of Graduate units. There is flexibility to study areas of specific interest to each student. Options are available in other related programs offered by the Faculty (eg, Design Computing, Film and Digital Video) and elective units may be taken from any other program in the Faculty or from other relevant programs at The University of Sydney. Some units have quotas. This may affect progression in your program and limit the places offered each year.

Energy Conservation

This program provides the necessary skills and knowledge to design energy-efficient and environmentally conscious buildings. It addresses the relationship between architecture and current environmental issues, and it explores environmentally sustainable architecture.

The core units of study in this program are listed in the Table of Graduate units of study. There is flexibility to study areas of specific interest to each student. Options are available in other related programs offered by the Faculty (eg, Building Services, Facilities Management, Illumination Design) and elective units may be taken from any other program in the Faculty or from other relevant programs at The University of Sydney.

Facilities Management

Commercial and domestic buildings are a long-term proposition and a considerable capital investment. Operating costs can often equal or outweigh this initial investment. Facilities managers are responsible for maintaining the value of the investment by ensuring that buildings and other facilities are properly serviced and adequately maintained. The program provides the skills and knowledge required by the facilities manager to operate in a professional environment.

Film and Digital Video

This program, provides a comprehensive curriculum incorporating both theoretical and practical hands-on learning and academic training for professionals in film and television

Illumination Design

A professional program for architects, interior designers, engineers, ergonomists and related professionals. The aim is to improve the quality of lighting design and the quality of the luminous environment.

This program is one of only a few in the world. Its emphasis is on producing good lighting designers by introducing you to the multidisciplinary background of lighting knowledge before integrating this knowledge into the general process of lighting design. Successful completion of the core will qualify you for full membership of the Illuminating Engineering Society of Australia and New Zealand, subject to the required practical experience.

Heritage Conservation

The program's primary aim is to develop skills in the assessment, interpretation, management, formulation of policy, and documentation of culturally significant places, including buildings, sites and cultural landscapes. Secondary aims include the analysis of pressures for change and the promotion of cross-cultural study.

The program emphasizes the importance of management issues and a practical understanding of mechanisms of statutory authorities, both local and international, which affect conservation and development.

A professional placement provides a link between the academic core of the program and the discipline and methods of practice.

Housing Studies

The program is offered mostly during the evenings to allow for working students. In the first year, half of the course will be presented at The University of Sydney and half at the University of New South Wales, including the diploma's summer fieldwork project. In the second year of the Master's degree program, you can elect to enrol at either institution.

Urban and Regional Planning

Planners assist government, private organisations, groups, and individuals in the community to achieve their future objectives, through developing relevant projects, policies, processes, and plans. The units in Urban and Regional Planning are recognised by the Planning Institute of Australia (PIA, formerly RAPI). Master's graduates are eligible, subject to the professional experience requirements, for corporate membership of that body.

Urban Design

The design studio project is the central core of this program. You will be engaged in the creative yet informed generation and discussion of leading design concepts for urban areas, developing the design and policy skills needed to effect useful and sustainable urban change.

A wide range of related disciplines and viewpoints is introduced to nurture a deep understanding of the conception, shaping and implementation of urban design projects, programs and policies. The curriculum is continually updated to meet shifting urban realities in relation to societal, cultural, technological, and environmental change.

■Table of Graduate units of study

A = Assumed knowledge P = Prerequisite C = Corequisite			C = Core unit of study O = Optional unit of study																		
Unit code Unit name	Credit points	Offered in 2002	Architectural Design	Arch. History/Tneory/Criticism	Audio Design	Building	Building Services	Design Computing	Digital Media	Energy Conservation	Facilities Management	Rim and Digital Video	Heritage Conservation	Housing Studies	Illumination Design	Urban Design	Urban/Regional Planning	URP (Heritage Conservation)	URP (Housing Studies)	URP (Urban Design)
Area: General																				
DESC 9104 Building Materials I	4	N									O									
DESC 9022 Cognitive Processes in Design 1	4	N						O	O											
DESC 9023 Cognitive Processes in Design 2	4	N						O	o											
DESC 9029 Computer-aided Design of Structures	4	Y						o												
DESC 9041 Electricity in Buildings	4	N													O					
DESC 9089 History of Australian Building Construction	6	Y																		
DESC 9058 History of Building Science	6	N																		
DESC 9066 Mathematical Modelling for Designers	4	N																		
ARCF 9001 Modes of Inquiry and Methods of Research and Scholarship	6	Y																		
DESC 9105 Neural Network Models and Applications	6	Y			O	O	O	o	o	O	O				0					
DESC 9076 Science and Society	4	Y																		
DESC 9079 Statistics in Environmental Design	4	N																		
DESC 9080 Structural Systems Synthesis	4	N																		
DESC 9087 Wind Effects on Buildings	4	N																		
ARCH 9045 Dissertation 1	12	Y	O	O									O	O		O	O	O	O	O
ARCH 9046 Dissertation 2	12	Y	O	0									O	o		0	o	0	0	0
DESC 9109 Dissertation 1	12	Y			0	o	O	o	o	O	o	O			o					
DESC 9110 Dissertation 2	12	Y			0	0	0	o	o	0	0	0			0					
ARCH 9039 General Elective 1	6	Y	0	0									0	o		0	0	0	o	o
ARCH 9040 General Elective 2	6	Y	o	0									o	0		0	0	0	0	0
ARCH 9041 General Elective 3	4	Y	o	o									o	0		0	0	o	0	o
ARCH 9042 General Elective 4	4	Y	0	0									0	0		0	0	o	o	o
ARCH 9043 General Elective 5	2	Y	0	0									0	o		0	0	0	0	0
ARCH 9044 General Elective 6	2	Y	o	0									o	0		0	o	0	0	o
DESC 9051 General Elective A	6	Y			0	0	0	o	o	0	0	o			0					
DESC 9052 General Elective B	6	Y			0	o	o	0	o	0	o	o			o					
DESC 9053 General Elective C	4	Y			0	o	o	0	o	o	o	0			0					
DESC 9054 General Elective D	4	Y			o	0	o	o	0	0	0	o			0					
DESC 9055 General Elective E	2	Y			0	0	o	0	o	0	0	o			0					
DESC 9056 General Elective F	2	Y			0	o	0	0	o	o	0	0			0					
Area: Architectural Design																				
ARCH 9052 Graduate Architectural Design 1	12	Y	C	o												0				
ARCH 9053 Graduate Architectural Design 2	12	Y	C	0												0				
ARCH 9048 History, Theory and Criticism 1: Theories of the History of Modern Architecture	6	Y	o	c									o	0		0	0	0	o	o
ARCH 9049 History, Theory and Criticism 2: Contemporary Architectural Theories	6	Y	o	C									0	0		0	0	0	o	o
ARCH 9050 History, Theory and Criticism 3: Globalisation, Cultural Diversity and Architecture	6	Y	0	C									0	0		0	0	0	0	0
ARCH 9051 History, Theory and Criticism 4: Urban Design in the 19th and 20th Centuries - the Impact of Modernization	6	Y	o	C									o	0		0	0	0	0	0
Area: Architectural History, Theory and Criticism																				
ARCH 9048 History, Theory and Criticism 1: Theories of the History of Modern Architecture	6	Y	o	C									o	0		0	0	0	o	o
ARCH 9049 History, theory and Criticism 2: Contemporary Architectural Theories	6	Y	0	c									0	0		0	0	0	0	0
ARCH 9050 History, Theory and Criticism 3: Globalisation, Cultural Diversity and Architecture	6	Y	0	C									o	0		0	0	0	o	0
ARCH 9051 History, Theory and Criticism 4: Urban Design in the 19th and 20th Centuries - the Impact of Modernization	6	Y	o	c									0	o		0	0	0	o	o
ARCH 9052 Graduate Architectural Design 1	12	Y	C	0												0				
ARCH 9053 Graduate Architectural Design 2	12	Y	C	o												0				
Area: Audio Design																				
DESC 9133 Architectural Acoustics Practice (A: DESC 9138 or DESC 9012)	6	Y	0	0	c				o						0					
DESC 9138 Architectural and Audio Acoustics	6	Y	0	o	c															

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DESC 9009 Audio Internship/Audio Project	6	N			0																
DESC 9011 Audio Production	6	Y	O	O	C																
DESC 9134 Audio Seminar	6	Y			0																
DESC 9090 Audio Systems and Measurement (A: DESC 9042, DESC 9008)	6	Y	O	0	C																
DESC 9135 DigitalAudio Production with ProTools	6	Y			0				O			O									
DESC 9115 Digital Audio Systems	6	Y	0	0	**c**																
DESC 9042 Electrics, Electronics and Electroacoustics	6	N	**o**	**o**	C																
DESC 9116 Loudspeaker Design	6	Y			0																
DESC 9143 Music for Audio	6	Y	0	0	C							0									
DESC 9136 Music Technologies	6	Y			0																
DESC 9117 Sound Design for New Media	6	Y	**o**	0	C			O	**c**			**C**									
DESC 9137 Spatial Audio and Virtual Sound Spaces	6	N			0																
Area: Building																					
DESC 9006 Architecture, Energy and the Environment	6	Y	0	0		C				C	O				O						
DESC 9014 Building Construction Technology	6	Y	**o**	0		**c**	C				O				O						
DESC 9118 Building Design Practice 1	6	Y	0	0		C															
DESC 9119 Building Design Practice 2 (A: DESC 9118)	6	Y	**o**	0		**c**															
DESC 9096 Designing with CAD (A: DESC 9100 or DESC 9101)	6	Y	0	0		**c**	0	**c**	**o**		0										
PLAN 9020 Planning Procedures	4	N	0	0		**c**							C				C	C	C	C	
DESC 9074 Project Management	6	Y	0	**o**		C	**c**				C				0						
Area: Building Services																					
DESC 9001 Air-conditioning Design (A: DESC 9067)	6	N					**o**			**o**											
DESC 9012 Building Acoustics and Noise Control	4	Y					0														
DESC 9014 Building Construction Technology	6	Y	**o**	0		**c**	**C**				**o**				0						
DESC 9025 ComputerAids for Airconditioning Design (A: DESC 9067)	6	Y					**o**			0											
DESC 9024 Communications	4	N					**o**														
DESC 9039 Electric Power Systems for Buildings (A: DESC 9040)	6	N					**o**			0					0						
DESC 9040 Electrical Services	6	N	0	**o**			**c**				0										
DESC 9050 Fire Protection Services	6	Y					0														
DESC 9059 Hydraulics Services	6	Y					**o**														
DESC 9067 Mechanical Services	6	Y	0	**o**			**c**				0										
DESC 9074 Project Management	6	Y	0	0		**c**	**c**				**c**				0						
DESC 9077 Services Control Systems (A: DESC 9067)	4	N					**o**			**o**	0				0						
DESC 9084 Vertical Transportation Systems	4	Y					**o**														
Area: Design Computing																					
DESC 9019 3D Modelling and Photorealism	6	Y						**o**	**c**			**o**									
DESC 9142 Advanced Multimedia Authoring and Interactive Interface Design (P: DESC 9068 or DESC 9123)	6	Y						**o**	**o**		0	0									
DESC 9120 Data Mining	6	Y						**o**	**o**												
DESC 9095 Design Data Management	6	Y	0	**o**			0	**c**	**o**		0										
DESC 9096 Designing with CAD (A: DESC 9100 or DESC 9101)	6	Y	0	0		**c**	**o**	C	0		**o**										
DESC 9097 Digital Communication in Design (A: DESC 9123)	6	Y	0	0			**o**	C	**o**	0	0				0						
DESC 9122 Expert Systems	6	Y						**o**	**o**												
DESC 9099 How Designers Think	6	N						0	0												
DESC 9132 Internet Programming 1	6	Y	**o**	0				C	**o**												
DESC 9140 Internet Programming 2 (A: DESC 9132)	6	Y						**o**	0												
DESC 9100 Introduction to ArchiCAD	4	Y						0	0												
DESC 9101 Introduction to AutoCAD	4	Y						0	**o**												
DESC 9139 Design Computing and Digital Media	6	Y	**o**	0				**c**	**c**												
DESQ 9068 Multimedia in Design (P or C: DESC 9091)	6	Y	0	0	0			**c**	C		0	0									
DESC 9103 Virtual Architecture	6	Y						**o**	**o**			0									
DESC 9123 Web Site Design (P or C: DESC 9139)	6	Y	0	0				C	**c**		0	**o**									
Area: Digital Media																					
DESC 9092 3D Animation 1 (P: DESC 9019 and DESC 9097)	6	Y	**o**	0				0	**c**		**o**	**c**									
DESC 9141 3D Animation 2 (P: DESC 9092)	6	Y						**o**	**o**			0									

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DESC 9019 3D Modelling and Photorealism	6	Y	O	O				O	C			C								
DESC 9142 Advanced Multimedia Authoring and Interactive Interface Design (P: DESC 9068 or DESC 9123)	6	Y						O	0		O	0								
DESC 9097 Digital Communication in Design (A: DESC 9123)	6	Y	O	o			O	C	0	O	0				O					
DESC 9091 Digital Media Production (A: DESC 9139)	6	Y	O	0	0			0	C											
DESC 9140 Internet Programming 1	6	Y	O	o				c	0											
DESC 9132 Internet Programming 2 (P: DESC 9140)	6	Y						0	0											
DESC 9139 Computing and Digital Media (Introduction)	6	Y	o	0				C	C											
DESC 9068 Multimedia in Design (P or C: DESC 9091)	6	Y	o	o	0			c	c		0	0								
DESC9117 Sound Design for New Media	6	Y	0	o	C			0	C											
DESC 9123 Web Site Design	6	Y	o	0				C	C		0									
Area: Energy Conservation																				
DESC 9006 Architecture, Energy and the Environment	6	Y	o	0		C				C	0				O					
DESC 9013 Building Climatology and Thermal Comfort	4	N								O					0					
DESC 9015 Building Energy Analysis	6	N	o	0			O			C	0				0					
DESC 9021 Climate Conscious Architectural Design	6	Y	o	o			0			c	0				0					
DESC 9045 Energy Conservation Research Project	8	Y	o	0						C										
DESC 9044 Energy Conservative Design Workshop	8	Y	0	0						C										
DESC 9078 Solar Energy and Passive Design	4	Y								O					0					
Area: Facilities Management																				
DESC 9111 Energy Management in Buildings	6	Y					0			o	*O*				0					
DESC 9047 Facilities Management 1	6	Y	o	0			o				c				0					
DESC 9048 Facilities Management 2	6	Y	0	0			o				c									
DESC 9112 Facilities Management 3 (A: DESC 9047, DESC 9048, TPTM 6115 or IREL 6001)	6	Y					o				0									
DESC 9113 Facilities Management 4 (A: DESC 9047, DESC 9048, TPTM 6115 or IREL 6001)	6	Y					0				0									
DESC 9049 Financial & Managerial Accounting	6	Y	o	o							c									
DESC 9088 Housing Asset Management	8	Y									0			O						
DESC 9071 Organisational Analysis and Behaviour*	6	Y	0	o							C									
TPTM 6115 People, Work and Organisation*	6	Y	o	0							C									
DESC 9074 Project Management	6	Y	o	o			c				c				0					
Area: Film andDigitalVideo																				
DESC 9019 3D Modelling and Photorealism	6	Y	o	0				0	C			C								
DESC 9124 Advanced Film Production (A: DESC 9127, DESC 9130)	6	Y										o								
DESC 9125 Digital Video Design and Production	6	Y	0	0				o	o			c								
DESC 9126 Documentary Digital Video (A: DESC 9125)	6	N						o	0			0								
DESC 9092 3D Animation 1 (P: DESC 9019 or DESC 9097)	6	Y	0	0				0	c			c								
DESC 9127 Film Production	6	Y							0			c								
DESC 9128 Memory, Time and Play (A: DESC 9129)	6	Y										0								
DESC 9129 Screen Studies	6	Y	0	0					0			c								
DESC 9130 Script Writing/Directing	6	Y										o								
DESC 9117 Sound Design for New Media	6	Y	0	0	c			0	c			c								
Area: Heritage Conservation																				
ARCH 9019 Aesthetic Assessment of Heritage Landscapes	4	N											0	O		O	O	O	0	O
ARCH 9028 Conservation Methods and Practices	12	Y	0	o									c					c		
ARCH 9016 Conservation of Finishes and Introduction of Modem Services	4	N											0	O		0	O	0	0	O
ARCH 9030 History of Landscape Design	4	N											0	0		0	0	0	0	0
ARCH 9003 Interpretation of Cultural Environments	4	Y	o	0									c					c		
ARCH 9017 Local Heritage in Community Development	4	N											0	0		0	0	0	0	o
PLAN 9021 Planning Lawt	4	Y	0	0									c				C	C	c	c
PLAN 9020 Planning Procedurest	4	Y	0	o									c				c	C	c	c
ARCH 9014 Professional Placement	8	Y	0	0									c							
ARCH 9031 Report	12	Y	0	0									c							
ARCH 9015 Traditional Building Methods and Conservation of Materials	4	Y											o	0		0	0	o	0	o

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ARCH 9007 Transformation of Cultural Environments	4	Y	O	O									C							
Area: Housing Studies																				
ARCH 9031 Report	12	Y												O						
DESC 9088 Housing Asset Management	8	Y											0	0		O	O	O	O	O
ARCH 9006 Housing Culture Studies	8	Y	O	0									0	C		0	0	0	**c**	**o**
ARCH 9032 Housing Development Studies	8	Y	0	0									0	C		0	0	0	**c**	0
ARCH 9008 Management Policy and Organisation	8	Y	**o**	0										C						
ARCH 9033 Policy Analysis	8	Y	**o**	0										C						
Area: Illumination Design																				
DESC 9106 Daylight in Buildings	4	Y					O			O					O					
DESC 9063 Light Sources and Luminaires (A: DESC 9072)	4	N	0	0			O			O					C					
DESC 9064 Lighting Design (A: DESC 9063, DESC 9072, DESC 9085, DESC 9086)	8	Y	0	0			0			0	O				**c**					
DESC 9072 Photometric and Colorimetric Concepts and Mensuration	4	N	**o**	0			**o**								**c**					
DESC 9085 Vision and Visual Perception	4	N	0	0			0		O						**c**					
DESC 9086 Visual Field and Human Factors (A: DESC 9085)	4	N	**o**	**o**			0								**c**					
Area: Urban Design																				
ARCH 9026 Development Finance	4	Y	**o**	**o**									0	**o**		**c**	0	0	**o**	**o**
PLAN 9027 Foundations of Environmental Planning	4	Y	**o**	**o**												**c**	**c**	**c**	**c**	**c**
ARCH 9047 Landscape Design & Urban Ecology	4	Y											**o**	0			0	**o**	**o**	**o**
ARCH 9022 Methods of Urban Design	4	Y	**o**	**o**												**c**				**c**
ARCH 9031 Report	12	Y	0	**o**												**c**				
ARCH 9037 Transportation and Traffic for Urban Design	4	N											0	0		0	0	**o**	0	0
ARCH 9036 Urban and Regional Design in Sydney	4	Y											0	0		0	0	0	0	**o**
ARCH 9021 Urban Design History, Theory and Criticism	4	N	0	0									0	0		**c**	0	0	**o**	**o**
ARCH 9001 Urban Design Studio A	12	Y	**o**	**o**												**c**				**c**
ARCH 9002 Urban Design Studio B	12	Y	**o**	**o**												**c**				
PLAN 9048 Environmental Design and Planning	6	N					0			**o**			**o**	0	0	**o**	0	0	**o**	**o**
Area: Urban and Regional Planning																				
PLAN 9032 Argumentation and Discourse in Planning	4	Y	**o**	0													**c**	**c**	**c**	**c**
PLAN 9005 Economic Applications in Planning	4	Y	0	0													**c**	**c**	**c**	**c**
PLAN 9045 Economic Tools and Community Development	6	Y											**o**	0		0	0	0	**o**	**o**
PLAN 9048 Environmental Design and Planning	6	N					0			0			**o**	0	0	0	0	0	**o**	0
PLAN 9027 Foundations of Environmental Planning	4	Y	0	**o**												**c**	**c**	**c**	**c**	**c**
PLAN 9031 History and Theory in Urban Planning	4	Y	**o**	**o**													**c**	**c**	**c**	**c**
PLAN 9028 Land Use, Infrastructure and Transportation Planning	4	Y	**o**	0													**c**	**c**	**c**	**c**
PLAN 9021 Planning Law	4	Y	0	0									C				**c**	**c**	**c**	**c**
PLAN 9044 Planning Methods	4	Y	0	0													**c**	**c**	**c**	**c**
PLAN 9020 Planning Procedures	4	Y	**o**	0		C							**c**				**c**	**c**	**c**	**c**
PLAN 9042 Principles of Urban Design and Development Control	6	Y											0	**o**		0	0	0	**o**	**o**
PLAN 9037 Regional Housing Practice	6	Y											**o**	0		0	0	0	**o**	**o**
ARCH 9031 Report	12	Y																		
PLAN 9046 Urban Development and Practice	6	N											**o**	0		0	0	0	0	**o**
ARCH 9028 Conservation Methods and Practices	12	Y											C					**c**		
ARCH 9003 Interpretation of Cultural Environments	4	Y											C					**c**		
ARCH 9006 Housing Culture Studies	8	Y											**o**	C		0			**c**	
ARCH 9032 Housing Development Studies	8	Y											0	C		0			**c**	
ARCH 9022 Methods of Urban Design	4	Y														**c**				**c**
PLAN 9043 Urban Design Policy & Practice	6	Y											**o**	0		0	0	0	**o**	0
ARCH 9001 Urban Design Studio A	12	Y														**c**				**c**

* Choose one of these two units of study.
t Choose one of these two units of study.

■ Graduate units of study

DESC 9092 3D Animation 1

6 credit points. Dr Kirsty Beilharz. Semester: 1,2. Classes: Lectures and tutorials. Assumed knowledge: DESC 9019 and DESC 9097. Assessment: Project work involving design and implementation of a 3D animated sequence.

NB: Permission required for enrolment. A resource fee of $500 will be charged for consumables (including equipment and software hire).

Objectives

Computed-based 3D animation is the process of rendering a consecutive sequence of images of a scene within which relative motion of objects, changes in objects and camera movement, provide the animation. The objective of this unit is to introduce issues of storyboarding, modelling, rendering and keyframe-based animation in the context of 3-dimensional

Outcomes

Students are expected to have a basic understanding of the components of animation and the processes involved in the development and implementation of animated sequences in a 3-dimensional environment. An animated sequence will have been produced using commercial software.

Textbooks

Reading list provided.
Manuals will be provided
Resource Fees: $500

DESC 9141 3D Animation 2

6 credit points. Prof. Gera. Semester: 1. Classes: Lectures and extensive tutorials. Assumed knowledge: DESC 9092. Qualifying: Preference will be given to Design Computing, Film and Digital Video and Digital Media students. Assessment: Project work involving design and implementation.

NB: A resource fee of $500 will be charged for consumables (including equipment and software hire)

Objectives

Computed-based 3D animation is the process of rendering a consecutive sequence of images of a scene within which relative motion of objects, changes in objects and camera movement, provide the animation. The objective of this unit is to introduce issues of modelling, rendering and animation in the context of 3-dimensional objects.

Outcomes

Students are expected to have an understanding of the components of animation and the processes involved in the development and implementation of animated sequences in a 3-dimensional environment. An animated sequence will have been produced using commercial software.

Textbooks

Manuals will be provided.

DESC 9019 3D Modelling and Photorealism

6 credit points. Prof. Gera. Semester: 1. Classes: Lectures supplemented by tutorials. Qualifying: Preference given to Design Computing and Digital Media students. Assessment: Assessment is based on two assignments that are intended to develop and demonstrate the student's understanding of 3D modelling and photo-rendering.

NB: Permission required for enrolment.

Objectives

This unit explores advanced systems of computer graphics in the context of design. A broad range of graphics technologies are considered with emphasis on 3D modelling and photorealism. In particular the aim is to understand the concepts and practical application of these techniques using commercial modelling and rendering packages.

Content

The content includes:

- Introduction to graphics technologies and photo-rendering;
- Specification of 3D geometric entities within a sophisticated modelling package;
- Assigning colour and texture information to geometric entities;
- Generating complex photorealistic images;
- Image processing;
- Future developments in modelling and visualization.

Outcomes

At the end of the unit the student will be conversant with 3D modelling and photo-rendering terminology and be able to produce sophisticated photorealistic images using advanced visualisation systems.

Textbooks

Foley, J., van Dam, A., Feiner, S. and Hughes, J. (1995). Computer Graphics: Principles and Practice, (2nd edn), Addison-Wesley, Reading, Massachusetts.
Watt, A. (1989). Fundamentals of Three-Dimensional Computer Graphics, Addison-Wesley, Reading, Massachusetts.

DESC 9124 Advanced Film Production

6 credit points. To be determined. Semester: 2. Classes: The unit involves one 3 hour class per week as well as a Saturday film shoot. Film students who miss more than 3 classes without written permission will fail the course. Students are required to follow UBS booking procedure. Facilities for assignments must be booked at least one week before use. Assumed knowledge: DESC 9127 and DESC 9130. Assessment: Assessment is largely project based, it consists of the following tasks: * Group film project - 60%. * A paper detailing the process of the film production and subsequent outcomes (including what pre-production decisions were made and how this affected the final product) - 40%.

NB: A resource fee of $300 will be charged for consumables (including equipment and software hire).

Objectives

This unit of study aims to further production techniques in the Film Production unit as well as centring on post-production skills. The class will produce a group project that will be finished on a 35mm optical print.

Content

Topics will include: an understanding of the organisational structures and finance of film production; the production process and the units that make it function; cinematography-lighting; negative matching using digital editing; the film laboratory process including an overview of colour grading; constructing a developed film narrative in a class project; film production using super 16mm film for motion picture; specialised classes in producing, cinematography and editing.

Outcomes

At the end of the unit students will be expected to be able to: have an understanding of film language and the ability to use it to recreate meaning in film production.; operate sound equipment for film; organise a film production shoot with an understanding of budgeting; have a developed understanding of film production where students will be able to specialise in areas of the film making process. Students will have acquired the knowledge and skills to produce a film project.

Textbooks

Airman, Sound Theory Sound Practice, Routledge, 1986
Pincus Edward & Steven Ascher, The Film Makers Handbook, Penguin Books, 1983

DESC 9142 Advanced Multimedia Authoring

6 credit points. Dr Kirsty Beilharz. Semester: 1. Classes: Lectures, online tutorial and reading modules. Assumed knowledge: DESC 9068 and DESC 9123. Qualifying: Preference will be given to Design Computing and Digital Media students. Assessment: Exercises and major design authoring project.

Objectives

- to develop a comprehensive understanding of multimedia authoring, extending fundamentals learned in Multimedia in Design and/or Web Site Design
- to understand the distinctive, specific requirements and implications of authoring for various publication media (the Internet, CD-ROM, DVD, stand-alone projection presentations, data cards)
- to develop effective acquisition, processing and integration of multiple media formats (images, sound, video, 2D animation, 3D models) presented in a homogenous package
- to construct effective and efficient multimedia architecture and to understand interactive interface design
- to learn and implement these skills in the Macromedia Flash and Action Scripting authoring environment

Content

This unit of study will comprise lectures and extensive online tutorials and exercises. The key areas learned and practised in this unit are authoring, integration of media and interactive interface design. Projects will utilise the authoring program Macromedia Flash and its scripting language, Action Scripting. Flash is versatile as an authoring program appropriate for distribution on various platforms and media. A solid grasp of the program is distinguished by an inherent understanding of aesthetic design principles, design architecture, and interactive interface design. This unit also examines different destination contexts and delivery media and the implications of different multimedia publication methods on authoring, the development environment, and media processing and handling for a compact,

communicative product (which includes distribution, packaging, loading, libraries, media resource efficiency). Advanced interactivity methods introduced, include: data handling; gaming, entertainment and education - user feedback; and interactive navigation. A grammatical and conceptual understanding of its programming/scripting language, Action Scripting, will be treated as an extension of these interactive capabilities (through Frame Actions, object-oriented Actions, media and movie control, and using variables and expressions to act on dynamic conditions). Students will also learn about contextual sound and video control, handling, synchronisation and streaming, imported media (including applying rotation and perspective to 3D models), 2D animation (motion, position, colour, morphing shape), packaging and optimisation for presentation or publication.

Outcomes

- an interactive multimedia product authored in Flash, integrating various digital media types
- a demonstration of clear, compact, effective multimedia architecture
- an acquisition of authoring skills and a furthered understanding of advanced interactivity and interface design principles

Textbooks

Recommended not Required:

Ulrich, Katherine (2001) Macromedia Flash (5) for Windows and Macintosh. Visual Quickstart
Guide, Peachpit Press, Berkeley, CA, USA. [A$39.95]
Hamlin, J.S. & Emberton, D.J. (2001) Flash 5 Magic with ActionScript, New Riders Publishing,
Indiana, USA. [c.A$87.95]

DESC 9133 Architectural Acoustics Practice

6 credit points. Dr Cabrera. **Semester: 2. Classes:** Lectures. **Prerequisite:** DESC 9138 or DESC 9012. **Assessment:** Assessment is based on two project - one theoretical and one practical.

Objectives

This unit will cover a range of theoretical, practical and professional issues in architectural acoustics.

Content

- Codes and standards pertaining to architectural acoustics
- Method and integrity of measurement
- Room acoustical measurement, modelling, simulation and criteria
- Sound absorption theory, measurement and specification
- Sound insulation theory, measurement and specification
- Design of spaces using acoustical criteria
- Field assessment of acoustical problems in and around buildings

Outcomes

Students will acquire knowledge and experience in areas commonly dealt with by the acoustical consulting profession. They will gain an appreciation of current issues in architectural acoustics, possibly inspiring future research.

DESC 9138 Architectural and Audio Acoustics

6 credit points. Dr Cabrera. **Semester: 1. Classes:** Lectures. **Assessment:** A series of small-scale assignments.

Objectives

This unit will introduce the fundamental concepts and issues of audio and architectural acoustics.

Content

Basic acoustical concepts, quantities and units

- Principles of sound propagation
- Sound absorption and room acoustics
- Physiological and psychological acoustics
- Microphones and loudspeakers
- Spatial audio
- Noise measurement and specification
- Principles and specification of sound insulation

Outcomes

Students will be able to understand acoustical terminology, and perform calculations applicable to sound in the environment, in buildings, and in audio contexts. They will have the ability to critically assess claims of acoustical performance. This unit will provide the theoretical foundation of advanced units in audio and acoustics.

DESC 9006 Architecture, Energy and Environment

6 credit points. Mr Forwood. **Semester: 1. Classes:** Lectures and Tutorials. **Assessment:** 2 assignments.

Objectives

This unit aims to explore the environmental context of architecture at the global scale; to make students cognisant of the major environmental issues of concern to contemporary society; to explore the impact of these issues and the more general issue of ecological sustainable development (ESD) upon the design of the built environment.

Content

Major topics covered in this unit include: the nature and extent of the energy and environmental crises which the world currently faces; the response of the architectural profession to these issues; the rise of passive solar and low energy architecture since the 1970s; sustainable energy sources for the built environment; an exploration of 'sustainable' architecture.

Outcomes

At the conclusion of the unit each student is expected to:

- have developed an understanding of, and formed opinions about the issue of ESD as it relates to the design of the built environment;
- have a working knowledge of both renewable and non-renewable energy sources in the built environment; and
- be able to debate the role that architects should play in the development of a sustainable future.

The assignments allow students the opportunity to research many of the basic issues raised in the course and develop a position in relation to them.

DESC 9011 Audio Production

6 credit points. Mr Bates. **Semester: 1. Classes:** Guest lectures and project work. **Assessment:** A project and accompanying report.

Objectives

The unit aims to give experience in calibration and use of equipment in studio recording/broadcast; set-up, calibration and use of equipment in live reinforcement; choice and use of equipment in location recording; choice and use of software/ hardware in audio computing; and calibration and use of equipment in studio post-production.

Content

This advanced unit involves students in projects which take account of all the topics covered in the prerequisite courses. It is intended that experts in various facets of audio will be guest lecturers for portions of this unit. Students will complete projects in particular areas of audio, taking part in every aspect of that project, from choice of equipment to final product.

Outcomes

By the end of the unit students will be expected to complete projects in at least studio recording/broadcast or location recording or live reinforcement, and studio post-production or audio computing. They should understand the principles involved in all of the above areas.

Students will complete projects in their areas of interest, using knowledge gained during the unit.

DESC 9134 Audio Seminar

6 credit points. Dr Cabrera. **Semester: 1,2. Classes: 1** hour seminar and individual supervision x 13 weeks. **Assessment:** Students will be required to do a small scale research project, which may be laboratory or studio based.This project will be presented in the seminar, and submitted with accompanying written report.

Objectives

This unit introduces students to a broad range of current research in audio and acoustics, and gives them experience in research.

Content

A series of seminars on current research projects presented by active researchers in audio and acoustics, together with individual or small-group supervision of small-scale research projects.

Outcomes

The students will gain understanding of the research process, and receive some modest experience in research. They will appreciate a range of research methods and subject areas at the forefront of audio and acoustics. They will be in a good position to assess their interest in undertaking further academic research.

DESC 9090 Audio Systems and Measurement

6 credit points. **Semester: 2. Prerequisite:** DESC 9042 + DESC 9008.

Contents

Main topics include microphone techniques, loudspeaker techniques, psychoacoustics, sound system design and acoustics.

DESC 9012 Building Acoustics and Noise Control

4 credit points. Assoc. Prof. Fricke. **Semester: 1. Classes:** Lectures, Laboratories, Tutorials. **Assessment:** 2 tutorial assignments (10 per cent), computer assignment (20 per cent), laboratory report (20 per cent), essay (50 per cent).

Objectives

One of the serious side-effects of our society is the noise that our activities generate. This course is primarily designed to make students aware of this and how to deal with noise. The unit aims to:

- present an outline of the history of acoustics and noise control;
- outline the effects of noise on people;
- give an understanding of the theoretical basis for tackling acoustic problems and undertaking acoustic design;
- familiarise students with acoustic measurement and analysis techniques;
- give an understanding of the work acoustical engineers undertake; and
- study in detail some aspects of the control of noise in building services.

Content

The main topics in the unit are: the history and application of acoustics, theory, hearing and perception, sound measurement, simplified model, sound transmission, enclosures, and noise assessment and control.

Outcomes

At the completion of the unit students will be expected to:

- understand basic acoustic theory and terminology;
- be able to undertake noise assessments;
- undertake the acoustic design of enclosures, reactive and dissipative mufflers and air-conditioning systems;

have an understanding of the mechanisms by which sound is generated and attenuated;

- be able to use sound level meters and other acoustic instrumentation;
- use some specialised software for acoustic design and/or analysis; and
- have an appreciation of the work undertaken by acoustical consultants.

The assessments allow students to apply what they have learned in lectures, give practice in the application of software to problems, use acoustic instrumentation, and to undertake a search of the literature on a topic of interest and report on these in the way a consultant or researcher would do.

DESC 9118 Building Design Practice 1

6 credit points. Dr Hayman. **Semester: 1. Classes:** Letures and seminars. **Assessment:** Assignment.

Objectives

The provision of good buildings that satisfy the wide range of client needs, community demands and social and environmental responsibility places significant demands upon building designers. The purpose of this unit is to introduce a performance-based approach on a range of single building design issues, with case studies, to provide guidelines in good design practice and their application.

Outcomes

The student will understand the principles of performance-based design and abe able to apply it to simple design situations.

DESC 9119 Building Design Practice 2

6 credit points. Dr Hayman. Semester: 1. **Classes:** Lectures and seminars. **Prerequisite:** DESC 9118. **Assessment:** Assignment.

Objectives

This unit develops the performance-based approach presented in Building Design Practice 1 with more complex and interacting issues. Emphasis will be placed upon the application of this approach to the students' own projects in their workplace.

Outcomes

The student will understand how interrelationships can be expressed with performance-based design and be able to apply it to more complex design situations.

DESC 9021 Climate Conscious Architectural Design

6 credit points. Mr Forwood. **Semester:** 2. **Classes:** Lectures and seminars. **Assessment:** 3 assignments.

Objectives

The unit will examine the influence of climate upon architectural form and explore the principles of designing sustainable energy efficient buildings applicable to the climates of Australia and its region.

Content

Topics covered include: climate as an architectural form determinant; energy exchanges between buildings and the environment; design strategies for major climate types; sustainable cooling strategies; sustainable heating strategies; day lighting strategies.

Outcomes

At the end of the unit students are expected to:

- have an understanding of the energy exchanges between a building and the natural environment;
- have an understanding of the thermal behaviour of materials and constructions which influences these energy exchanges; and
- be able to develop climate conscious design strategies for heating and cooling buildings in a range of climates relevant to Australia and the Southeast Asia and Southern Pacific regions.

The assignments provide the opportunity to study the design implications of various climates; undertake a case study of a particular building responding to a particular climate and develop a set of strategies relevant to a particular climate.

DESC 9025 Computer Aids for Airconditioning Design

6 credit points. Mr Rowe. **Semester: 2. Classes:** Lectures and computer laboratory workshops. **Assumed knowledge:** Assumed knowledge of the core unit Mechanical Services. **Assessment:** 5 assignment projects (20% each).

Objectives

The objectives of this unit are:

- to demonstrate to students and provide them with hands-on experience in the use of micro-version software for estimation of cooling and heating loads in buildings, simulation of HVAC system operation and estimation of energy consumption over time
- analysis of air flows and acoustic performance in air-conditioning ductwork systems

Content

The unit extends students' ability to design basic air-conditioning systems and to appreciate the benefits and limitations of thermal control of indoor environments. Principles of design for good indoor air quality and energy conservation are discussed.

Outcomes

Students will gain familiarity with the application of software programs in common use in Australia. It is expected that they will be able to apply learned skills to design applications and to evaluation of the impact on thermal flows of alternative methods and materials of construction.

Assignments will test the ability of students to apply software modelling techniques to a set of design problems typical of those encountered in applications that are directly relevant to air-conditioning design as currently practised in many professional offices in Australia.

DESC 9029 Computer-Aided Design of Structures

4 credit points. Dr Gunaratnam. **Semester: 2. Classes:** Lectures, tutorials and computer laboratory sessions. **Assessment:** Assignments.

Objectives

- To introduce students to a range of the analysis and design tools presently available for the computer-aided design of skeletal, spatial and fabric structures;
- to familiarise students with the methods and techniques on which most of these tools are based and the issues relating to their implementation on the computer;
- to provide students with information on the various aspects of structural modelling on the computer and experience in selecting appropriate models of the structure for the computer; and
- to explore different ways of integrating the analysis and design tools into the structural decision making process.

Content

This unit provides hands-on experience in integrating computer-based design tools into the structural design process and in rapidly exploring the different structural design options. Information is also provided on the theoretical bases, structure and organisation of some of the state-of-the-art computer-based analysis and design tools. Topics covered include: introduction to stiffness, flexibility and finite element methods of structural

analysis; modelling of structure (including finite element models, static and dynamic loads, and materials); pre- and post-analysis processing; and modelling guidelines (including model refinement). Assignments include applications from skeletal, planar, shell and tension structures, and case studies.

Outcomes

At the completion of the unit each student is expected to:

- have a good understanding of the capabilities and limitations of the computer-based structural analysis and design tools;
- be cognisant of the methods and techniques commonly used in the development of structural analysis and design tools;
- be able to select and generate appropriate models of the structure for the different stages in the structural design process;
- be able to take appropriate structural decisions based on information provided by the computer-based tools; and
- have a good understanding of the different stages in the computer-aided design of skeletal, spatial and fabric structures.

The above unit outcomes provide the basis for the different assessment tasks.

DESC 9139 Computing & Digital Media (introduction)

6 credit points. Prof M L Maher. **Semester: 1,** 2. **Classes:** Lectures, tutorials and reading modules (Online in July). **Qualifying:** Preference will be given to Design Computing and Digital Media students. **Assessment:** Quizzes, exercises and image gallery project.

NB: Permission required for enrolment.

Objectives

- to develop a basic working knowledge of computing theory and practice on operating systems, networks, secondary storage, categories of software/hardware, TCP/IP protocols
- to develop an understanding of and skills in designing using digital representation
- to introduce digital media production principles
- to develop an overall understanding of data representation
- to learn skills in Photoshop and Image Ready

Content

This unit of study will provide an overview of the theory and practice of computing and digital media for designers. The computing knowledge will cover various aspects of computing through lectures, reading material, and quizzes. Topics such as operating systems, networks, secondary storage, categories of software/hardware, TCP/IP protocols will be covered to provide a working knowledge for efficient and effective use of resources. Topics related to digital media representation and design such as: bitmap representation, vector representation, compression, colour, 3D representation, moving images, types of animation, shapes, and graphic design, will be presented in lectures and reinforced in exercises using Photoshop and Image Ready. Basic principles of digital media production will be introduced. Finally, the alternatives for data representation will be presented and illustrated.

Outcomes

- an image gallery presenting the student's work in digital media
- a working knowledge of computing theory and practice
- demonstrated skills in using a broad range of digital image tools and techniques in Photoshop and Image Ready

ARCH 9028 Conservation Methods and Practices

12 credit points. Dr Lamb/Mr Howells. **Semester:** 1. Classes: Lectures and site visits. **Assessment:** 3 assignments (equally weighted).

Objectives

The aims of this unit are to develop practical skills in the methods and practices of conservation at an accepted professional level, and to interpret and apply the theory of practice taught in the mandatory core of the course in practical, on-site projects.

Content

The unit focuses on culturally significant structures and cultural landscapes and includes: methods of survey and documentation (locating, describing and recording components with possible heritage value; identifying and reading historic fabric; historic and archival research methods; thematic history methods; pattern recognition; natural systems; settlements; cultural mapping; aesthetic analysis; material and stylistic analysis); evaluation methodology (assigning heritage significance); assessment methodology (establishing conservation priorities); and appropriate conservation actions (conservation and management plans, policies and strategies).

Outcomes

At the end of the unit the student will successfully demonstrate:

- an understanding oftheAustralia ICOMOS Burra Charter and the ability to prepare, in accordance with current accepted professional practice, a conservation plan of a place or places of cultural significance;
- skill in methods and techniques of analysis, assessment and documentation of cultural significance; and
- the ability to develop relevant policies and strategies for the conservation of a variety places of cultural significance.

The intended outcomes are achieved through inquiry, individual study and research and are demonstrated by each student upon the successful completion of set assignments. The assignments are constructed to allow each student to demonstrate his or her level of understanding of the accepted professional methodology and practice in the preparation and presentation of a conservation plan. Assessment criteria based on unit outcomes are used for the examination of the assignments.

DESC 9120 Data Mining

6 credit points. Prof. Gero. **Semester:** 1. Classes: Lectures and tutorials. **Assessment:** Exercises and an assignment.

Objectives

- To understand the concepts and methods of data mining.
- To be able to use available data mining tools to mine data.

Content

Data mining is a method for finding patterns in large data sets. The basic methodology of understanding the data, data cleaning, data mining, and results evaluation is introduced. A variety of types of design data sets are considered. Various database representations for the data include text files, XML files, and relational database files. Techniques for data cleaning are introduced. Data mining techniques for conceptual clustering and rule discovery are described and tools for these techniques are used in a data mining project. Various statistical methods and visualisation techniques are introduced as needed for student projects.

Outcomes

Students will have an understanding of the concepts and techniques of data mining and the potential of the approach.

DESC 9106 Daylight in Buildings

4 credit points. Dr Simon Hayman. **Semester: 1**. **Classes:** Lectures. **Assessment:** Design or research study.

Objectives

The unit will:

- introduce the physical processes behind the availability of daylight
- explore the techniques for modelling daylight
- explore design issues that result from daylighting needs
- provide design information for the resolution of daylighting design problems
- outline the issues involved in integration of daylight and electric lighting

Content

This unit provides an overview of research in daylight measurement and knowledge about the possibilities for daylight design for buildings. Topics include:

- The atmosphere and daylight
- Sky luminance distributions
- Daylight measurement
- Daylight modelling including illuminance and luminance models
- Traditional daylighting techniques including building form, openings, glass and control devices
- Innovative daylight technologies including 'light shelves', 'beam' lighting and photochromic glasses
- Economics of daylight including electric light supplementation

Outcomes

DESC 9095 Design Data Management

6 credit points. Dr Chase. **Semester:** 1. **Classes:** Lectures and tutorials. **Qualifying:** Preference given to Design Computing and Digital Media students. **Assessment:** Design and implementation of databases using spreadsheet, relational database, and semantic product modelling paradigms.

NB: Permission required for enrolment.

Objectives

- Introduce the theoretical bases of database management systems.

(Teach the design of data models and their implementation in database management systems.

- Provide an overview of data management for design applications.

Content

This unit provides an introduction to the management of design data and writing simple programs to manipulate design data. A theoretical perspective includes the use of hypermedia in managing data, data models, database design, and scripting and query languages. A practical perspective considers the applications of database management in the construction industry, facilities management, and multimedia data management.

- Spreadsheets as databases
- Relational, extended relational, and object-oriented data models
- Database design and normalisation techniques
- Query languages and SQL
- Multimedia data management
- Database management in the construction industry
- Product modelling

Standards for the construction industry

(Outcomes

The students will be able to:

Implement a simple database with a spreadsheet.

Design and develop a database using a relational database management system (RDBMS).

Develop product design models using high level information modelling techniques.

Select an appropriate software tool for implementing a professional design database.

Textbooks

Elmasri R, Navathe S B, 2000 Fundamentals of Database Systems (Addison-Wesley, Reading, Mass.)

Mitchell W J, McCullough M, 1995 Digital Design Media (Van Nostrand Rheinhold, New York)

Schenck D, Wilson P, 1994 Information Modeling: the EXPRESS Way (Oxford University Press, New York)

DESC 9096 **Designing with CAD**

6 credit points. Dr Scott Chase. Semester: 2. Classes: Studio and lectures. Assumed knowledge: DESC 9100 or DESC 9101 or equivalent. Prerequisite: DESC 9100 or DESC 9101 or equivalent 3D modelling experience. Qualifying: Preference given to Design Computing and Digital Media students. Prohibition: Availabale to CH005 and CH006 and CH008 and CH009 students only with written permission from the lecturer. Same applies to students from other faculties (eg, Engineering) and Study Abroad. Assessment: Based on two submissions: a short design modelling exercise (30%) and a more extensive design project (70%), covering the initial stages of a design through to final presentation, utilising some advanced techniques covered in the course.

NB: Permission required for enrolment.

Objectives

- To further develop the student's existing skills in the use of an industry standard CAD system.
- To explore the use of CAD as a design and modelling tool.
- To present the various issues in the use of CAD in the building and construction industry.

Content

In this unit, advanced and strategic topics in designing and visualising with CAD are covered and demonstrated in a design project. The objective is to provide a professional view of the use of CAD in design. The specific unit content will vary depending on the CAD system the student and lecturer choose to use. The general knowledge portion of the unit includes:

Advanced techniques in CAD such as virtual reality and the use of parametric design procedures.

Management of CAD data through organisation of drawings and models, databases, data sharing and exchange, and standards.

Presentations by visiting lecturers from professional practice on the use of CAD.

Outcomes

- Skills in the use of CAD as a design modelling and presentation tool.
- Basic understanding of CAD data management.
- A portfolio of original designs developed and documented using a CAD system.

Textbooks

Mitchell W J, McCullough M, 1995 Digital Design Media (Van Nostrand Reinhold, New York)

ARCH 9026 Development Finance

4 credit points. Dr Phibbs. Semester: 2. Classes: Lectures and tutorials. Assessment: Applied and reflective exercises (equally weighted).

Objectives

The unit aims to impart a thorough and general understanding of development finance as it affects and is affected by the aims of urban and architectural design quality.

Content

The unit focuses on the economics of property development in the public and private sectors in ways that squarely address design quality. It explains the nature of real property and its markets, optimum financing models, principles of private versus public finance, property valuation, design scope and feasibility studies, as well as joint venturing, public-private partnerships and other innovatively financed design and development schemes.

Outcomes

Students will acquire the ability to operate fluidly, intuitively and creatively in designing in the context of both pragmatic and creative finance.

Paper assessments are designed to measure the ability of participants to both design in financially constrained contexts and develop finance strategies that meet high levels of design ambition.

DESC 9135 Digital Audio Production with Protools

6 credit points. Mr Bates. Semester: 1, Summer. Classes: Lectures held as intensive weekend course (3) with computer laboratory sessions. Assessment: Written project proposal demonstrating further research and comprehension of conceptual aspects of the production process, class presentation and project.

NB: Permission required for enrolment.

Objectives

This unit is intended to give an understanding of the principles and practice of computer-based audio production and post-production, through the focus of the industry standard ProTools software.

Content

This course will: introduce the student to multitrack audio production concepts and practices as used with a personal computer; give an understanding of the specialised approaches and techniques used with various media, genres and formats; teach skills in computer-based audio production in lectures, practical demonstrations and by individual or small-group practical work, both in-class and by assignments.

<head6)Outcomes

Students will develop technical and conceptual digital sound recording skills across a wide range of production areas. They will gain an understanding of the implications of non linear, hard disk based recording systems on production practices. They will develop sound design skills in composition, editing, signal processing and mixing, as well as mastering for various media, technical presentation of material, data management and archiving.

DESC 9115 Digital Audio Systems

6 credit points. Mr Fisher. Semester: 1. Classes: Ten lectures (3 hours each) Three laboratory sessions (3 hours each). Assessment: Three assignments: 70% Three laboratory reports: 30%.

Objectives

The objective of this unit is to provide both a strong theoretical understanding of digital audio and practical experience in applying these principles to digital audio systems.

Content

This unit offers a systematic approach to understanding digital audio systems. Beginning with basic principles the course provides a knowledge base for understanding advanced digital audio components, systems and techniques. Examples of everyday audio signals are used and characterised in terms of their temporal and spectral properties. Practical application is emphasised and is supported through laboratory exercises that include programming as well as the use of current hardware and software packages.

Topics include: digital principles, digital systems, sampling and quantisation, 1-bit and multi-bit conversion, digital signal processing, filtering, spectral analysis, sampling-rate conversion, data compression (MPEG etc), effects processing (echo, reverb etc), virtual reality audio, mixing, editing, optical storage (CD & DVD), magnetic storage (DAT & disks) and transmission formats (AES/EBU, SPDIF etc).

Outcomes
Having successfully completed this course the student will have the tools to understand what happens to a digital audio signal when a given process is applied to it; how to best apply this process and how to successfully combine digital audio components.
Practical: Practical exercises include programming a DSP chip in assembly language to perform real-time audio effects and the use of high-level software packages to generate, manipulate and analyse sounds.
Textbooks
Pohlmann, Ken Principles of Digital Audio McGraw Hill

DESC 9097 Digital Communication in Design

6 credit points. Prof. Maher. Semester: 1. Classes: Lectures, tutorials, group projects. Prerequisite: DESC 9123 or DESC 9102. Qualifying: Preference given to Design Computing and Digital Media students. Assessment: 50 per cent case study, 50 per cent collaborative project. iVB: *Permission required for enrolment.*
(Objectives
To provide a high level understanding of networks and protocols.
To understand in more depth the differences between asynchronous and synchronous CMC.
To learn to use various communications software in a design environment.
Content
Design projects are increasingly relying on computer-mediated communication (CMC) for messages, project management, and design documents. This unit of study introduces the basics of networks, network protocols, and file transfers. The background of computer-mediated communication is presented according to the characterisation of communication as synchronous and asynchronous. Issues in Computer-Supported Collaborative Work (CSCW) are presented. Software for communication such as email, bulletin boards, video conferences, shared whiteboards, chat, and virtual worlds are introduces. Concepts associated with effective communication are developed. Recording and analysing communication in a design project are part of a collaborative design project..
Outcomes
- Have a basic understanding of the Internet and how it supports design communication.
- Have a working knowledge of a variety of software for communication.
- Have an understanding of the effective use of CMC in design.

DESC 9091 Digital Media Production

6 credit points. Prof. Gero. Semester: 1. Classes: Weekly lectures and tutorials. Assumed knowledge: DESC 9139. Qualifying: Preference given to Digital Media and Design Computing students. Assessment: Digital media project.
NB: Permission required for enrolment.
Objectives
The objectives of this unit are to provide the students with a methodology for digital media production that includes design and production of the digital media product and to give students the opportunity to apply the methdology to a specific project. The focus for the methodology is on the integration of media types such as image, audio, and video through a holistic design approach.
Content
The unit addresses issues relating to the acquisition, synthesis and manipulation of digital image, digital audio and digital video, in the context of interactive multimedia application development. Students are introduced to design and production concepts for digital media. Students are expected to produce a CD as part of the result of the unit.
Outcomes
At the end of this unit students will have an in-depth understanding and practical experience in the production of digital media for interactive multimedia on CD-ROM and on-line web-based applications. Students will be able to critically assess the resources needed and technical demands required for a digital multimedia project.

DESC 9125 Digital Video Design and Production

6 credit points. To be determined. Semester: 2. Classes: The unit consists of thirteen 3 hour sessions with five of these sessions occurring in small workshop classes. Students must follow the UBS booking procedure. Assessment: The assessment is: Computer based exercise in non linear manipulation - 10%. Written reports outlining the basics of data storage, resolution - 10%. A project outline detailing the development of content and production paths - 20%. Creating a video digital video project that explores the medium, aesthetics and form of digital technology within the proposed outline - 60%.
NB: A resource fee of $300 will be charged for consumables (including equipment and software hire).
Objectives
The unit of study deals with the distinct differences between the digital medium and film. The rapid advances in digital cameras and editing have expanded low budget productions in the later 1990's. The course examines different equipment and their use in digital production.
Content
The topics include: introduction to digital technology in film and video productions; operation of digital cameras and their application in shot structure; fighting for digital cameras; production techniques for digital video; constructing a narrative; digital editing; digital graphics for video; post production effects.
Outcomes
Students will be able to: construct a narrative using the specifics of the media; identify the requirements of digital graphic production; describe video production paths; understand the operation of key digital equipment.
Textbooks
Altman, Sound Theory Sound Practice, Routledge, 1986
Media 100 Digital video System User Guide, 1998
Adobe After Effects Version 3.0

ARCH 9045 Dissertation 1

12 credit points. The appointment of a supervisor will depend on the topic chosen for the dissertation by the student. Semester: 1, 2. Classes: There will be no classes associated with the dissertation but it is recommended that the student enrols in the Research Methods course.
NB: Permission required for enrolment.
Objectives
The aim of the dissertation is twofold:
(1)To train the student in how to undertake advanced study. The student should learn how to examine published and unpublished data, survey and experimental results, set objectives, organise a program of work, analyse information, evaluate this in relation to existing knowledge and document the work.
(2)To allow the student to pursue an area of interest in greater depth than is possible in coursework or to investigate an area of interest which is not covered in coursework.
Content
The dissertation will normally involve a critical review of published material in a specified subject area, but it may also be an experimental or theoretical investigation, a feasibility study, a case study, a computer program, or other work demonstrating the student's analytical ability.
There is no prescribed word or page limit on the dissertation, but it will usually be less than 25 000 words. The dissertation should contain a literature review, a research methodology, analysis of data, a discussion of results and conclusions. The dissertation will be judged on the extent and quality of the student's work, and in particular on how critical, perceptive and constructive the student has been in assessing his or her own work and that of others.
Three typed A4 sized copies of the dissertation are required to be presented for examination. (Consult page 109 of the Faculty resolutions for more details of the form of the dissertation.)

DESC 9109 Dissertation 1

12 credit points. The appointment of a supervisor will depend on the topic chosen for the dissertation by the student. Semester: 1,2. Classes: There will be no classes associated with the dissertation but it is recommended that the student enrols in the Research Methods course.
NB: Permission required for enrolment.
Objectives
The aim of the dissertation is twofold:
(1)To train the student in how to undertake advanced study. The student should learn how to examine published and unpublished data, survey and experimental results, set objectives, organise a program of work, analyse information, evaluate this in relation to existing knowledge and document the work.
(2)To allow the student to pursue an area of interest in greater depth than is possible in coursework or to investigate an area of interest which is not covered in coursework.
Content
The dissertation will normally involve a critical review of published material in a specified subject area, but it may also be an experimental or theoretical investigation, a feasibility study, a

case study, a computer program, or other work demonstrating the student's analytical ability.

There is no prescribed word or page limit on the dissertation, but it will usually be less than 25 000 words. The dissertation should contain a literature review, a research methodology, analysis of data, a discussion of results and conclusions. The dissertation will be judged on the extent and quality of the student's work, and in particular on how critical, perceptive and constructive the student has been in assessing his or her own work and that of others.

Three typed A4 sized copies of the dissertation are required to be presented for examination. (Consult page 109 of the Faculty resolutions for more details of the form of the dissertation.)

ARCH 9046 **Dissertation** 2

12 credit points. The appointment of a supervisor will depend on the topic chosen for the dissertation by the student. **Semester:** 1, 2. **Classes:** There will be no classes associated with the dissertation but it is recommended that the student enrols in the Research Methods course.

NB: Permission required for enrolment.

Objectives

The aim of the dissertation is twofold:

(l)To train the student in how to undertake advanced study. The student should learn how to examine published and unpublished data, survey and experimental results, set objectives, organise a program of work, analyse information, evaluate this in relation to existing knowledge and document the work.

(2)To allow the student to pursue an area of interest in greater depth than is possible in coursework or to investigate an area of interest which is not covered in coursework.

Content

The dissertation will normally involve a critical review of published material in a specified subject area, but it may also be an experimental or theoretical investigation, a feasibility study, a case study, a computer program, or other work demonstrating the student's analytical ability.

There is no prescribed word or page limit on the dissertation, but it will usually be less than 25 000 words. The dissertation should contain a literature review, a research methodology, analysis of data, a discussion of results and conclusions. The dissertation will be judged on the extent and quality of the student's work, and in particular on how critical, perceptive and constructive the student has been in assessing his or her own work and that of others.

Three typed A4 sized copies of the dissertation are required to be presented for examination. (Consult page 109 of the Faculty resolutions for more details of the form of the dissertation.)

DESC 9110 **Dissertation** 2

12 credit points. The appointment of a supervisor will depend on the topic chosen for the dissertation by the student. **Semester:** 1, 2. **Classes:** There will be no classes associated with the dissertation but it is recommended that the student enrols in the Research Methods course.

NB: Permission required for enrolment.

Objectives

The aim of the dissertation is twofold:

(l)To train the student in how to undertake advanced study. The student should learn how to examine published and unpublished data, survey and experimental results, set objectives, organise a program of work, analyse information, evaluate this in relation to existing knowledge and document the work.

(2)To allow the student to pursue an area of interest in greater depth than is possible in coursework or to investigate an area of interest which is not covered in coursework.

Content

The dissertation will normally involve a critical review of published material in a specified subject area, but it may also be an experimental or theoretical investigation, a feasibility study, a case study, a computer program, or other work demonstrating the student's analytical ability.

There is no prescribed word or page limit on the dissertation, but it will usually be less than 25 000 words. The dissertation should contain a literature review, a research methodology, analysis of data, a discussion of results and conclusions. The dissertation will be judged on the extent and quality of the student's work, and in particular on how critical, perceptive and constructive the student has been in assessing his or her own work and that of others.

Three typed A4 sized copies of the dissertation are required to be presented for examination. (Consult page 109 of the Faculty resolutions for more details of the form of the dissertation.)

PLAN 9005 **Economic Applications in Planning**

4 credit points. Dr Phibbs. **Semester: 2. Classes:** Lectures. **Assessment:** 2 assignments (25 per cent each) and an open book examination (50 per cent).

Objectives

On completion of the unit students should be able to:

- explain the following economic terms 6 price elasticity, income elasticity, marginal costs, fixed costs, variable costs, opportunity costs, accounting and economic profit, social and private costs
- undertake basic demand and supply analysis for markets
- explain the impact of indirect taxes and charges on market outcomes
- describe the fixed, variable and marginal costs associated with a subdivision
- explain why economists prefer competitive markets as opposed to other sorts of market organisation
- explain the notion of externalities
- describe in detail the operation of pollution and road congestion externalities in a city
- define what is a public good
- discuss appropriate pricing policies for public goods
- discuss the benefits and costs of privatisatio;
- evaluate a simple cost-benefit analysis
- explain the terms shadow pricing, intangibles, and the social discount rate as they relate to cost-benefit analysis
- discuss the major factors that affect interest rates and the factors which affect exchange rates.

Content

This unit provides a basic understanding of major economic concepts and an introduction to major economic techniques likely to be encountered by planners. For a list of the topics covered refer to the objectives.

Outcomes

Students will fulfil the learning objectives of the unit of study.

The assignments in the unit are aimed at allowing the students to achieve the skills listed in the objectives by 'doing'.

PLAN 9045 **Economic Tools and Community Development**

6 credit points. Assoc Prof Phibbs. **Semester: 2. Assessment:** Students will be assessed on the basis their ability to use key concepts and methods in undertaking practical projects. Assessment will be based on a student's ability to: * critically analyse regional economic impact and project evaluation documents * undertake a literature review using a variety of sources - use the Internet as a research tool - apply the main concepts of input-output analysis, economic and project evaluation (including discount rate, net present value, internal rate of return); and - consider intangible items in economic evaluation.

Objectives

On completion of the unit students should be able to:

- critically review a cost-benefit analysis, a feasibility study, economic impact analysis and a social impact analysis
- generate an economic development strategy for a region
- analyse a regional planning policy; and
- understand the social and economic impacts of tourism

Content

This specialisation unit is concerned with:

- project and program evaluation
- economic and social impact analysis;
- regional planning and development; and
- assessment of benefits and costs, and justification for public funding

Outcomes

Generic Attributes

The key attributes engendered by the unit are:

- to be able to apply theoretical concepts and methods to practical problem
- to think creatively and critically about planning issues
- to be able to use the available computer and information technology; and
- to apply technical skills in a sound and useful manner.

DESC 9045 **Energy Conservation Research Project**

8 credit points. Mr Forwood. **Semester: 1,2. Classes:** Lectures and Seminars. **Assessment:** Project (100 per cent).

Objectives

The unit will provide students with the opportunity to undertake supervised research on a topic related to the subject matter of the Energy Conservation area.

Content
The unit provides students with an opportunity to develop their interests in a particular issue or aspect of low energy building design. The research project may take many forms including state of the art reviews, case studies, modelling and simulation, monitoring exercises or a position paper on a particular issue. Students undertaking a dissertation for a Master's degree could use this unit to explore and develop potential topics.
Outcomes
At the conclusion of the unit each student is expected to be able to devise, develop and execute a small piece of research under direct supervision, and to be able to document the research undertaken in a major project report.

The assessment is in the form of a written research report and a verbal presentation of the major issues in a seminar.

DESC 9044 **Energy Conservative Design Workshop**

8 credit points. Mr Forwood. **Semester: 1, 2. Classes:** Tutorials. **Assessment:** Project (100 percent).

Objectives
The unit provides an opportunity for applying the principles enunciated in the course Climate Conscious Architectural Design and the tools explored in Building Energy Analysis to a particular design project.
Outcomes
At the conclusion of this unit students are expected to be able to respond to the requirements of a design brief by providing a design proposal which can be demonstrated to be climate conscious and sustainable.

The major project requires students to document a design solution and demonstrate through assignment and analysis that it satisfies the requirements of sustainability.

DESC 9111 **Energy Management in Buildings**

6 credit points. **Semester:** 2. **Classes:** This unit is taught in as an intensive program comprising lectures introducing new material, workshops and case-based learning activities. The unit of study requires students to complete assignments and to participate in class activities and workshops. **Assessment:** This unit of study requires students to complete assignments and to participate in class activities and workshops. * 30% individual assignment * 50% collaborative case study * 20% collaborative presentation.

Objectives
The unit aims to provide students with an understanding of the ecological issues as the context of the management of active energy systems in buildings and the experience of conducting an energy audit and presenting the results before a group.

This unit explores the effectiveness of building energy management techniques that rely upon behavioural or management actions by the users and owners of buildings. The theoretical component considers the statutory environment in which facility owners and operators must exist, the availability and management of energy resources and the economic framework of energy management. The practical component considers the application of energy audit techniques and development of energy management plans for buildings.
Content
Major topics in this unit of study include:
- World energy issues
- Energy management plans
- Energy accounting- Energy contracts
- Energy audits (energy use)
- Energy conservation opportunities

Outcomes
On completion of the unit students will be able to conduct a Building Energy Audit and understand the implications of that audit for active and passive energy management systems and the ecological context of the building.
Textbooks
Reccommended readings
Franco, A (1993): Building Energy Manual. DPWS NSW.
Ed Edwards, Brian (1998): Green Buildings Pay. Pub. E & FN Spon, London.
Yeang, Ken (?): The Skyscraper Bioclimatically Considered: A Design Primer Pub.
Prior, Josephine (1999): Sustainable Retail Premises. Pub. BRE/CRC Ltd, London.
Ed Harrison, Andrew, Loe, Eric, & Read, James (1998): Intelligent Buildings in South-East Asia. Pub. E & FN Spon, London.
Harris, R. J,, & Leiper, N. eds (1995): Sustainable Tourism: An Australian Perspective. Pub. Butterworth-Heinemann, Chatswood.
The Building Owners and Managers Association of Australia (1991): 'NSW Energy Survey, 1991' Pub. The Building Owners and Managers Association of Australia, Sydney.

DESC 9122 **Expert Systems**

6 credit points. Dr Rosenman. **Semester: 1,2. Classes:** On-line tutorials and reading.

Objectives
- To understand the concept of separation of knowledge from the processing of that knowledge.
- To understand the symbolic and heuristic nature of expert system reasoning.
- To become familiar with the development of expert systems.

Content
This is an on-line unit that introduces the concepts of expert systems and logic and/or rule-based production systems. The role of expert systems in design such as code checking and simple generative systems are presented with examples. Programming environments for logic and rule-based backward chaining languages are introduced. Students will learn to extend a given expert system and to develop their own expert system.
Outcomes
- An understanding of the symbolic and declarative nature of expert systems.
- An ability to formulate knowledge in a form capable of processing by an expert system.
- An ability of selecting expert systems or expert system shells for particular problem situations.

Textbooks
Buchanan B G and Shortliffe E H (1984). Rule-Based Expert Systems, Addison-Wesley, Reading, Mass.
Coyne R D, Rosenman, M A, Radford A D, Balachandran M and Gero J S (1990). Knowledge-Based Design Systems, Addison-Wesley, Reading, Mass.
Harmon P and King D (1985). Expert Systems, John Wiley, NY.
Hayes-Roth F, Waterman D A and Lenat D B (1983). Building Expert Systems, Addison-Wesley, Reading, Mass.

DESC 9047 **Facilities Management 1**

6 credit points. **Semester: 1**. **Classes:** Lectures. **Assessment:** 4 assignments: strategic planning (20 per cent), facilities management and human resource management (40 per cent), land economics (20 per cent), occupational health and safety (20 per cent).

Objectives
The unit aims to provide students with a conceptual framework and knowledge of the context of facilities management, including statutes and regulations, occupational health and safety, location and the property market, location and the product cycle, human resource management, facility design and planning, and strategic planning. Students will gain a working knowledge of the business of consultants and contractors which the facilities manager must manage: maintenance managers; project managers and builders; architects, interior designers and facilities planners; property managers and real estate agents; electrical, fire, hydraulic and lift engineers and contractors.
Content
The unit comprises three major components.
- Facilities management theory and practice: what is facilities management?, the demand for, and practice of facilities management, outsourcing, benchmarking, the role of professional organisations, and the development of strategic facility plans.
- The context of facilities management: land economy, property cycle, valuation and leasing; statutes and regulations; occupational health and safety; and the relationship between facilities management and human resource management, property portfolio management and architecture and interior design.
- Facility design: the history of corporate office facilities design and space management.

Outcomes
At the end of the unit students should understand the role of the facilities manager, be able to prepare a Strategic Facilities Plan, and have a working knowledge of the consultants and contractors 6 architects, engineers, human resource managers, leasing agents, property portfolio managers, occupational health and safety officers 6 with whom they must liaise.

DESC 9048 **Facilities Management 2**

6 credit points. **Semester: 2. Classes:** Lectures. **Assessment:** Life cycle costing assignment (20 per cent), preparation of a Strategic Facilities Plan (60 per cent) and presentation of the plan to the class and a jury panel (20 per cent).

Objectives

The unit aims to provide students with an understanding of the methodologies, tools, techniques and information management for assessing the operational performance of facilities: maintenance management methodologies, life-cycle analysis, benchmarking, property indices, relocation logistics, building automation systems, energy management systems, asset management systems, total quality management, and computer-aided facilities management.

Content

Students will be exposed to the role of the facilities manager within an organisation, the working environment, organisational behaviour, interior design tools, lease administration, building codes and legal requirements, project management, construction management and documentation and maintenance operations.

Outcomes

On completion of the unit students should be able to apply methods and relevant information technology for facilities management information control and performance and measurement. These skills will be used and presented within the framework of a Strategic Facilities Plan.

Students will be required to demonstrate, through the case study analysis, use of the various methodologies, maintenance management, life-cycle costing, and an understanding of the application of computer-aided facilities management. Using knowledge of strategic planning, property portfolio management, leasing, facilities management consultants and contractors, students are required to make a decision supported by operational data, and to develop and produce reports. Working in groups they will need to demonstrate team-building skills and, through a formal presentation, the skills required to make executive presentations.

DESC 9112 Facilities Management 3

6 credit points. **Semester: 1. Classes:** This unit is taught in as an intensive program comprising lectures introducing new material, workshops and case-based learning activities. The unit of study requires students to complete assignments and to participate in class activities and workshops. **Prerequisite:** DESC 9047 + DESC 9048 + DESC 9071. **Assessment:** * 30% collaborative facility service project and presentation * 70% individual case study facility service project.

Objectives

This unit focuses on identifying what services are required to be delivered and explores selection strategies for a range of facility services and activities that support efficient corporate operations. The unit develops the processes and arrangements for procuring selected services. The unit also considers the administration processes required to manage service delivery agreements and to monitor and evaluate service delivery. The unit explores issues of communications in managing service delivery.

Content

Major topics in this unit of study include:

- Strategic facility services: services planning and resource planning
- Services procurement: strategy and tendering
- Service delivery: agreements and contracts and contract review
- Management of service delivery: performance measurement, reporting and communications

Outcomes

On completion of the unit students will have

- The knowledge to identify strategically service delivery
- An understanding of procurement methodologies
- The knowledge to manage service delivery through a procurement agreement
- Developing interpersonal skills to perform professionally in a consumer/trader relationship within or external to an organisation

Recommended reading

Ed Domberger, Simon and Hall, Christine (1995): The Contracting Casebook - Competitive tendering in action. Pub. AGPS, Canberra

Finnegan, Jerome P. (1996): The Manager's Guide To Benchmarks. Pub. Jossey-Blass Inc. Publishers, San Francisco

DESC 9113 Facilities Management 4

6 credit points. **Semester:** 2. **Classes:** This unit is taught in as an intensive program comprising lectures introducing new material, workshops and case-based learning activities. Prerequisite: DESC 9047 + DESC 9048 + DESC 0971. **Assessment:** 50% collaborative facility planning project and verbal presentation 50% individual case study and analysis of facility planning projects and issues in practice.

Objectives

This unit focuses on facility planning for a range of facility types and explores issues of facility briefing and design, facility information, workplace strategies and concepts. It considers the impact that computer technology has on the space planning process for future space management.

Content

- functional use planning
- user requirement measurement
- post-occupancy evaluation
- design evaluation
- processes for computer aided facility management including space planning furniture and equipment inventory

Outcomes

On completion of the unit students will have

- an understanding of space planning processes
- knowledge of software and applications to space planning and space management
- experience of a facility planning process

Recommended reading

Brauer, Roger L (1992): Facilities Planning 2nd Edition. Pub. Amacom, New York

Worthington, John (1997): Reinventing the Workplace. Pub. Architectural Press, London

Duffy, F (1997): The New Office. Pub Conran Octopus, London

Becker, F. (1990): The Total Workplace and FM and the Elastic Organisation. Pub Van Nostrand Reinhold

DESC 9127 Film Production

6 credit points. To be determined. **Semester: 1. Classes:** The unit involves one 3 hour class per week as well as a Saturday film shoot. Class participation. Students are required to follow UBS booking procedure. Facilities for assignments must be booked at least one week before use. **Assessment:** Assessment is largely project based, it consists of the following tasks. * Students will work in groups of three to take a series of still photographs or slides and record a sound scape on audio cassette of about two minutes, with no dialogue or voice over, to support and intensify the images. They produce up to 10 pictures in a sequence as if a storyboard, including at some point the setting without character (20%) * A group film project (60%) * Conduct an interview at a post-production office and give a 1500 word qualitative research paper examining organisational structure with the post production facility as a case study (20%).

NB: A resource fee of $300 will be charged for consumables (including equipment and software hire).

Objectives

This unit of study is aimed specifically at developing technical, analytical and aesthetic skills relating to film production and post-production.

Content

Students will have acquired the knowledge and skills to produce a film project. Topics will include: an understanding of the organisational structures and finance of film production; the physical process of film making from production to post production; the production process and the units that make it function; functioning of key equipment for capturing images and sound; cinematography - lighting; film editing; comparative digital editing; and the film laboratory process.

Outcomes

At the end of the unit students will be expected to be able to: have an understanding of film language and the ability to use it to recreate meaning in film production.; organise a film production shoot with an understanding of budgeting; and have the technical and production skills to produce a film.

Textbooks

Airman, Sound Theory Sound Practice, Routledge, 1986

Buckmaster John & Peter, Introduction to Film Production, 1994

Pincus Edward & Steven Ascher, The Film Makers Handbook, Penguin Books, 1983

DESC 9049 Financial and Managerial Accounting

6 credit points. **Semester:** 2.

DESC 9050 Fire Protection Services

6 credit points. Mr Rowe. **Semester: 2. Classes:** Lectures and computer laboratory. **Assessment:** 5 assignments (20 per cent each).

Objectives

To provide students with the knowledge and skills to design water-based fire suppression systems and fire detection systems for the more commonly encountered fire risks, and to impart an understanding of the basic principles of fire safety engineering.

Content
Fire safety in large modern buildings depends heavily on fire detection and suppression systems. This unit explores design rules for manual and automatic water-based systems intended to extinguish fires and detection systems designed to give early warning of fire. It also introduces the fundamental principles of fire safety engineering and their application in lieu of prescriptive rules.
Outcome
It is expected that students will complete the unit with sufficient knowledge to be able to design fire hydrant and hosereel, automatic sprinkler and fire detection systems for large buildings and that they will have a broad understanding of the principles of fire safety engineering, sufficient to enable them to consider some of the alternatives to conventional prescriptive design.
Assignments will test design skills learned during the progress of the course.

PLAN 9027 Foundations of Environmental Planning

4 credit points. Assoc. Prof. Toon. **Semester:** 1.

Content
An introduction to bsic planning concepts, the unit will outline the types of planning interventions and plans. It will also introduce the concepts of urban form and densities, urban growth and metropolitan structure, and the environmental considerations in urban planning. It will outline the types of studies and methods involved in preparing plans, and the procedural requirements regarding consultation and public information.

ARCH 9039 General Elective 1

6 credit points. **Semester:** 1, 2. **Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.
Description
General Elective 1 is a recommended option available to students undertaking: Architectural Design; Arch. History/Theory/ Criticism; Heritage Conservation; Housing Studies; Urban Design; Urban/Regional Planning; URP(Heritage Conservation); URP (Housing Studies); & URP (Urban Design).
Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

ARCH 9040 General Elective 2

6 credit points. **Semester:** 1,2. **Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.
Description
General Elective 2 is a recommended option available to students undertaking: Architectural Design; Arch. History/Theory/ Criticism; Heritage Conservation; Housing Studies; Urban Design; Urban/Regional Planning; URP(Heritage Conservation); URP (Housing Studies); & URP (Urban Design).
Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

ARCH 9041 General Elective 3

4 credit points. **Semester: 1,2. Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.
Description
General Elective 3 is a recommended option available to students undertaking: Architectural Design; Arch. History/Theory/ Criticism; Heritage Conservation; Housing Studies; Urban Design; Urban/Regional Planning; URP(Heritage Conservation); URP (Housing Studies); & URP (Urban Design).
Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

ARCH 9042 General Elective 4

4 credit points. **Semester: 1, 2. Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.
Description
General Elective 4 is a recommended option available to students undertaking: Architectural Design; Arch. History/Theory/ Criticism; Heritage Conservation; Housing Studies; Urban Design; Urban/Regional Planning; URP(Heritage Conservation); URP (Housing Studies); & URP (Urban Design).
Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

ARCH 9043 General Elective 5

2 credit points. **Semester:** 1,2. **Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.
Description
General Elective 5 is a recommended option available to students undertaking: Architectural Design; Arch. History/Theory/ Criticism; Heritage Conservation; Housing Studies; Urban Design; Urban/Regional Planning; URP(Heritage Conservation); URP (Housing Studies); & URP (Urban Design).
Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

ARCH 9044 General Elective 6

2 credit points. **Semester:** 1, 2. **Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.
Description
General Elective 6 is a recommended option available to students undertaking: Architectural Design; Arch. History/Theory/ Criticism; Heritage Conservation; Housing Studies; Urban Design; Urban/Regional Planning; URP(Heritage Conservation); URP (Housing Studies); & URP (Urban Design).
Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

DESC 9051 General Elective A

6 credit points. **Semester:** 1,2. **Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.
Description
General Elective A is a recommended option available to students undertaking: Audio Design; Building; Building Services; Design Computing; Digital Media; Energy Conservation; Facilities Management; Film and Digital Video; & Illumination Design
Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

DESC 9052 General Elective B

6 credit points. **Semester:** 1,2. **Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.
Description
General Elective B is a recommended option available to students undertaking: Audio Design; Building; Building Services; Design Computing; Digital Media; Energy Conservation; Facilities Management; Film and Digital Video; & Illumination Design
Enrolment in electives are subject to agreement with the supervising staff member, and ah Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

DESC 9053 General Elective C

4 credit points. **Semester: 1**,2, Summer. **Classes:** A combination of private study, seminars and other means.
NB: Permission required for enrolment.

Description
General Elective C is a recommended option available to students undertaking: Audio Design; Building; Building Services; Design Computing; Digital Media; Energy Conservation; Facilities Management; Film and Digital Video; & Illumination Design

Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

DESC 9054 General Elective D

4 credit points. **Semester: 1,** 2. **Classes:** A combination of private study, seminars and other means.

NB: Permission required for enrolment.

Description
General Elective D is a recommended option available to students undertaking: Audio Design; Building; Building Services; Design Computing; Digital Media; Energy Conservation; Facilities Management; Film and Digital Video; & Illumination Design

Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

DESC 9055 General Elective E

2 credit points. **Semester:** 1, 2. **Classes:** A combination of private study, seminars and other means.

NB: Permission required for enrolment.

Description
General Elective E is a recommended option available to students undertaking: Audio Design; Building; Building Services; Design Computing; Digital Media; Energy Conservation; Facilities Management; Film and Digital Video; & Illumination Design

Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is-added to your enrolment.

DESC 9056 General Elective F

2 credit points. **Semester:** 1,2. **Classes:** A combination of private study, seminars and other means.

NB: Permission required for enrolment.

Description
General Elective F is a recommended option available to students undertaking: Audio Design; Building; Building Services; Design Computing; Digital Media; Energy Conservation; Facilities Management; Film and Digital Video; & Illumination Design

Enrolment in electives are subject to agreement with the supervising staff member, and an Independent Study Approval Form returned to the Student Services Centre (Room 450, Level 4, Wilkinson Building) before the unit of study is added to your enrolment.

ARCH 9052 Graduate Architectural Design 1

12 credit points. Adjunct Professors on rotation. **Semester:** 1. **Classes:** Design studio. **Assessment:** Assessment will be based on drawings and models that will comprehensively explore the design concept and its architectonic implementation for the final project.

NB: Permission required for enrolment.

Objectives
The objectives of this unit are:
- to investigate formal/spatial dimensions of a hybrid building
- to interpret program as a conceptual paradigm
- to investigate the impact of architecture on the fabric of the city

Content
This design studio attempts to explore design issues involved in a large-scale multi-purpose project in the metropolitan area of Sydney. The studio will focus on the tectonic interpretation of a given program and site and their impact on architectural space.

Outcomes
Students will be equipped with the following:
- the typological and morphological issues concerning the relationship between architecture and the city
- spatial flux running through public, semi-public and private spaces
- spatial and formal visibility of architecture in the city

ARCH 9053 Graduate Architectural Design 2

12 credit points. Adjunct Professors on rotation. **Semester:** 2. **Classes:** Design studio. **Assessment:** Assessment will vary based on the chosen context (rural/ oceanic) and the design objectives shared with the urban design tutor.

NB: Permission required for enrolment.

Objectives
The objectives of this unit are:
- to explore strategies to counter the periphery of cities
- to address the primary of the formation of spatial rather than the formation of objects in the 'edge of a city'
- to provide a vision for a city's future

Content
This design studio is conceived in conjunction with design studios taught in the Graduate Program of Urban Design. The aim is to explore the idea of 'Edge of a City.' The studio will examine strategies focusing on the boundary between the urban and rural, or the urban and oceanic.

Outcomes
Students will be equipped with the following:
- change in the scope of design as the scale of projects moves towards urban issues
- the intrinsic relation bonding the edge of a city to its organizations
- strategies to synthesize urban life and urban form based on a given context
- the essentiality of psychological space, program, movement, light quality, and tactility in the strategies presented for a city edge

ARCH 9048 History of Modern Architecture Theories

6 credit points. Dr Gevork Hartoonian. **Semester: 1. Classes:** Lectures. **Assessment:** An essay exploring one of the three mentioned expected outcomes.

Objectives
The objectives of this unit are to:
- explore and critically evaluate the theoretical dimension of architectural historiography
- understand history as a work of interpretation rather a series of facts

Content
This seminar attempts to explore theories of contemporary architectural history. The aim is to re-read and historically contextualise histories of modern architecture. The seminar deals with a set of texts that propose historical interpretations of architecture almost contemporaneous with those texts, recording the shift of meaning in the relationship between architecture and its history from 1950-2000.

Outcomes
Students will be equipped with the following:
- an in depth awareness of diverse approaches to architectural history
- an understanding of history as a multi-dimensional text
- a historical understanding of the differences between text and building

ARCH 9049 Contemporary Architectural Theories

6 credit points. Dr Gevork Hartoonian and Dr Harry Margalit. **Semester:** 2. **Classes:** Lectures.

Objectives
The objectives of this unit are:
- to provide the various historical developments that initiated the idea of autonomy in architecture
- to explore the ways architects have entertained 'autonomy' in their theories

Content
This seminar explores the theme of autonomy in contemporary theories of architecture. Since the 18th century and apropos of what is called the French Revolutionary Architects, architecture had the chance, though for a short period of time, to have the pleasure of entertaining its autonomy from the classical wisdom. Though in more than one way architecture soon had to confront the imperatives of the capitalist cycle of production and consumption, nevertheless, architects have attempted to dwell on the notion of autonomy even by plunging into interdisciplinary issues or critically reflecting on ideas endemic for modern architecture.

Outcomes
Students will gain an in depth knowledge of the following:
- a historical awareness of me themes endemic for modern architectural theories

- the importance of aesthetic theories for architecture
- the relationship between history and theory
- the genesis of the historical avant-garde in architectural theories

ARCH 9050 Globalisation-Cultural Diversity & Arch

6 credit points. Associate Professor Anna Rubbo and Dr Harry Margalit. **Semester: 2. Classes:** Lectures. **Assessment:** Assessment contribution to the seminar through presentations, and a final essay.

Objectives

The unit aims to provide a basis for better understanding the process of globalization in relation to the built and natural environment, and the significance of cultural identity. It will seek to enhance professional effectiveness through knowledge of these processes and their impact on social and cultural sustainability in architecture and settlement planning.

Content

Increasingly architects from global metropolitan centres engage in work or competitions around the world. As globalization gathers pace, inequality between countries also increases. This seminar will critically explore the phenomenon and processes of globalization and their impact on settlement patterns and architectural form, and related health and social factors, in selected areas of the world and look at way s in which architecture can help enhance the positive aspects of globalization. There will be a focus on post-colonial and post-imperialist conditions in the developing world, and the ways in which cultural identity and custom as expressed in built form and through the social use of space is resistant to, transformed, destroyed or enhanced by globalization. The more recent concept of localization and the earlier critical regionalism will be explored in the context of key texts, which have traditionally informed the debate about development, settlement patterns and architecture. Examples will be drawn from Asia, India and the Pacific region, but also Latin America, Africa and Australia. The unit will seek to identify and develop professional strategies for working in sites influenced by globalization.

Outcomes

Students will develop:

- an awareness and understanding of globalization
- an understanding of the ways in which globalization impacts on architecture and settlement patterns in principle, and through selected case studies
- strategies to enable a more effective professional practice in such areas

ARCH 9051 Urban Design:The Imact of Modernisation

6 credit points. Dr Peter Armstrong and new Urban Design Lecturer. **Semester: 1. Classes:** Lectures. **Assessment:** Assessment will take the form of an analysis of the processes of development of a city that experienced substantial growth in the 19th and 20th centuries. The analysis may be in written or graphic form.

Objectives

Representative examples in Europe, America and Asia are examined, revealing the progress from the disintegration and destruction of traditional urban form and space in the initial phases of the Revolution to the multiple approaches to the reconstitution of society and space from the middle of the 19th century onwards.

The underlying causes of the differing philosophies and approaches to the solution of the political, environmental and social problems are examined in the light of the then current differing social and cultural influences.

Content

The unit examines the development of concepts of urban design from the onset of the Industrial Revolution until the late twentieth century. Following the social upheavals and rapid disintegration of urban form and society under the unprecedented growth in technology, production and population, the variety of attempts to come to terms with the demands of the 19th century are traced.

Outcomes

Specific areas of study include Haussmann's restructuring of Paris, Utopian schemes from Fourier and Robert Owen to Le Corbusier and the development of the megalopolitan complexes which characterizes the first World economics.

PLAN 9031 History and Theory in Urban Planning

4 credit points. Nicole Gurran. **Semester: 1. Classes:** Lectures and discussions. **Assessment:** Two written assignments (2000-2,500 words each). The first examines a topic relevant to block 1 and the second to block 2.

Objectives

Much contemporary urban and regional planning takes place in an ahistorical context in the way it seldom manages to address past factors which have largely determined the nature of present urban settlement conditions. Additionally, key theoretical concepts and ideas in contemporary urban planning are closely associated with past practices of town establishment, governance and choice of growth options. This unit examines the manner in which this legacy of history, ideas and theory adds to our understanding of modern urban development in Australia and neighbouring regions. It links with the unit 'Argument and Discourse in Planning Practice'. The treatment is selective, proceeding from the examination of key historical themes in Australasian planning practice, to urban design concepts employed in metropolitan planning, and to the evolution of orthodox modernist approaches towards planning as part of the development process.

Content

The unit is divided into two broad blocks covering firstly: theoretical contributions to Australian planning history, the character of regional cities in Oceania, the emergence of urban governance in Australia, new resource-based towns; contemporary concepts; and Sydney metropolitan planning in history. Block two explores the literature on evolving planning ideas.

Outcomes

The unit is designed to do the following:

- Encourage participants to examine theories and concepts which underpin a wide range of contemporary planning issues.
- Develop a reasoned understanding of the practice of urban and regional planning within the prevailing legal institutional, political, social and economic context in Australia.
- Understand the contributions of colonial and other cultures to the establishment of towns and cities in Australia and Oceania.
- Differentiate among the important concepts which have shaped the character of urban form in Australia.
- Contrast orthodox modernist approaches towards plan-making with newer postmodern and gender-based concepts.

DESC 9089 History of Aust Building Construction

6 credit points. **Semester: 1**.

Content

The first part reviews the devlopment of Australian building construction and environmental deasign from the eighteenth century to the present. The second part reviews the extent to which the history of building construction and environmental design, from Ancient Egypt and Rome to the eighteenth century, has influenced Australian architecture.

DESC 9088 Housing Asset Management

8 credit points. **Semester: 1. Classes:** Lectures and seminars.

Objectives

- To introduce asset management practices which ensure:
- priorities are established in line with organisational objectives
- development options and feasibility studies are fully explored
- financing and expenditure related to property is planned and controlled in accordance with these objectives
- resources are used effectively and appropriately to obtain value for money spent.

Outcomes

Students should develop an understanding of the broad economic issues within which an asset management strategy will operate together with a comprehensive understanding of the element and procedures which contribute to the formulation of an asset management plan.

ARCH 9006 Housing Culture Studies

8 credit points. Mr James. **Semester:** 1.

Content

This unit introduces students to the broad concerns that an effective housing delivery policy and practice needs to take into account. Thus, the unit content includes an introduction to the Australian housing system at both policy and practice levels, with a focus on understanding its history, the social context of housing, and skills necessary in the provision of housing in a complex market structure. Issues will be approached from a variety of vantage points: from policy maker to procurer to consumer.

ARCH 9032 **Housing Development Studies**

8 credit points. Mr James. Semester; 2.

Objectives

- Introduction to housing economics: the nature, structure and operation of housing markets, the determinants of supply of and demand for housing, factors affecting house prices, rents and tenure choice.
- Planning for housing: strategic and physical planning, the distribution of demand, the supply of physical and social infrastructure.
- Attitudes and housing preferences: consumer preferences for housing types and styles, the nature of acceptable and appropriate housing environments, matching housing types to community group needs, the needs of particular groups - eg, the elderly, students, techniques of housing evaluation.
- The house building industry: the nature and structure of the industry, the finance and management of house building, the importance of subcontracting, the influence of large firms and building material manufacturers, industrial relations.
- Housing design and procurement: policies and regulation, designing for diversity, private and public sector relationships, ecologically sustainable development, multicultural influences
- Asset management: project review and evaluation, asset valuation, monitoring asset utilisation and performance, life cycle costing, building maintenance.

DESC 9059 **Hydraulic Services**

6 credit points. Semester: 2.

Content

Presents principles, concepts assumptions, rules and regulations required for the analysis and design of hot and cold water supply systems, and stowmwater drainage systems, including stormwater retention systems and systems for piped gases for commercial and industrial buildings.

DESC 9132 **Internet Programming 1**

6 credit points. Prof John Gero and Dr Kirsty Beilharz. Semester: 2. Classes: Lectures and tutorials. Assessment: Exercises and an assignment.

Objectives

- to develop an understanding of the principles of object-oriented programming
- to learn the basics of software development for the Internet through a scripting language
- to learn Javascripting

Content

Software development is introduced through an overview of Javascripting and its use in creating interactive Web pages. Students will then learn structured progrannming and will be introduced to object-oriented programming techniques in the context of the development of Web page control. Students will be able to enhance their design portfolio through the final submission

Outcomes

Basic scripting and software development skills and a knowledge of the use of software in interactive Web page design and control.

DESC 9140 **Internet Programming 2**

6 credit points. Prof. Gero. Semester: 2. Classes: Lectures and tutorials. Assumed knowledge: DESC 9132. Assessment: Exercises and assignments.

Objectives

- to develop an understanding of the principles of how to pass information from an html document to a program that can process that information and back - Common Gateway Interface (CGI)
- to learn the basics of software development to support CGIs
- to learn Perl

Content

The ability to use Web pages as interfaces to other programs such as databases and spreadsheets relies on extracting information from the page. Similarly producing dynamic Web pages that include information calculated by other programs enhances the utilityofthe Web. The CGI with the Perl programming language provide the tools to allow this to be designed and implemented. This unit is about how to design and implement CGIs using Perl.

Students will leam Perl programming/scripting in the context of the development of dynamic Web pages. Students will be able to enhance their design portfolio through the final submission.

Outcomes

Basic CGI and Perl software development skills and a knowledge of the use of software in information control and flow in dynamic Web page design.

ARCH 9003 **Interpretation of Cultural Environments**

4 credit points. Semester: 1.

Content

Considers three major themes in the interpretation of cultural significance:

- historic - historic basis of conservation and traditions of object-based conservation
- theoretical - relationship between values, methods, perceptions and history, and an introduction to research techniques, changing attitudes and tastes
- place - the cultural landscape as the physical setting and social context of conservation, the need for a natural systems base to interpretation of cultural environments, and holistic methods of assessment

DESC 9100 **Introduction to Archicad**

4 credit points. Assoc. Prof. Maher. Semester: 1,2, Summer. Classes: On-line tutorials and project notes. Qualifying: Preference given to Design Computing and Digital Media students. Prohibition: Available to CH005, CH006, and new undergraduate degrees students only with written permission from the lecturer. Same applies to students from other Faculties (eg, Engineering) and Study Abroad. Assessment: 20 per cent tutorial submission, 80 per cent modelling project.

NB: Permission required for enrolment.

Objectives

- To provide an overview of the ArchiCAD working environment.
- To introduce the basics of CAD modelling and 3D animation.
- To provide an understanding of 2D drawing, 3D models, and movies from CAD models.

Content

ArchiCAD is a widely used CAD package that specialises in models for the architecture profession. ArchiCAD represents the components of the design in a 3D object-oriented format, providing 3D views at all stages of the modelling process. This unit of study introduces the basics of using ArchiCAD6.5 as well as the basic principles in using CAD for modelling, and animation of designs.

Outcomes

- *A* CAD model presented on paper and in multimedia formats.
- An understanding of CAD and CAD file formats.

DESC 9101 **Introduction to Autocad**

4 credit points. Dr Chase. Semester: 1, 2, Summer. Classes: On-line tutorials and project notes. Qualifying: Preference given to Design Computing and Digital Media students. Prohibition: Available to CH005 and CH006 and CH008 and CH009 students only with written permission from the lecturer. Same applies to students from other faculties (eg, Engineering) and Study Abroad. Assessment: 20 per cent tutorial submission, 80 per cent modelling project.

NB: Permission required for enrolment.

Objectives

- To provide an overview of the AutoCAD working environment.
- To introduce the basics of CAD modelling and documentation.
- To provide an understanding of 2D drawing, 3D models, and printing and plotting.

Content

AutoCAD is a widely used CAD package that provides an industry standard for many design professionals. This unit of study introduces the basics of using AutoCAD2000 as well as the basic principles in using CAD for drawing, modelling, and documentation of designs.

Outcomes

- *A* CAD model presented on paper and in multimedia formats.
- An understanding of CAD and CAD file formats.

PLAN 9028 **Land Use.Infrastructure/Transport Plan**

4 credit points. Mr Payne. Semester: 2.

Content

This unit follows on from Foundations of Environmental Planning. You will be required to apply concepts, terms and methods in responding to practical problems. The unit will give you skills in site analysis, in designing and preparing development proposals, in reviewing land use, infrastructure and

transportation plans, and in preparing documents which present, explain and justify proposals.

ARCH 9047 **Landscape Design and Urban Ecology**

4 credit points. Professor Droege. **Semester: 2. Classes:** Lectures and field visits. **Assessment:** Applied and reflective execises, including design evaluations, throught the semester, equally weighted.

Objectives

To develop a good understanding of public open space and landscape design issues in current urban design.

Outcomes

- Enhanced ability to design in urban developmoent contexts.
- Assessments gauge participants' growing understanding of urban design challenges from a landscape and open space perspective.
- This subject engages Australian Indigenous, recent and international landscape dimensions in tangible ways. Participants will come to better understand the nexus between urban design, architecture, and landscape design, in ways that respond to principles of ecologically sustainable development.

DESC 9064 **Lighting Design**

8 credit points. Prof. Julian. **Semester:** 1. **Classes:** Lectures and studio. **Assessment:** 5 assignments (3 x 16.7 per cent and 2 x 25 per cent).

Objectives

To develop the basic skills needed in the design of interior and exterior lighting.

Content

This unit brings together the material of the four basic lighting units to develop the concepts and methodologies of interior lighting design. Topics covered include: the perception of colour, form, pattern and space, and issues relating to the perception and comprehension of the large-scale environment; aesthetics, perception and emotion; the limited quantitative procedures available for use in achieving the foregoing; the practical methods available for predicting illuminances from daylight and uniform arrays of luminaires; the prediction of discomfort; appraisals; codes of practice; economics; maintenance; integration of daylight and electric light.

More advanced methods of interior lighting design follow, including: design appearance techniques; lighting systems; colour and atmosphere-creating; task analysis; choices of sources and luminaires; practical considerations of various lighting situations (eg, domestic, offices, factories, hospitals, schools, etc.); special applications (stage, television, merchandising, agriculture, etc.).

The requirements for various exterior lighting applications are discussed. Some topics are treated in greater depth (eg, various floodlighting techniques) than others (eg, road, tunnel, aircraft and navigation lighting). Topics covered include: general floodlighting requirements; floodlighting equipment; light distributions; calculation methods; area floodlighting; building floodlighting; road lighting; pedestrian lighting; tunnel lighting; vehicle lighting; traffic signals, airport lighting; navigation lighting; display lighting; advertising.

Various computer-aided design methods are discussed and demonstrated. Assignments based on computer-aided design are used as part of the assessment.

Outcomes

The student will be able to design simple and complex interior lighting using manual and computer-aided methods. The experience will include design for effect and atmosphere. The student will also be able to design exterior lighting for roads, sport and floodlighting.

The outcomes will be demonstrated through individual design assignments.

DESC 9116 **Loudspeaker Design**

6 credit points. Semester: 2.

Content

- Theory of electrodynamic loudspeaker operation
- Theory and practice of selecting and testing drivers, designing enclosures and crossovers
- Interaction of loudspeakers with room acoustics
- Objective and subjective testing of systems

ARCH 9008 **Management Policy and Organization**

8 credit points. To be determined. Semester: 2.

Content

An examination of policy relating to housing management in Australia. Issues covered will include the role of government and intergovernmental arrangements, relations between the public and private sector, funder-provider distinctionsand their relevance to housing, and comparative studies of housing policy. Contributions will be made by housing experts drawn from the public and private sectors.

DESC 9067 **Mechanical Services**

6 credit points. Mr Rowe. **Semester:** 1. **Classes:** Lectures, laboratory work and demonstrations. **Assessment:** Six assignments (2 x 10 per cent, 2 x 15 per cent, 2 x 20 per cent) and a laboratory report (10 per cent).

Objectives

- To review relevant principles of thermodynamics and fluid mechanics;
- to introduce students to practical applications of these principles to the processes of heat load estimation and the distribution of fluids as heat transfer media and to the design of simple air conditioning and ventilation systems;
- to outline elementary principles of noise control in buildings; and
- to outline the basic principles of water supply, drainage and water-based fire suppression systems in buildings.

Content

Mechanical services are an essential component of most modern commercial buildings with a strong influence on other services and the architecture. This unit provides an introduction to these services for recent graduates or diplomates in mechanical engineering and an understanding of fundamental principles and practice for people from backgrounds other than mechanical engineering.

Outcomes

Students should acquire skills in estimation of building cooling and heating loads, design of simple air-conditioning systems and the design of piped systems for the circulation of water and refrigerants as heat transfer media. Students should also gain an understanding of the principles of energy and mass transfer underlying mechanical services systems and fundamentals of noise control, water supply and drainage and fire suppression systems.

Assignments will test the students' ability to apply knowledge and skills gained in lectures. They include simple applications of thermodynamics and fluid mechanics, estimation of building cooling and heating loads and the design of a piped system for water circulation, a refrigerant transport system and a simple air-conditioning system.

DESC 9128 **Memory, Time and Play**

6 credit points. To be determined. **Semester:** 2. **Classes:** Classes will be structured into a three hour class per week. **Assumed knowledge:** DESC 9129. **Assessment:** A 2500 word essay on memory and time in relation to a film of their choice - 50%. Class presentation of fifteen to twenty minutes where students will show a story board accompanied with video, slides and audio to demonstrate memory theory. The class presentation is between fifteen and twenty minutes.- 50%.

Objectives

This unit of study offers detailed examination of current philosophical debates about memory, narrative, and self, as applied to specific issues in film theory and criticism. No background in philosophy is assumed. All theoretical views discussed will be synthesised to draw out their direct relevance to film. The course examines the treatment in film of oddities and disorders of memory and self, and the use of resources of memory theory to understand film practice.

Content

Topics covered will include the following: time travel; documentary and fiction; perceptions of the past; narrative time and objective time; memory distortion, recovered and false memories; doubles-twins; delusions of mis-identification; multiple personality or dissociative identity disorder; screen memories and psychoanalytic theory; flashbacks, narrative, and trauma; the unreliable narrator; memory and nostalgia; the concept of a memory trace and the early history of cinema; observer vs field memories (do we remember events from our own past point of view, or do we 'see' ourselves in the remembered scene?).

Outcomes

Students who successfully complete the unit will have acquired a powerful set of theoretical tools with which to understand diverse

representations of self in film. Students will be up to date with some of the most pressing and controversial issues in the interdisciplinary study of mind and memory. Students will acquire a developed ability to read film language in relation to memory theory and the self to construct complex narratives.

Textbooks

Francis Barker, The Culture of Violence (Routledge, 1994)
Ed Casey, The Memorability of the Filmic Image, in Spirit and Soul, Spring Publications, 1991
Greg Currie, 'McTaggart at the Movies', Philosophy 64 (1992), 343-355
Greg Currie, Image and Mind: film, philosophy, and cognitive science (CUP.1995)
Greg Currie, 'Visible Traces: documentary and the content of photographs', Journal of Aesthetics and Art Criticism (1998)
Mary Ann Doane, [Marey, Freud,.. .time, narrative, and early cinema] Critical Inquiry (1995)
John Forrester [time and psychoanalysis]
Ian Hacking, Rewriting the Soul: multiple personality and the sciences of memory (Princeton UP, 1995)
. Adam Phillips, On Flirtation (Faber, 1995)
Daniel Schachter, Searching for Memory: the mind, the brain, and the past (Basic Books, 1996)
Hillel Schwartz, The Culture of the Copy (Zone Books, 1996)
Barbara Maria Stafford, Body Criticism (MIT Press, 1992)
John Sutton, Philosophy and Memory Traces (CUP, 1998)

ARCH 9022 Methods in Urban Design

4 credit points. Prof. Draege. **Semester: 1. Classes:** Lectures, field work, and exercises. **Assessment:** Papers and analytic design projects throughout the semester.

Objectives

To provide structured opportunities in exploring fundamental methods of inquiry and design research, and their theoretical bases.

Content

The unit conveys concepts and methods of inquiry thet are useful for urban design discourse and reflective practice, aiming at better environmental programming and design. Departing from intuitive reasoning and environmental psychology concepts, we explore ways of telling, sensing, noting, inquiring, conceiving, debriefing and guiding in urban design. Finally a one-month module focuses specifically on research methods.

Outcomes

A feasible, useful, and creative advanced study proposal (in preparation of Research Study/Project Report); skills in designing and conducting basic environmental performance inquiries.

Assessments both develop and evaluate participants' abilities of conducting urban design inquiry and research. The authors of the most promising advanced study proposals will be eligible to be considered for the 1996 Wood Bagot Scholarship in Urban Design.

DESC 9068 Multimedia in Design

6 credit points. Prof. Gero. **Semester:** 2. **Classes:** Lectures and tutorials. **Assumed knowledge: DESC 9091. Qualifying:** Preference given to Design Computing and Digital Media students. **Prohibition:** Available to CH005 and CH006 and CH008 and CH009 students only with written permission from the lecturer. Same applies to students from other faculties (eg, Engineering) and Study Abroad. **Assessment:** Project work involves a series of staged exercises exploring different aspects of multimedia, leading up to the production of a complete multimedia system. The assessment involves key milestones in the development methodology, such that the student is involved in designing and implementing a multimedia system.

NB: Permission required for enrolment.

Objectives

This unit focuses on multimedia development methodology, for the design, development and delivery of modern multimedia applications. Multimedia is a fusion of software, graphic and sound elements with interactivity that is appropriate for the project at hand. Students will be given the opportunity to develop the ability to take a 'Brief, translate it into a list of requirements, and then set about satisfying those requirements. The key roles available in this industry will be discussed.

Content

This unit introduces the broad range of technologies that make up multimedia systems and their integration. The course takes students through a series of staged exercises to build up to an interactive multimedia presentation involving graphics, sound and video. The material covered will include:

- multimedia development methodologies,
- interactivity and navigation design,
- production and management of digital media,
- authoring and programming,
- integrated multimedia systems.

Outcomes

Students will be equipped with the following:

- a strong overview of a professional multimedia development methodology,
- a broad understanding of the capabilities of computer systems in the area of graphics and multimedia,
- material for a folio of work and sample systems demonstrating design and technical competence in the many areas of multimedia covered in the unit.

Textbooks

Persidsky, A. (1999) Director for Macintosh and Windows, Peachpit Press, Berkeley, CA. (latest edition)

DESC 9143 Music for Audio

6 credit points. To be determined. **Semester: 1. Classes:** Lectures. **Assessment:** Students will be assessed by a series of small scale exercise-based assignments.

Objectives

This unit will introduce Audio Design students to fundamental concepts of music, and enhance their understanding of issues in audio production involving musicians.

Content

- The nature of music
- Musics, cultures and styles
- Music notation systems and score reading
- The piano keyboard
- Aural skills
- Musical instruments and techniques
- Musical acoustics
- Timbre
- Elements of rhythm
- The musician's and engineer/producer's perspectives and concerns in audio production

Outcomes

Students will acquire a broad understanding of music, and learn to relate musical theory and practice to the audio production context. The unit will greatly facilitate communication between the students (as audio practitioners) and musicians.

DESC 9136 Music Technologies

6 credit points. Mr Bates. **Semester:** 2. **Classes:** lectures, computer laboratories, studio sessions. **Assessment:** Students will be assessed by a series of small assignments, as well as a larger scale final project.

Objectives

This unit will introduce a wide range of electronic and computational approaches to music production, with a focus on analogue and digital sound synthesis, MIDI and audio sequencing, sampling, and inter-application synchronisation.

Concepts and practices examined will include the implications of non-linear recording technologies on music composition, sound design and studio production practices; the integration of symbolic and continuous audio data; music production for the Internet; interactive and intelligent computer-music systems; virtual musical instrument design; and computer music programming.

Content

- Sound synthesis theory and practice
- Symbolic music and sequencing
- MIDI, M-LAN, MPEG 4 and other recent developments in music technology
- Sampling and re-processing
- Interactive music technology and virtual musicians
- Computer programming for music production
- Real-time interactive networked music
- Music in new media

Outcomes

Students will gain an understanding of many approaches to music technology, and will become adept at music production using computers. The knowledge acquired in this course will be applicable to a wide range of music and audio production contexts including film, video and new media.

DESC 9105 Neural Network Architecture and Applicat

6 credit points. Assoc. Prof. Fricke & Dr Gunaratnam. **Semester:** 1. **Classes:** Lectures and tutorials. **Assessment:** 3 assignments (2 x 30 per cent, and 40 per cent. Students have the option of selecting **a** problem, from a domain of interest to them, for the 40 per cent assognment).

Objectives

The unit aims to:

- introduce students to a number of neural network computational models available for solving a varitey of generic problems
- explore and identify the existence of these generic problems in a number of application areas within different disciplines
- investigate the different pre-processing techniques available for improving the learning and generalisation capabilities of neural networks
- explore the different methods available for selecting the neural network model characteristics for a given application
- present the basis for a number of the leaerning algoifhms available for some of the widely used neural network models

Content

The unit is organised around the three main sections: neurak network basics, models and applications. The section on neural network basics include the features and classification of generic problems, the architecture of neural networks and learning paradigms. A number of well established neural network types such as Multilayer Perceptron, Radial Basis Function, Kohonen, Probabilistic and Generalised regression networks along wityh the associated learning algorithms are considered in the models section. The application section considers issues such as variables selection, pre-processing of data, network selection and, training and validating of neural networks. The unit also explores the latest developments and refinements to some of the well established models, particularly in the areas of pre-processing of data and learning algorithms.

Outcomes

At the completion of the course each student is expected to:

- have a good understanding of the characteristics and capabilities of a number of neural network models
- be able to associate a problem in a given application area with a generic problem class and select an appropriate neural network model
- be cognisant of the theoretical bases for the features available in a number of the neural network simulation tools
- be familiar with the latest developments in neural network modelling procedures
- be able to develop neural network models for applications within their own disciplines

The above outcomes provide the basis for the different assessment tasks.

Textbooks

StatSoft (1998). Statistica: Neural networks manual (On-line manual).
Bishop, C. M. (1995). Neural networks for pattern recognition, Oxford University Press, Oxford.
Smith, M. (1993). Neural networks for statistical modelling, Van Nostrand Reinhold, New York.
Masters, T. (1995). Advanced algorithms for neural networks: A C++ sourcebook, New York.
Haykin, S. (1994). Neural network: A comprehensive foundation, Macmillan College Publishing Company, New York.

DESC 9071 **Organisational Analysis and Behaviour**

6 credit points. Semester: 1.

PLAN 9021 **Planning Law**

4 credit points. Ms Taylor. Semester: 2. Classes: Seminars and workshops. Assessment: 3 assignments.

Objectives

To develop an understanding of planning law which permits competent professional practice in addressing complex planning issues.

Content

The intention of the unit is to give students an understanding of some of the basic mechanisms of the law as an instrument of public policy. The effect of state intervention on property rights and proprietary relationships is considered. The unit will concentrate on those aspects of land and environmental law which guide the planning and development process.

Outcomes

Students should achieve:

- an appreciation of the way in which planning ideas are translated into policies and controls
- an awareness of the procedures for addressing environmental issues in planning
- a general understanding of techniques associated with community consultation
- an appreciation of the importance of using evidence and argument when preparing planning recommendations
- an understanding of the characteristics of well-structured planning documents.

Assignments require students to demonstrate the ability to generate and analyse data for the purpose of preparing planning documents and assessing development proposals. The emphasis will be upon the production of well-reasoned and well-structured planning documents which reflect an understanding of institutional arrangements and planning procedures.

PLAN 9044 **Planning Methods**

4 credit points. Assoc Prof Phibbs. Semester: 1. Assessment: Students will be assessed on their ability to use basic concepts and methods in solving problems. Each student is expected to develop a critical and creative approach to generating information relevant for problem solving. The assessment exercises require students to develop and demonstrate skills in responding to practicalproblems.

Objectives

The generic attributes engendered by the unit are capability:

- to select and use appropriate software and methods for analysing problems
- to develop creative methods for generating useful information for planning and designing
- to use computers, software and related information technology
- to prepare short practical reports

Content

The unit is taught in a set of modules that introduce basic concepts and methods by using practical applications. The main modules are:

- Census and other ABS information relevant to planners, and its use in specific analyses (such as local area studies and population predictions)
- Geographical Information Systems and related software used in planning practice
- Demographic analyses and population forecasts for a small area
- Evaluation methods based on discounting, IRR and NPV and their use in preparing feasibility studies evaluating simple program or projects; and
- Sampling and related statistical techniques for undertaking surveys

Outcomes

On completion of the unit students will be computer literate and able to use a range of concepts and methods in undertaking a range of practical planning tasks. The unit engenders knowledge and skills for engaging with the increasing roles of the computer, Internet and 'Web' systems in planning practice.

PLAN 9020 **Planning Procedures**

4 credit points. Dr. Cox. Semester: 1. Classes: Seminars, workshops and site, visits with an emphasis on class discussion of planning issues and procedures. Assessment: 2 Assignments.

Objectives

To develop an understanding of planning procedures which permits competent professional practice in addressing complex planning issues.

Content

This unit is designed to give students a working understanding of the practice of environmental planning. Basic skills essential to the preparation and implementation of planning policies and instruments are taught within the context of the Australian legislative framework, the machinery of government and the implications for the financing of development.

Outcomes

Students should achieve:

- an appreciation of the way in which planning ideas are translated into policies and controls
- an awareness of the procedures for addressmg environmental issues in planning
- a general understanding of techniques associated with community consultation
- an appreciation of the importance of using evidence and argument when preparing planning recommendations
- an understanding of the characteristics of well-structured planning documents.

Assignments require students to demonstrate the ability to generate and analyse data for the purpose of preparing planning documents and assessing development proposals. The emphasis will be upon the production of well-reasoned and well-structured planning documents which reflect an understanding of institutional arrangements and planning procedures.

ARCH 9033 **Policy Analysis**

8 credit points. To be determined. Semester: 1. Classes: Lectures.

Objectives
The objectives of this unit are to:
- provide an understanding of the nature of policy and its role in organisations
- enhance skills in dealing with policy and management issues in organisations
- enable you to apply theoretical approaches to policy analysis and to current policy issues

Content
The unit examines the way in which the term 'policy' is mobilised, to make sense of what happens in and around organisations and to shape the action. It also examines the different dimensions of policy and the significance of each for policy analysis.

PLAN 9042 **Princ of Urban Design & Dev Control**
6 credit points. Associate Professor Toon. **Semester: 1. Classes:** Lectures, class discussions and presentations, site visits and monitoring and presentation of assignments.

Objectives
The unit aims to develop a professional standard of competence in the generation and implementation of urban design and development control policies and instruments; and to demonstrate a critical and reflective awareness of the philosophies, concepts and practice of urban design and development control.

Content
The unit focuses on the development of design arguments, the translation of preferred design outcomes into development control codes, the legal framework of development controls and the preparation of development control reports. The unit covers the technical areas of local traffic and pedestrian movement, environmental factors, such as sunlight and shade, wind and noise effects, together with the aesthetic considerations relevant to landscape and those elements of the built environment that give definition to the public realm.

Outcomes
Students should be able to prepare clear and concise planning documents with advocative arguments on design and development issues, assess and report on the physical, social and economic impact of alternative urban design and development control strategies, and prepare and evaluate design proposals (arguments).

The unit is structured around a series of assignments that are designed to progressively develop the skills and knowledge essential to the achievement of a professional level of competence in the practice of urban design and development control.

DESC 9074 **Project Management**
6 credit points. **Semester:** 2. **Classes:** Lectures. **Assessment:** 3 assignments (20 per cent, 40 per cent and 40 per cent).

Objectives
- to present an introduction to the principles of contract formation and management;
- to instruct students in the methodology of contract formation and administration;
- to provide instruction in the core skills of project management including organisation, definition of project requirements; programming, cost administration and control techniques, design control and industrial relations managment; and
- to introduce related topics of quality assurance, value management, project finance and professional responsibilities.

Content
Modern buildings involve the participation of many specialist professionals and contractors who each contribute a part or parts of the work within tight cost and time constraints. An understanding of project management skills is therefore an essential requirement for successful practice by professionals and managers engaged within the building industry. The unit is designed to provide an introduction to the necessary skills and the fundamental principles and practice of them.

Outcomes
Students should acquire knowledge of contract administration within the legal framework; programming tools for time and cost management; the industrial relations environment of the construction industry; the organisation of projects and project management teams; sources and constraints applicable to project finance; and professional ethics and responsibilities.

Assignments will test the understanding of students of concepts of contract administration, prograrnming, cost control and industrial relations.

PLAN 9037 **Regional Housing Practice**
6 credit points. Assoc. Prof. Lea. **Semester: 1. Classes:** Lectures, class discussions (intensive course). **Assessment:** A practical assignment details of which will be handed out in lecture 2 and a written essay of 2-3,000 words on a topic based on the regional housing and development literature.

Objectives
Housing development policy and practice at national, regional and local levels are key concerns in Australia and countries throughout the Asia/Pacific region where economic, physical and cultural distinctions have resulted in highly differentiated housing markets. Export of housing-related services from Australia throughout the region is also well established and has led to opportunities for Australian-trained housing professionals to work offshore. At the metropolitan and municipal scales there are demands from state/provincial and local governments for local housing studies designed to address a variety of housing needs, covering analysis and forecasting of demographic, economic and social data.

Content
The unit is divided into two blocks: the first dealing with Australian housing market studies; followed by international and regional housing policy and planning considerations and case studies in the second.

Outcomes
On completion of the unit participants should be able to:
- conduct a local area housing market study in Australia and neighbouring regions
- comprehend the principles of housing data management and the content of housing data bases
- distinguish the characteristics of special housing markets
- understand the evolution of housing policy in developing countries
- compare and assess housing partnerships and enabling strategies in the Asia/Pacific region
- utilise the content and understand the methodology contained in comparative national housing policy studies and plans.

ARCH 9031 **Research Report**
12 credit points. Determined by program. **Semester: 1,2. Classes:** Independent research. **Qualifying:** For Master's students only. **Assessment:** 10 000 (maximum) word report (90 per cent), research proposal (10 per cent). Students attend an 8-hour module in research methods. Each student has an academic supervisor for the research report.

(for Master's students only)

Objectives
- To provide opportunities for students to pursue and demonstrate research skills in conservation themes of special relevance to their cultural and professional backgrounds;
- to enable students to develop innovative research approaches to the conservation of places, landscapes and buildings under expert supervision;

Content
The research report is not necessarily a piece of original research, but is primarily designed to extend the knowledge of individual students and assist them in developing relevant skills.

Outcomes
Students are assessed on their ability to carry out independent research and communicate the results in a conventional way which is appropriate for publication.

ARCH 9027 **Research Study or Research Proj Report**
12 credit points. **Semester:** 1, 2.

DESC 9076 **Science and Society**
4 credit points. Dr Hayman. **Semester:** 1. **Classes:** Lectures and seminars. **Assessment: 1** assignment.

Objectives
The unit aims to develop an appreciation of the history of Western science and its impact on Western thought, explore the impact of science on the practice of building and architecture, and encourage self-directed research and communication of ideas.

Content
This unit provides a contextual alternative to the specificity of most courses within the technical postgraduate program. It is an introduction to the study of science and covers the major

philosophical developments in Western scientific thought from its Greek foundations. Topics covered include medieval science, the Enlightenment, the Darwinian revolution and 20th century critiques of science. Part of the unit looks at the impact of science on the practice of building and architecture.

Outcomes

Students should be familiar with the history and philosophy of the Western scientific tradition and its impact on the practice of building and architecture. They should also be able to carry out and communicate a small-scale, self-directed, research report.

The scope covered by the lectures allows students to explore the research potential of a particular area of interest, within the domain of the unit. The seminars provide students with a more public environment to communicate their ideas.

DESC 9129 **Screen Studies**

6 credit points. To be determined. **Semester:** 1. **Classes:** The unit will be held once a week with each session being three hours in length. **Assessment:** The assessment is based on three assignments. * A two and a half thousand word essay reviewing an Australian film with reference to the social period in which the film was made - 50%. * Class presentations using slides, still film and audio to express an understanding of film language - 25%. * Class presentation of a pitch with a prepared budget.

Objectives

The objective of this unit of study is to give students a complex understanding of film as a language, the context of film within Australian history and its organisational structure. Film will be analysed through its audio-visual aesthetic to examine how meaning is created. Australian film history is discussed with reference to the current nature of the industry in the late nineties. The course will give students a firm grounding in how film as an industry functions in Australian society. Content

Topics include: how sound and image create meaning; mise en scene; Australian film history 1900 to 1945; the new Wave 1968 to 1986; film making today; the translation of film from script to screen.; funding bodies including the Australian Film Commission, The New South Wales Film and Television Office, Film Finance Corporation, Local Television stations and private funding bodies.

Outcomes

The students will: gain an understanding of the principals of film language; have a knowledge of the Australian film history; have an understanding of the structure of the Australian film industry; be able to prepare a script pitch either for a short or feature film; prepare a budget for either a short or feature film.

Textbooks

Altaian, Sound Theory Sound Practice, Routiedge, 1986
Pincus Edward & Steven Ascher, The Film Makers Handbook, Penguin Books, 1983
Scott Murray, Australian Cinema, Allen and Unwin, 1994
Louis Giannetti, Understanding Movies, Simon and Schuster Company, 1993 3rd Edition.

DESC 9130 **Script Writing/Directing**

6 credit points. To be determined. **Semester:** 1. **Classes:** The unit is given in one three hour lecture or workshop per week over thirteen weeks. The first part is the presentation of the theoretical material and the viewing of examples. The remaining is workshop based where students execute individual projects. **Assessment:** Assessment is based on five criteria: participation in, class discussions of ideas and material presented, crewing in class exercises and contribution to the team spirit of the group (20%); for the selection or writing of an appropriate script and a one page outline for that script (20%); for directing a short script (20%); a written script (20%); for a written self appraisal and evaluation of their practical work (20%).

Objectives

This unit of study will introduce the industry standards in writing and directing within the process of film production. The specific areas of examination are: the ninning of a film set with chains of command, responsibilities and standard procedures; the conception and maintenance of a vision for film projects; an understanding of different approaches to the production of a screen performance; an understanding of writing for the screen in both visual translation and formatting.

Content

This unit provides an opportunity to view and explore a wide range of approaches to the actor / director relationship. Topics include: European, Asian, American and Australian feature film traditions; the distinctions in the actor/director relationship between film and theatre practice; the importance of actors (characters) to the resulting drama of a film; special considerations for short film production; script formatting for motion picture; the translation of script to screen.

Outcomes

It is expected that students will: have a good understanding of the range of skills and preparation needed to direct actors; be able to interpret a short script in the preparation for direction; develop a plan for achieving their stated objectives for directing a short script; gain confidence through the practical execution of a short script; learn a character part for a small scene and take directions in performing that role; be able to critically examine their own work off the screen and suggest changes that might improve their directing; be able to work within the group dynamic and to creative outcomes in film making; be able to format a script and write for the screen; be able to edit their scriptwriting and translate ideas to the special considerations for the screen.

Textbooks

Airman, Sound Theory Sound Practice, Routiedge, 1986
Armer, Alan, Writing the screenplay: TV and Film. Belmont. Ca:Wadsworth Publishing Co.1988
Brady, John, The Craft of the Screenwriter. Interviews with six celebrated screenwriters. New York: Simon and Schuster.
Robert Bresson (1986) Notes on the cinematographer, Quartet Encounters, Quartet Books
Dmytryk, Edward, On Screen Writing. Boston: Focal Press 1985
Pincus Edward & Steven Ascher, The Film Makers Handbook, Penguin Books, 1983.
Field, Syd, The Screenwriter's Workbook, Dell Publishing 1984
Field, Syd, Screenplay:the foundations of screenwriting, NewYork:Delta 1979.
King, Viki, Wow to write a movie in twenty one days:the inner movie meuiod. New York: Perennial Library 1988.
Mehring, Margaret, The screen: a blend of film and content. Boston: Focal Press 1990.
Seger, Linda, Making a good script great. New York: Dogg, Mead 1987.
Tarkovsky Andre, Scultping in Time, Penguin Books, 1983
Vogler, Christopher, The Writer's Journey: Mythical Structures for Storytellers and Screenwriters. Michael Wiese Productions, USA, 1992.

DESC 9078 **Solar Energy and Passive Design**

4 credit points. Mr Forwood. **Semester:** 2. **Classes:** Lectures, tutorials and seminars. **Assessment:** 2 assignments.

Objectives

The unit aims to provide the opportunity to study solar energy as an energy source for buildings and to explore, in depth, the principles and practice of passive solar building design.

Content

Topics covered in the unit include: solar energy as a source of power; the physics of radiant energy transfer; active solar systems; principles of passive solar design; sizing of passive solar elements; case studies.

Outcomes

At the end of the unit students are expected to have a working knowledge of the physics of radiation energy transfer; have an understanding of the use of solar energy in active and passive technologies in building; and have studied, in depth, some aspect of the impact of solar energy in buildings. Students should be able to determine the preliminary sizing of the major elements of a passive solar building.

One assignment provides the opportunity for students to present the findings of their in-depth study and the other is a design analysis exercise.

DESC 9117 **Sound Design for New Media**

6 credit points. To be determined. **Semester: 1,** 2. **Classes:** Lectures, computer lab, and studio sessions. **Qualifying:** Preference given to Digital Media and Film and Digital Video students. **Assessment:** Project work - 50 percent, written assignment - 35 per cent, class attendance and participation - 1 5 per cent.

NB: Permission required for enrolment.

Objectives

- To introduce essential sound design concepts including editing, synchronisation, rythm and counterpoint.
- To provide an overview of the sound design for visual media process including development an understanding of the historical impact of film 'factory', radio and television broacasting production antecedents on the design language.
- To learn skills in tracklaying, mixing and mastering audio for different media and genres.
- To learn essential sound recording skills.
- To learn the creation of various psychoacoustic effects and atmospheres.
- To learn essential file management and archiving skills.

Content
This unit is intended to give an understanding of the theory and practice of digital audio production for various visual media including digital video, web-based and interactive media.

Using the industry standard ProTools software the unit will look at current computer-based tools and techniques available to the sound designer, as well as examine the various underlying strategies, processes, and sound design philosophies. The unit will offer a grounding in the history, theory and criticism of sound design and its applicability to current digital visual media. It will introduce conventional and non-conventional production models across a range of media production modes in broadcasting and multimedia.

The sound designer's role in the process of creation of meaning will be examined in cultural as well as technical contexts of compositional practices. It is anticipated that the unit will encourage debate about and a demystification of current production practices. It will aim at developing and extending production techniques towards an individual aesthetic.

To learn essential post-production skills in computer-based sound design in a studio environment.

Outcomes
At the completion of this unit students will be expected to:

- understand the aural medium, essential concepts and terms;
- have an overview of film 'factory', radio and atelevision broadcasting production antecedents on the design language;
- be acquainted with the history, theory and criticism of audiovisual technology and design;
- develop an audiovisual language;
- understand spatial aspects of sound design;
- develop technical and conceptual skills in preproduction; general miking techniques; postsynchronisation dialogue; editing dialogue; producing sound effects; multi-tracklaying; selecting music; creating atmospheres and various psychoacoustic effects; synchronisation and related issues; mixing sound for vision; mastering for different media and genres; archiving.

Practical: A TDM -based ProTools 5.0x system capable of synchronisation with QuickTime movies based in the Audio Studio (Room 157) would be desirable to teach all aspects of the course as outlined above, particularly with respect to exercises and demonstrations of sound-image synchronisation such as Foley and ADR. Additional access to Mac Lab work stations will be required. It is, however, possible to offer the course, including synchronisation practices, using current resources which include a ProTools LITE system albeit certain areas of practice (as opposed to theory) such as Foley and ADR would be covered less extensively. In addition access to a VHS video projector and data projector would be required for some classes. A video capture card would also be desirable.

Textbooks
Chion, Michele Audio Vision. Columbia U. Press 1994
Altaian, Rick (ed) Sound Theory/Sound Practice NY Routledgel992
Alten, Stanley R. Audio In Media
Holman, Tomlinson Sound For Film & Television
Kerner, Marvin M. The Art of the Sound Effects Editor
LoBrutto Vincent Sound On Film: Interviews With Creators Of Film Sound Praeger 1994
Mansfield, John Music and sound effects: Sound for television
Neale, Steve The Aesthetic of Film Sound
Ong, Walter J. The Inferiority of Sound
Weis Elisabeth and John Belton (eds) Film Sound: Theory and Practice NY Columbia University press 1985.
Williams, Alan 'Is Sound Recording Like A Language?' in Yale French Studies

ARCH 9015 Trad Bldg Methods & Conserv of Materials

4 credit points. Mr Howells. **Semester: 2. Classes:** Lectures and site visits. **Assessment:** Assignment (50 per cent) and seminar: presentation (25 percent), report (25 percent).

Objectives
This unit gives students the opportunity to acquire a thorough understanding and appreciation of traditional building methods and to develop an understanding and knowledge of current and appropriate methods of materials conservation.

Content
The unit will consist of the following: traditional methods of construction (stone and brick masonry, vernacular and primitive building methods, timber construction, use of glass, glazed and unglazed tiles, cast iron, lead copper, corrugated iron); and the conservation of materials (stone, brick, pise, timber, terracotta, glazed ceramic tiles, cast and corrugated iron, lead, copper and pressed metal).

Outcomes
At the conclusion of the unit the student will successfully demonstrate (1) an understanding of traditional methods of building materials and their attendant techniques, (2) an appreciation of the implications of the employment of traditional crafts in the current building environment, and (3) knowledge of appropriate methods of repair and conservation of traditional materials.

The intended outcomes, achieved through inquiry, individual and group study and research, will be demonstrated by each student upon the successful completion of the set assignments. The unit surveys the knowledge in the field and focuses on the major forms of traditional construction and materials. The assignment has been constructed to allow the student to demonstrate a detailed understanding of a selected material and the methods of its traditional use. Assessment criteria based on unit outcomes are used for the examination of the assignment.

ARCH 9007 Transformation of Cultural Environments

4 credit points. Dr Lamb. **Semester: 2. Classes:** Lectures and seminars. **Assessment:** Essay (30 per cent), position paper (20 per cent), seminar presentation (25 per cent) and participation in class discussion (25 per cent).

Objectives
This unit will examine the rapid change in traditional settlements, cultural values and the relation of tradition to modernisation; analyse the rehabilitation of historic areas; assess the impacts of cultural exchanges and visitation in historic urban places; and facilitate the incorporation of cultural factors in planning urban developments.

Content
The unit covers four main areas: cultural development (cultural identity and continuity in urban places and their relationship to heritage conservation); cultural transformation (trends in the cross-cultural occupation, use and rehabilitation of places in historic settlements; change in habitats and the resilience of local communities in urban places); dual urban structures (Asian and European morphologies in colonial and post-colonial settlements); cultural tourism (cultural heritage, tourism and cultural exchange, visitation trends and cultural rush; carrying capacity of historic places and resources).

Outcomes
Students will have the ability to identify changes in traditional settlements and critical aspects of cultural continuity portrayed in the use and fabric of traditional places; identify the social exchanges and impacts observed in such places when subject to intense visitation and conflict; and define strategies for rehabilitation of traditional settlements.

Students are assessed on their demonstrated ability to present seminars on the identification of cultural continuity in traditional settlements and develop programs to foster the development of strategies for rehabilitation of places subject to tourism pressure and development conflicts.

ARCH 9036 Urban and Regional Design in Sydney

4 credit points. Prof. Droege. **Semester: 2. Classes:** Lectures and design exercises. **Assessment:** Several papers throughout the semester, comparably weighted.

Objectives
To provide a critical understanding of the aims, activities and impacts of the key urban and regional design and management institutions in greater Sydney and NSW.

Content
The unit examines histories, present realities and futures of urban and regional change in Australia's premier city. Major planning, transport, and environmental institutions are introduced by their executives, presenting their respective roles and interactions in shaping long-range urban and regional form outcomes. Community groups, policy-innovators and visionary planning and design experts complete the picture, challenging the participants to form his or her own positions, and contribute to ideas about a better Sydney that aer at once professionally informed and personally engaged.

Outcomes
Raised levels of insight in the institutional construction of large-scale, long-range design decisions,

Assessments probe into participants' understanding of the issues, their ability for criticl inquiry and to formulate policy advice. The final in-class workshop explores team work and regional-scale design capabilities.

ARCH 9021 **Urban Design History, Theory & Criticism**

4 credit points. Webber and Armstrong. **Semester: 1. Classes:** Lectures and discourse sessions. **Assessment:** Applied and reflective written exercises, discourse.

Content

Explores the evolution of ideas and principles of urban design by centring on the relationship between societal change and the formal organisation of the urban environment. Historical, theoretical and critical lines of argument will be pursued by examining urban places and spaces in their making, use and change, ranging rom early civilisations to the present.

PLAN 9043 **Urban Design Policy and Practice**

6 credit points. Associate Professor Toon. **Semester: 2. Classes:** Lectures, workshops, and field trips. **Assessment:** Urban design evaluation (20%), two development assessments (20% each), major settlement study (40%).

Objectives

Achieve a professional standard of competence in formulation and evaluation of urban design and devlopment principles and proposals.

Outcomes

Students will be able to competently address diverse design and deveopment issues in preparing instruments and implementing policies. They will have achieved demonstrable skills in design and planning arguments to support analyses, policy intervention and development issues of different scale and complexity within prevailing legal and political contexts.

ARCH 9001 **Urban Design Studio A**

12 credit points. Prof. Droege and other Faculty staff. **Semester: 1. Classes:** Studio work, presentations and critiques. **Assumed knowledge:** It is recommended that unit ARCH 9022 (Methods in Urban Design) is taken concurrently with Urban Design Studio A. **Assessment:** Ongoing, equally weighted evaluation of progressive studio tasks ranging from one to four weeks in duration.

Objectives

The unit will provide structured opportunities to understand urban design in its comprehensive nature, and to develop design, decision-making and communication skills.

Content

The studios are central to the program experience. In intensive work on real-life urban design challenges both practical skills and critical thinking are developed. The studios emulate the comprehensive nature of today's urban design challenges and test participants' growing ability to invent practical solutions of social, environmental, cultural, aesthetic and intellectual relevance. Design concepts will flow throughout the year along a 'cities within' theme, focusing on institutional, communal and corporate domains within large metropolitan areas.

Outcomes

Students will gain a comprehensively structured range of advanced urban design skills.

Assessments evaluate the participants' ability to intelligently assess needs and conditions, produce and interpret design briefs, generate creative design visions and develop comprehensive institutional strategies to achieve the desired outcomes.

ARCH 9002 **Urban Design Studio B**

12 credit points. Prof. Droege and other Faculty staff. **Semester:** 2. **Classes:** Studio work, presentations and critiques. **Prerequisite:** ARCH 9001. **Assessment:** Ongoing, equally weighted evaluation of progressive studio tasks ranging from one to four weeks in duration.

Objectives

The unit will provide structured opportunities to understand urban design in its comprehensive nature, and to develop design, decision-making and communication skills.

Content

The studios are central to the program experience. In intensive work on real-life urban design challenges both practical skills and critical thinking are developed. The studios emulate the comprehensive nature of today's urban design challenges and test participants' growing ability to invent practical solutions of social, environmental, cultural, aesthetic and intellectual relevance. Design concepts will flow throughout the year along a 'cities within' theme, focusing on institutional, communal and corporate domains within large metropolitan areas.

Outcomes

Students will gain a comprehensively structured range of advanced urban design skills.

Assessments evaluate the participants' ability to intelligently assess needs and conditions, produce and interpret design briefs, generate creative design visions and develop comprehensive institutional strategies to achieve the desired outcomes.

DESC 9084 **Vertical Transportation Services**

4 credit points. **Semester: 2. Classes:** Lectures.

Objectives

- To present an understanding of the movement of people through high-rise buildings;
- to instruct students in regulations and standards affecting the vertical transportation industry;
- to examine available types of lifts, escalators and moving walks;
- to present the methodology of lift traffic studies and manual and computer-aided lift system design;
- ′ to develop an understanding of lift power and control systems; and
- to discuss maintenance and repair and to consider possibilities for the future in the lift industry.

Content

Many modem building projects require installation of lifts or other means of moving people vertically. An understanding of the equipment used for this purpose together with associated design skills is therefore a valuable attainment for professionals and managers engaged with the building industry. This unit is designed to provide that understanding of underlying principles and practice.

Outcomes

It is expected that students will acquire a knowledge of the relationships between buildings, building populations and the lift installation; regulations and standards affecting lift, escalator and moving walk installations in Australia; the elements and construction of vertical transportation equipment; lift power and control systems; and traffic analysis calculations.

Assignments will test the ability of students to apply the knowledge gained to the solution of practical problems in lift system design.

DESC 9103 **Virtual Architecture**

6 credit points. Prof. Maher. **Semester:** 2. **Classes:** Lectures and tutorials. **Assumed knowledge:** DESC 9097, DESC 9019 or DESC 9096. **Prerequisite:** DESC 9097. **Assessment:** 30 per cent essay; 70 per cent virtual architecture design.

Objectives

- To understand the different types of virtual architecture.
- To develop design principles in creating new virtual architecture.
- To develop skills in using and designing virtual worlds.

Content

Virtual Architecture is the use of digital media to represent buildings and other forms of architecture. This unit of study focusses on the design and implementation of Virtual Architecture that produces functional places in their digital representation. Virtual Worlds such as MOOs, Active Worlds, and Virtools will be introduced as the tools for implementing Virtual Architecture. Emphasis will be placed on the development of object-oriented persistent Virtual Architecture.

Outcomes

- An implemented virtual world design.
- Skills in using 3D midels for implementation as virtual architecture.
- An appreciation of different design styles for virtual architecture.

DESC 9123 **Web Site Design**

6 credit points. Prof. Maher. **Semester:** 1,2, Summer. **Classes:** On-line exercises and tutorials. **Assumed knowledge:** DESC 9139. **Assessment:** 20 per cent home page design; 80 per cent Web design portfolio.

NB: Permission required for enrolment.

Objectives

- To understand the basics of the Internet and WWW standards and protocols.
- To develop design principles for effective layout and navigation, use of colour and images in Web pages.
- To learn to use Web site design software such as Dreamweaver.

Content

This is an online unit of study that presents the basics and the concepts of developing a Web site. The basics include a working knowledge of HTML and the Internet protocols. Different uses of Web sites will be introduced, including Internet, intranet, and

ecommerce. Web site design concepts introduced to concepts of basic user interface design and graphic design and will be presented with examples and principles of effective use of colour, images, animation and layout, as well as topics such as navigation and cognitive overload. Students will learn to use a Web site editor such as Dreamweaver. Students will learn to create a basic home page and publish it on a Web server. Students will also learn advanced navigation and presentation techniques in the development of a design portfolio.

Outcomes

- A web-based design portfolio.
- An understanding of good design principles for hypermedia.
- Skills in using Web page design and publishing software.

6 Postgraduate research information

■ Research centres

AHURI Housing and Urban Research Centre

The AHURI Research Centre is a University-wide research centre housed in the Faculty. Concerned with the breadth of housing research concerns, current research is focusing on the socio-cultural, economic and health impacts of housing, the comparative assessment of housing worldwide and the analysis and development of Australian housing policy. Like all research centres in the Faculty, it offers the opportunity to carry out research towards the MPhil(Arch) or PhD under supervision of internationally recognised academic staff actively working on these and other research questions.

Ian Buchan Fell Housing Research Centre

Ian Buchan Fell, who died in 1961, left the income from his estate to the University for the promotion and encouragement of education and research on housing. The Centre is concerned with the needs of people relative to their housing. These needs are related to the complex interactions between people, their housing and other aspects of the built environment.

Planning Research Centre

The Planning Research Centre's main purpose is to further fundamental research into physical planning and development. It also sponsors seminars in specialised fields, undertakes research and consultancy projects, runs professional development courses, and promotes the publication of research material. It has an active membership comprised of members of government and industry.

Key Centre of Design Computing and Cognition

The Key Centre of Design Computing and Cognition was established by the University with funding provided by the Department of Employment, Education and Training. The Key Centre's principal objectives are to improve the effectiveness and competitiveness of designers by providing better design decisions support through advanced computing technology. The philosophy of the Key Centre is to consider design as a discipline in its own right, requiring an interdisciplinary approach to its computational support. The Key Centre carries out teaching, research, development and consulting in the areas of design computing and design cognition. The Web site is at www.arch.usyd.edu.au/kcdc/.

■Areas of research interest

The research interests of staff members fall into the following broad areas of internationally recognized research expertise:

Architecture and Applied Arts

For further information contact Mr Trevor Howells (howells@arch.usyd.edu.au) or any member of the disciplinary group.

Architectural Education

Current work is concentrated on a study of construction and design teaching and on the learning preferences of students entering architecture. (Researchers: Purcell, Smith, Sodersten)

Architectural History,Theory and Criticism

Recent publications have been based on research in twentieth century Australian architecture, Asian art and architecture, French medieval architecture and theatre history. (Researchers: Armstrong, Hartoonian, Hill, Howells, Margalit, Rubbo, Snodgrass)

Heritage Conservation

Research has been undertaken on landscape conservation, cultural identity in international urban programs, conservation of render and decorative plasterwork, and facade retention. (Researchers: Howells, Lamb)

Architectural and Design Science

For further information contact Associate Professor Warren Julian (warren@arch.usyd.edu.au) or any member of the disciplinary group.

Audio and Acoustics

Research into acoustics includes auditorium acoustics, auditory perception, community noise assessment and environmental acoustics. Audio research includes alternative methods of controlling feedback in audio systems, analysis and synthesis of stereo and multi-channel recording and reproduction systems, the establishment of acoustic criteria, and harmonic form in sound art. (Researchers: Cabrera, Fricke, Goldberg, Helyer, Theile)

Building Services

Research includes the study of factors determining healthy building interiors, indoor air quality and natural ventilation. (Researchers: Hein, Rowe)

Energy Conservation

Research includes the form and spacemaking potential of energy and environmental issues, the history of climatic design in Australia, the exploration of contemporary wind-catchers, the aerodynamic performance of traditional Indian architecture and the use of phase change storage materials in buildings. (Researcher: Forwood)

Illumination

Research includes lighting and visual comfort models, daylighting and sky illuminance models, daylight perception. (Researchers: Hayman, Julian, Ruck)

Neural Networks

Research includes the application of neural networks to structural design and fire safety engineering. (Researcher: Gunaratnam)

Design Computing and Cognition

For further information contact Professor John Gero (john@arch.usyd.edu.au) or any member of the disciplinary group.

Agents in Design

Computational agents are active software that interacts with the environment. Current research relates to their use in creative design, virtual environments and web-related design. (Researchers: Gero, Maher, Reffat)

Computational Models of Design

The development of models of case-based reasoning in design, emergence in design, qualitative representation and reasoning with shapes and objects, design grammars and creative design. (Researchers: Gero, Maher, Reffat, Rosenman)

Computer-Mediated Collaborative Design

Research on computer-mediated collaborative design includes the development, use and effect of multi-user tools and techniques, models of collaborative design processes and communication and the behaviour of designers while designing with computer-mediation. (Researcher: Lee, Maher)

Design Cognition

Research on the cognitive studies of designers includes fixation, the role of protocol studies and the analysis of the information and cognitive structures which map onto human design activities. Research on the role of sketching in design includes the development of methodologies and the construction of

experimentally-based models of the differing roles of sketching. (Researchers: Gero, Purcell)

Evolutionary Design

Research includes evolutionary systems in design, co-evolutionary design, genetic engineering applied to design, and biological development models applied to design. (Researchers: Gero, Maher, Rosenman)

Machine Learning in Design

Research on learning and representation in design includes constructive memory models of designing, situatedness in models of designing, and knowledge discovery in multimedia design cases. (Researchers: Gero, Maher, Reffat, Rosenman)

Virtual Architecture

Research issues include the needs for and use of virtual places, models for the representation and design of virtual worlds, intelligent interfaces to virtual worlds and the role of the architecture metaphor in creating virtual places. (Researchers: Beilharz, Lee, Maher, Reffat)

Environment-Behaviour Studies

For further information contact Professor Gary Moore (gtmoore@arch.usyd.edu.au) or any member of the disciplinary group.

Children,Youth and Environments

The development and testing of scales for the assessment of children's architecture, comparative evaluation of early childhood development centres worldwide and theories of child development and the socio-physical environment. (Researcher: Moore)

Environmental Experience, Perception and Cognition

Research on environmental experience, perception and cognition including preference and evaluation of the built environment, aesthetic assessment, perception, environmental quality and cultural identity. (Researchers: Lamb, Moore, Purcell)

Housing

Research on the socio-cultural, health and economic impacts of housing, methods for the comparative assessment of housing in Australia and policy issues in social including indigenous housing. (Researchers: Moore, Phibbs, Pholeros)

Urban and Regional Planning and Policy

For further information contact Martin Payne (martin@arch.usyd.edu.au) or any member of the disciplinary group.

Economic and Community Development

Research interests include the measurement of local and regional economic impacts, regional development and planning, computer applications in planning and measuring housing need, allocating government resources for low income housing and social impact assessment. (Researcher: Phibbs)

Planning Procedures

Research interests include: rural community planning; national parks and World Heritage areas; planning procedures in NSW; housing policy. (Researcher: Gurran)

Urban Development and Planning Theory and Practice

Research interests are primarily concerned with the preparation of planning arguments, especially in the area of urban development, local government and planning procedures. (Researchers: Payne, Toon)

Housing

Research interests include measuring housing need, the non-shelter impacts of housing, increasing the supply of affordable housing, policy issues in social housing, housing and social capital. (Researchers: Gurran, Lea, Phibbs)

e-Government

Research interests include examining the impact of impact of the Internet on the world of planning; Planning in a wired world; Local Government and the Internet; How planners can use the resources on the Internet to assist them. (Researcher: Phibbs)

■ Research degrees

Doctor of Philosophy

This research degree is awarded for a thesis considered to be a substantial, original contribution to the discipline concerned. Entry requirements include a Master's degree or a Bachelor's degree with first or second class honours. Alternatively you may be admitted having passed a qualifying examination at an equivalent standard. This examination could be completion of a period of relevant advanced study and research towards a Master's degree at The University of Sydney. The PhD is normally completed within eight semesters full time or 16 semesters part time. Various forms of financial assistance are available.

For more information see the Faculty's Graduate Programs Prospectus or contact the Program Director, Professor John Gero.

Master of Philosophy (Architecture) (MPhil(Arch))

The research master's program allows a candidate to undertake research and advanced specialisation in any of the areas of scholarship and research undertaken by the Faculty. Entry requirements for the MPhil(Arch) include a bachelor's degree in a relevant discipline. The program is generally completed in four semsters full-time or eight semesters part-time. Students with a first or second class honours degree may complete the program in two semesters.

For more information, see the Faculty's Graduate Program Prospectus or contact the Program Director, Professor Gary Moore.

7 Information for Architecture students

■ Resolutions of the Senate and Faculty

These are requirements for the degrees which must be fulfilled before any student can graduate. Full details are given in the relevant chapters (2, 3,4 and 5).

Assumed knowledge

There are no formal prerequisites for students wishing to enrol in the BDes(Arch) or the BDesComp. The degrees are, however, taught on the assumption that students will have successfully completed HSC 2 Mathematics, Advanced Mathematics and Advanced English or have the equivalent knowledge. Students who have not reached that standard will benefit from supplementary work in this discipline prior to the commencement of their degree. It is recommended that students whose mathematical background is weak should, after discussion with Dr Hayman, attend one of the bridging courses in mathematics offered by the Mathematics Learning Centre (phone (02) 9351 4061) or see the General University information chapter of this handbook.

Entry to the BArch

Although most students entering the BArch are proceeding from the BDes(Arch), the Faculty reserves some places for applicants who have academic standing equivalent to the BDes(Arch) and who have degrees from other universities.

Admission to the program is competitive and is determined on the basis of academic record, a portfolio of design work, and work experience. Students should apply to the Student Admissions Adviser who is based in the Faculty Marketing and Development Centre (not the Universities Admissions Centre or UAC). Applications normally close at the end of October prior to enrolment. *It is essential that all applicants provide with their application form the original transcripts of previous study and details of work experience.* Applicants will then be considered for entry and, if shortlisted, applicants may be asked to attend an interview with the Faculty's BArch Program Committee.

Variation of enrolment

A student may discontinue one or all units of study and have these shown as a non-failure on his or her record as set out below. He or she may also enrol in new units as replacements according to the following:

(i) Withdrawal

A candidate who discontinues enrolment in a first semester unit on or before 31 March, or in a second semester unit on or before 31 August, shall be recorded as having withdrawn from that unit of study.

(ii) Discontinuation

A candidate who discontinues enrolment in a unit of study before the end of the lectures for that unit of study shall be recorded as 'Discontinued' unless the Dean, on grounds of serious ill health or misadventure, determines that the discontinuation should be recorded as 'Discontinued with Permission'.

(iii) Adding to enrolment

A student may not add to the total number of credit points of his or her enrolment after 31 March.

(iv) New enrolments

After withdrawal from a unit of study a student may enrol in a replacement unit of study up until the end of the second week of the first semester for a first semester unit of study and the end of the second week of semester two for a second semester unit, provided that the total number of credit points in which the student was enrolled at 31 March is not exceeded.

All variations to enrolment should be forwarded to the Faculty's Student Services Centre staff.

Drawing board deposit

Students are asked to pay an annual partly-refundable deposit for use of a drawing board. The Faculty will retain part of the deposit to cover the cost of maintenance of the boards during the year and for protective coverings. The rest of the deposit will be refunded at the end of third year if the board is in good condition.

Consumables fee (Tin Sheds Gallery and Art Studios)

Students choosing to study Art Studio electives will be asked to pay a consumables fee for materials that are necessary for the unit of study. Students may buy their own materials independently but are advised to purchase them through the Art Studios to save time and cost.

Building access or Swipe card

After hours access to the Wilkinson Building, and access to the computer laboratories is by swipe card. Students are asked to pay a deposit, refundable when the card is returned.

Transfer students

Students transferring from other disciplines may receive credit for elective units of study where these are deemed relevant to the aims and objectives of the degrees. Advanced standing for transferring students in architecture or related disciplines is subject to review by the Faculty.

Timetables

Timetables for the BDesign(Arch), BDes(Comp) and BArch are available before enrolment so that students can consult the timetables when planning their enrolment. Units of study cannot be taken if lecture times clash with other units of study being taken. Individual student timetables are available via the Web on MyUni.

Units of study

The University reserves the right to discontinue or vary such units of study, arrangements or staff allocations at any time but will make every effort to inform students accordingly.

Work visits

Some units of study include work or site visits to places of interest for first-hand observation. Details of these works visits will be given during classes. Where works visits are a normal part of a unit of study, this is indicated in the unit description. In all cases students are covered by University insurance on these site visits. Other units of study may involve field work or a community project outside the University grounds.

Student projects

Although a student's work which is carried out as an assignment during the course will normally be returned, it should be noted that the Faculty has the right to keep all work which may be used for exhibition or publication. It remains the responsibility of every student to safeguard his or her work to prevent damage or loss, particularly at the end of semester when studios are cleaned out. Students are advised to keep all the graphic material related to their design work in a portfolio for future use as required.

Study options after completion Of the BDesign(Arch) and BDesComp

Upon completion of the BDesign(Arch) degree there are several options available to students for further study within the Faculty of Architecture. Students enrolled on the BDesign(Arch) or BDesComp may consider applying for graduate study, provided they have achieved the appropriate qualifications and taken the specific prerequisite units of study. A list of all the Faculty's degrees is given at the front of this Handbook, but for more information, please consult the Faculty's Graduate Prospectus or the Student Admissions Adviser who is based in the Faculty Marketing and Development Centre.

Enrolment

In determining the academic direction of their degree programs, students face a complex task when enrolling, as course structures allow a wide choice. They must ensure that their yearly program of study not only meets their own requirements but also complies with those of the unit system, the prerequisite structure, the provisions for mandatory units of study and the structure of the timetable. They must also ensure that their enrolment each year gives them a workload evenly balanced over the full academic year, bearing in mind that some units of study run for one semester only and others for the full year. Staff of the Faculty will be available to assist students with enrolment. Listed below are major points that must be borne in mind during enrolment and whenever variation of enrolment is contemplated:

- completion of mandatory units of study;
- completion of prerequisites for units of study in which enrolment is intended;
- compliance with total credit point requirements for each degree;
- completion of option requirements for streams in the Bachelor of Design;
- completion of prerequisites for the Bachelor of Architecture degree course;
- structuring of an even workload over the two semesters of the academic year;
- avoidance of timetable clashes;
- observance of the full-time annual load of 48 credit points, with a maximum 56 credit points, see Faculty Resolutions forBDesign(Arch), BDesComp and BArch total for all units of study taken in any one year.

Confirmation of enrolment

All the information provided when you enrol is added to the University's computerised student record system. This includes your degree, academic year and the units you are taking. It is important that this information be recorded correctly at the beginning of the year, and amended should a change occur in any of the details during the year. Under the Higher Education Contribution Scheme (HECS), any subject enrolment has a financial implication.

To enable you to see what enrolment data has been recorded, you will be sent a HECS assessment notice every semester. You should check this carefully. If the information is correct you should keep the notice as a record of your current enrolment. Should the notice be incorrect in any detail, you should advise the Faculty's Student Services Centre promptly to have your record amended. A new notice will then be prepared and sent to you.

If you wish to:

- change a subject in which you are enrolled
- discontinue a subject
- discontinue enrolment totally

you should apply at the Faculty's Student Services Centre to obtain the appropriate approval. Your record at the University will not be correct unless you do this and in some cases you could incur a financial liability under HECS. **It is not sufficient to inform the teaching or tutoring staff that you discontinued a unit.**

Suspension of candidature

Candidates may apply for suspension of their candidature due to work pressures, illness or before admission tos the BArch. Applications should be made in writing to the Faculty's Student Services Centre as soon as the decision to suspend has been taken, giving full details of the reasons for suspension and the period requested. The Faculty normally considers suspensions for two semesters only at a time. **Once the period of suspension is over, students must re-enrol or apply for a further period of suspension.**

Upgrade of candidature

Students who have completed the Graduate Certificate requirements and have a weighted average mark (WAM) of at least 65, may apply to be upgraded to the Graduate Diploma or Masters version of their program. Graduate Diploma students may also be considered for upgrading to Masters. Applications should be made to Ms Lesley Vanderkwast, Marketing and Development Centre, by the end of October before enrolment.

Change of degree program

If at any time you consider transferring to a different degree program within the Faculty, you should first consult your program coordinator. Further details can be obtained from the Student Services Centre.

Attendance

Students must attend all lectures and other classes required for a unit of study. Design Practice and Design Studio require attendance at all sessions from week 1. Each unit has its own specific requirements for attendance, usually 90-100 per cent, without certification for illness or misadventure. If a student does not fulfil the attendance requirements as well as all other unit of study requirements, they may fail the unit.

Assessment methods and posting of results

In Bachelor of Design (Architecture), Bachelor of Design Computing and Bachelor of Architecture, a system of continuous assessment is applied in most units of study. In some, assignments are set during and at the end of the unit. Assessment by examination at the end of the unit of study is carried out for some units.

Supplementary work may be given to provide a student with a second chance to pass a unit of study. The opportunity to do supplementary work is granted only if the student's original work demonstrates that he or she has potential to perform satisfactorily (or has been seriously ill or had some other misadventure).

Students may be awarded the grades of High Distinction, Distinction or Credit for achieving a high standard in a unit of study. These grades provide the means of assessment for awarding scholarships and prizes, the selection of students who may enrol for the BDes(Arch) and BDesComp honours degrees and the award of honours in the BArch degree.

Final results for units of study are discussed by staff at a number of meetings, where extenuating circumstances, such as illness, are taken into account. Results are available on the Web via MyUni about three weeks after the end of the examination period. The Registrar writes to each student notifying them of the results in each unit of study.

Late submission policy

In the interests of equity, the Faculty requires students to submit all assignments by the due dates, which are notified in the formal written information given to students for each unit of study.

This policy applies to all undergraduate and graduate coursework students in the Faculty. The Head of School is responsible for ensuring that this policy is applied consistently by all staff.

1. Extensions

An extension to a submission date may be granted to a student in the event of illness or misadventure, or for a part-time postgraduate student because of unexpected employer demands.

To request an extension, the student must complete a Request Form available from the Faculty's Student Services Centre, as soon as practical after the illness, misadventure or change in circumstances.

The student:

(a) contacts and provides copies of the form and evidence to each unit of study coordinator involved.
(b) returns the completed request form with original copies of any documentary evidence to the Student Services Centre, together with an appropriate academic signature;

The unit of study coordinator will:

(a) inform the student whether he or she has been granted an extension and if so, the revised due date;
(b) keep a record of all requests received for special consideration (including extensions) including the date received, and the date of and response to the student.

2. Late submissions without permission

If a unit of study allows late submissions and a student has not received an extension to the due date, the following will apply to each late submission (includes separate components of a unit's assessment, honours theses, Advanced Study Reports and dissertations):

Submissions of assignments will be accepted up to 14 days late with the following penalties applied

- Up to 7 days late: the mark awarded is reduced by 10 per cent
- Up to 14 days late: the mark awarded is reduced by 30 per cent
- More than 14 days late: not accepted.

Professional qualifications

Graduates who hold the degree of Bachelor of Architecture will be entitled to registration as architects under the Architects Act 1921 (NSW), subject to obtaining two years of approved practical experience, at least twelve months of which must be subsequent to graduation, and passing an architectural practice examination before registration. Application for registration may be made to the Board of Architects of New South Wales, 'Tusculum', 3 Manning Street, Potts Point, 2011.

Students are eligible for student membership of the Royal Australian Institute of Architects. Student members receive each issue of *Architecture Australia,* the New South Wales chapter Bulletin, and the RAJA News. They may also attend Institute functions.

Admission to Associate Membership of the Royal Australian Institute of Architects is based on two years' approved practical experience.

Assessment and examinations

There are two formal examination periods in each year:

- Semester 1, around June, 2-3 weeks
- Semester 2, around November, 3-4 weeks.

In addition examinations may be set at other times and by various methods of assessment, such as essays, assignments, viva voce, practical work, etc.

Examination timetables

Draft timetables available via the Web (MyUni) and are displayed in the Carslaw Student Centre Foyer approximately 3-4 weeks before the commencement of examinations.

Notification of examination results

The results of annual examinations available via MyUni and posted directly to you at the end of the year.

Disclosure of examination marks

Final marks will appear on your annual results notice. Marks may also be obtained from your department for the major components of assessment which make up the final marks. You are entitled to information about any details of the assessment procedures used to determine the final result.

Your examination scripts and any other assessment material may be retrieved within a reasonable time after the completion of assessment in each unit of study. This does not apply to examination papers which involve the repeated use of the same material in successive examinations.

Examination grades

Each unit taken, unless a pass/fail unit in which case the result is R (requirements met), will be allotted one of the following grades at the annual examinations:

- High Distinction, 85-100
- Distinction, 75-84
- Credit, 65-74
- Pass, 50-64
- Fail, 0-49

AF: Absent Fail
W: Withdrawn
DNF: Discontinued - not count as failure
DF: Discontinued - fail

Illness or misadventure

You may apply in writing for special consideration of your examination performance on grounds of illness or misadventure. In the case of illness a medical certificate should be provided. The minimum requirements of a medical certificate are that it:

(a) be submitted and signed by your own medical practitioner and indicate the date on which you sought attention;
(b) certify unambiguously to a specified illness or medical disability for a definite period;
(c) indicate the degree of your incapacity, and express a professional opinion as to the effect of your illness on your ability to take an examination.

Certificates in connection with annual examinations should be submitted prior to the examinations, unless the illness or misadventure takes place during the examinations, in which case the evidence must be forwarded as soon as practicable, and in any case before the close of the examination period. There is a special form available at the Student Centre and at the University Health Service for submission with medical certificates.

For special consideration on the ground of misadventure, your application must include a full statement of circumstances and any available supporting evidence.

The need to seek early advice

Many students in need of advice fail to make full use of the assistance available to them. If you believe that your performance during a unit, or your preparation for your examinations, has been adversely affected by medical, psychological or family circumstances, you should seek advice as early as possible. Members of the teaching staff, the Umversity Counselling Service, and the University Health Service, are all available for consultation and can give advice on appropriate action to take.

Plagiarism

The University is committed to the basic academic right that students receive due credit for work submitted for assessment. Integral to this is the notion that it is clearly unfair for students to submit work for assessment that is not their own and which is not attributed to the original authors. This is known as plagiarism. Such activity undermines the fabric of universities by compromising the integrity of academic work

Exclusion

Restriction upon re-enrolment

There are certain circumstances in which you could be asked to show 'good cause' why you should be permitted to repeat any previously attempted study. In the Faculty of Architecture the most common reason is that a student has failed a required unit of study more than once.

The resolutions of the Senate restricting re-enrolment may be found in The University of Sydney (Coursework) Rule 2000 (see chapter 8) and under Faculty resolutions governing your degree. If you are in any doubt about your liability for exclusion following academic failure or discontinuation of units of study you should seek advice from the Student Services Centre.

It is not possible to define in advance all the reasons that constitute 'good cause' but serious ill health, or misadventure properly attested, will be considered. In addition your general record, for example in other units, would be taken into account. In particular if you were transferring from another faculty your record in your previous faculty would be considered. Not usually acceptable as 'good cause' are such matters as demands of employers, pressure of employment, time devoted to non-university activities, except if they may be relevant to any serious ill health or misadventure.

Appeals

Many decisions about academic and non-academic issues are made in the University each year, and in some cases the by-laws or resolutions of the Senate provide for a right of appeal against decisions. This is the case, for example, in the resolutions of the Senate relating to exclusion of students after failure. However, there are many other situations without such specific provision for appeal where you might wish to have a decision reviewed or to draw attention to additional information relevant to your case. As a general rule in these circumstances you are invited to address a request of this nature in writing, or to discuss the matter with, the relevant organisation (for example, the SRC or SUPRA) or University department (for example, Examinations, Scholarships, Financial Assistance). Advice may also be sought from the Student Services Centre.

Discrimination

The University is opposed to all forms of discrimination, including those based on sex, race, marital status, age, sexual preference, political or religious beliefs and physical impairment. State and Federal legislation supports this view. Discrimination can occur in various ways, including verbal and physical harassment. The Vice-Chancellor has appointed Discrimination Advisers to hear complaints from staff and students who suspect or believe that they are being discriminated against.

The Discrimination Advisers are available to discuss problems in confidence and to provide advice and assistance if the complainant wishes. Details are available from the Staff and Student Equal Opportunity unit Web site at www.usyd.edu.au/eeo/ or phone (02) 9351 2212.

■ Scholarships and prizes

A large number of scholarships and prizes for the Faculty of Architecture are awarded by the Faculty on the basis of academic merit. The following are other awards for which application must

be made. Full details of all scholarships may be obtained from the Scholarships Office in the Main Quadrangle.

Details of the Faculty's Prizes and Scholarships can be viewed on the Web at www.arch.usyd.edu.au/nwfa/scholarships/index.html#4.

■ Faculty centres and facilities

Student Services Centre

The Centre provides friendly confidential advice on student issues such as enrolment, suspensions and annual progress. Advice on academic matters (eg, assessment deadlines) should be addressed to individual members of academic staff or the Academic Support Centre in Room 353.

The Denis Winston Library

The Denis Winston Library is a branch of the University Library and is acknowledged as the largest and best architecture, architectural science, design science, planning and allied disciplines library in Australia. Students also have access to the other branch libraries and the main Fisher Library.

Resource Centres

In addition to the facilities already mentioned, the Faculty has a number of specialised resource centres. These have been developed to assist the Faculty's teaching and research and are accessible to all students.

Audio Visual Centre

The Audio Visual Centre has a library housing an extensive film, video, slide and tape collection including an extensive digital media collection. It also has a wide range of equipment for use in the Centre or in the attached viewing theatre.

Architectural and Technical Services Centre

The Faculty has well-established laboratories and items of equipment for teaching, student project work and graduate and staff research. These include the following laboratories: materials testing, ventilation modelling, object design, model making, manufacture and prototype construction as well as large models testing. There are also industry standard facilities such as heliodon, acoustics laboratory with anechoic and reverberant rooms, wind tunnel, mirror chamber skies, photometry, thermal environment, natural lighting, artificial skies and psychophysics laboratories.

Computer facilities

Our computer labs are open 24 hours for enrolled students and are a great resource for teaching computer aided design, computer-aided presentation, digital media and the technical skills of programming and systems organisation and management in design computing. Our servers include Web servers, database servers, a virtual campus, and various virtual worlds. The labs contain networked multimedia computers and workstations with the latest technology in computer-aided design, and have links to university and external computer networks for access to the Internet.

Acoustics Laboratory

This is a teaching and research laboratory with reverberant and anechoic test chambers and an extensive range of NATA certified measuring equipment plus computer systems for instrument control, audio and acoustic measurement, acoustic modelling and sound field simulation.

Audio Recording and Research Studio

This is a computer-based recording studio, with acoustically isolated recording and control rooms. The studio is set up for music and voice recording and video sound post-production. The studio incorporates ProTools software.

Digital Media Studio

Established in 1998 for teaching and research, the digital media studio augments the Faculty's existing computing resources and provides a network of Silicon Graphics workstations which are used for 3D animation and graphics programming.

Illumination Laboratory

There are a number of lighting laboratories in the building. The photometric laboratory contains an optical bench (which also serves as a distribution photometer), an integrating sphere and numerous measuring instruments. The psychophysics laboratory has a dimmable lighting system for various experiments. A specialised teaching room is equipped with lamps, luminaires and other equipment and there is also a heliodon.

Darkrooms and plan printing

Darkrooms, plan printing equipment and an artiscope are available for student use.

Other laboratories

The Faculty has well-established laboratories and items of equipment for teaching, student project work and graduate and staff research. These include: materials laboratory, stress grading laboratory, ventilation model laboratory, small models laboratory, large models laboratory, services laboratory, heliodon, elementary and senior mechanics laboratories, anechoic room, acoustics laboratory, reverberant room, psychophysics laboratory, natural lighting laboratory, photometry laboratory, three artificial skies and a thermal environment laboratory.

Sydney University Architecture Society

The Sydney University Architecture Society is run by the students to promote student interaction both within and outside the Faculty through a variety of activities, which includes participation in Faculty and departmental committees, inter-faculty sporting competitions, guest lectures, a faculty newspaper, the Architecture Ball and the Architecture Revue.

Every undergraduate student in the Faculty is automatically a member of the Society - part of the SRC subscription paid by each student is allocated to the Society, which uses the money to promote activities. Enquires about the Society should be directed to the SUAS office, level 2, Wilkinson Building, University of Sydney. Messages may be left in the Faculty's Academic Support Centre

Participation in University governance

There is provision for the election of students, by and from the student body, to membership of the Senate, the Academic Board and the faculties and boards of studies. Student members are also to be found on other committees of the University, including faculty and departmental committees and boards.

The term of office is generally one year, from January to December, except the Senate which is from 1 December one year to 30 November the next. Elections are held by postal vote in October and notices calling for nominations are sent out in August/September. Details of the elections are placed on the noticeboards in the Science Road tunnel and published in *UniNews* and the *Bulletin Board.* Election announcements are also made available to *Honi Soit* and the *Union Recorder* for publication and are available from the Student Centre and faculty/college offices. Before any election the appropriate ballot papers and instructions, as well as information about the candidates, are sent to all students concerned.

The Senate is the governing body of the University; the Academic Board coordinates the work of the faculties and boards of studies and advises the Senate on academic matters; the faculties and boards of studies are concerned with the teaching and examining of their subjects and with research in the various departments and schools.

The important contribution that students can make to the governance of the University is recognised through student membership of its governing bodies. As a student you are urged to take an active part in the selection of student members by nominating candidates and by voting in each election that concerns you. By participating in these elections you can become more familiar with the functioning of the University and can help ensure that your interests are taken into consideration in decisions that affect your work at the University.

Membership of the Senate is provided for in the University of Sydney Act 1989, Section 9. Membership of the Academic Board, of the faculties and boards of studies and of the school and departmental boards, is specified in Chapter 8 of the by-laws and in resolutions of the Senate following that chapter. For details see the *Calendar 1999, Vol. I: Statutes and Regulations.*

8 University of Sydney (Coursework) Rule 2000

Under The University of Sydney By-law 1999 The Senate of The University of Sydney has approved the following Rule pursuant to section 37(1) of The University of Sydney Act 1989 for the purposes of The University of Sydney By-law 1999.

This Rule:

(a) takes effect from 1 January 2001 in accordance with section 37(2) of The University of Sydney Act 1989; and

(b) repeals and replaces The University of Sydney (Undergraduate Courses) Rule 1999.

William Adams, Registrar
Dated 6 December 2000.

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■ Preliminary

1. Commencement and purpose of Rule

(l)This Rule is made by the Senate pursuant to section 37(1) of the University of Sydney Act 1989 for the purposes of the University of Sydney By-law 1999.

(2) This Rule comes into force on 1 January 2001.

(3) This Rule governs all coursework award courses in the University. It is to be read in conjunction with the University of Sydney (Amendment Act) Rule 1999 and the Resolutions of the Senate and the faculty resolutions relating to each award course in that faculty.

■ Rules relating to coursework award courses

1. Definitions

In this Rule:

award course means a formally approved program of study which can lead to an academic award granted by the University.

coursework means an award course not designated as a research award course. While the program of study in a coursework award course may include a component of original, supervised research, other forms of instruction and learning normally will be dominant. All undergraduate award courses are coursework award courses;

credit means advanced standing based on previous attainment in another award course at the University or at another institution. The advanced standing is expressed as credit points granted towards the award course. Credit may be granted as specific credit or non-specific credit.

Specific credit means the recognition of previously completed studies as directly equivalent to units of study.

Non-specific credit means a 'block credit' for a specified number of credit points at a particular level. These credit points may be in a particular subject area but are not linked to a specific unit of study;

credit points mean a measure of value indicating the contribution each unit of study provides towards meeting award course completion requirements stated as a total credit point value;

dean means the dean of a faculty or the director or principal of an academic college or the chairperson of a board of studies;

degree means a degree at the level of bachelor or master for the purpose of this Rule;

embedded courses/programs means award courses in the graduate certificate / graduate diploma / master's degree by coursework sequence which allow unit of study credit points to count in more than one of the awards;

faculty means a faculty, college board, a board of studies or the Australian Graduate School of Management Limited as established in each case by its constitution and in these Rules refers to the faculty or faculties responsible for the award course concerned;

major means a defined program of study, generally comprising specified units of study from later stages of the award course;

minor means a defined program of study, generally comprising units of study from later stages of the award course and requiring a smaller number of credit points than a major;

postgraduate award course means an award course leading to the award of a graduate certificate, graduate diploma, degree of master or a doctorate. Normally, a postgraduate award course requires the prior completion of a relevant undergraduate degree or diploma.

research award course means an award course in which students undertake and report systematic, creative work in order to increase the stock of knowledge. The research award courses offered by the University are: higher doctorate, Doctor of Philosophy, doctorates by research and advanced coursework, and certain degrees of master designated as research degrees. The systematic, creative component of a research award course must comprise at least 66% of the overall award course requirements;

stream means a defined program of study within an award course, which requires the completion of a program of study specified by the award course rules for the particular stream, in addition to the core program specified by award course rules for the award course.

student means a person enrolled as a candidate for a course;

testamur means a certificate of award provided to a graduate, usually at a graduation ceremony;

transcript or *academic transcript* means a printed statement setting out a student's academic record at the University;

unit of study means the smallest stand-alone component of a student's award course that is recordable on a student's transcript. Units of study have an integer credit point value, normally in the range 3-24;

undergraduate award course means an award course leading to the award of an associate diploma, diploma, advanced diploma or degree of bachelor.

2. Authorities and responsibilities

(1) Authorities and responsibilities for the functions set out in this Rule are also defined in the document *Academic Delegations of Authority*. The latter document sets out the mechanisms by which a person who has delegated authority may appoint an agent to perform a particular function.

(2) The procedures for consideration of, and deadlines for submission of, proposals for new and amended award courses will be determined by the Academic Board.

Division 1 -Award course requirements, credit points and assessment

3. Award course requirements

(l)To qualify for the award of a degree, diploma or certificate, a student must:

(a) complete the award course requirements specified by the Senate for the award of the degree, diploma or certificate concerned;

(b) complete any other award course requirements specified by the Academic Board on the recommendation of the faculty and published in the faculty resolutions relating to the award course;

(c) complete any other award course requirements specified by the faculty in accordance with its delegated authority and published in the faculty resolutions relating to the award course; and

(d) satisfy the requirements of all other relevant by-laws, rules and resolutions of the University.

4. Units of study and credit points

(1) (a) A unit of study comprises the forms of teaching and learning approved by a faculty. Where the unit of study is being provided specifically for an award course which is the responsibility of another faculty, that faculty must also provide approval.

(b) Any faculty considering the inclusion of a unit of study in the tables of units available for an award course for which it is responsible may review the forms of teaching and learning of that unit, may consult with the approving faculty about aspects of that unit and may specify additional conditions with respect to inclusion of that unit of study.

(2) A student completes a unit of study if the student:

(a) participates in the learning experiences provided for the unit of study;

(b) meets all examination, assessment and attendance requirements for the unit of study; and

(c) passes the required assessments for the unit of study.

(3) Each unit of study is assigned a specified number of credit points by the faculty responsible for the unit of study.

(4) The total number of credit points required for completion of an award course will be as specified in the Senate resolutions relating to the award course.

(5) The total number of credit points required for completion of award courses in an approved combined award course will be specified in the Senate or faculty resolutions relating to the award course.

(6) A student may, under special circumstances, and in accordance with faculty resolutions, be permitted by the relevant dean to undertake a unit or units of study other than those specified in the faculty resolutions relating to the award course and have that unit or those units of study counted towards fulfilling the requirements of the award course in which the student is enrolled.

5. Unit of study assessment

(1) A student who completes a unit Of study will normally be awarded grades of high distinction, distinction, credit or pass, in accordance withpolicies established by the Academic Board. The grades high distinction, distinction and credit indicate work of a standard higher than that required for a pass.

(2) A student who completes a unit of study for which only a pass/fail result is available will be recorded as having satisfied requirements.

(3) In determining the results of a student in any unit of study, the whole of the student's work in the unit of study may be taken into account.

(4) Examination and assessment in the University are conducted in accordance with the policies and directions of the Academic Board.

6. Attendance

(1) A faculty has authority to specify the attendance requirements for courses or units of study in that faculty. A faculty must take into account any University policies concerning modes of attendance, equity and disabled access.

(2) A faculty has authority to specify the circumstances under which a student who does not satisfy attendance requirements may be deemed not to have completed a unit of study or an award course.

Division 2 - Enrolment

7. Enrolment restrictions

(1) A student who has completed a unit of study towards the requirements of an award course may not re-enrol in that unit of study, except as permitted by faculty resolution or with the written permission of the dean. A student permitted to re-enrol may receive a higher or lower grade, but not additional credit points.

(2)Except as provided in sub-section (1), a student may not enrol in any unit of study which overlaps substantially in content with a unit that has already been completed or for which credit or exemption has been granted towards the award course requirements.

(3) A student may not enrol in units of study additional to award course requirements without first obtaining permission from the relevant dean.

(4) Except as prescribed in faculty resolutions or with the permission of the relevant dean:

(a) a student enrolled in an undergraduate course may not enrol in units of study with a total value of more than 32 credit points in any one semester, or 16 credit points in the summer session; and

(a) a student enrolled in a postgraduate award course may not enrol in units of study with a total value of more than 24 credit points in any one semester, or 12 credit points in the summer session.

Division 3 - Credit, cross-institutional study and their upper limits

8. Credit for previous studies

(l)Students may be granted credit on the basis of previous studies.

(2) Notwithstanding any credit granted on the basis of work completed or prior learning in another award course at the University of Sydney or in another institution, in order to qualify for an award a student must:

(a) for undergraduate award courses, complete a minimum of the equivalent of two full-time semesters of the award course at the University; and

(b) for postgraduate award courses, complete at least fifty percent of the requirements prescribed for the award course at the University.

These requirements may be varied where the work was completed as part of an embedded program at the University or as part of an award course approved by the University in an approved conjoint venture with another institution.

(3) The credit granted on the basis of work completed at an institution other than a university normally should not exceed one third of the overall award course requirements.
(4) A faculty has authority to establish embedded academic sequences in closely related graduate certificate, graduate diploma and master's degree award courses. In such embedded sequences, a student may be granted credit for all or some of the units of study completed in one award of the sequence towards any other award in the sequence, irrespective of whether or not the award has been conferred.
(5)In an award course offered as part of an approved conjoint venture the provisions for the granting of credit are prescribed in the Resolutions of the Senate and the faculty resolutions relating to that award course.

9. Cross-institutional study

(l)The relevant dean may permit a smdent to complete a unit or units of study at another university or institution and have that unit or those units of study credited to the student's award course.
(2) The relevant dean has authority to determine any conditions applying to cross-institutional study.

Division 4 - Progression

10. Repeating a unit of study

(1) A student who repeats a unit of study shall, unless granted exemption by the relevant dean:
(a) participate in the learning experiences provided for the unit of study; and
(b)meet all examination, assessment and attendance requirements for the unit of study.
(2) A student who presents for re-assessment in any unit of study is not eligible for any prize or scholarship awarded in connection with that unit of study without the permission of the relevant dean.

11.Time limits

A student must complete all the requirements for an award course within ten calendar years or any lesser period if specified by Resolution of the Senate or the faculty.

Division 5 - Discontinuation of enrolment and suspension of candidature

12. Discontinuation of enrolment

(1) A student who wishes to discontinue enrolment in an award course or a unit of study must apply to the relevant dean and will be presumed to have discontinued enrolment from the date of that application, unless evidence is produced showing:
(a) that the discontinuation occurred at an earlier date; and
(b)that there was good reason why the application could not be made at the earlier time.
(2) A student who discontinues enrolment during the first year of enrolment in an award course may not re-enrol in that award course unless:
(a) the relevant dean has granted prior permission to re-enrol; or
(b) the student is reselected for admission to candidature for that course.
(3) No student may discontinue enrolment in an award course or unit of study after the end of classes in that award course or unit of study, unless he or she produces evidence that:
(a) the discontinuation occurred at an earlier date; and
(b) there was good reason why the application could not be made at the earlier time.
(4) A discontinuation of enrolment may be recorded as *Withdrawn (W)* or *Discontinued Not To Count As Failure (DNF)* where that discontinuation occurs within the time-frames specified by the University and published by the faculty, or where the student meets other conditions as specified by the relevant faculty.

13. Suspension of candidature

(1) A student must be enrolled in each semester in which he or she is actively completing the requirements for the award course. A student who wishes to suspend candidature must first obtain approval from the relevant dean.
(2) The candidature of a student who has not re-enrolled and who has not obtained approval from the dean for suspension will be deemed to have lapsed.
(3) A student whose candidature has lapsed must apply for re-admission in accordance with procedures determined by the relevant faculty.
(4) A smdent who enrols after suspending candidature shall complete the requirements for the award course under such conditions as determined by the dean.

Division 6 - Unsatisfactory progress and exclusion

14. Satisfactory progress

A faculty has authority to determine what constitutes satisfactory progress for all students enrolled in award courses in that faculty, in accordance with the policies and directions of the Academic Board.

15. Requirement to show good cause

(l)For the purposes of this Rule, *good cause* means circumstances beyond the reasonable control of a student, which may include serious ill health or misadventure, but does not include demands of employers, pressure of employment or time devoted to non-University activities, unless these are relevant to serious ill health or misadventure. In all cases the onus is on the student to provide the University with satisfactory evidence to establish good cause. The University may take into account relevant aspects of a student's record in other courses or units of study within the University and relevant aspects of academic studies at other institutions provided that the student presents this information to the University.
(2) The relevant dean may require a student who has not made satisfactory progress to show good cause why he or she should be allowed to re-enrol.
(3)The dean will permit a student who has shown good cause to re-enrol.

16. Exclusion for failure to show good cause

The dean may, where good cause has not been established:
(1) exclude the student from the relevant course; or
(2) permit the student to re-enrol in the relevant award course subject to restrictions on units of study, which may include, but are not restricted to:
(a) completion of a unit or units of study within a specified time;
(b) exclusion from a unit or units of study, provided that the dean must first consult the head of the department responsible for the unit or units of study; and
(c) specification of the earliest date upon which a student may re-enrol in a unit or units of study.

17. Applying for re-admission after exclusion

(1) A student who has been excluded from an award course or from a unit or units of study may apply to the relevant dean for readmission to the award course or re-enrolment in the unit or units of study concerned after at least 4 semesters, and that dean may readmit the student to the award course or permit the student to re-enrol in the unit or units of study concerned.
(2) With the written approval of the relevant dean, a student who has been excluded may be given credit for any work completed elsewhere in the University or in another university during a period of exclusion.

18. Appeals against exclusion

(l)In this Rule a reference to the Appeals Committee is a reference to the Senate Student Appeals Committee (Exclusions andReadmissions).
(2) (a) (i) A student who has been excluded in accordance with this Rule may appeal to the Appeals Committee.
(ii) A student who has applied for readmission to an award course or re-enrolment in a unit of study after a period of exclusion, and who is refused readmission or re-enrolment may also apply to the Appeals Committee.
(b) The Appeals Committee shall comprise:
(i) 3 *ex officio* members (the Chancellor, the Deputy Chancellor and the Vice-Chancellor and Principal);
(ii) the Chair and Deputy Chairs of the Academic Board;
(iii) 2 smdent Fellows; and
(iv) up to 4 other Fellows.
(c) The Appeals Committee may meet as one or more sub-committees providing that each sub-committee shall include at least 1 member of each of the categories of:

(i) *ex officio* member;
(ii) Chair or Deputy Chair of the Academic Board;
(iii) student Fellow; and
(iv) other Fellows.

(d) Three members shall constitute a quorum for a meeting of the Appeals Committee or a sub-committee.

(e) The Appeals Committee and its sub-committees have authority to hear and determine all such appeals and must report its decision to the Senate annually.

(f) The Appeals Committee or a sub-committee may uphold or disallow any appeal and, at its discretion, may determine the earliest date within a maximum of four semesters at which a student who has been excluded shall be permitted to apply to re-enrol.

(g)No appeal shall be determined without granting the student the opportunity to appear in person before the Appeals Committee or sub-committee considering the appeal. A student so appearing may be accompanied by a friend or adviser.

(h)The Appeals Committee or sub-committee may hear the relevant dean but that dean may only be present at those stages at which the student is permitted to be present. Similarly, the dean is entitled to be present when the Committee or sub-committee hears the student.

(i) If, due notice having been given, a student fails to attend a meeting of the Appeals Committee or sub-committee scheduled to consider that student's appeal, the Appeals Committee or sub-committee, at its discretion, may defer consideration of the appeal or may proceed to determine the appeal.

(j) A student who has been excluded in accordance with these resolutions and has lodged a timely appeal against that exclusion may re-enrol pending determination of that appeal if it has not been determined by the commencement of classes in the next appropriate semester.

Division 7 - Exceptional circumstances

19. Variation of award course requirements in exceptional circumstances

The relevant dean may vary any requirement for a particular student enrolled in an award course in that faculty where, in the opinion of the dean, exceptional circumstances exist.

Division 8 - Award of degrees, diplomas and certificates

20. Classes of award

(1) Undergraduate diplomas may be awarded in five grades - pass, pass with merit, pass with distinction, pass with high distinction or honours.

(2) Degrees of bachelor may be awarded in two grades - pass or honours.

(3) Graduate diplomas and graduate certificates may be awarded in one grade only— pass.

(4) Degrees of master by coursework may be awarded three grades - pass, pass with merit or honours.

21. Award of the degree of bachelor with honours

(l)The award of honours is reserved to indicate special proficiency. The basis on which a student may qualify for the award of honours in a particular award course is specified in the faculty resolutions relating to the course.

(2) Each faculty shall publish the grading systems and criteria for the award of honours in that faculty.

(3) Classes which may be used for the award of honours are:
First Class
Second Class/Division 1
Second Class/Division 2
Third Class.

(4) With respect to award courses which include an additional honours year:

(a) a student may not graduate with the pass degree while enrolled in the honours year;

(b) on the recommendation of the head of the department concerned, a dean may permit a student who has been awarded the pass degree at a recognised tertiary institution to enrol in the honours year in that faculty;

(c) faculties may prescribe the conditions under which a student may enrol part-time in the honours year;

(d) a student who fails or discontinues the honours year may not re-enrol in it, except with the approval of me dean.

22. University Medal

An honours bachelor's degree student with an outstanding academic record throughout the award course may be eligible for the award of a University medal, in accordance with Academic Board policy and the requirements of the faculty resolutions relating to the award course concerned.

23. Award of the degree of master with honours or merit

The award of honours or pass with merit is reserved to indicate special proficiency or particular pathways to completion. The basis on which a student may qualify for the award of honours or the award with merit in a particular degree is specified in the faculty resolutions relating to that degree.

24. Transcripts and testamurs

(1) A student who has completed an award course or a unit of study at the University will receive an academic transcript upon application and payment of any charges required.

(2)Testamurs may indicate streams or majors or both as specified in the relevant faculty resolutions.

Division 9 - Transitional provisions

25. Application of this Rule during transition

This Rule applies to all candidates for degrees, diplomas and certificates who commence candidature after 1 January 2001. Candidates who commenced candidature prior to this date may choose to proceed in accordance with the resolutions of the Senate in force at the time they enrolled, except that the faculty may determine specific conditions for any student who has re-enrolled in an award course after a period of suspension.

9 General University information

See also the Glossary for administrative information relating to particular terms.

Accommodation Service

The Accommodation Service assists students to find off-campus accommodation by maintaining an extensive database of suitable accommodation in various areas but primarily close to University or within easy access via public transport.

Level 7, Education Building, A35
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 3312
Fax: (02) 9351 8262
TTY: (02) 9351 3412
Email: accomm@stuserv.usyd.edu.au
Web: www.usyd.edu.au/su/accom

Admissions Office

The Admissions Office is responsible for overseeing the distribution of offers of undergraduate admission and can advise prospective local undergraduate students regarding admission requirements. Postgraduate students should contact the appropriate faculty. If you are an Australian citizen or a permanent resident but have qualifications from a non-Australian institution, phone (02) 9351 4118 for more information. For enquiries regarding Special Admissions (including Mature-Age Entry), phone (02) 9351 3615. Applicants without Australian citizenship or permanent residency should contact the International Office.

Student Centre
Ground Floor, Carslaw Building, F07
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 4117 or (02) 9351 4118
Fax: (02) 9351 4869
Email: admissions @records.usyd.edu.au

Applying for a course

Prospective (intending) students must lodge an application form with the Universities Admissions Centre (UAC) by the last working day of September of the year before enrolment. Note that some faculties, such as Pharmacy, the Sydney Conservatorium of Music and Sydney College of the Arts, have additional application procedures.

Assessment

For matters regarding assessment, refer to the relevant department or school.

Careers information

Provides careers information and advice, and help in finding course-related employment both while you're studying and when you commence your career.

Careers Centre
Ground Floor, Mackie Building, K01
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 3481
Fax: (02) 9351 5134
Email: info@careers.usyd.edu.au
Web: www.careers.usyd.edu.au

Casual Employment Service

The Casual Employment Service helps students find casual and part-time work during their studies and in University vacations.

Level 7, Education Building, A35
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 8714
Fax: (02) 9351 8717
Email: ces@stuserv.usyd.edu.au
Web: www.usyd.edu.au/su/cas_emp

Centre for Continuing Education

Bridging courses, study skills courses, essay writing courses, accounting extension courses, university preparation courses, access to university courses, non-award short courses.

Mackie Building, KOI
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 2907
Fax: (02) 9351 5022
Email: info@cce.usyd.edu.au
Web: www.usyd.edu.au/cce

Centre for English Teaching

The Centre for English Teaching (CET) offers a range of English language courses including Academic English, General & Business English and IELTS preparation. CET programs help international students to reach the required English language levels for entry to degrees at the University. Students have the opportunity to take the CET university direct entry test at the completion of their language programs.

Level 2, Building F, 88 Mallett St
University of Sydney (M02)
NSW 2006 Australia
Phone: (02) 9351 0706
Fax: (02) 9351 0710
Email: info@cet.usyd.edu.au
Web: www.usyd.edu.au/cet

Child care

Contact the Child Care Coordinator for information about Children's Services for students and staff of the University who are parents.

Child Care Coordinator
Level 7, Education Building, A35
Phone: (02) 9351 5667
Fax: (02) 9351 7055
TTY: (02) 9351 3412
Email: childc@stuserv.usyd.edu.au
Web: www.usyd.edu.au/su/childcare

Co-op Bookshop

Sells textbooks, reference books, general books and software. Special order services available.The Co-op Bookshop is located at:

Sydney University Sports and Aquatic Centre, G09
Cnr Codrington St and Darlington Rd
Phone: (02) 9351 3705 or (02) 9351 2807
Fax: (02) 9660 5256
Email: sydu@mail.coop-bookshop.com.au
Web: www.coop-bookshop.com.au

Counselling Service

The Counselling Service aims to help students fulfil their academic, individual and social goals through professional counselling which is free and confidential. Counselling presents an opportunity to: gain greater self awareness; learn to cope more efficiently with the problem at hand; discuss any work related, social or personal issues that cause concern; explore options with professionally trained staff. In addition, workshops are offered each semester on topics such as stress management, relaxation, exam anxiety, communication skills and others.

Level 7, Education Building, A35
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 2228
Fax: (02) 9351 7055

Email: counsell@mail.usyd.edu.au
Web: www.usyd.edu.au/su/counsel

Disability Services

Disability Services is the principal point of contact and advice on assistance available for students with disabilities. The Service works closely with academic and administrative staff to ensure that students receive reasonable accommodations in all areas of their study. Assistance available includes the provision of notetaking, interpreters, and advocacy with academic staff to negotiate assessment and course requirement modifications where appropriate.

Level 7, Education Building, A35
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 4554
Fax: (02) 9351 7055
Email: disserv@stuserv.usyd.edu.au
Web: www.usyd.edu.au/su/disability

Enrolment and pre-enrolment

Students entering first year

Details of the enrolment procedures will be sent with the UAC Offer of Enrolment. Enrolment takes place at a specific time and date, depending on your surname and the Faculty in which you are enrolling, but is usually within the last week of January. You must attend the University in person or else nominate, in writing, somebody to act on your behalf. On the enrolment day, you pay the compulsory fees for joining the Student Union, the Students' Representative Council and sporting bodies and nominate your preferred 'up front' or deferred payment for your Higher Contribution Scheme (HECS) liability. You also choose your first-year units of study, so it's important to consult the Handbook before enrolling.

All other students

A pre-enrolment package is sent to all enrolled students in late September, and contains instructions on the procedure for pre-enrolment.

Examinations

The Examinations and Exclusions Office looks after the majority of exam papers, timetables and exclusions. Some faculties, such as the Sydney Conservatorium of Music, make all examination arrangements for the units of study that they offer.

Examinations and Exclusions Office
Student Centre
Level 1, Carslaw Building, F07
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 4005 or (02) 9351 4006
Fax: (02) 9351 7330
Email: exams.office@exams.usyd.edu.au

Fees

For information on how to pay, where to pay, and if payments have been received.

Fees Office
Margaret Telfer Building, K07
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 5222
Fax: (02) 9351 4202

Financial Assistance Office

The University has a number of loan funds and bursaries to assist students who experience financial difficulties. Assistance is not intended to provide the principal means of support but to help in emergencies and to supplement other income.

Level 7, Education Building, A35
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 2416
Fax: (02) 9351 7055
TTY: (02) 9351 3412
Email: fao@stuserv.usyd.edu.au
Web: www.usyd.edu.au/su/fin_assist

Freedom of Information

The University of Sydney falls within the jurisdiction of the NSW Freedom of Information Act, 1989. The Act requires information concerning documents held by the University to be made available to the public, to enable a member of the public to obtain access to documents held by the University and to enable a member of the public to ensure that records held by the University concerning his or her personal affairs are not incomplete, incorrect or out of date. By definition, a 'member of the public' includes staff or students of the University.

Application may be made for access to access University documents, however the Act provides some exemptions to particular documents. The Act contains review and appeal mechanisms which are required to be explained to applicants where applicable. The University is required to report to the public on its FOI activities on a regular basis. The two reports provided are the Statement of Affairs and the Summary of Affairs. The Statement of Affairs contains information about the University, its structure and function and the kinds of documents held. The Summary of Affairs identifies each of the University's policy documents and provides a contact list for those wishing to access these documents. Further information, and copies of the current reports may be found at www.usyd.edu.au/arms/foi/.

It is a requirement of the Act that applications be processed and a determination be made generallywithin 21 days. Determinations are made by the University's Registrar.

Graduations Office

The Graduations Office is responsible for organising graduation ceremonies and informing students of their graduation arrangements.

Student Centre
Ground Floor, Carslaw Building, F07
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 3199, (02) 9351 4009, Protocol (02) 9351 4612
Fax: (02) 9351 5072

(Grievances) appeals

Many decisions about academic and non-academic matters are made each year and you may consider that a particular decision affecting your candidature for a degree or other activities at the University may not have taken into account all the relevant matters.

In some cases the by-laws or resolutions of the Senate (see University Calendar) specifically provide for a right of appeal against particular decisions; for example, there is provision for appeal against academic decisions, disciplinary decisions and exclusion after failure.

A document outlining the current procedures for appeals against academic decisions is available at the Student Centre, at the SRC, and on the University's web site at www.usyd.edu.au/su/planning/policy/.

If you wish to seek assistance or advice regarding an appeal, contact:

Students' Representative Council
Level 1, Wentworth Building, G01
The University of Sydney
NSW 2006 Australia
Phone: (02) 9660 5222

HECS

Student Centre
Ground Floor, Carslaw Building, F07
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 5659, (02) 9351 5062, (02) 9351 2086
Fax: (02) 9351 5081

International Student Centre

The International Student Centre consists of the International Office (IO), the International Student Services Unit (ISSU) and the Study Abroad and Exchange Office. The International Office provides assistance with application, admission and enrolment procedures and administers scholarships for international students. The ISSU provides a wide range of international student support services including arranging arrival accommodation and offering advice and professional counselling. The Study Abroad and Exchange Unit assists both

domestic and international students who wish to enrol for Study Abroad or Exchange programs.

International Student Centre
Services Building, G12
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 4079
Fax: (02) 9351 4013
Email: info@io.usyd.edu.au
Web: www.usyd.edu.au/io

International Student Services Unit
Phone: (02) 9351 4749
Fax: (02) 9351 6818
Email: info@issu.usyd.edu.au
Web: www.usyd.edu.au/issu

Study Abroad and Exchange Unit
Study Abroad
Phone: (02) 9351 5841
Fax: (02) 9351 2795
Email: studyabroad@io.usyd.edu.au
Web: www.usyd.edu.au/io/studyabroad

Exchange
Phone: (02) 9351 5843
Fax: (02) 9351 2795
Email: exchange@io.usyd.edu.au
Web: www.usyd.edu.au/io/exchange

Intranet

USYDnet is The University of Sydney's intranet. It provides easy access to staff and student directories, maps, software and useful resources for both staff and students. As well as delivering information, the intranet provides interactive services such as the calendar of events, where staff and students can enter events and publish them University-wide.

MyUni is the personalised section of USYDnet. All staff and students are provided with access to MyUni through a login name and password. This enables them to customise the information they see and also receive delivery of personal information such as exam results and seat numbers. MyUni is a portal from which students and staff can complete tasks that were previously only possible offline. Web enrolment variation is one of the first of many facilities that are helping to move the every day tasks of all members of the university online.

Koori Centre and Yooroang Garang

The Koori Centre provides tutorial assistance: access to computers, Indigenous counsellor, Aboriginal Studies library study rooms, Orientation program at the beginning of the year, and assistance in study and learning skills. Education Unit: courses in Education for ATSI students. Indigenous Studies Unit: aims to increase the awareness of Indigenous Australian issues through courses across the University.

Ground Floor, Old Teachers' College, A22
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 2046 general enquiries,
(02) 9351 7003 Liaison Officer
Fax: (02) 9351 6923
Email: koori@koori.usyd.edu.au
Web: www.koori.usyd.edu.au

Language Centre

Provides self-access course materials in over 140 languages. Beginners and intermediate courses in Modern Spanish, Modem Russian, Modern Welsh, Modern Irish, Modern Portuguese languages and cultures; Diploma Course in Modern Language Teaching.

Level 2, Christopher Brennan Building, A18
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 2371
Fax: (02) 9351 3626
Email: language.enquiries@language.usyd.edu.au
Web: www.arts.usyd.edu.au/Arts/departs/langcent/home.html

Learning Centre

The Learning Centre assists students to develop the generic skills which are necessary for learning and communicating knowledge and ideas at university. The Centre is committed to helping students to achieve their academic potential throughout their undergraduate and postgraduate studies. The Centre's program includes a wide range of workshops on study skills, academic reading and writing, oral communication skills and postgraduate writing and research skills. Other services the Centre provides are an Individual Learning Program (ILP), a special program for international students, Faculty-based workshops, publications of learning resources and library facilities.

Level 7, Education Building, A35
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 3853
Fax: (02) 9351 4865
Email: lc@stuserv.usyd.edu.au
Web: www.usyd.edu.au/su/lc

Library

Students are welcome to use any of the 22 libraries in the University. The student card is also the library borrower's card. Further details of the libraries, including services provided, locations and opening hours are available on the Library's homepage www.library.usyd.edu.au as well as in the printed *Library Guide,* available at any library. Consult the Library staff for assistance.

The libraries listed below are located on the Camperdown/ Darlington campus unless otherwise specified.

Architecture Library
Wilkinson Building, G04
Phone: (02) 9351 2775
Fax: (02) 9351 4782
Email: architecture@library.usyd.edu.au

Badham Library
Badham Building, A16
Phone: (02) 9351 2728
Fax: (02) 9351 3852
Email: badham@library.usyd.edu.au

Biochemistry Library
Biochemistry Building, G08
Phone: (02) 9351 2231
Fax: (02) 9351 7699
Email: biochemistry@library.usyd.edu.au

Burkitt-Ford Library
Sir Edward Ford Building, A27
Phone: (02) 9351 4364
Fax: (02) 9351 7125
Email: burkittford @ library.usy d. edu. au

Camden Library
University Farms, Camden, C15
Phone: (02) 93511627
Fax: (02) 4655 6719
Email: camden@library.usyd.edu.au

Chemistry Library
Chemistry Building, F11
Phone: (02) 9351 3009
Fax: (02) 9351 3329
Email: chemistry@library.usyd.edu.au

Curriculum Resources Library
Old Teachers College, A22
Phone: (02) 9351 6254
Fax: (02) 9351 7766
Email: curriculum@library.usyd.edu.au

Dentistry Library
United Dental Hospital, 2 Chalmers St, Surry Hills, C12
Phone: (02) 9351 8331
Fax: 9212 5149
Email: dentistry@library.usyd.edu.au

Engineering Library
PN Russell Building, J02
Phone: (02) 9351 2138
Fax: (02) 9351 7466
Email: engineering@Ubrary.usyd.edu.au

Fisher Library
Eastern Ave, F03
Phone: (02) 9351 2993
Fax: (02) 9351 2890
Email: fishinf@library.usyd.edu.au

Geosciences Library
Madsen Building, F09
Phone: (02) 9351 6456
Fax: (02) 9351 6459
Email: geosciences ©library.usyd.edu.au
Health Sciences Library
East St, Lidcombe, C42
Phone: (02) 9351 9423
Fax: (02) 9351 9421
Email: h.knight@cchs.usyd.edu.au
Law Library
Law School, 173-175 Phillip St, Sydney, C13
Phone: (02) 9351 0216
Fax: (02) 9351 0301
Email: library@law.usyd.edu.au
Mathematics Library
Carslaw Building, F07
Phone: (02) 9351 2974
Fax: (02) 9351 5766
Email: mathematics @library.usyd.edu.au
Medical Library
Bosch Building, D05
Phone: (02) 9351 2413
Fax: (02) 9351 2427
Email: medical@library.usyd.edu.au
Music Library
Seymour Centre, J09
Phone: (02) 9351 3534
Fax: (02) 9351 7343
Email: music@library.usyd.edu.au
Nursing Library
88 Mallett St, Camperdown, M02
Phone: (02) 9351 0541
Fax: (02) 9351 0634
Email: nursing@library.usyd.edu.au
Orange Library
Leeds Parade, Orange
Phone: (02) 6360 5594
Fax: (02) 6360 5637
Email: lib@orange.usyd.edu.au
Physics Library
New Wing, Physics Building, A29
Phone: (02) 9351 2550
Fax: (02) 9351 7767
Email: physics@library.usyd.edu.au
Shaeffer Fine Arts Library
Mills Building, A26
Phone: (02) 9351 2148
Fax: (02) 9351 7624
Email: john.spencer@arthist.usyd.edu.au
Sydney College of the Arts Library
Balmain Rd, Rozelle, N01
Phone: (02) 9351 1036
Fax: (02) 9351 1043
Email: scalib@sca.usyd.edu.au
Sydney Conservatorium of Music Library
Macquarie St (opposite Bridge St), Sydney, C41
Phone: (02) 9351 1316
Email: library@conmusic.usyd.edu.au

Mathematics Learning Centre

The Mathematics Learning Centre runs bridging courses in mathematics at the beginning of the academic year (fees apply). It also provides on-going support during the year through individual assistance and small group tutorials.
Level 4, Carslaw Building, F07
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 4061
Fax: (02) 9351 5797
TTY: (02) 9351 3412
Email: mlc@stuserv.usyd.edu.au
Web: www.usyd.edu.au/su/mlc

Part-time, full-time

Students are normally considered as full-time if they have a HECS weighting of at least 0.375 each semester. Anything under this amount is considered a part-time study load. Note that some faculties have minimum study load requirements for satisfactory progress.

Privacy

The University is subject to the NSW Privacy and Personal Information Protection Act 1998 (the Act). Central to the Act is Part 2 which contains twelve Information Protection Principles (EPPs) which regulate the collection, management, use and disclosure of personal information.

In response to Section 33 of the Act the University has developed a Privacy Management Plan which includes a new University Privacy Policy incorporating the requirements of the IPPS. Both the Plan and the new University Privacy Policy were endorsed by the Vice-Chancellor on 28 June 2000. The Privacy Management Plan sets out the IPPs and how they apply to functions and activities carried out by the University.

Further information and a copy of the Plan may be found at www.usyd.edu.au/arms/privacy/. Any questions regarding the Freedom of Information Act, the Privacy and Personal Information Protection Act or the Privacy Management Plan should be directed to:
Tim Robinson: (02) 9351 4263 or
Judith Russell: (02) 9351 2684
Email: foi@mail.usyd.edu.au

Student Centre

Ground Floor, Carslaw Building, F07
The Umversity of Sydney
NSW 2006 Australia
Phone: (02) 9351 3023 General Enquiries
(02) 9351 4109 Academic Records
(02) 9351 3023 Discontinuation of Enrolment
(02) 9351 5057 Handbooks
(02) 9351 5060 Prizes
Fax: (02) 9351 5081, (02) 9351 5350 Academic Records

Student identity cards

In 1999 the University incorporated a photograph into the student identity card. This means that all students have to provide a colour, passport-sized, head and shoulders photograph when they attend on campus sites to have their student ID card laminated. University student ID cards also function as transport concession cards for eligible students, thus eliminating the need for a separate concession card. The endorsement for concession travel will take the form of a hologram sticker attached to the front of the student ID card.

Student Services

Student Services exists to help you achieve your educational goals by providing personal, welfare, and academic support services to facilitate your success at University. Many factors can impact on your well being while studying at University and Student Services can assist you in managing and handling these more effectively. Refer to Accommodation Service, Casual Employment Service, Child Care, Disability Service, Financial Assistance Office, Learning Centre, Mathematics Learning Centre. The web site is at www.usyd.edu.au/su/stuserv.

The Sydney Summer School

Most faculties at the University offer units of study from degree programs during January/February. As the University uses all of its HECS quota in first and second semester, these units are full fee-paying and entirely voluntary. However, Summer School units enable students to accelerate their degree progress, make up for a failed unit or fit in a unit which otherwise would not suit their timetables. New students may also gain a head start by completing requisite subjects before they commence their degrees. Units start on 2 January and run for up to six weeks (followed by an examination week). Notice of the units available is contained in the various faculty handbooks and is usually circulated to students with their results notices.

Timetabling Unit

The timetabling unit in the Student Centre is responsible for producing students' class and tutorial timetables. Students can obtain their Semester 1 timetables from the Wednesday of Orientation Week via the web.

The Sydney Conservatorium of Music operates in accordance with a local calendar of dates and produces a complete timetable

for all teaching that it delivers. The timetable is available on enrolment at the Conservatorium.

Undergraduate Scholarships

Scholarships Unit, Room 147
Ground Floor, Mackie Building, KO1
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 2717
Fax: (02) 9351 5134
Email: scholarships@careers.usyd.edu.au
Web: www.usyd.edu.au/study/

University Health Service

Provides full general practitioner services and emergency medical care to the University community.

Email: director@unihealth.usyd.edu.au
Web: www.unihealth.usyd.edu.au

University Health Service (Wentworth)
Level 3, Wentworth Building, G01
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 3484
Fax: (02) 9351 4110

University Health Service (Holme)
Science Rd Entry, Holme Building, A09
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 4095
Fax: (02) 9351 4338

■ Student organisations

Students' Representative Council

Level 1, Wentworth Building, G01
The University of Sydney
NSW 2006 Australia
Phone: (02) 9660 5222 Editors, Honi Soit/Legal Aid
(02) 9660 4756 Second-hand Bookshop
(02)93510691MaUettSt
(02) 9230 3777 Pitt St - Conservatorium
Fax: (02) 9660 4260
Email: postmaster@src.usyd.edu.au

Sydney University Sports Union

Services, facilities and clubs for sport, recreation and fitness.

Noel Martin Sports and Aquatic Centre, G09
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 4960
Fax: (02) 9351 4962
Email: sports_union@susu.usyd.edu.au

University of Sydney Union

Main provider of catering facihties, retail services, welfare programs, and social and cultural events for the University community on the Camperdown and Darlington campuses, and at many of the University's affiliated campuses.

University of Sydney Union
Box 500, Holme Building, A09
The University of Sydney
NSW 2006 Australia
Phone: (02) 9563 6000 Switchboard/Enquiries
Fax: (02) 9563 6239
Email: email@usu.usyd.edu.au
Web: www.usu.usyd.edu.au

Women's Sports Association

Provides for students, predominanfly women, to participate in sport and recreation through the provision of facilities, courses and personnel.

The Arena Sports Centre, A30
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 8111
Fax: (02) 9660 0921
Email: secretary@suwsa.usyd.edu.au
Web: www.suwsa.usyd.edu.au

Glossary

This glossary describes terminology in use at The University of Sydney.

Academic Board

The Academic Board is the senior academic body within the University. In conjunction with faculties, the Academic Board has responsibility for approving, or recommending to Senate for approval, new or amended courses and units of study and policy relating to the admission of students. (For further information, see the University Calendar.)

Academic cycle

The academic cycle is the program of teaching sessions offered over a year. Currently the cycle runs from me enrolment period for Semester 1 through to the completion of the processing of results at the end of Semester 2. (See also *Stage.)*

Academic record

The academic record is the complete academic history of a student at the University. It includes, among other things, personal details, all units of study and courses taken, assessment results (marks and grades), awards and prizes obtained, infringements of progression rules, approvals for variation in course requirements and course leave, thesis and supervision details.

Access to a student's academic record is restricted to authorised University staff. A student's academic record is not released to a third party without the written authorisation of the student. (See also *Academic transcript.)*

Academic transcript

An academic transcript is a printed statement setting out a student's academic record at the University. There are two forms of academic transcript: external and internal. (See also *External transcript, Internal transcript.)*

Academic year

An academic year is a normal full-time program taken in a course in a year. Some courses consist of stages, which may readily be equated with academic year. Others use the aggregation of credit points to do this (eg, 48 credit points = an academic year). (See also *Academic cycle, Stage.)*

Addresses

All enrolled students need to have a current postal address recorded on FlexSIS to which all official University correspondence is sent. (See also *Business address, Permanent home address, Semester address, Temporary address.)*

Admission

Admission is governed by the University's admission policy and is the process for identifying applicants eligible to receive an initial offer of enrolment in a course at the University. Admission to most courses is based on performance in the HSC with applicants ranked on the basis of their UAI. Other criteria such as a portfolio, interview, audition, or results in standard tests may also be taken into account for certain courses.

Admission basis

The main criterion used by a faculty in assessing an application for admission to a course. The criteria used include, among other things, previous secondary, TAPE or tertiary studies, work experience, special admission and the Universities Admission Index (UAI).

Admission (deferment)

An applicant who receives an offer of admission to a course may apply to defer enrolment in that course for one semester or one academic cycle.

Admission mode

Admission mode is a classification based on how a student was admitted to a course, for example 'UAC or 'direct'.

Admission period

The period during which applications for admission to courses are considered. The main admission period takes place before Semester 1, but there may also be an admission period for mid-year applicants before the beginning of Semester 2 and other admission periods.

Admission reply

A code used by FlexSIS to indicate whether an applicant who has received an offer has accepted the offer or not.

Admission result

A code used by FlexSIS to indicate the result of a direct application to study at the University (eg, offer, unsuccessful, withdrawn).

Admission year

The year the student began the course.

Advanced diplomas

See *Award course.*

Advanced standing

See *Credit.*

Advisor

A member of academic staff appointed in an advisory role for some postgraduate coursework students. (See also *Associate supervisor, Instrumental supervisor (teacher), Research supervisor, Supervision.)*

Annual Progress Report

The Annual Progress Report is a form issued by faculties which is used to monitor a research student's progress each year. The form provides for comments by the student, the supervisor, the head of the department and the dean (or nominee). The completed form is attached to the student's official file.

FlexSIS records that me form has been sent out and that it has been satisfactorily completed.

APA

Australian Postgraduate Awards. (See also *Scholarships, UPA.)*

Appeals

Students may lodge appeals against academic or disciplinary decisions. FlexSIS will record an academic appeal (eg, against exclusion) while they are under consideration and will record the outcome of the appeal. Disciplinary (that is, non-academic) appeals are not recorded on FlexSIS.

ARTS

Automated Results Transfer System. This system was developed on behalf of ACTAC (Australasian Conference of Tertiary Admissions Centres) to allow me electronic academic record of a student to be accessible, via an admission centre, between tertiary institutions.

Assessment

The process of measuring the performance of students in units of study and courses. The assessment of performance in a unit of study may include examinations, essays, laboratory projects, or assignments. (See also *Board of examiners, Result processing, Result processing schedule.)*

Associate supervisor

A person who is appointed in addition to the supervisor of a research student who can provide the day-to-day contact with the candidate or provide particular expertise or additional experience in supervision. (See *also Advisor, Instrumental supervisor (teacher), Research supervisor, Supervision.)*

Assumed knowledge

For some units of study, a student is assumed to have passed a relevant subject at the HSC and this is called assumed knowledge. While students are generally advised against taking a unit of study for which they do not have the assumed knowledge, they are not prevented from enrolling in the unit of study. (See also *Prerequisite.)*

Attendance mode

A DETYA classification defining the manner in which a student is undertaking a course - ie, internal, external, mixed or offshore.

Attendance pattern/type

Refers to whether the student is studying part-time or full-time. For coursework students this is a function of course load - ie, the

proportion being undertaken by the student of the normal full-time load specified for the course in which the student is enrolled. To be considered full-time, a coursework student must undertake at least 0.75 of the normal full-time load over the academic cycle or at least 0.375 if only enrolling in half of an academic year. It is important to note, however, that, for some purposes, to be considered full-time a student may need to be enrolled in at least 0.375 in each half year. Research students, with the approval of their faculty, nominate whether they wish to study part-time or full-time. The attendance status is then recorded on FlexSIS as part of the application or enrolment process. (See also ***Coursework,*** *Student load.)*

AusAID

Australian Agency for International Development.

AUSCHECK

AUSCHECK is the software provided by Centrelink to validate data prior to reporting to Centrelink.

AUSTUDY

Replaced by Youth Allowance. (See *also Youth Allowance.)*

Award course

An award course is a formally approved program of study that can lead to an academic award granted by the University. An award course requires the completion of a program of study specified by course rules. (See also *Course rules.)* Award courses are approved by Senate, on the recommendation of the Academic Board. Students normally apply to transfer between Award courses through the UAC. The award course name will appear on testamurs. The University broadly classifies courses as undergraduate, postgraduate coursework or postgraduate research. The award courses offered by the University are:

Higher doctorates
Doctor of philosophy (PhD)
Doctorates by research and advanced coursework
Master's degree by research
Master's degree by coursework
Graduate diploma
Graduate certificate
Bachelor's degree
Advanced diplomas
Diplomas
Certificates

(See also *Bachelor's degree, Course rules, Diploma, Doctorate, Major, Master's degree, Minor, PhD, Stream.)*

Bachelor's degree

The highest undergraduate award offered at the University of Sydney. A bachelor's degree course normally requires three or four years of full-time study or the part-time equivalent. (See also *Award course.)*

Barrier

A barrier is an instruction placed on a student's FlexSIS record that prevents the student from re-enrolling or graduating. (See also *Deadline (fees), Suppression of results.)*

Board of examiners

A Board of examiners was a body appointed by a faculty or board of studies which met to approve the results of all students undertaking courses supervised by that faculty or board of studies. Boards of examiners were dis-established following revision of the University's examination procedures in 2000. (See also *Assessment, Result processing, Result processing schedule.)*

Board of studies

An academic body which supervises a course or courses and which is similar to a faculty except that it is headed by a chair rather than a dean and does not supervise PhD candidates.

Bursaries

See *Scholarships.*

Business address

FlexSIS can record a student's business address and contact details. (See *also Addresses, Permanent home address, Semester address, Temporary address.)*

Cadigal Program

The Cadigal Program is a University wide access and support scheme for Aboriginal and Torres Strait Islanders.

Campus

The grounds on which the University is situated. There are eleven campuses of the University of Sydney: Burren Street (Institute for International Health, Institute of Transport Studies), Camperdown and Darlington (formerly known as Main Campus), Camden (Agriculture and Veterinary Science), Conservatorium (Conservatorium of Music), Cumberland (Health Sciences), Mallett Street (Nursing), Orange (Faculty of Rural Management), Rozelle (Sydney College of the Arts), St James (Law) and Surry Hills (Dentistry).

Census date

See HECS census date.

Centre for Continuing Education

The Centre for Continuing Education develops and conducts courses, conferences and study tours for the general public and professional groups. The Centre offers approximately 1,000 courses for approximately 20,000 students each year. Most of these courses are held over one of the four main sessions that are conducted each year, though the Centre is offering an increasing number of ad hoc courses in response to increased competition and changing demands. The Centre operates on a cost recovery/ income generation basis. (See also *Continuing professional education.)*

Centrelink

Centrelink is the agency responsible for providing information and assistance on a range of Commonwealth Government programs including Youth Allowance. (See also *Youth Allowance)*

Ceremony

See *Graduation ceremony.*

Chancellor

The non-executive head of the University. An honorary position, the Chancellor chairs meetings of the University's governing body, the Senate, and presides over graduation ceremonies amongst other duties.

Class list

A listing of all currently enrolled students in a particular unit of study. (See also *Unit of study.)*

Combined course '

A course which leads to two awards. For example the Arts/Law course leads to the separate awards of Bachelor of Arts and Bachelor of Laws.

Combined degree

See *Combined course.*

Commencing student

A student enrolling in an award course at the University of Sydney for the first time. The DETYA glossary provides a more detailed definition.

Comp subs

See *Compulsory subscriptions.*

Compulsory subscription rates

There are two rates for some annual subscriptions: full-time and part-time. (See also *Compulsory subscriptions.)*

Compulsory subscription waiver provision

Certain students over a certain age or with disabilities or medical conditions may be exempted from the subscription to the sports body.

Students with a conscientious objection to the payment of subscriptions to unions of any kind may apply to the Registrar for exemption. The Registrar may permit such a student to make the payment to the Jean Foley Bursary Fund instead. (See also *Compulsory subscriptions.)*

Compulsory subscriptions

Each enrolled student is liable to pay annual (or semester) subscriptions as determined by the Senate to the student organisations at the University. These organisations are different on different campuses. There are different organisations for undergraduate and postgraduate students.

At the Camperdown/Dariington campus (formerly known as Main Campus), compulsory submissions depend on the level of study.

Undergraduate: the University of Sydney Union, Students' Representative Council (SRC) and the University of Sydney Sports Union or the Sydney University Women's Sports Association.

Postgraduate: the University of Sydney Union and the Sydney University Postgraduate Representative Association (SUPRA).

Student organisations at other campuses include: the Conservatorium Student Association, the Cumberland Student Guild, the Orange Agricultural College Student Association and the Student Association of Sydney College of the Arts.

(See also *Compulsory subscription rates, Compulsory subscription waiver provision, Joining fee, Life membership.)*

Confirmation of Enrolment form

A Confirmation of Enrolment form is issued to students after enrolment showing the course and the units of study they are enrolled in, together with the credit point value of the units of study and the HECS weights. Until all fees are paid, it is issued provisionally.

A new Confirmation of Enrolment form is produced every time a student's enrolment is varied.

For postgraduate research students the form also lists candidature details and supervisor information.

Where students have an appointed advisor, the advisor information is also shown.

Continuing professional education

The continuing professional education process provides a number of programs of continuing education courses for professionals as they move through their career. These programs are presently administered by the Centre for Continuing Education and a number of departments and Foundations across the University. This process supports the whole of life learning concept and requires/promotes the maintenance of a long term relationship between the student and the University. It is envisaged that the importance of this mode of education will increase in the future. (See also *Centre for Continuing Education.)*

Convocation

Convocation is the body comprising all graduates of the University.

Core unit of study

A unit of study that is compulsory for the course or subject area. (See also *Unit of study!)*

Corequisite

A corequisite is a unit of study which must be taken in the same semester or year as a given unit of study (unless it has already been completed). These are determined by the faculty or board of studies concerned, published in the faculty handbook and shown in FlexSIS. (See also *Prerequisite, Waiver.)*

Course

An award course or non-award course undertaken at the University of Sydney. (See *also Award course, Non-award course.)*

Course alias

Each course in FlexSIS is identified by a unique five-digit alpha-numeric code.

Course code

See *Course alias.*

Course leave

Students (undergraduate and postgraduate) are permitted to apply for a period away from their course without losing their place, course leave is formally approved by the supervising faculty for a minimum of one semester and recorded on FlexSIS (leave for periods of less than one semester should be recorded internally by the faculty). Students on leave are regarded as having an active candidature, but they are not entitled to a student card. At undergraduate level leave is not counted towards the total length of the course. Students who are absent from study without approved leave may be discontinued and may be required to reapply formally for admission. The term 'suspension of candidature' was previously used to describe research students on course leave.

Course (research)

A classification of courses in which students undertake supervised research leading to the production of a thesis or other piece of written or creative work over a prescribed period of time. The research component of a research course must comprise 66% or more of the overall course requirements.

Course rules

Course rules govern the allowable enrolment of a student in a course; eg, a candidate may not enrol in units of study having a total value of more than 32 credit points per semester. Course rules also govern the requirements for the award of the course - eg, a candidate must have completed a minimum of 144 credit points. Course rules may be expressed in terms of types of units of study taken, length of study, and credit points accumulated. (See also *Award course.)*

Course suspension

See *Course leave.*

Course transfer

A course transfer occurs where a student changes from one course in the University to another course in the University without the requirement for an application and selection (eg, from a PhD to a master's program in the same faculty).

Course type

Course type is a DETYA code.

Coursework

Coursework is a classification used to describe those courses that consist of units of study rather than research work. All undergraduate courses are coursework programs. Postgraduate courses can be either research courses or coursework courses. (See also *Course (research))*

Credit

The recognition of previous studies successfully completed at this or another recognised (by the University of Sydney) university or tertiary institution as contributing to the requirements for the award of the course in which the applicant requesting such recognition has been admitted.

Where the University agrees to recognise successfully completed previous studies, their contribution to the requirements for the award of the course, in which the applicant has been admitted, will be expressed as specific or non-specific credit.

Credit awarded to a credit applicant - whether specific or non-specific - will be recorded with a mark and grade of 50 pass, unless in individual cases the credit is assessed by the faculty as having a mark and grade greater than 50 pass. This equivalent mark and grade will be used for the purposes of calculating a student's weighted average mark and for the purposes of satisfying prerequisite rules where a level of passing grade is specified.

(See also *Precedents, Specific credit, Non-specific credit, Waiver, Weighted average mark (WAM).)*

Creditpoints

Credit points are a measure of value indicating the contribution each unit of study provides towards meeting course completion requirements stated as a total credit point value. Each unit of study will have a credit point value assigned to it, normally in the range 3 to 24. Resolutions of Senate set me number and level of credit points required for graduation.

Cross-institutional enrolment

Cross-institutional enrolment is an enrolment in units of study at one umversity to count towards an award course at another university. Cross-institutional enrolments incur a HECS liability or tuition fee charge at the institution at which the unit of study is being undertaken. Students pay compulsory subscriptions to one university only (usually their home university - ie, the university which will award their degree). (See also *Non-award course, Enrolment non-award.)*

DAC (Data Audit Committee)

DAC is a sub-committee of the VCAC Enrolment Working Party, chaired by the Registrar, with membership including the deans, the Student Centre, FlexSIS and the Planning Support Office. Its role is to oversee the integrity and accuracy of the course and unit of study data as strategic university data. It has a role in advising the Academic Board on suggested policy changes with relation to course and unit of study data.

Deadlines (enrolment variations)

See Enrolment variations.

Deadlines (fees)

The University has deadlines for the payment of fees (eg, HECS, compulsory subscriptions, course fees, etc). Students who do not pay fees by these deadlines may have their enrolment cancelled or they may have a barrier placed on the release of their record. (See also *Barrier.)*

Dean

The head of a faculty or the principal or director of a college (such as the Conservatorium of Music or the Sydney College of Arts).

Dean's certificate

A statement from the dean certifying that all requirements, including fieldwork and practical work, have been met and that the student is eligible to graduate. Not all faculties use dean's

certificates. In faculties that do, qualified students have 'dean's certificate' noted on their academic record.

Deferment

See Admission (deferment), Leave.

Degree

(See also *Award course, Bachelor's degree.)*

Delivery mode

Indicates the mode of delivery of the instruction for a unit of study - eg, normal (ie, by attending classes at a campus of the University), distance (ie, remotely by correspondence or other distance means - eg, Web delivery). The delivery mode must be recorded for each unit as distinct from the attendance mode of the student - ie, an internal student may take one or more units by distance mode and an external student may attend campus for one or more units.

Department

For the purposes of FlexSIS, a department is the academic unit, which is responsible for teaching and examining a unit of study. It may be called a school, a department, a centre or a unit within the University.

DETYA

The Department of Education Training and Youth Affairs is the Commonwealth Government department responsible for higher education. The University is required to provide DETYA with information about its students three times a year. The Government in its funding deliberations uses this information.

Differential HECS

See *Higher Education Contribution Scheme (HECS).*

Diploma

The award granted following successful completion of diploma course requirements. A diploma course usually requires less study than a degree course. Graduate diploma courses are only available to students who already hold an undergraduate degree. (See also *Award* course.)

Direct admissions

For some courses, applications may be made directly to the University. Applications are received by faculties or the International Office, registered on FlexSIS and considered by the relevant department or faculty body. Decisions are recorded on FlexSIS and FlexSIS produces letters to applicants advising them of the outcome. (See also *Admission, UAC admissions.)*

Disability information

Students may inform the University of any temporary or permanent disability, other than a financial disability, which affects their life as a student. Disability information is recorded in FlexSIS but it is only visible to particular authorised users because of its sensitive nature.

Discipline codes

Discipline codes are four-letter codes for each area of study available at the university (eg, CHEM Chemistry, ECON Economics).

Discipline group

A DETYA code used to classify units of study in terms of the subject matter being taught or being researched.

Discontinuation (course)

See Enrolment variation.

Discontinuation (unit of study)

See Enrolment variation.

Dissertation

A dissertation is a written exposition of a topic and may include original argument substantiated by reference to acknowledged authorities. It is a required unit of study for some postgraduate award courses in the faculties of Architecture and Law.

Distance and flexible learning

Distance and flexible learning affords the opportunity to provide higher education to a much wider market - including students from anywhere in the world- at times, locations and modes that suit them.

Doctor of philosophy (PhD)

See Award course, Doctorate, PhD.

Doctorate

The doctorate and the PhD are high-level postgraduate awards available at the University of Sydney. A doctorate course normally involves research and coursework; the candidate submits a thesis that is an original contribution to the field of study. Entry to a doctorate course often requires completion of a master's degree course. Note that the doctorate course is not available in all departments at the University of Sydney. (See also *Award course, PhD.)*

Earliest date

See Research candidature.

EFTSU

The equivalent full-time student unit (EFTSU) is a measure of student load expressed as a proportion of the workload for a standard annual program for a student undertaking a full year of study in a particular award course. A student undertaking the standard annual program of study (normally 48 credit points) generates one EFTSU.

EFTYR

The effective full-time enrolment year (EFTYR) is a calculation of how long, in terms of equivalence to full-time years of enrolment, a student has been enrolled in a course. If a student has always been full-time, the calculation is straightforward (eg, the fifth year of enrolment is EFTYR 5). If the student has had a mixture of part-time and full-time enrolment, this can be equated with an EFTYR. (See also *Stage.)*

Enrolment

A student enrolls in a course by registering with the supervising faculty in the units of study to be taken in the coming year, semester or session. The student pays whatever fees are owing to the University by the deadline for that semester. New students currently pay on the day they enrol which is normally in early February. Students already in a course at the University re-enrol each year or semester; for most students pre-enrolment is required. (See also *Pre-enrolment.)*

Enrolment non-award

Non-award enrolment is an enrolment in a unit or units of study, which does not count towards a formal award of the University. Non-award enrolments are recorded in various categories used for reporting and administrative purposes. (See also *Cross-institutional enrolment, Non-award course.)*

Enrolment status

A student's enrolment status is either 'enrolled' or 'not enrolled'. An enrolment status is linked to an enrolment status reason or category.

Enrolment status reason/ category

Not enrolled status reasons/categories include: withdrawn, totally discontinued, cancelled, on leave (suspended), transferred, lapsed, terminated, qualified and conferred.

Enrolment variation

Students may vary their enrolment at the beginning of each semester. Each faculty determines its deadlines for variations, but HECS liability depends on the HECS census date. (See also *HECS.)*

Enrolment year

See EFTYR, Stage.

Examination

See Examination paper code, Examination period, Supplementary exams.

Examination paper code

A code that identifies each individual examination paper. Used to help organise examinations.

Examination period

The examination period is the time set each semester for the conduct of formal examinations.

Exchange student

An exchange student is either a student of the University of Sydney who is participating in a formally agreed program involving study at an overseas university or an overseas student who is studying here on the same basis. The International Office provides administrative support for some exchanges.

Exclusion

The faculty may ask a student whose academic progress is considered to be unsatisfactory to 'show cause' why the student should be allowed to re-enrol. If the faculty deems the student's explanation unsatisfactory, or if the student does not provide an explanation, the student may be excluded either from a unit of study or from a course. An excluded student may apply to the faculty for permission to re-enrol. Normally at least two years must have elapsed before such an application would be considered.

University policy relating to exclusion is set out in the University Calendar. (See also *Senate appeals.)*

Extended semesters

Distance learning students may be allowed more time to complete a module/program if circumstances are beyond the student's control - eg, drought, flood or illness, affect the student's ability to complete the module/program in the specified time.

External

See Attendance mode.

External transcript

An external transcript is a certified statement of a student's academic record printed on official University security paper. It includes the student's name, any credit granted, all courses the student was enrolled in and the final course result and all units of study attempted within each course together with the result (but not any unit of study which has the status of withdrawn). It also includes any scholarships or prizes the student has received. Two copies are provided to each student on graduation (one with marks and grades for each unit of study and one with grades only). External transcripts are also produced at the request of the student. The student can elect either to have marks appear on the transcript or not. (See also *Academic transcript, Internal transcript.)*

Faculty

A faculty, consisting mainly of academic staff members and headed by a dean, is a formal part of the University's academic governance structure, responsible for all matters concerning the award courses that it supervises (see the 2001 University Calendar, pp. 140-141). Usually, a faculty office administers the faculty and student or staff inquiries related to its courses. The Calendar sets out the constitution of each of the University's 17 faculties. (See also *Board of studies, Supervising faculty.)*

Fail

A mark of less than 50% which is not a concessional pass. (See also *Results.)*

Fee-paying students

Fee-paying students are students who pay tuition fees to the University and are not liable for HECS.

Fee rate

Local fees are charged in bands, a band being a group of subject areas. The bands are recommended by faculties and approved by the DV-C (Planning and Resources).

Fee type

Fee type can be 'international' or 'local'.

Flexible learning

See *Distance* and *Flexible learning.*

Flexible start date

Full fee-paying distance students should not be restricted to the same enrolment time frames as campus-based or HECS students.

FlexSIS

FlexSIS is the computer-based Flexible Student Information System at the University of Sydney. Electronically FlexSIS holds details of courses and units of study being offered by the University and the complete academic records of all students enrolled at the University. FlexSIS also holds the complete academic records of many (but not all) past students of the university. For past students whose complete records are not held on FlexSIS, there will be a reference on FlexSIS to card or microfiche records where details are kept.

Full-time student

See Attendance status, EFTSU.

Grade

A grade is a result outcome for a unit of study normally linked with a mark range. For example, in most faculties, a mark in the range 85-100 attracts the grade 'high distinction' ('HD'). (See also ***Mark.)***

Graduand

A Graduand is a student who has completed all the requirements for an award course but has not yet graduated. (See also *Graduation, Potential graduand.)*

Graduate

A graduate is a person who holds an award from a recognised tertiary institution. (See also *Graduand, Graduation.)*

Graduate certificate

See Award course.

Graduate diploma

See Award course.

Graduate register

The graduate register is a list of all graduates of the University. (See **also** *Graduation.)*

Graduation

Graduation is the formal conferring of awards either at a ceremony or in absentia. (See also *In absentia, Potential graduand.)*

Graduation ceremony

A graduation ceremony is a ceremony where the Chancellor confers awards upon graduands. The Registrar publishes annually the schedule of graduation ceremonies.

HECS

See *Higher Education Contribution Scheme (HECS).*

HECS census date

The date at which a student's enrolment, load and HECS liabiUty. are finalised before reporting to DETYA. The following dates apply:

Semester 1:31 March

Semester 2:31 August.

HECS code

A code used by DETYA to identify the HECS status of a student (eg, 10 deferred, 11 upfront).

Higher doctorates

See Award course.

Higher Education Contribution Scheme (HECS)

All students, except international students, local fee-paying students and holders of certain scholarships are obliged to contribute towards the cost of their education under the Higher Education Contribution Scheme (HECS). HECS liability depends on the load being taken.

Current students, except possibly those who began their studies prior to 1997, have a HECS rate charged for each unit of study in their degree program which depends on the 'discipline group' it is in, and the 'band' to which the Government has assigned it. Theses are all determined annually by the Government.

Honorary degrees

A degree *honoris causa* (translated from the Latin as 'for the purpose of honouring') is an honorary award, which is conferred on a person whom the University wishes to honour.

A degree *ad eundem gradum* (translated as 'at the same level') is awarded to a member of the academic staff who is not a . graduate of the University in recognition of outstanding service to the University. The award of an honorary degree is noted on the person's academic record.

Honours

Some degrees may be completed 'with Honours'. This may involve either the completion of a separate Honours year or additional work in the later years of the course or meritorious achievement over all years of the course. Honours are awarded in a class (Class 1, Class II, Class HI) and sometimes there are two divisions within Class II.

HSC

The HSC is the NSW Higher School Certificate, which is normally completed at the end of Year 12 of secondary school. The UAI (Universities Admission Index) is a rank out of 100 that is computed from a student's performance in the HSC.

In absentia

In absentia is Latin for 'in the absence of. Awards are conferred in absentia when a graduand does not, or cannot, attend the graduation ceremony scheduled for them.

Those who have graduated *in absentia* may later request that they be presented to the Chancellor at a graduation ceremony. **(See also** *Graduation.)*

Instrumental supervisor (teacher)

All students at the Conservatorium of Music and BMus students on the Camperdown campus have an instrumental teacher appointed. (See also *Advisor, Associate supervisor, Research supervisor, Supervision.)*

Internal

See Attendance mode.

Internal transcript

An Internal transcript is a record of a student's academic record for the University's own internal use. It includes the student's

name, SID, address, all courses in which the student was enrolled and the final course result, and all units of study attempted within each course together with the unit of study result. (See also *Academic transcript, External transcript.)*

International student

An International student is required to hold a visa to study in Australia and may be liable for international tuition fees. Any student who is not an Australian or New Zealand citizen or a permanent resident of Australia is an international student. New Zealand citizens are not classified as international students but have a special category under HECS that does not permit them to defer their HECS liability. (See also *Local student, Student type.)*

Joiningfee

Students enrolling for the first time pay, in addition, a joining fee for the University of Sydney Union or equivalent student organisation. (See also *Compulsory subscription.)*

Leave

See *Course leave.*

Life membership

Under some circumstances (eg, after five full-time years of enrolments and contributions) students may be granted life membership of various organisations, which means they are exempt from paying yearly fees. (See also Compulsory subscription.)

Load

Load for an individual student is the sum of the weights of all the units of study in which the student is enrolled. (See also EFTSU, HECS.)

Local student

A local student is either an Australian or New Zealand citizen or Australian permanent resident. New Zealand citizens are required to pay their HECS upfront. (See also Fee type, HECS, International student.)

Major

A major is a defined program of study, generally comprising specified units of study from later stages of the award course. Students select and transfer between majors by virtue of their selection of units of study. One or more majors may be prescribed in order to satisfy course requirements. Majors may be included on testamurs. (See also *Award course, Minor, Stream.)*

Major timetable clash

Used by FlexSIS to denote occasions when a student attempts to enrol in units of study which have so much overlap in the teaching times that it has been decided that students must not enrol in the units together.

Mark

An integer (rounded if necessary) between 0 and 100 inclusive, indicating a student's performance in a unit of study. (See also *Grade.)*

Master's degree

A postgraduate award. Master's degree courses may be offered by coursework, research only or a combination of coursework and research. Entry to the course often requires completion of an Honours year at an undergraduate level. (See also *Award course.)*

Method of candidature

A course is either a research course or a coursework course and so the methods of candidature are 'research' and 'coursework'. (See also *Course, Course (research), Coursework.)*

Minor

A minor is a defined program of study, generally comprising units of study from later stages of the award course and requiring a smaller number of credit points than a major. Students select and transfer between minors (and majors) by virtue of their selection of units of study.

One or more minors may be prescribed in order to satisfy course requirements. Minors may be included on testamurs. (See also *Award course, Major, Stream.)*

Minor timetable clash

Used by FlexSIS to denote occasions when a student attempts to enrol in units of study which have some identical times of teaching.

Mixed mode

See Attendance mode.

Mode

See *Attendance mode* and *Delivery mode.*

Mutually exclusive units of study

See *Prohibited combinations of units of study.*

MyUni

MyUni is a personalised space for staff and students on the University of Sydney's intranet, called USYDnet. MyUni is used to deliver information and services directly through a central location, while also allowing users to customise certain information. Students are able to access such services as exam seat numbers, results, timetables and FlexSIS pre-enrolment and enrolment variations on MyUni. (See also *UsydNet.)*

Non-award course

Non-award courses are courses undertaken by students who are not seeking an award from the University. These may be students enrolled in an award course at another institution or students not seeking an award from any institution. Non-award courses are assigned a course code in the same way as award courses. A separate course code is assigned for each faculty, level (undergraduate or postgraduate) and method (research or coursework) which offers a non-award course. Various categories of non-award enrolment are recorded on FlexSIS for reporting and administrative purposes.(See also *Course, Cross-institutional enrolment, Enrolment non-award.)*

Non-award enrolment

See *Enrolment non-award.*

Non-specific credit

Non-specific credit is awarded when previous studies are deemed to have satisfied defined components of a course other than named units of study. These components include, but are not limited to:

- entire years in courses that progress through the successful completion of a set of prescribed units of study per year
- a set number of credit points within a particular discipline or level (ie, first, second or third year)
- one or more semesters for research courses.

(See also *Credit, Specific credit.)*

OPRS

Overseas Postgraduate Research Scholarship.

Orientation Week

Orientation or 'O Week', takes place during the week prior to lectures in Semester 1. During O Week, students can join various clubs, societies and organisations, register for courses with departments and take part in activities provided by the University of Sydney Union.

Part-time student

See Attendance status, EFTSU.

Permanent home address

The permanent home address is the address for all official University correspondence both inside and outside of semester time (eg, during semester breaks), unless overridden by semester address. (See also *Addresses, Business address, Semester address, Temporary address.)*

PhD

The Doctor of Philosophy (PhD) and other doctorate awards are the highest awards available at the University of Sydney. A PhD course is normally purely research-based; the candidate submits a thesis that is an original contribution to the field of study. Entry to a PhD course often requires completion of a master's degree course. Note that the PhD course is available in most departments in the University of Sydney. (See also *Award course, Doctorate.)*

Postgraduate

A term used to describe a course leading to an award such as graduate diploma, a master's degree or PhD, which usually requires prior completion of a relevant undergraduate degree (or diploma) course. A 'postgraduate' is a student enrolled in such a course.

Potential graduand

Potential graduands are students who have been identified as being eligible to graduate on the.satisfactory completion of their current studies. (See also *Graduand, Graduation)*

Precedents

Where a credit applicant has credit approved in terms of the granting of specific or non-specific credit on the basis of study previously taken, a precedent is established at system level. Any other credit applicant subsequently seeking credit on the basis of the same pattern of previous study will be eligible to have the item of credit to be immediately approved on the basis of the previously approved precedent. (See also *Credit.)*

Pre-enrolment

Pre-enrolment takes place in October for the following year. Students indicate their choice of unit of study enrolment for the following year. After results are approved, registered students are regarded as enrolled in those units of study they chose and for which they are qualified. Their status is 'enrolled' and remains so provided they pay any money owing or comply with other requirements by the due date. Re-enrolling students who do not successfully register in their units of study for the next regular session are required to attend the University on set dates during the January/February enrolment period. Pre-enrolment is also known as provisional re-enrolment. (See also *Enrolment)*

Prerequisite

A prerequisite is a unit of study that is required to be completed before another unit of study can be attempted. (See also *Assumed knowledge, Corequisite, Waiver.)*

Prizes

Prizes are awarded by the University, a faculty or a department for outstanding academic achievement. Full details can be found in the University Calendar.

Probationary candidature

A probationary candidate is a student who is enrolled in a postgraduate course on probation for a period of time up to one year. The head of department is required to consider the candidate's progress during the period of probation and make a recommendation for normal candidature or otherwise to the faculty.

Progression

See *Course progression.*

Prohibition (prohibited combinations of units of study)

When two or more units of study contain a sufficient overlap of content, enrolment in any one such unit prohibits enrolment in any other identified unit. A unit related in this way to any other unit is linked in tables of units of study via use of the symbol N to identify related prohibited units.

Provisional re-enrolment

See *Pre-enrolment.*

Qualification

A qualification is an academic attainment recognised by the University.

Registrar

The Registrar is responsible to the Vice-Chancellor for the keeping of official records and associated policy and procedures within the University. (See the University Calendar for details.)

Registration

In addition to enrolling with the faculty in units of study, students must register with the department responsible for teaching each unit. This is normally done during Orientation Week.

Note that unlike enrolment, registration is not a formal record of units attempted by the student.

Research course

See *Course (research).*

Research supervisor

A supervisor is appointed to each student undertaking a research postgraduate degree. The person will be a full-time member of the academic staff or a person external to the University appointed in recognition of their association with the clinical teaching or the research work of the University. A research supervisor is commonly referred to as a supervisor. (See also *Advisor, Associate supervisor, Instrumental supervisor (teacher), Supervision.)*

Resolutions of Senate

Regulations determined by the Senate of the University of Sydney that pertain to degree and diploma course requirements and other academic or administrative matters.

Result processing

Refers to the processing of assessment results for units of study. Departments tabulate results for all assessment activities of a unit of study and assign preliminary results for each unit of study. Preliminary results are considered by the relevant board of examiners, which approves final results. Students are notified of results by result notices that list final marks and grades for all units of study. (See *also Assessment, Examination period.)*

Result processing schedule

The result processing schedule will be determined for each academic cycle. It is expected that all departments and faculties will comply with this schedule. (See also *Assessment, Examination period, Result processing.)*

Results

The official statement of the student's performance in each unit of study attempted, as recorded on the academic transcript, usually expressed as a grade:

HD	High distinction	a mark of 85-100
D	Distinction	a mark of 75-84
CR	Credit	a mark of 65-74
P	Pass	a mark of 50-64
R	Satisfied requirements	This is used in pass/fail only outcomes
UCN	Unit of study continuing	Used at the end of semester for units of study that have been approved to extend into a following semester. This will automatically flag that no final result is required until the end of the last semester of the unit of study.
PCON	Pass (concessional)	A mark of 46-49. Use of this grade is restricted to those courses that allow for a concessional pass of some kind to be awarded. A student may re-enrol in a unit of study for which the result was PCON. Each faculty will determine and state in its course regulations what proportion, if any, may count - eg, 'no more than one sixth of the total credit points for a course can be made up from PCON results'.
F	Fail	This grade may be used for students with marks of 46-49 in those faculties which do not use PCON
AF	Absent fail	Includes non-submission of compulsory work (or non-attendance at compulsory labs, etc) as well as failure to attend an examination
W	Withdrawn	Not recorded on an external transcript. This is the result that obtains where a student applies to discontinue a unit of study by the HECS census date (ie, within the first four weeks of enrolment).
DNF	Discontinued - not to count as failure	Recorded on external transcript. This result applies automatically where a student discontinues after the HECS Census Date but before the end of the seventh week of the semester (or before half of the unit of study has run, in the case of units of study which are not semester-length). A faculty may determine that the result of DNF is warranted after this date if the student has made out a special case based on illness or misadventure.
DF	Discontinued - fail	Recorded on transcript. This applies from the time DNF ceases to be automatically available up to the cessation of classes for the unit of study.

MINC	Incomplete with a mark of at least 50	This result may be used when examiners have grounds (such as illness or misadventure) for seeking further information or for considering additional work from the student before confirming the final mark and passing grade. Except in special cases approved by the Academic Board, this result will be converted to a normal passing mark and grade either: • by the dean at the review of examination results conducted pursuant to section 2 (4) of the Academic Board policy 'Examinations and Assessment Procedures'; or • automatically to the indicated mark and grade by the third week of the immediately subsequent academic session. Deans are authorised to approve the extension of a MINC grade for individual students having a valid reason for their incomplete status.
INC	Incomplete	This result is used when examiners have grounds (such as illness or misadventure) for seeking further information or for considering additional work from the student before confirming the final result. Except in special cases approved by the Academic Board, this result will be converted to a normal permanent passing or failing grade either: • by the dean at the review of examination results conducted pursuant to section 2 (4) of the Academic Board policy 'Examinations and Assessment Procedures'; or • automatically to an AF grade by the third week of the immediately subsequent academic session. Deans are authorised to approve the extension of a MINC grade for individual students having a valid reason for their incomplete status.
UCN	Incomplete	A MINC or INC grade is converted, on the advice of the dean, to UCN when all or many students in a unit of study have not completed the requirements of the unit. The students may be engaged in practicum or clinical placements, or in programs extending beyond the end of semester (eg, Honours).

Scholarships
Scholarships are financial or other forms of support made available by sponsors to assist Australian and international students to pursue their studies at the University. When a student's means are a criterion, scholarships are sometimes called bursaries. (See also *Prizes.)*

School
See *Department.*

SCR
System change request.

Semester
A semester is a session whose dates are determined by the Academic Board. Normally all undergraduate sessions will conform to the semesters approved by the Academic Board. Any offering of an undergraduate unit not conforming to the semester dates must be given special permission by the Academic Board.

Semester address
The semester address is the address to which all official University correspondence is sent during semester time, if it is different to the permanent address. Unless overridden by a temporary address all official University correspondence during semester (including Session 4 for students enrolled in Summer School) will be sent to this address. (See also *Addresses, Business address, Permanent home address, Temporary address)*

Senate
The Senate of the University is the governing body of the University. (See the University Calendar.)

Senate appeals
Senate appeals are held for those students who, after being excluded by the faculty from a course, appeal to the Senate for readmission. While any student may appeal to the Senate against an academic decision, such an appeal will normally be heard only after the student has exhausted all other avenues - ie, the department, faculty, board of study and, in the case of postgraduates, the Committee for Graduate Studies. (See also *Exclusion.)*

Session
A session is a teaching period that defines the offering of a unit of study. A session cannot be longer than six months. Session offerings are approved by the relevant dean, taking into account all the necessary resources, including teaching space and staffing. The Academic Board must approve variation to the normal session pattern.

Session address
See *Semester address.*

Special consideration
Candidates who have medical or other serious problems, which may affect performance in any assessment, may request that they be given special consideration in relation to the determination of their results.

They can obtain an official form from the Student Centre. The Student Centre stamps the form and the medical or other documentation. The student gives a copy of the material to the Student Centre staff and takes copies to the relevant departments. The student retains the originals. The dates for which special consideration is sought are recorded on FlexSIS and printed on the examination register.

Special permission
See *Waiver.*

Specific credit
Specific credit is awarded when previous studies are entirely equivalent to one or more named units of study offered by the University of Sydney that contribute to the course in which the applicant has been admitted. (See also *Credit, Non-specific* ***credit.)***

Sponsorship
Sponsorship is the financial support of a student by a company or government body. Sponsors are frequently invoiced directly.

SRS
SRS is the student record system responsible, prior to FlexSIS, for the processing of student records. The functions of SRS are gradually being incorporated into FlexSIS. (See also *FlexSIS.)*

Stage
For the purposes of administration, a course may be divided into stages to be studied consecutively. The stages may be related to sessions or they may relate to an academic cycle. Part-time students progress through a course more slowly and would often enrol in the same stage more than once.

Status
Status is a variable for students both with relation to course and unit of study. With relation to course, students can have the status of enrolled or not enrolled. 'Not enrolled' reasons can be: totally discontinued, withdrawn, suspended, cancelled, awarded, etc. With relation to unit of study, students can have the status of CURENR or WITHDN, discontinued, etc.

Stream
A stream is a defined program of study within an award course, which requires the completion of a program of study specified by the course rules for the particular stream, in addition to the core program specified by the course rules for the award course. Students enrolled in award courses that involve streams will have the stream recorded in their enrolment record. Students normally enter streams at the time of admission, although some award courses require students to enrol in streams after the completion of level 1000 units of study. Where permitted to do so by faculty resolution, students may transfer from one stream to another, within an award course, provided they meet criteria approved by the Academic Board on the advice of the faculty concerned. A stream will appear with the award course name on testamurs - eg, Bachelor of Engineering in Civil Engineering (Construction Management). (See also *Award course, Major, Minor.)*

Student ID card
All students who enrol are issued with an identification card. The card includes the student name, SID, the course code, and a library borrower's bar code. The card identifies the student as eligible to attend classes and must be displayed at formal

examinations. It must be presented to secure student concessions and to borrow books from all sections of the University Library.

Student identifier (SID)

A 9-digit number which uniquely identifies a student at the University.

Student load

See *Load.*

Study Abroad Program

A scheme administered by the International Education Office which allows international students who are not part of an exchange program, to take units of study at the University of Sydney, but not towards an award program. In most cases the units of study taken here are credited towards an award at their home institution. (See also *Exchange student.)*

Subject area

A unit of study may be associated with one or more subject areas. The subject area can be used to define prerequisite and course rules - eg, the unit of study 'History of Momoyama and Edo Art' may count towards the requirements for the subject areas 'Art History and Theory' and 'Asian Studies'.

Summer School

See *Sydney Summer School.*

Supervising faculty

The supervising faculty is the faculty which has the responsibility for managing the academic administration of a particular course - ie, the interpretation and administration of course rales, approving students' enrolments and variations to enrolments. Normally the supervising faculty is the faculty offering the course. However, in the case of combined courses, one of the two faculties involved will usually be designated the supervising faculty at any given time. Further, in the case where one course is jointly offered by two or more faculties (eg, the Liberal Studies course) a joint committee may make academic decisions about candidature and the student may be assigned a supervising faculty for administration.

The International Office has a supporting role in the administration of the candidatures of international students and alerts the supervising faculty to any special conditions applying to these candidatures (eg, that enrolment must be full-time). (See also *Board of studies.)*

Supervision

Supervision refers to a one-to-one relationship between a student and a nominated member of the academic staff or a person specifically appointed to the position. (See also *Advisor, Associate supervisor, Instrumental supervisor (teacher), Research supervisor.)*

Supplementary examinations

Supplementary exams may be offered by faculties to students who fail to achieve a passing grade or who were absent from assessment due to illness or misadventure.

Suppression of results

Results for a particular student can be suppressed by the University for the following reasons:

- the student has an outstanding debt to the university
- the student is facing disciplinary action.

Suspension

See *Course leave.*

Sydney Summer School

Sydney Summer School is a program of accelerated, intensive study running for approximately 6 weeks during January and February each year. Both undergraduate and postgraduate units are offered. Summer School provides an opportunity for students at Sydney and other universities to catch up on needed units of study, to accelerate completion of a course or to undertake a unit that is outside their award course. All units are full fee-paying and enrolled students are also liable for compulsory subscriptions. Some fee-waiver scholarships are available.

Teaching department

See *Department.*

Temporary address

Students may advise the University of a temporary address. Correspondence will be sent to this address between the dates specified by the student. (See also *Addresses, Business address, Permanent home address, Semester address.)*

Testamur

A testamur is a certificate of award provided to a graduate usually at a graduation ceremony.

Thesis

A thesis is a major work that is the product of an extended period of supervised independent research. 'Earliest date' means the earliest date at which a research student can submit the thesis. 'Latest date' means the latest date at which a research student can submit the thesis.

Timetable

Timetable refers to the schedule of lectures, tutorials, laboratories and other academic activities that a student must attend.

Transcript

See Academic transcript.

Transfer

See *Course transfer.*

Tuitionfees

Tuition fees may be charged to students in designated tuition fee-paying courses. Students who pay fees are not liable for HECS.

VAC

The Universities Admissions Centre (UAC) receives and processes applications for admission to undergraduate courses at recognised universities in NSW and the ACT. Most commencing undergraduate students at the University apply through UAC.

UAC admissions

Most local undergraduates (including local undergraduate fee payers) apply through the Universities Admission Centre (UAC).

The University Admissions Office coordinates the processing of UAC applicants with faculties and departments and decisions are recorded on the UAC system.

Applicants are notified by UAC and an electronic file of applicants who have been made offers of admission to courses at the University is loaded onto FlexSIS. (See also *Admission, Direct admissions.)*

UAI (Universities Admission Index)

The Universities Admission Index (UAI) is a number between 0.00 and 100.00 with increments of 0.05. It provides a measure of overall academic achievement in the HSC that assists universities in ranking applicants for university selection. The UAI is based on the aggregate of scaled marks in ten units of the HSC.

Undergraduate

A term used to describe a course leading to a diploma or bachelor's degree. An 'undergraduate' is a student enrolled in such a course.

Unit of study

A unit of study is the smallest stand-alone component of a student's course that is recordable on a student's transcript. Units of study have an integer credit point value, normally in the range 3-24. Each approved unit of study is identified by a unique sequence of eight characters, consisting of a four character alphabetical code which usually identifies the department or subject area, and a four character numeric code which identifies the particular unit of study. Units of study can be grouped by subject and level. (See also *Core unit of study, Course, Major.)*

Unit of study enrolment status

The enrolment status indicates whether the student is still actively attending the unit of study (ie, currently enrolled) or is no longer enrolled (withdrawn or discontinued).

Unit of study group

A grouping of units of study within a course. The units of study which make up the groups are defined within FlexSIS.

Unit of study level

Units of study are divided into Junior, Intermediate, Senior, Honours, Year 5, and Year 6. Most majors consist of 32 Senior credit points in a subject area (either 3000 level units of study or a mix of 2000 and 3000 level units of study).

University

Unless otherwise indicated, University in this document refers to the University of Sydney.

University Medal

A faculty may recommend the award of a University Medal to students qualified for the award of an undergraduate Honours degree or some master's degrees, whose academic performance is judged outstanding.

UPA
University Postgraduate Award.

USYDnet
USYDnet is the University of Sydney's intranet system. In addition to the customised MyUni service, it provides access to other services such as directories (maps, staff and student, organisations), a calendar of events (to which staff and students can submit entries), and a software download area. (See also *MyUni.)*

Variation of enrolment
See *Enrolment variation.*

Vice-Chancellor
The chief executive officer of the University, responsible for its leadership and management. The Vice-Chancellor is head of both academic and administrative divisions.

Waiver
In a prescribed course, a faculty may waive the prerequisite or corequisite requirement for a unit of study or the course rules for a particular student. Unlike credit, waivers do not involve a reduction in the number of credit points required for a course (See also *Credit.)*

Weighted average mark (WAM)
The Weighted Average Mark (WAM) is the average mark in the unit of study completed, weighted according to credit point value and level. The formulae used to calculate the WAMs are course-specific: there are many different WAMs in the University.

Year of first enrolment (YFE)
The year in which a student first enrols at the University.

Youth Allowance
Youth Allowance is payable to a full-time student or trainee aged 16-24 years of age; and enrolled at an approved institution such as a school, college, TAPE or university, and undertaking at least 15 hours a week face-to-face contact. Youth Allowance replaces AUSTUDY.

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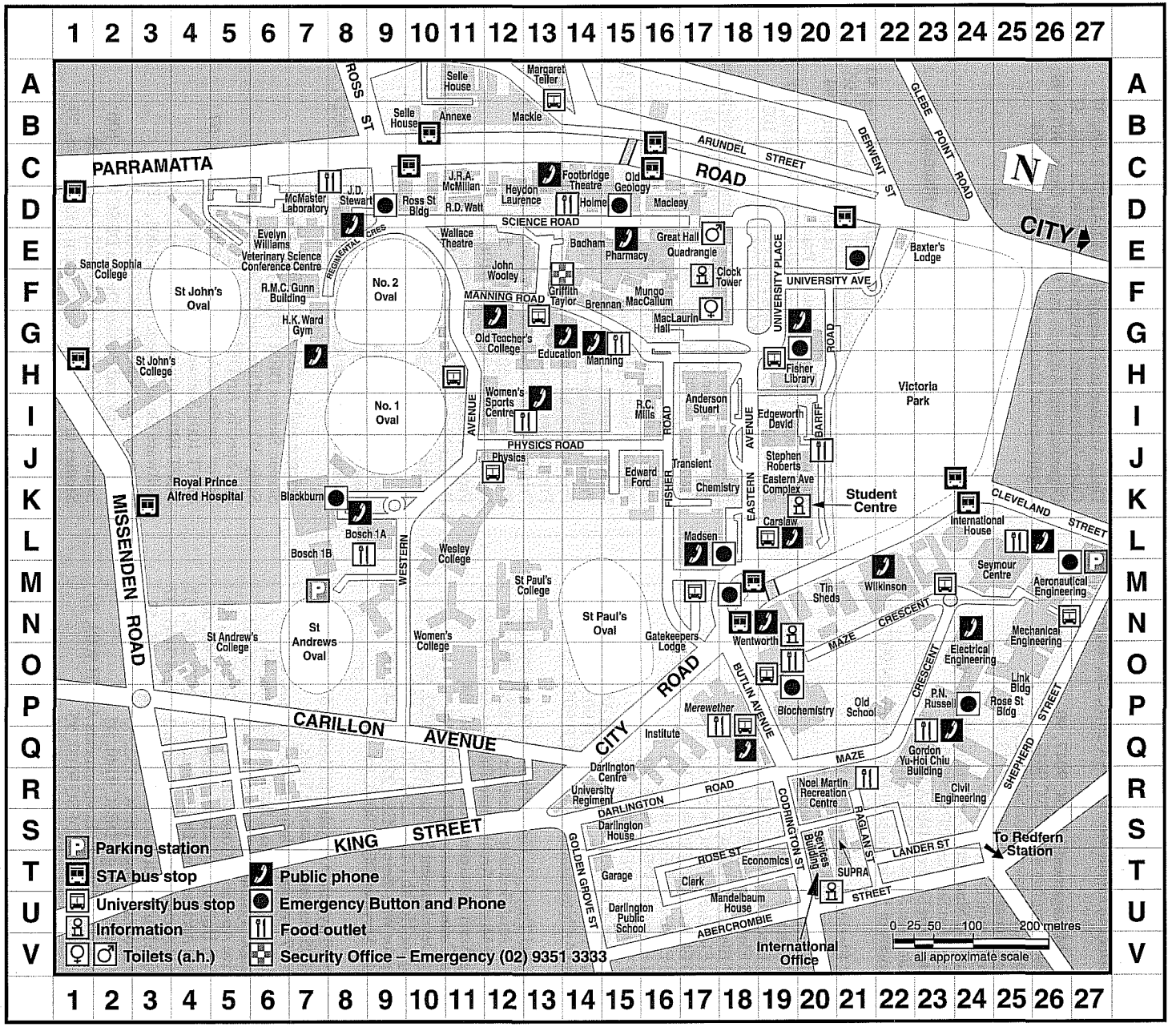

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Education Bldg and Faculty Office **13G**
Educational Development & Evaluation **15K**
Educational Psychology, Literacies & Learning **13G**
Edward Ford Bldg **15K**
Electrical Engineering **240**
Employment Service, Casual **14C**
Engineering Faculty Office **250**
English **12E**
Equal Employment Opportunity Unit **13A**
Evelyn Williams Bldg **6E**
Experimental Medicine **7K**
External Relations Division **16E**
Facilities Planning, Office of **20T**
Family and Community Health in Nursing **Mallett St**
Financial institutions:
Commonwealth Bank **14D**
Credit Union-ATM only **14D**
National Australia Bank 15E, **19N**
Finance, Dept of **16Q**
Financial Management & Reporting **13A**
Financial Services Division **13A**
Financial Systems Development **13A**
Fine Arts (Art History & Theory) **161**
Fisher Library **19G**
Footbridge Theatre **14C**
French Studies 1SF
Garage, University **15T**
Gender Studies **16E**
General Practice **Westmead Hospital**
Geography **16Q**
Geology and Geophysics **19J**
Germanic Studies **15F**
Government and Public Administration **17P**
Great Hall **18E**
Greek, Modern **14F**
Griffith Taylor Bldg **14F**
Gunn, R.M.C. Bldg **7F**
Heydon Laurence Bldg **12D**
Health Information Management **Cumberland**
Health Sciences Faculty Office **Cumberland**
Health Service (Holme Bldg, Wentworth Bldg) **14D, 19N**
History **15F**
History and Philosophy of Science **19L**
Holme Bldg **14D**
Industrial Relations, Dept of **16Q**
Infectious Diseases **7K**
Information Technology Services **19U**
Institute Bldg **16Q**
International Office and International Student Services **20T**
International House **23L**
International Preparation Program **20T**
Italian **161**
Jurisprudence **St James**
Koori Centre **12G**
Law Dept and Faculty Offce **St** James
Learning Assistance Centre **13G**
Life Sciences in Nursing **Mallett St**
Linguistics **17J**
Link Bldg **250**
Lost Property **14F**
MackieBldg **13B**
MacLaurin Hall **16G**
Macleay Bldg and Museum **16D**
MadsenBldg **17L**
Mail Room (Internal) **20T**
Main Bldg **17F**
Management Studies **Burren Street**
Mandelbaum House **18U**
Manning House **14H**
Margaret Telfer Bldg **13A**
Marketing, Dept of **16Q**
Mathematics and Statistics **19L**
McMasterBldg **7D**
McMillan, J.R.A., Bldg **11C**
Mechanical and Aeronautical Engineering Bldg **25N**
Media and Publications **16E**
Mechanical Engineering **25N**
Media Office **16E**
Medical Radiation Technology **Cumberland**
Medicine, Dept of **7K**
Medicine, Faculty of **15K**
Merewether Bldg **17P**
Microbiology **20P**
Mills, R.C. Bldg **161**
Mungo MacCallum Bldg **16F**
Music, Dept of **24M**
Nicholson Museum **16G**
Nursing Therapeutics **Cumberland**
Obstetrics and Gynaecology **9K**
Occupational Therapy **Cumberland**
Old Geology Bldg **15D**
Old School Bldg **21P**
Old Teachers'College Bldg **12G**
Operations Accounting **13A**
Orange - Rural Management, Faculty **Orange**
Orthoptics Cumberland
Paediatrics and Child Health **New Children's Hospita**
Pathology **7K**
Personnel Services **13A**
Pharmacology **7L**
Pharmacy **15E**
Philosophy **17G**
Photowise Imaging **20T**
Physics **13J**
Physiology **171**
Physiotherapy **Cumberland**
Planning Support Office **16E**
Post Office **15E**
Printing Services, University **20T**
Professional Studies **13G**
Properties and Investments **13A**
Prospective Students Unit **12B**
Psychological Medicine **4K**
Psychology **14E**
Purchasing **13A**
Publications Unit **16E**
Public Health and Community Medicine **15K**
Quadrangle **17F**
Queen Elizabeth II Research Institute **9K**
Regiment, University **14R**
Religion, School of Studies in **12E**
Research and Scholarships **16E**
Revenue Services **13A**
Risk Management **13A**
Rose Street Bldg **24P**
Ross Street Bldg **10D**
Russell, Peter Nicol, Bldg **23P**
St Andrew's College SO
St John's College **3H**
St Paul's College **12N**
Sancta Sophia College IF