The University of Sydney

Faculty of Architecture Handbook 2004

University dates

University semester and vacation dates 2004

Summer School	
Lectures begin	Monday 5 January
Lectures end	Friday 20 February
Semester 1	
Lectures begin	Monday 8 March
AVCC Common Week/non-teaching Easter Period	Friday 9 April to Friday 16 April
Last day of lectures	Friday 11 June
Study vacation: 1 week beginning	Monday 14 June to Friday 18 June
Examination period	Monday 21 June to Saturday 3 July
Semester ends	Saturday 3 July
AVCC Common week/non-teaching period	Monday 5 July to Friday 9 July
Semester 2	
Lectures begin	Monday 26 July
AVCC Common Week/non-teaching period	Monday 27 September to Friday 1 October
Last day of lectures	Friday 29 October
Study vacation	Monday 1 November to Friday 5 November
Examination period	Monday 8 November to Saturday 20 November
Semester ends	Saturday 20 November

Last dates for withdrawal or discontinuation 2004

Semester 1 units of study.	
Last day to add a unit	Friday 19 March
Last day for withdrawal	Wednesday 31 March
Last day to discontinue without failure (DNF)	Friday 30 April
Last day to discontinue (Discontinued – Fail)	Friday 11 June
Semester 2 units of study.	
Last day to add a unit	Friday 6 August
Last day for withdrawal	Tuesday 31 August
Last day to discontinue without failure (DNF)	Friday 17 September
Last day to discontinue (Discontinued – Fail)	Friday 29 October
Withdrawal from intensive units of study offered at any time.	
Last day to withdraw from an intensive unit with a duration of less than six weeks.	Close of business on the first teaching day.
Last day to withdraw from an intensive unit with a duration of six weeks or more but less than that of a standard semester.	Close of business on the fourteenth day after teaching has commenced.

University semester and vacation dates 2004–2006 are listed on the University Web site at www.usyd.edu.au/fstudent/undergrad/apply/scm/dates.shtml.

*Academic Board has approved delayed starting and ending dates for certain students. Semester will begin and end one week later for some students who are in classrooms using the first and second floor of the Wilkinson Building, due to building

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NSW 2006
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The University of Sydney Faculty of Architecture Handbook 2004
© 2003 The University of Sydney. ISSN 1323-0344.
CRICOS Provider Code 00026A.
The information in this handbook is subject to approval and/or change by the appropriate faculty of the University. Students should always check the accuracy of the information with faculty staff.
Produced by the Publications Office, The University of Sydney, with the assistance of Tim Mansour from Neologica Print & Promotions,
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Printed by PLT Print Solutions, Frenchs Forest, NSW.

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A welcome from the Dean

Welcome to the Faculty of Architecture at The University of Sydney.

Ours is a broad, multidisciplinary faculty comprised of internationally recognised architects, urban designers and planners, design computing and digital media specialists, practicing artists, architectural scientists, architectural technologists and environment-behaviour experts. 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 designed, planned and built environments.

As the first Faculty of Architecture in Australia, Sydney offers 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, and among the best in the world, you will receive an excellent design, planning or research education from distinguished staff and many of the most exciting architects, planners and design-computing specialists from Australia and around the world

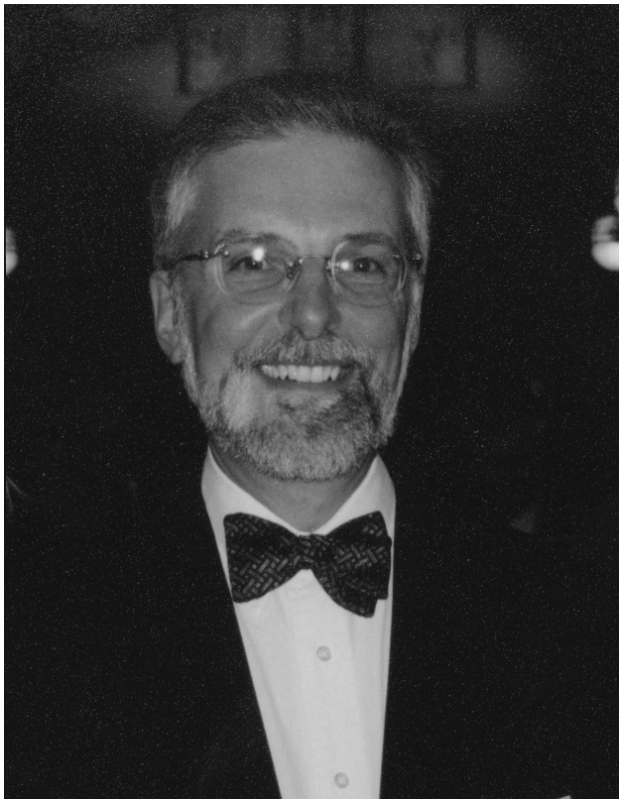
The majority of undergraduate students entering the Faculty will become architects through the combined Bachelor of Design (Architecture)/Bachelor of Architecture professionally accredited degree. For you we have a broad, integrative curriculum centred on architectural design and highly integrative of all the knowledge areas you need to be a practicing architect. It is structured around designing, inhabiting and constructing the built environment, with a mix of open and integrative studios. The curriculum is flexible to allow ample time to take electives from our Faculty or the rest of the University. Like all architecture degrees in Australia, this is a five-year program, during which many students take time away from the University for professional practice experience, travel or an international exchange program abroad. Some students also complete the equivalent of a minor in Arts, in Art History and Theory, in a language or other fields in the University, or in allied arts in architecture, digital architecture, urban design and planning or another subject area here in the Faculty.

You may also study with us to become a professional urban designer or urban or regional planner. To do these simply choose the BDesArch(UrbDes&Plan) Stream in Year 2. This will permit you to enter the Master of Urban Design or Master of Urban and Regional Planning Programs and fast track to a combined BDesArch(UrbDes&Plan)/MUrbDes or BDesArch(UrbDes&Plan)/ MUrbRegPlan combined undergraduate and master's degree in 4 to 5 years. Graduates of these programs have become leaders in the urban design and urban planning communities throughout Australia and the Asia Pacific region.

Another flexible option is to choose the BDesArch(DigitalArch) Stream to become a digital media expert in the architectural, built environment and building industry. This stream also permits you to move into the Design Computing or Digital Media Programs and fast track to complete the BDesArch(DigArch)/MDesSc(DesComp) or (DigMed) in four to five years.

We also offer another major undergraduate degree, the Bachelor of Design Computing, combining studies of the design process with computing. This too can easily lead, if you wish, to graduate studies in design computing or digital media. For over twenty-five years, we have offered a masters degree in Design Computing. For several years now, we have been bringing that expertise to an exciting new undergraduate program. It focuses on developing environments for designing digitally (eg, virtual realities, design computing in architecture and the built environment) and interacting with designs digitally (eg, digital media presentations). Graduates move into architecture and the built environment professions as design computing experts or into related design computing and virtual architecture fields.

At the graduate or postgraduate level, we offer a broad array of 13 different graduate coursework degrees, diplomas and certificates in wide ranging fields bearing on the design and planning of the built environment. These range from Audio



Design through Urban and Regional Planning and include Architectural Design, Architectural History Theory & Criticism, Building, Building Services, Design Computing, Digital Media, Facilities Management, Heritage Conservation, Illumination Design, Sustainable Design and Urban Design. You may pursue any of these graduate/postgraduate programs for a half-year Graduate Certificate, a one-year Graduate Diploma or the full 1–-year Masters degree, you may start with the GradCert or GradDip and articulate up to the full Masters, and you may pursue any of them full-time or part-time.

If you are interested in a research degree, we offer an undergraduate Honors degree, the MPhil and PhD, and the DSc(Arch) higher doctorate, all in five areas of internationally recognised research – architecture, architectural science, design computing and cognition, environment behaviour and society, and urban and regional policy and planning.

While still a friendly size (just over 1,000 students with 45 full-time academic staff, another 10 distinguished adjunct staff, and dozens of part-time lecturers and tutors from the various professions we serve), and all in one dedicated building, the Faculty is truly a world-leader with an unparalleled array of internationally recognised undergraduate and graduate programs. We welcome you to join us.

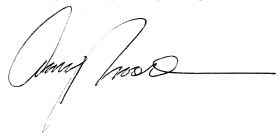
Our students and staff come from around the world to study and work with us. You may select to work in any of these fields, or to work interdisciplinary in a combination of fields within the Faculty or between the Faculty and the rest of the University. The Faculty includes world-renowned researchers and educators in each of these areas, ready to assist and mentor you in your studies.

The facilities of the Faculty are without parallel in Australia. Each undergraduate architecture and design computing student has his or her own individual, design workstation in newly refurbished and expanded dedicated design studios. The Faculty also has its own Art Workshops, Architectural and Technical Workshops and Tin Sheds Gallery to provide you with the opportunity to work and exhibit in a range of media under the direction of professional artists and technicians. The

Architectural and Technical Services Centre includes specialised teaching and research laboratories to allow you to delve deeply into audio and acoustics, indoor and natural lighting, and includes a wind tunnel, structures and materials lab, artificial sky and heliodon, among other labs and studios. The Faculty has the largest library in architecture, planning and the built environment – the Denis Winston Library – and the most advanced centre for design computing and digital architecture and other media in the Australasian region – both in the heart of our Wilkinson Building.

Graduates of our Faculty are leaders throughout Australia in architectural design, architectural science, design computing, environment-behaviour studies 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, you are most welcome to visit the Faculty anytime 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*, RAIA PIA 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. In 2002 the Faculty was 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 1,300 students enrolled in the following degrees, diplomas, and certificates that may be awarded in the Faculty:

Undergraduate degrees

- Bachelor of Design – BDesign (*final intake 2003*)
- Bachelor of Design in Architecture – BDesArch
- Bachelor of Design Computing – BDesComp
- Bachelor of Science (Architecture) – BSc(Arch) (*final intake 2000*)
- Bachelor of Architecture – BArch

Research degrees

- Doctor of Science in Architecture – DScArch
- Doctor of Philosophy – PhD
- Master of Philosophy (Architecture) – MPhil(Arch)

Graduate degrees by coursework

- Master of Architecture (Architectural Design) – MArch(ArchDes)
- Master of Architecture (Architectural History, Theory and Criticism) – MArch(ArchHistTheory&Crit)
- Master of Design Science (Audio Design) – MDesSc(AudioDes)
- Master of Design Science (Building) – MDesSc(Build)
- Master of Design Science (Building Services) – MDesSc(BuildServ)
- Master of Design Science (Design Computing) – MDesSc(DesComp)
- Master of Design Science (Digital Media) – MDesSc(DigMed)
- Master of Design Science (Facilities Management) – MDesSc(FacMan)
- Master of Design Science (Film and Digital Video) – MDesSc(Film&DigVideo) (*final intake 2004*)
- Master of Design Science (Illumination Design) – MDesSc(IllumDes)
- Master of Design Science (Sustainable Design) – MDesSc(SustainDes)
- Master of Heritage Conservation – MHeritCons
- Master of Housing Studies – MHS (*final intake 2002*)
- Master of Urban Design – MUrbDes
- Master of Urban and Regional Planning – MURP
- Master of Urban and Regional Planning (Heritage Conservation) – MURP(HeritCons)
- Master of Urban and Regional Planning (Housing Studies) – MURP(HS)
- Master of Urban and Regional Planning (Urban Design) – MURP(UrbDes)

Graduate diplomas by coursework

- Graduate Diploma in Architecture (Architectural Design) – GradDipArch(ArchDes)
- Graduate Diploma in Architecture (Architectural History, Theory and Criticism) – GradDipArch(ArchHistTheory&Crit)
- Graduate Diploma in Design Science (Audio Design) – GradDipDesSc(AudioDes)
- Graduate Diploma in Design Science (Building) – GradDipDesSc(Build)
- Graduate Diploma in Science (Building Services) – GradDipDesSc(BuildServ)
- Graduate Diploma in Design Science (Design Computing) – GradDipDesSc(DesComp)
- Graduate Diploma in Science (Digital Media) – GradDipDesSc(DigMed)
- Graduate Diploma in Science (Facilities Management) – GradDipDesSc(FacMan)
- Graduate Diploma in Science (Film and Digital Video) – GradDipDesSc(Film&DigVideo) (*final intake 2004*)
- Graduate Diploma in Science (Illumination Design) – GradDipDesSc(IllumDes)
- Graduate Diploma in Science (Sustainable Design) – GradDipDesSc(SustainDes)
- Graduate Diploma in Heritage Conservation – GradDipHeritCons
- Graduate Diploma in Housing Studies – GradDipHS (*final intake 2002*)
- Graduate Diploma in Urban Design – GradDipUrbDes
- Graduate Diploma in Urban and Regional Planning – GradDipURP

Graduate certificates by coursework

- Graduate Certificate in Architecture (Architectural Design) – GradCertArch(ArchDes)
- Graduate Certificate in Architecture (Architectural History, Theory and Criticism) – GradCertArch(ArchHistTheory&Crit)
- Graduate Certificate in Design Science (Audio Design) – GradCertDesSc(AudioDes)
- Graduate Certificate in Design Science (Building) – GradCertDesSc(Build)
- Graduate Certificate in Science (Building Services) – GradCertDesSc(BuildServ)
- Graduate Certificate in Design Science (Design Computing) – GradCertDesSc(DesComp)
- Graduate Certificate in Science (Digital Media) – GradCertDesSc(DigMed)
- Graduate Certificate in Science (Facilities Management) – GradCertDesSc(FacMan)
- Graduate Certificate in Science (Film and Digital Video) – GradCertDesSc(Film&DigVideo) (*final intake 2004*)
- Graduate Certificate in Science (Illumination Design) – GradCertDesSc(IllumDes)
- Graduate Certificate in Science (Sustainable Design) – GradCertDesSc(SustainDes)
- Graduate Certificate in Heritage Conservation – GradCertHeritCons
- Graduate Certificate in Housing Studies – GradCertHS (*final intake 2002*)
- Graduate Certificate in Urban Design – GradCertUrbDes
- Graduate Certificate in Urban and Regional Planning – GradCertURP

■ 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.

Academic Staff

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) PhD DipBdgSc, LFIES ANZ IALD
Associate Dean (Research)
Simon N Hayman, BSc(Arch) MArch PhD DipIllumDes, MIESANZ
Associate Dean (Teaching and Learning)
Harry Z Margalit, BArch *CapeT* MA PhD
Associate Dean (Undergraduate Studies)
Kristine S Sodersten, DipHEd *UNSW* BArch, ARAIA

Undergraduate programs coordinators

Bachelor of Design in Architecture
Kristine S Sodersten
Bachelor of Design Computing
Professor Mary Lou Maher
Bachelor of Architecture
Dr Peter Armstrong

Graduate programs coordinators

Architecture
Professor Tom Heneghan
Audio Design
Dr Densil Cabrera
Building
Dr Simon N Hayman
Building Services
Associate Professor Warren G Julian
Design Computing
Dr Michael A Rosenman
Digital Media
Dr Kirsty Beilharz
Facilities Management
Dr David Leifer
Film and Digital Video
Dr Michael A Rosenman
Heritage Conservation
Trevor Howells
Housing Studies
Colin L James
Illumination Design
Associate Professor Warren G Julian
Sustainable Design
Bruce S A Forwood
Urban Design
Barrie Shelton
Urban and Regional Planning
Dr Nicole Gurran

Art workshops

Coordinator
Jan Fieldsend

Disciplinary heads

Architecture and Allied Arts
Professor Tom Heneghan
Architectural and Design Science
Associate Professor Warren G Julian
Design Computing and Cognition
Professor John S Gero
Environment-Behaviour Studies
Professor Gary T Moore
Urban and Regional Planning and Policy
Professor Edward Blakely

School of Architecture, Design Science & Planning

Professor of Architecture
Tom Heneghan, AADipl. Appointed 2002
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Professor of Design Science
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Professor of Urban & Regional Planning
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A Terrence Purcell, PhD *Macq* BA
Peter R Smith, MArch PhD, FRAIA (to 30 July, 2003)
Adrian Snodgrass, MSc(Arch) PhD (to 31 December, 2003)
Jennifer Taylor, MArch *Wash*, FRAIA (to 31 July, 2004)
John G Toon, DipArch *Leic*, FRAPI MRTPI ARIBA ARAIA (to 1 July, 2005)
Honorary Senior Lecturer
David M Rowe, DipMechEng, ASTC FIE MAIRAH
Honorary Associates
Lynne Armitage (to 30 June 2003)
Michael Bates (to 31 December, 2005)

Lan Ding, MArch MUT *China*, PhD (to 31 December 2005)
Peter Droege, DipIng *MunichTU* MArchAS *MIT*, MRAPI AAIA (to 31 December, 2004)
John Goldberg (to 31 December, 2005)
Nigel Helyer (to 30 September, 2005)
Graham Holland, BArch *UNSW* PhD (to 31 December, 2005)
Estelle Lazer (to 31 December 2005)
Nancy Ruck, BArch *Auck* PhD *UNSW* MBdgSc (to 30 September, 2005)
Adrian Snodgrass, MSc(Arch) PhD (until 31 December 2003)
Hans Schneider
Neville Thiele, BE, FAES FIREE FIEAust MSMPTE (to 30 September, 2005)

Adjunct Professors
Kerry Clare, BArch *QUT*, RAIA
Lindsay Clare, DipArch *QUT*, RAIA
Andrew Davids
Romaldo Giurgola, AO, BArch *Rome* MScArch *Col*, FAIA FRAIA
Christopher Johnson, MBEnv *UTS* MArch *UNSW* BArch, FRAIA
Harry Seidler, AC OBE, BArch *Manit* MArch *Harv*, HonFRIBA HonFAIA LFRAIA

Adjunct Associate Professors
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David Marchant
Paul Pholeros, BSc(Arch) BArch
Harvey Sanders, MSc *Reading* MPhil *Lond* , FRAPI MRTPI ARICS
Mary-Lynne Taylor, BA LLB

Visiting Professor
Andrew Benjamin

Visiting Scholars
Dr Douglas Viera de Aguiar (to 31 March, 2004)
Professor Michael Burt (to 31 March, 2004)
Dr Neusa Felix (to 31 December, 2003)
Dr Jaehee Jang (to 31 January, 2004)
Dr Dae-up Jeong (to 28 February, 2004)
Professory Thomas Kvan (to 1 June, 2006)
Professor William Mitchell
Professor Yangki Oh (to 15 Feb, 2004)
Dr Jong-Soo Park (to 5 May, 2004)
Dr Dagmar Reinhardt (to 5 July, 2004)
Dr Michihiko Shinozaki (to 30 September, 2003)

Administration

Faculty Administration Office

Faculty Manager (seconded to the Sydney College of the Arts)
Raymond J Patman, MA BEc

Faculty Administration & Personnel Officer (on secondment)
Matthew Leach, BEc MA(Psych)

Executive Assistant to the Dean
Vacant

Finance and Resources Manager
Kerry Song, BSc(ApplEcon) *NELondPoly*

Academic Support Centre

Administrative Assistants
Anne Christian
Megan Haig
Callum MacLeod
Suzanne Roberts
Sally Yong

Architectural and Technical Services Centre

Manager
Phil Granger

Technical Officers
Linda Fienberg, BA
Rick Moss
Ken Stewart, MDesSc

Audio Visual Centre

Manager
Mark Neill, BA GradDipInfMgmt *UNSW*

Computer Support Centre

Computer Network Systems Manager
David Formosa, BCompSci *WSyd*

Computer User Support Officers
Joseph R Nappa, BE
Julian Tam

Continuing Professional Development Centre

Continuing Professional Development Manager
Lesley Vanderkwast

Marketing and Development Centre

Manager
Michaela James, BA GradDip(ProfArtStud) *UNSW*

Student Admissions Adviser
Lesley Vanderkwast

Web Master/ Marketing Officer
Ricardo Guiterrez, BArch *Colombia* GradDipDesSc, MMDes

Student Administration Centre

Manager
Martin Hesse, BA *Macq*

Student Services Officer
Charlie Reimer, BSc *Wis*

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 Assistants
Helen Campbell
Maria El Chami

General Library Assistants
Rowie Daskalakis
Michelle Harrison, BArtEd *UNSW* GradCert(TESOL) *UTS*
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

Research Assistant
Susan Clarke

Key Centre of Design Computing and Cognition

Co-Directors
Professor John S Gero, BE *UNSW* MBdgSc PhD, FRSA FIEAust FAAAI
Professor Mary Lou Maher, BS *Col* MS PhD *Carnegie-Mellon*
Honorary Associate Professor A Terrence Purcell, PhD *Macq* BA

Planning Research Centre

Director
Honorary Associate Professor John G Toon, DipArch *Leic*, FRAPI MRTPI ARIBA ARAIA

Deputy Director
Martin J Payne, MS *Col State*

Associate Director (Research and Development)
Jon Hall, BA *Massey MTCP*

2 Undergraduate degrees

■ Bachelor of Design in Architecture

The Bachelor of Design in Architecture, and its streams Allied Arts in Architecture, Digital Architecture and Urban Design and Planning are focused on learning about designing in the built environment. The program is structured around a required set of core units of study, with a choice of 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

- Bachelor of Design in Architecture or
- Bachelor of Design in Architecture (Allied Arts in Architecture) or
- Bachelor of Design in Architecture (Digital Architecture) or
- Bachelor of Design in Architecture (Urban Design and Planning)

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 seven streams, particular areas of specialisation offered within the streams and other specialised areas offered as electives within the Faculty. Opportunities also exist for you to take units of study in other Faculties within the University.

If your interest is in becoming a professional architect, you can apply to continue 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 applying for enrolment 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, sustainable design.

In summary the Bachelor of Design in Architecture 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; and
- 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 of Design in 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 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.

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 Bachelor of Design in 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; and
- possess a sense of their ethical responsibilities.

Streams in the Bachelor of Design in Architecture

Allied Arts and Architecture

The Bachelor of Design in Architecture (Allied Arts in Architecture) offers students the opportunity to specialise in art as it relates to architecture, while completing their major studies in architecture. The stream is structured so that the student starts with a general approach and finishes with a focus on the growing fields of public art and site-specific art. The stream consists of mandatory and elective units of study. The mandatory units are DESA 1601 (3cp) Foundation Art Studio 1- Introduction to Architectural Sketching and Drawing in year one and DESA 2618 Public Art (4cp) and DESA 2619 Site Specific Art (4cp) in the Senior years. Alongside these mandatory units of study students can choose from a wide range of Allied Arts in Architecture electives; photography, digital video, Web art and design, drawing, painting, mixed media, ceramics, sculpture, object design, screen printing on paper and fabric, etching and graphic design.

To construct an Allied Arts in Architecture stream best suited to each individual it is suggested that students speak with the coordinator of the stream, Ms Jan Fieldsend. Students can build a particular emphasis into the stream itself so that they focus on, for example, three-dimensional forms or photography or design or the decorative arts as they relate to architecture. It is also expected that students will keep an ongoing, informal resource diary during second and third years to collate ideas, images and a bibliography about art and architecture. This diary will form a strong basis for ongoing research.

The mandatory senior units of study, Site Specific Art and Public Art, allow the student to focus on an area of particular relevance to contemporary architects and planners in that the units specifically look at place and space and how art and architecture can be thought about in dynamic and imaginative ways.

On the successful completion of the Allied Arts in Architecture stream students will have: an awareness of current thinking and practice in various art media, knowledge and insight about the relationship of art to architecture and from that point be able to develop critical analysis and further research, have a set of technical skills in various media, and the ability to develop and translate ideas in various art media and written work in relation to architecture.

Students will be able to further develop their research in the BArch degree by completing an Advanced Study Report and other criteria as set out in the Handbook.

This stream is also relevant to those contemplating taking graduate programs in Architecture or in Urban Design.

Urban Design and Planning

The units of study in the Urban Design and Planning stream provide Bachelor of Design (Architceture) students with the opportunity to extend their design skills, working with a wider set of contextual variables such as nearby activities, access, pedestrian provisions and views. Skills in developing proposals (for buildings, sites and local areas) which fit the context and create desirable public places are given a strong emphasis. Students are taught to work at a range of scales using various forms of representation. Particular attention is given to developing skills in preparing site analyses and local area studies, and with constructing basic reasoning to explain and justify proposals.

The introductory unit is based on lectures and on two case projects that require students' simple analyses, before moving to interpreting key points and making simple design proposals.

All the other urban design and planning units are taught as interactive workshops, where each student prepares and presents reports on urban design and planning projects.

Assessment in these workshops is based on a workbook presenting ongoing, preparatory work, with critical and reflective comments, besides presenting the final responses

Equal weight is given to the graphic presentation of proposals or background studies, and to a short report that explains and justifies the proposals.

Bachelor of Design in Architecture enrolment guide

The Bachelor of Design in Architecture is a three year degree, or four years with honours. In order to qualify for the degree candidates must complete the requirements as specified in the resolutions of the Senate and Faculty for this degree. All students should read the degree resolutions and monitor their progress throughout the degree by reference to them. The following points summarise the resolutions but do not replace them.

Summary of requirements

In order to qualify for the award of the pass degree candidates:

- must maintain a full time enrolment (18 credit points or more per semester – a normal full time load is 24 credit points per semester, the maximum allowed is 28 credit points per semester);
- must complete successfully 144 credit points;
- must complete successfully 92 credit points from the core units of study as described in Table A;
- must complete successfully at least 20 credit points from the Architecture Electives as described in Table A;
- may complete the requirements for an additional stream as described in Table A;
- may complete no more than 14 credit points from Allied Arts electives unless in the Allied Arts in Architecture stream;
- may complete no more than 12 Junior and 8 Intermediate or Senior credit points from units of study offered by other faculties;
- must complete successfully the remainder elective units of study from those listed in Table A that have not already been completed;

- talented candidates who have completed at least 96 credit points with a WAM of at least 70 may, with the permission of the unit coordinator concerned, enrol in elective units of study from Table G, the faculty's table of graduate units.

Bachelor of Architecture prerequisites

Candidates who wish to proceed to the Bachelor of Architecture must include the prerequisite units of study described in Table A. Other conditions apply to entry to the Bachelor of Architecture and intending students should read the information for that degree.

Honours

In order to qualify for the honours degree candidates must satisfy the requirements for the pass degree with a Weighted Average Mark of at least 70 and in addition successfully complete 48 credit points consisting of a research thesis. In their third years students would normally enrol in the preparatory unit of study as an elective. Honours may only be undertaken on a full time basis.

BACHELOR OF DESIGN in Architecture 144cp constituted as follows

CORE UNITS OF STUDY		**ARCHITECTURE ELECTIVES** UNITS OF STUDY		**DIGITAL ARCHITECTURE STREAM** Bachelor of Design in Architecture (Digital Architecture)		**ELECTIVE** UNITS OF STUDY
		A minimum of 20 CP from the Architecture Electives		**19 cp** minimum (3 junior cp + 16 senior cp) Select from **Digital Architecture** Stream Units of Study	+	**13 cp** maximum (9 junior cp + 4 senior cp) Select from **Elective** Units of Study including **Allied Arts** (max. 14cp) , other faculties (max. 20 cp), and **Streams**
				or		
92 cp	+	**20 cp** (senior) minimum	+	**URBAN DESIGN AND PLANNING STREAM** Bachelor of Design in Architecture (Urban Design and Planning) **19 cp** minimum (3 junior cp + 16 senior cp) Select from **Urban Design and Planning** Stream Units of Study	+	**ELECTIVE** UNITS OF STUDY **13 cp** maximum (9 junior cp + 4 senior cp) Select from **Elective** Units of Study including **Allied Arts** (max. 14cp) , other faculties (max. 20 cp), and **Streams**
				or		
		(12 senior credit points of this stream are **prerequisite units of study** for students wishing to proceed to the **Bachelor of Architecture** degree)		**ALLIED ARTS IN ARCHITECTURE STREAM** Bachelor of Design in Architecture (Allied Arts in Architecture) **19 cp** minimum (3 junior cp + 16 senior cp) Select from **Allied Arts in Architecture** Stream Units of Study	+	**ELECTIVE** UNITS OF STUDY **13 cp** maximum (9 junior cp + 4 senior cp) Select from **Elective** Units of Study including **Allied Arts** (max. 14cp) , other faculties (max. 20 cp), and **Streams**
				or		
See list of **Core** Units of Study		Select from list of **Architecture Elective** Units of Study		**ELECTIVE** UNITS OF STUDY Bachelor of Design in Architecture **32 cp** maximum (12 junior credit points + 20 senior credit points, without B.Arch prerequisites) Select from **Elective** Units of Study including **Allied Arts** Electives (max. 14cp), electives from other faculties (max. 20 cp) and all **Streams**		

Planning your degree

The program has been designed so that the core units should be taken in a certain order and the elective units for the stream fitted with them. Students intending to proceed to the Bachelor of Architecture should complete the prerequisite units of study in their final year. Students are advised to carefully consider which stream or streams interest them and plan their elective units accordingly. Enrolment planners for the different streams follow.

Bachelor of Design in Architecture

Unit Code	Name	Credit points
Year 1		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
	Electives	6
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
	Electives	6
	Total for Year 1	48
Year 2		
Semester 1		
DESA 2001	Design Practice 2A	12
DESA 2101	Design Studies 2	8
	Electives	4
Semester 2		
DESA 2002	Design Practice 2B	12
	Electives	12
	Total for Year 2	48
Year 3		
Semester 1		
DESA 3001	Design Practice 3A	12
	Electives / BArch Prerequisites	12
Semester 2		
DESA 3002	Design Practice 3B	12
	Electives / BArch Prerequisites	12
	Total for Year 3	48

Bachelor of Design in Architecture (Allied Arts in Architecture)

Unit Code	Name	Credit points
Year 1		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
DESA 1601	Foundation Art Studio 1	3
	Elective	3
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
	Electives	6
	Total for Year 1	48
Year 2		
Semester 1		
DESA 2001	Design Practice 2A	12
DESA 2101	Design Studies 2	8
DESA 26**	Allied Art elective	4
Semester 2		
DESA 2002	Design Practice 2B	12
DESP 2202	Design and Planning Instruments	4
DESA 26**	Allied Art elective	4
	Electives	4
	Total for Year 2	48
Year 3		
Semester 1		
DESA 3001	Design Practice 3A	12
DESA2618	Public Art	4
	Electives / BArch Prerequisites	8
Semester 2		
DESA 3002	Design Practice 3B	12
DESA 2619	Site Specific Art	4
	Electives / BArch Prerequisites	8
	Total for Year 3	48

Bachelor of Design in Architecture (Digital Architecture)

Unit Code	Name	Credit points
Year 1		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
DECO 1001	Digital Image Representation & Design	3
	Electives	3
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
	Electives	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 1002	Web-based Design Information Systems	4
DECO 1003	CAD Modelling	4
	Electives	4
	Total for Year 2	48
Year 3		
Semester 1		
DESA 3001	Design Practice 3A	12
DECO 2001	3D Modelling and Photorealism	4
	Electives / BArch prerequisites	8
Semester 2		
DESA 3002	Design Practice 3B	12
DECO 2005	Computer-Supported Collaborative Design	4
	Electives / BArch prerequisites	8
	Total for Year 3	48

Bachelor of Design in Architecture (Urban Design and Planning)

Unit Code	Name	Credit points
Year 1		
Semester 1		
DESA 1001	Design Practice 1A	12
DESA 1101	Design Studies 1A	6
	Electives	6
Semester 2		
DESA 1002	Design Practice 1B	12
DESA 1102	Design Studies 1B	6
DESP 1201	Introductory Urban Design & Planning	3
	Electives	3
	Total for Year 1	48
Year 2		
Semester 1		
DESA 2001	Design Practice 2A	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
	Electives	4
	Total for Year 2	48
Year 3		
Semester 1		
DESA 3001	Design Practice 3A	12
DESP 2204	Planning for the Built Environment	4
	Electives / BArch Prerequisites	8
Semester 2		
DESA 3002	Design Practice 3B	12
DESP 2205	Planning Sustainable Built Environments	4
	Electives / BArch Prerequisites	8
	Total for Year 3	48

Table A: Bachelor of Design in Architecture

Unit of study	CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Core units of study			
Candidates are required to complete all of the following core units.			
Junior units of study			
DESA 1001 Design Practice 1A	12	**A** HSC Mathematics, HSC English Standard. **C** DESA 1101.	1
DESA 1101 Design Studies 1A	6	**A** HSC Mathematics and HSC English Standard or equivalent. **C** DESA 1001.	1
DESA 1002 Design Practice 1B	12	**A** HSC Mathematics and HSC English Standard or equivalent. **P** DESA (1001 and 1101). **C** DESA 1102.	2
DESA 1102 Design Studies 1B	6	**A** HSC Mathematics and HSC English Standard or equivalent. **P** DESA (1001 and 1101). **C** DESA 1002.	2
Senior units of study			
DESA 2001 Design Practice 2A	12	**A** DESA 1101 and DESA 1102, or equivalent. **P** DESA 1001 and DESA 1002. **C** DESA 2101.	1
DESA 2101 Design Studies 2	8	**P** DESA 1101 and DESA 1102.	1
DESA 2002 Design Practice 2B	12	**A** DESA 1101 and DESA 1102, or equivalent. **P** DESA (2001 and 2101).	2
DESA 3001 Design Practice 3A	12	**A** DESA (1001 and 1101 and 1102), or equivalent. **P** DESA (2001 and 2002 and 2101).	1
DESA 3002 Design Practice 3B	12	**P** DESA 3001.	2
Bachelor of Architecture Prerequisite units of study			
Candidates wishing to proceed to the Bachelor of Architecture are required to complete the following prerequisite units. These may also be used to count towards the Architecture Electives.			
Senior units of study			
DESA 2301 Environmental Technologies	4	**A** DESA 1101and DESA 1102 and DESA 2002, or equivalent. *NB: Prerequisite unit for the Bachelor of Architecture program.*	2
DESA 2302 Australian Architecture: 1788 – Present	4	**A** DESA 1101, DESA 1102, DESA 2002 or equivalent. **C** DESA 3001. *NB: Prerequisite for the Bachelor of Architecture Program.*	1
DESA 2303 Construction, Structures and Management	4	**A** DESA 1101 and DESA 1102 and DESA 2002, or equivalent. **C** DESA 3002. *NB: Prerequisite for the Bachelor of Architecture program.*	2
Architecture Electives			
All candidates are required to complete a minimum of 20 Senior credit points from the Architecture Electives. The units are grouped into sub-disciplines. Units counted here may not count to the requirements of a Stream.			
■ **Appropriate Sustainable Technologies**			
Senior units of study			
DESA 2201 Design, Ecology and Sustainability	4	**A** DESA 1101 and DESA 1102 or equivalent. **C** DESA 2101.	1
DESA 2202 Sustainable Interior Environments	4	**A** DESA 1101 and DESA 1102, or equivalent. **P** DESA 2101.	2
DESA 2207 Sustainable Architecture	4		1
DESA 2301 Environmental Technologies	4	**A** DESA 1101and DESA 1102 and DESA 2002, or equivalent. *NB: Prerequisite unit for the Bachelor of Architecture program.*	2
■ **Architectural History and Theory**			
Senior units of study			
DESA 2302 Australian Architecture: 1788 – Present	4	**A** DESA 1101, DESA 1102, DESA 2002 or equivalent. **C** DESA 3001. *NB: Prerequisite for the Bachelor of Architecture Program.*	1
DESA 2305 Australian Modernist Architecture	4		2
■ **Environment, Behaviour & Society**			
Senior units of study			
DESA 2211 Architecture, Place and Society	4		1
DESA 2212 Social Studies in Architecture	4	**P** DESA 2211 or ARCH 2002 or permission of the coordinator.	2
DESA 2213 Housing for Health	4		1
DESA 2610 Designing with Colour 1	4	**A** DESA 2612 or equivalent Photoshop skills. **P** Students must have completed 48 credit points towards their degree (except BArch).	1, 2, Summer
DESA 2611 Designing with Colour 2	4	**P** DESA 2610 and completion of 48 credit points.	1, 2, Summer
■ **Management in Architecture**			
Senior units of study			
DESA 2206 Innovative Building Structures	4	**A** DESA 1101 and DESA 1102, or equivalent. **P** DESA 2101.	2

Table A: Bachelor of Design in Architecture (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESA 2208	Introduction to Project Management	4		2
DESA 2209	Built Environment Project Management	4	**P** DESA 2208.	1
DESA 2303	Construction, Structures and Management	4	**A** DESA 1101 and DESA 1102 and DESA 2002, or equivalent. **C** DESA 3002. *NB: Prerequisite for the Bachelor of Architecture program.*	2

Streams

It is not a requirement to complete a stream. Candidates may complete a maximum of one stream and this will be recorded on the testamur.

Allied Arts in Architecture Stream

The minimum requirement is 19 credit points, including 11 credit points from the mandatory units of study and a minimum of 8 additional credit points, chosen from the following units of study. Candidates not enrolled in the Allied Arts in Architecture stream are restricted to a maximum of 14 credit points from the list and are not required to complete the mandatory units.

■ Mandatory units

Junior units of study

DESA 1601	Foundation Art Studio 1	3	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1

Senior units of study

DESA 2618	Public Art	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2619	Site Specific Art	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2

■ Additional Allied Arts in Architecture units

Junior units of study

DESA 1602	Foundation Art Studio 2	3	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2

Senior units of study

DESA 2608	Advanced Art Studio 1	4	**A** Art Studio in the same medium with a result of at least 65 per cent. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2609	Advanced Art Studio 2	8	**A** Art Studio in the same medium, with a result of at least 65 per cent. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2616	Explorations in Mixed Media	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESA 2629	Photography	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2630	Etching	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESA 2631	Ceramics (wheel throwing)	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2632	Digital Video	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2633	General Drawing	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2634	Ceramics (handbuilding)	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2635	Painting (acrylic or oil)	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2

Table A: Bachelor of Design in Architecture (continued)

Unit of study		CP		A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESA 2636	Sculpture	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2637	Graphic Design	4	**P**	Semester 1 – BDesign Computing students only. *NB: In semester one this unit is limited to BDesComp students only (no permission required). In semester 2 enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2638	Screen Printing on Paper	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2639	Screen Printing on Fabric	4		*NB: Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	N/A in 2004
DESA 2641	Life Drawing	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2642	Experimental Photography	4	**P**	DESA 2629. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2643	Object Design	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2644	Ceramic Art and Design	4	**P**	DESA (2631 or 2634). *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1

Digital Architecture Stream

The minimum requirement is 19 credit points from the following units of study.

Junior units of study

DECO 1001	Digital Image Representation and Design	3		*NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1

Senior units of study

DECO 1002	Web-based Design Information Systems	4	**A** **N**	DECO 1001 or equivalent. DESC 9123. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 1003	CAD Modelling	4		*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2001	3D Modelling and Photorealism	4		*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2002	Interactive Multimedia Design	4	**N**	DESC 9068. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2005	Computer-Supported Collaborative Design	4		*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2

Urban Design and Planning Stream

The minimum requirement is 19 credit points from the following units of study.

Junior units of study

DESP 1201	Introductory Urban Design and Planning	3			2

Senior units of study

DESP 2201	Designing and the Public Domain	4		*NB: Urban Design and Planning stream in the BDesign.*	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

Table A: Bachelor of Design in Architecture (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Elective units of study				
A maximum of 12 Junior and 8 Senior credit points of elective units may be chosen from other faculties. Candidates for the honours degree should include ARCF 6001.				
Junior units of study				
DECO 1001	Digital Image Representation and Design	3	*NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 1004	Understanding Design	3	*NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DESA 1201	Principles of ArchiCAD	6	**N** DESC 9100. *NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1, 2
DESA 1202	Principles of AutoCAD	6	**N** DESC 9101. *NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1, 2
DESA 1601	Foundation Art Studio 1	3	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESA 1602	Foundation Art Studio 2	3	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2612	Designing with Surfaces and Light	3		1, 2, Summer
DESA 2626	Mathematics in Architecture	3	*NB: Department permission required for enrolment.*	1
DESP 1201	Introductory Urban Design and Planning	3		2
Senior units of study				
ARCF 6001	Preparatory Honours Research	4	**P** 96 credit points and a WAM of at least 65. *NB: Department permission required for enrolment.*	2
DECO 2003	Knowledge-Based Design	4	**A** SOFT 1001 or equivalent. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2004	Product Modelling	4	**A** INFO 2005 and DECO 2003. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2602	Evolutionary Design	4	**A** COMP 1001 or SOFT 1001. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2603	Agents in Design	4	**A** COMP 1001 or SOFT 1001. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2605	History of Animation	4	*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2606	Real Time 3D Multimedia	6	**A** Fundamental software development and digital multimedia skills. *NB: Permission required unless enrolled as an undergraduate in the Faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2607	Sound Design	4	*NB: Permission required unless enrolled in the Bachelor of Design Computing. Next preference to other students in the Architecture Faculty. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 3003	Design Computing Research Opportunity	6	**A** Computer programming. **P** 96 credit points and minimum WAM of 65. *NB: Department permission required for enrolment. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 3005	Advanced Interactive Multimedia Design	6	**A** DECO 1002 and 2002. **N** May not be counted with DESC 9142. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 3006	Principles of 3D Animation	6	**N** DESC 9019 or 9141. *NB: Department permission required for enrolment. First preference given to third year students in the Bachelor of Design Computing. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
■ **General Electives**				
Senior units of study				
ARCH 3551	Architecture General Elective A	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2

Table A: Bachelor of Design in Architecture (continued)

Unit of study		CP		A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
ARCH 3552	Architecture General Elective B	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
ARCH 3553	Architecture General Elective C	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
ARCH 3554	Architecture General Elective D	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DECO 3551	Design Computing General Elective A	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2, Summer
DECO 3552	Design Computing General Elective B	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DECO 3553	Design Computing General Elective C	6	**P**	48 credit points. *NB: Department permission required for enrolment.*	1, 2
DECO 3554	Design Computing General Elective D	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3551	Design Architecture General Elective A	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3552	Design Architecture General Elective B	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3553	Design Architecture General Elective C	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3554	Design Architecture General Elective D	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
■ **Independent Study Electives**					
Senior units of study					
ARCH 3441	Architecture Independent Study A	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3442	Architecture Independent Study B	6	**P**	48 credit points and a WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3443	Architecture Independent Study C	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3444	Architecture Independent Study D	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3441	Design Computing Independent Study A	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3442	Design Computing Independent Study B	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3443	Design Computing Independent Study C	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3444	Design Computing Independent Study D	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3441	Design Architecture Independent Study A	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3442	Design Architecture Independent Study B	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3443	Design Architecture Independent Study C	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3444	Design Architecture Independent Study D	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2

Table A: Bachelor of Design in Architecture (continued)

Unit of study		CP		A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Honours units of study					
Candidates enrol in A and B in their first semester and C and D in their second semester.					
ARCH 4003	Dissertation and Research Methods A	12	**P**	Completion of the Pass degree with a WAM of at least 70. *NB: Department permission required for enrolment. Bachelor of Design (Architecture) honours students only.*	1, 2
ARCH 4004	Dissertation and Research Methods B	12	**C**	ARCH 4003.	1, 2
ARCH 4005	Dissertation and Research Methods C	12	**C**	ARCH 4004.	1, 2
ARCH 4006	Dissertation and Research Methods D	12	**C**	ARCH 4005.	1, 2

■ 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.

Bachelor of Design Computing enrolment guide

The Bachelor of Design is a three year degree, or four years with 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.

In order to qualify for the degree candidates must complete the requirements as specified in the resolutions of the Senate and Faculty for this degree. All students should read the degree resolutions and monitor their progress throughout the degree by

reference to them. The following points summarise the resolutions but do not replace them.

Summary of requirements

In order to qualify for the award of the pass degree candidates:

- must maintain a full time enrolment (18 credit points or more per semester – a normal full time load is 24 credit points per semester, the maximum allowed is 28 credit points per semester);
- must complete successfully 144 credit points;
- must complete successfully 96 credit points from the core units of study as described in Table B;
- must complete successfully at least 24 credit points from elective units of study from those listed in Table B;
- may complete no more than 24 credit points from units of study outside Table B;
- talented candidates who have completed at least 96 credit points with a WAM of at least 70 may, with the permission of the unit coordinator concerned, enrol in elective units of study from Table G, the faculty's table of graduate units.

Honours

In order to qualify for the honours degree candidates must satisfy the requirements for the pass degree with a Weighted Average Mark of at least 70 and in addition successfully complete 48 credit points consisting of a research thesis. In their third years students would normally enrol in the preparatory unit of study as an elective. Honours may only be undertaken on a full time basis.

Planning your degree

The program has been designed so that the core units should be taken in a certain order and the elective units fitted with them. An enrolment planner for the degree follows.

Bachelor of Design Computing

Unit Code	Name	Credit points
Year 1		
Semester 1		
DECO 1011	Design Computing Studio 1A	10
DECO 1001	Digital Image Representation and Design	3
DECO 1004	Understanding Design	3
DECO 2002	Interactive Multimedia Design	4
DESA 2637	Graphic Design	4
Semester 2		
DECO 1021	Design Computing Studio 1B	10
DECO 1002	Web-based Design Information Systems	4
DECO 1003	CAD Modelling	4
SOFT 1001	Software Development 1	6
	Total for Year 1	48
Year 2		
Semester 1		
DECO 2001	3D Modelling and Photorealism	4
DECO 2003	Knowledge-Based Design	4
INFO 2000	Systems Analysis and Design	4
	Electives	12
Semester 2		
DECO 2004	Product Modelling	4
DECO 2005	Computer-Supported Collaborative Design	4
INFO 2005	Database Management, Introductory	4
	Electives	12
	Total for Year 2	48
Year 3		
Semester 1		
DECO 3001	Life-Cycle Integrated Design Comp Studio	12
	Electives	12
Semester 2		
DECO 3002	Adv. Technology Integrated Design Comp Studio	12
	Electives	12
	Total for Year 3	48

Table B: Bachelor of Design Computing

Unit of study	CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Core units of study			
Candidates are required to complete all the core units of study listed in this table.			
Junior units of study			
DECO 1001 Digital Image Representation and Design	3	*NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 1011 Design Computing Studio 1A	10	*NB: Core unit for Bachelor of Design Computing students only.*	1
DECO 1021 Design Computing Studio 1B	10	*NB: Core unit for Bachelor of Design Computing students only.*	2
DECO 1004 Understanding Design	3	*NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
SOFT 1001 Software Development 1	6	**A** HSC Mathematics Extension 1. **N** May not be counted with SOFT 1901 or COMP (1001 or 1901).	1, 2, Summer
Senior units of study			
DECO 1002 Web-based Design Information Systems	4	**A** DECO 1001 or equivalent. **N** DESC 9123. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 1003 CAD Modelling	4	*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2001 3D Modelling and Photorealism	4	*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2002 Interactive Multimedia Design	4	**N** DESC 9068. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2003 Knowledge-Based Design	4	**A** SOFT 1001 or equivalent. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1

Table B: Bachelor of Design Computing (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DECO 2004	Product Modelling	4	**A** INFO 2005 and DECO 2003. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2005	Computer-Supported Collaborative Design	4	*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 3001	Life-Cycle Integrated Design Comp Studio	12	**A** DECO (1002 and 1003 and 2003 and 2004) and SOFT 1001 and INFO 2005. *NB: Core unit for Bachelor of Design Computing students only.*	1
DECO 3002	Advanced Technology Integrated Design Co	12	**A** DECO (1002 and 2001 and 2005) and or SOFT 1001. *NB: Core unit for Bachelor of Design Computing students only.*	2
DESA 2637	Graphic Design	4	**P** Semester 1 – BDesign Computing students only. *NB: In semester one this unit is limited to BDesComp students only (no permission required). In semester 2 enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
INFO 2000	Systems Analysis and Design	4	**Q** ISYS 1003 or INFO 1000 or INFS 1000 or [COSC (1001 or 1901) and COSC (1002 or 1902)] or SOFT (1001 or 1901) or COMP (1001 or 1901). **N** May not be counted with INFO 2900.	1, Summer
INFO 2005	Database Management, Introductory	4	**Q** ISYS 1003 or INFO 1000 or INFS 1000 or [COSC (1001 or 1901) and COSC (1002 or 1902)] or SOFT (1001 or 1901) or COMP (1001 or 1901). **N** May not be counted with INFO 2905.	2

Elective units of study

Candidates are required to complete at least 24 credit points from the elective units of study listed in this table. The units are grouped into sub-disciplines. Candidates for the honours degree should included DECO 2604.

■ Design Computing

Senior units of study

DECO 2602	Evolutionary Design	4	**A** COMP 1001 or SOFT 1001. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2603	Agents in Design	4	**A** COMP 1001 or SOFT 1001. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2604	Design Computing Prep Hons Research	4	**P** 96 credit points and minimum WAM of 65. *NB: Department permission required for enrolment.*	2
DECO 2605	History of Animation	4	*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2606	Real Time 3D Multimedia	6	**A** Fundamental software development and digital multimedia skills. *NB: Permission required unless enrolled as an undergraduate in the Faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2607	Sound Design	4	*NB: Permission required unless enrolled in the Bachelor of Design Computing. Next preference to other students in the Architecture Faculty. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 3003	Design Computing Research Opportunity	6	**A** Computer programming. **P** 96 credit points and minimum WAM of 65. *NB: Department permission required for enrolment. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 3005	Advanced Interactive Multimedia Design	6	**A** DECO 1002 and 2002. **N** May not be counted with DESC 9142. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 3006	Principles of 3D Animation	6	**N** DESC 9019 or 9141. *NB: Department permission required for enrolment. First preference given to third year students in the Bachelor of Design Computing. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1

■ Allied Arts in Architecture

Junior units of study

DESA 1601	Foundation Art Studio 1	3	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESA 1602	Foundation Art Studio 2	3	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2

Senior units of study

DESA 2608	Advanced Art Studio 1	4	**A** Art Studio in the same medium with a result of at least 65 per cent. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2

Table B: Bachelor of Design Computing (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESA 2609	Advanced Art Studio 2	8	**A** Art Studio in the same medium, with a result of at least 65 per cent. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2616	Explorations in Mixed Media	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESA 2618	Public Art	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2619	Site Specific Art	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2629	Photography	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2630	Etching	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESA 2631	Ceramics (wheel throwing)	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2632	Digital Video	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2633	General Drawing	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2634	Ceramics (handbuilding)	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2635	Painting (acrylic or oil)	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2636	Sculpture	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2638	Screen Printing on Paper	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2639	Screen Printing on Fabric	4	*NB: Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	N/A in 2004
DESA 2641	Life Drawing	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2642	Experimental Photography	4	**P** DESA 2629. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2643	Object Design	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2644	Ceramic Art and Design	4	**P** DESA (2631 or 2634). *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1

■ **Appropriate Sustainable Technologies**

Senior units of study

DESA 2201	Design, Ecology and Sustainability	4	**A** DESA 1101 and DESA 1102 or equivalent. **C** DESA 2101.	1
DESA 2202	Sustainable Interior Environments	4	**A** DESA 1101 and DESA 1102, or equivalent. **P** DESA 2101.	2
DESA 2207	Sustainable Architecture	4		1

Table B: Bachelor of Design Computing (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESA 2301	Environmental Technologies	4	**A** DESA 1101and DESA 1102 and DESA 2002, or equivalent. *NB: Prerequisite unit for the Bachelor of Architecture program.*	2
■ Architectural History and Theory				
Senior units of study				
DESA 2302	Australian Architecture: 1788 – Present	4	**A** DESA 1101, DESA 1102, DESA 2002 or equivalent. **C** DESA 3001. *NB: Prerequisite for the Bachelor of Architecture Program.*	1
DESA 2305	Australian Modernist Architecture	4		2
■ Architectural Design				
Junior units of study				
DESA 1101	Design Studies 1A	6	**A** HSC Mathematics and HSC English Standard or equivalent. **C** DESA 1001.	1
DESA 1102	Design Studies 1B	6	**A** HSC Mathematics and HSC English Standard or equivalent. **P** DESA (1001 and 1101). **C** DESA 1002.	2
DESA 1201	Principles of ArchiCAD	6	**N** DESC 9100. *NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1, 2
DESA 1202	Principles of AutoCAD	6	**N** DESC 9101. *NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1, 2
Senior units of study				
DESA 2101	Design Studies 2	8	**P** DESA 1101 and DESA 1102.	1
■ Environment, Behaviour & Society				
Junior units of study				
DESA 2612	Designing with Surfaces and Light	3		1, 2, Summer
Senior units of study				
DESA 2211	Architecture, Place and Society	4		1
DESA 2212	Social Studies in Architecture	4	**P** DESA 2211 or ARCH 2002 or permission of the coordinator.	2
DESA 2213	Housing for Health	4		1
DESA 2610	Designing with Colour 1	4	**A** DESA 2612 or equivalent Photoshop skills. **P** Students must have completed 48 credit points towards their degree (except BArch).	1, 2, Summer
DESA 2611	Designing with Colour 2	4	**P** DESA 2610 and completion of 48 credit points.	1, 2, Summer
■ Management in Architecture				
Junior units of study				
DESA 2626	Mathematics in Architecture	3	*NB: Department permission required for enrolment.*	1
Senior units of study				
DESA 2206	Innovative Building Structures	4	**A** DESA 1101 and DESA 1102, or equivalent. **P** DESA 2101.	2
DESA 2208	Introduction to Project Management	4		2
DESA 2209	Built Environment Project Management	4	**P** DESA 2208.	1
DESA 2303	Construction, Structures and Management	4	**A** DESA 1101 and DESA 1102 and DESA 2002, or equivalent. **C** DESA 3002. *NB: Prerequisite for the Bachelor of Architecture program.*	2
■ Urban Design and Planning				
Junior units of study				
DESP 1201	Introductory Urban Design and Planning	3		2
Senior units of study				
DESP 2201	Designing and the Public Domain	4	*NB: Urban Design and Planning stream in the BDesign.*	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
■ Information Technology Electives				
Junior units of study				
SOFT 1002	Software Development 2	6	**Q** SOFT (1001 or 1901) or COMP (1001 or 1901). **N** May not be counted with SOFT 1902 or COMP (1002 or 1902).	1, 2, Summer

Table B: Bachelor of Design Computing (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Senior units of study				
INFO 2900	System Analysis and Design Advanced	4	**Q** ISYS 1003 or INFO 1000 or INFS 1000 or [COSC (1001 or 1901) and COSC (1002 or 1902)] or SOFT (1001 or 1901) or COMP (1001 or 1901) and Distinction in one INFO, ISYS or SOFT unit. **N** May not be counted with INFO 2000.	1
ISYS 2006	Information Systems in Organisations	4	**A** Use of basic PC tools such as spreadsheets, Internet, email and word processing software. **P** Credit in one of ISYS 1003 or INFS 1000 or INFO 1000. *NB: Enrolment Restriction: Entry is restricted to students who have a credit or better in one of the qualifying units.*	1
SOFT 2001	Concurrent Programming	4	**Q** SOFT (1002 or 1902) or COMP (1002 or 1902). **N** May not be counted with SOFT 2901.	2
SOFT 2004	Software Development Methods 1	4	**Q** SOFT (1002 or 1902) or COMP (1002 or 1902). **N** May not be counted with SOFT 2904 or COMP (2004 or 2904).	1, Summer
INFO 3005	Organisational Database Systems	4	**P** INFO (2000 or 2900) and INFO (2005 or 2905). **N** May not be counted with INFO 3905 or COMP (3005 or 3905).	1
ISYS 3012	Project Management and Practice	4	**P** INFO (2000 or 2900).	1
MULT 3018	Multimedia Interaction	4	**P** SOFT (2004 or 2904) or COMP (2004 or 2904). **N** May not be counted with MULT 3918.	1
SOFT 3101	Object-Oriented Software Design	4	**P** SOFT (2001 or 2901) and INFO (2000 or 2900) and INFO (2005 or 2905) and [SOFT (2004 or 2904) or COMP (2004 or 2904)]. **N** May not be counted with SOFT 3801 or COMP (3008 or 3908).	1
SOFT 3102	User Interface Design and Programming	4	**P** [SOFT (2004 or 2904) or COMP (2004 or 2904)]. **N** SOFT 3802 or COMP (3102 or 3802).	1
■ General Electives				
Senior units of study				
ARCH 3551	Architecture General Elective A	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
ARCH 3552	Architecture General Elective B	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
ARCH 3553	Architecture General Elective C	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
ARCH 3554	Architecture General Elective D	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DECO 3551	Design Computing General Elective A	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2, Summer
DECO 3552	Design Computing General Elective B	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DECO 3553	Design Computing General Elective C	6	**P** 48 credit points. *NB: Department permission required for enrolment.*	1, 2
DECO 3554	Design Computing General Elective D	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3551	Design Architecture General Elective A	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3552	Design Architecture General Elective B	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3553	Design Architecture General Elective C	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3554	Design Architecture General Elective D	6	**P** 48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
■ Independent Study Electives				
Senior units of study				
ARCH 3441	Architecture Independent Study A	6	**P** 48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3442	Architecture Independent Study B	6	**P** 48 credit points and a WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3443	Architecture Independent Study C	6	**P** 48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3444	Architecture Independent Study D	6	**P** 48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2

Table B: Bachelor of Design Computing (continued)

Unit of study		CP		A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DECO 3441	Design Computing Independent Study A	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3442	Design Computing Independent Study B	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3443	Design Computing Independent Study C	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3444	Design Computing Independent Study D	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3441	Design Architecture Independent Study A	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3442	Design Architecture Independent Study B	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3443	Design Architecture Independent Study C	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3444	Design Architecture Independent Study D	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2

Honours units of study

Candidates enrol in A and B in their first semester and C and D in their second semester.

DECO 4001	Design Computing Honours Research A	12	**P**	Completion of the Pass degree. Students in the Bachelor of Design Computing will require a WAM of at least 70. *NB: Department permission required for enrolment. Students in the Faculty of Science should apply for honours to their own faculty office.*	1, 2
DECO 4002	Design Computing Honours Research B	12	**C**	DECO 4001.	1, 2
DECO 4003	Design Computing Honours Research C	12	**C**	DECO 4002.	1, 2
DECO 4004	Design Computing Honours Research D	12	**C**	DECO 4003.	1, 2

■ Bachelor of Architecture

Aims of the BArch

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.

Admission

The Resolutions of the Faculty specify the conditions of admission to the degree. In summary, an applicant for admission to the Bachelor of Architecture must:

- either complete the Bachelor of Design in Architecture, the Bachelor of Science (Architecture), or an equivalent degree;
- have completed the Bachelor of Architecture prerequisite units of study in their first degree, if proceeding from the Bachelor of Design in Architecture or the Bachelor of Science (Architecture);
- have completed the Architectural Experience Requirement by completing the Bachelor of Design in Architecture or the Bachelor of Science (Architecture) with Honours or by one or more of the following:
  - (i) professional work experience as an employee in architecture (minimum of 18 weeks recorded in the Architects Accreditation Council of Australia (AACA) Log Book);
  - (ii) field study in relation to architecture (including, but not limited to, international field study);
  - (iii) professional work experience in a related industry (minimum of 18 weeks appropriately recorded);
  - (iv) study at an Australian or overseas tertiary institution in a relevant discipline; or
  - (v) a combination of methods (1)–(4) above.
- apply within six years of completion of the first degree.

Students may apply to commence study in the BArch program in either Semester 1 or 2.

Bachelor of Architecture enrolment guide

The Bachelor of Architecture is a two year degree and students with a sufficient WAM who complete the Advanced Study Report may graduate with honours in the same timeframe. In order to qualify for the degree candidates must complete the requirements as specified in the resolutions of the Senate and Faculty for this degree. All students should read the degree resolutions and monitor their progress throughout the degree by reference to them. The following points summarise the resolutions but do not replace them.

Summary of requirements

In order to qualify for the award of the pass degree candidates:

- must maintain a full time enrolment (18 credit points or more per semester – a normal full time load is 24 credit points per semester, the maximum allowed is 28 credit points per semester);
- must complete successfully 96 credit points;
- must complete successfully 70 credit points from the core units of study as described in Table C;
- must complete successfully 26 credit points from elective units of study from those listed in Table C and/or from the Table of Graduate units of study in the Faculty of Architecture.

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 ARCF 6003 Advanced Study Report wherein the student demonstrates an ability to undertake individual research and its documentation, as well as have an overall Weighted Average Mark of 70. Honours are awarded in two classes: Class I, and Class II (with Divisions 1 and 2).

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 Semester 1 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 Semester 1 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.

Planning your degree

The program has been designed so that some core units should be taken in a certain order and the remaining core and elective units fitted with them. An enrolment planner for the degree follows.

Bachelor of Architecture enrolment planner

Subject area	*Credit points show in brackets*					
					Floating	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 1 or 3	Semester 2 or 4
Design • 32 credit points • 33% of BArch • 46% of mandatory credit points	**ARCH 2106** Open Architectural Design Studio 1 (8)	**ARCH 2107** Integrated Architectural Design Studio 1 (8)	**ARCH 3104** Open Architectural Design Studio 2 (8)	**ARCH 3105** Integrated Architectural Design Studio 2 (8)		
Architectural Science and Technology • 19 credit points • 20% of BArch • 27% of mandatory credit points		**DESC 2102** Architectural Structures and Materials (5) **ARCH 2103** Advanced Construction (5)		**ARCH 3102** Applications of Technology in Architectural Design (6)	**DESC 2101** Building Services Systems (3)	
Cultural Studies • 8 credit points • 8% of BArch • 11% of mandatory credit points					**ARCH 2104** Architecture in the 20th Century (5)	**ARCH 2102** Theory of Architecture (3)
Professional Practice • 11 credit points • 11% of BArch • 16% of mandatory credit points					**ARCH 3106** Professional Practice (3) **ARCH 2105** Contract Documentation (5)	**ARCH 3107** Practice Management (3)
Mandatory credit points:	8	18	8	14		
Electives • 26 credit points		**ARCF 6002** Advanced Study Report Preparation (4)	**ARCF 6003** Advanced Study Report (12) (Semester 3 or 4)			
See Table C BArch units of study for further details of the electives available						

Table C: Bachelor of Architecture

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Core units of study				
Candidates are required to complete all the core units listed in this table.				
Senior units of study				
ARCH 2102	Theory of Architecture	3		2
ARCH 2103	Advanced Construction	5	**C** ARCH 2107.	2
ARCH 2104	Architecture in the Twentieth Century	5		1
ARCH 2105	Contract Documentation	5		1
ARCH 2106	Open Architectural Design Studio 1	8		1
ARCH 2107	Integrated Architectural Design Studio 1	8	**C** ARCH 2103 and DESC 2102.	2
ARCH 3102	Applications of Technology – Arch Design	6	**P** ARCH 2103, ARCH 2107, DESC 2101 and DESC 2102.	2
ARCH 3104	Open Architectural Design Studio 2	8	**P** ARCH 2106.	1
ARCH 3105	Integrated Architectural Design Studio 2	8	**P** ARCH 2107. **C** ARCH 3102.	2
ARCH 3106	Professional Practice	3	**C** ARCH 2105.	1
ARCH 3107	Practice Management	3	**P** ARCH 3106.	2
DESC 2101	Building Services Systems	3	**N** May not be counted with DESC 9151.	1
DESC 2102	Architectural Structures and Materials	5	**C** ARCH 2107.	2

Table C: Bachelor of Architecture (continued)

Unit of study	CP		A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Elective units of study				
Candidates are required to complete 26 credit points from the elective units listed in this table. Graduate units of study may be included with the permission of the unit coordinator concerned. Candidates intending to graduate with Honours should include ARCF 6002 and ARCF 6003 in their program. The units are grouped into sub-disciplines.				
■ **Allied Arts in Architecture**				
Senior units of study				
DESA 2608 Advanced Art Studio 1	4	**A**	Art Studio in the same medium with a result of at least 65 per cent. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2609 Advanced Art Studio 2	8	**A**	Art Studio in the same medium, with a result of at least 65 per cent. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2616 Explorations in Mixed Media	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESA 2618 Public Art	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2619 Site Specific Art	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2629 Photography	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2630 Etching	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESA 2631 Ceramics (wheel throwing)	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2632 Digital Video	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2633 General Drawing	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2634 Ceramics (handbuilding)	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2635 Painting (acrylic or oil)	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2636 Sculpture	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2637 Graphic Design	4	**P**	Semester 1 – BDesign Computing students only. *NB: In semester one this unit is limited to BDesComp students only (no permission required). In semester 2 enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2638 Screen Printing on Paper	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 2639 Screen Printing on Fabric	4		*NB: Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	N/A in 2004
DESA 2641 Life Drawing	4		*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2642 Experimental Photography	4	**P**	DESA 2629. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2

Table C: Bachelor of Architecture (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESA 2643	Object Design	4	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 2644	Ceramic Art and Design	4	**P** DESA (2631 or 2634). *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
■ Appropriate Sustainable Technologies				
Senior units of study				
ARCH 6096	Studies in Innovative Construction	4		1
DESA 2201	Design, Ecology and Sustainability	4	**A** DESA 1101 and DESA 1102 or equivalent. **C** DESA 2101.	1
DESA 2202	Sustainable Interior Environments	4	**A** DESA 1101 and DESA 1102, or equivalent. **P** DESA 2101.	2
DESA 2207	Sustainable Architecture	4		1
■ Architectural History and Theory				
Senior units of study				
DESA 2305	Australian Modernist Architecture	4		2
■ Environment, Behaviour & Society				
Senior units of study				
DESA 2211	Architecture, Place and Society	4		1
DESA 2212	Social Studies in Architecture	4	**P** DESA 2211 or ARCH 2002 or permission of the coordinator.	2
DESA 2213	Housing for Health	4		1
DESA 2610	Designing with Colour 1	4	**A** DESA 2612 or equivalent Photoshop skills. **P** Students must have completed 48 credit points towards their degree (except BArch).	1, 2, Summer
DESA 2611	Designing with Colour 2	4	**P** DESA 2610 and completion of 48 credit points.	1, 2, Summer
■ Management in Architecture				
Senior units of study				
DESA 2206	Innovative Building Structures	4	**A** DESA 1101 and DESA 1102, or equivalent. **P** DESA 2101.	2
DESA 2208	Introduction to Project Management	4		2
DESA 2209	Built Environment Project Management	4	**P** DESA 2208.	1
■ Urban Design and Planning				
Senior units of study				
DESP 2201	Designing and the Public Domain	4	*NB: Urban Design and Planning stream in the BDesign.*	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
■ Design Computing				
Senior units of study				
DECO 1002	Web-based Design Information Systems	4	**A** DECO 1001 or equivalent. **N** DESC 9123. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 1003	CAD Modelling	4	*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2001	3D Modelling and Photorealism	4	*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2002	Interactive Multimedia Design	4	**N** DESC 9068. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2003	Knowledge-Based Design	4	**A** SOFT 1001 or equivalent. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1

Table C: Bachelor of Architecture (continued)

Unit of study		CP		A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DECO 2004	Product Modelling	4	**A**	INFO 2005 and DECO 2003. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2005	Computer-Supported Collaborative Design	4		*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2602	Evolutionary Design	4	**A**	COMP 1001 or SOFT 1001. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2603	Agents in Design	4	**A**	COMP 1001 or SOFT 1001. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2604	Design Computing Prep Hons Research	4	**P**	96 credit points and minimum WAM of 65. *NB: Department permission required for enrolment.*	2
DECO 2605	History of Animation	4		*NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 2606	Real Time 3D Multimedia	6	**A**	Fundamental software development and digital multimedia skills. *NB: Permission required unless enrolled as an undergraduate in the Faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 2607	Sound Design	4		*NB: Permission required unless enrolled in the Bachelor of Design Computing. Next preference to other students in the Architecture Faculty. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
DECO 3003	Design Computing Research Opportunity	6	**A** **P**	Computer programming. 96 credit points and minimum WAM of 65. *NB: Department permission required for enrolment. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 3005	Advanced Interactive Multimedia Design	6	**A** **N**	DECO 1002 and 2002. May not be counted with DESC 9142. *NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	2
DECO 3006	Principles of 3D Animation	6	**N**	DESC 9019 or 9141. *NB: Department permission required for enrolment. First preference given to third year students in the Bachelor of Design Computing. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.*	1
■ **General Electives**					
Senior units of study					
ARCH 3551	Architecture General Elective A	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
ARCH 3552	Architecture General Elective B	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
ARCH 3553	Architecture General Elective C	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
ARCH 3554	Architecture General Elective D	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DECO 3551	Design Computing General Elective A	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2, Summer
DECO 3552	Design Computing General Elective B	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DECO 3553	Design Computing General Elective C	6	**P**	48 credit points. *NB: Department permission required for enrolment.*	1, 2
DECO 3554	Design Computing General Elective D	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3551	Design Architecture General Elective A	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3552	Design Architecture General Elective B	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3553	Design Architecture General Elective C	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2
DESA 3554	Design Architecture General Elective D	6	**P**	48 credit points. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.*	1, 2

Table C: Bachelor of Architecture (continued)

Unit of study		CP		A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
■ Independent Study Electives					
Senior units of study					
ARCH 3441	Architecture Independent Study A	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3442	Architecture Independent Study B	6	**P**	48 credit points and a WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3443	Architecture Independent Study C	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
ARCH 3444	Architecture Independent Study D	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3441	Design Computing Independent Study A	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3442	Design Computing Independent Study B	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3443	Design Computing Independent Study C	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DECO 3444	Design Computing Independent Study D	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3441	Design Architecture Independent Study A	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3442	Design Architecture Independent Study B	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3443	Design Architecture Independent Study C	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
DESA 3444	Design Architecture Independent Study D	6	**P**	48 credit points and WAM of at least 70. *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.*	1, 2
■ Honours preparation units of study					
Senior units of study					
ARCF 6002	Preparatory Advanced Study Report	4			2
Honours units of study					
ARCF 6003	Advanced Study Report	12	**P**	ARCF 6002. *NB: To qualify for honours in the BArch students must achieve a WAM of at least 70 in all units attempted, including the ASR. First class honours requires a WAM of at least 75.*	1, 2

3 Undergraduate units of study

ARCF 6001 **Preparatory Honours Research**

4 credit points. A/Prof Anna Rubbo. **Session**: 2. **Classes**: lectures. **Prerequisite**: 96 credit points and a WAM of at least 65. **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.

NB: Department permission required for enrolment.

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.

ARCF 6002 **Preparatory Advanced Study Report**

4 credit points. Dr Glen Hill. **Session**: 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. **Session**: 1, 2. **Classes**: Research and consultation with supervisor. **Prerequisite**: ARCF 6002.

NB: To qualify for honours in the BArch students must achieve a WAM of at least 70 in all units attempted, including the ASR. First class honours requires a WAM of at least 75.

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.

ARCH 2102 **Theory of Architecture**

3 credit points. Prof Andrew Benjamin. **Session**: 2. **Classes**: Lectures and seminars. **Assessment**: Three seminars (15% each) and an assignment (55%).

Objectives

The unit aims to encourage familiarity with some of the important theoretical writings about the discipline, to stimulate a questioning approach to theoretical positions in architecture, and to provide opportunities for structured discussion and debate about the fundamental attributes of architecture.

Outcomes

At the conclusion of the unit participants should be able to refer with confidence to the views and arguments of a representative range of important theorists, demonstrate an open-minded, receptive and inquiring position about architectural theories, and show that they have formed some thoughtful ideas about the essential qualities of architecture.

The assessments are based upon the achievement of the students in seminars and written work specifically in relation to the objectives of the course and to the outcomes.

The first part of this unit provides an opportunity to review and reflect on the fundamental and timeless attributes of architecture. A series of questions are raised as a basis for argument. Lectures provide an introduction to various positions and arguments which relate to these questions. Some of the core questions deal with issues of the integrity of structure and form, the nature and expression of materials, environment and context, the relation of moral and political issues to architectural expression, the role of formal themes, and the nature of meaning in architecture.

The second part of the unit explores some issues which are the subject of current debate, and which are also of critical importance to understanding of the nature of architecture.

ARCH 2103 **Advanced Construction**

5 credit points. Dr Peter Armstrong. **Session**: 2. **Classes**: Lectures, tutorials and site visits. **Corequisite**: ARCH 2107. **Assessment**: Assessment is in four parts: attendance of 90% for all components, design development drawings of the studio project, a written report on site visits and detailing exercises related to the lecture program.

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.

ARCH 2104 **Architecture in the Twentieth Century**

5 credit points. **Session**: 1. **Classes**: Lectures and seminars. **Assessment**: Two short in-class tests on the mandatory readings (20%), and a 2500–3000w essay (80%).

Objectives

The unit presents selected topics on major issues addressed in architecture in the early Modern Movement and during the second half of the twentieth century. It aims to explain the rationale behind the evolution of the theoretical and formal aspects of modern architecture and some of the various strands that characterise the search for a relevant architecture today.

Outcomes

It is intended that students will:

- have knowledge and insight into the evolution of architectural thought and built form during the twentieth century;
- be able to enter into informed and critical debate on architectural issues;
- be in a sound position to place their own work in the context of historical architectural development;
- be able to assess the value and relevance of the contemporary work of others as it relates to their own endeavour; and
- be culturally educated individuals, well-informed and confident in determining their own stance regarding value in architectural ideology and performance.

The tests and the essay are designed to indicate the extent to which the student can both discourse on, and apply knowledge of, this history to their own and others' architectural works.

The unit is presented in two parts. The first part covers the emergence of modern architecture in Europe and America, and the development of the ideas and proposals arrived at through the heroic phase of the 1920s and 1930s. The second part looks at the dominance of modern architecture following the Second World War and the early critiques. This is followed by an analysis of the emergence of postmodern thought and the various directions being pursued to find viable and meaningful designs for the current period.

ARCH 2105 **Contract Documentation**

5 credit points. Dr Peter Armstrong. **Session**: 1. **Classes**: Lectures, seminars and studio. **Assessment**: Preparation of a set of basic working drawings and specifications; submission of papers based on class work.

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 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, 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 2106 **Open Architectural Design Studio 1**

8 credit points. Dr Peter Armstrong. **Session**: 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. Dr Peter Armstrong. **Session**: 2. **Classes**: Studio and lectures. **Corequisite**: ARCH 2103 and DESC 2102. **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 Advanced Construction 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 3102 **Applications of Technology – Arch Design**

6 credit points. Assoc Prof Warren Julian. **Session**: 2. **Classes**: Building visits, seminars and studio classes. **Prerequisite**: ARCH 2103, ARCH 2107, DESC 2101 and DESC 2102. **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 climate

modification systems and the strategic consideration of electrical systems, lifts and hydraulic services; and the strategic and detailed consideration of an ecologically sustainable building.

ARCH 3104 **Open Architectural Design Studio 2**

8 credit points. **Session**: 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 design ideas effectively through drawings, models, CAD etc.

ARCH 3105 **Integrated Architectural Design Studio 2**

8 credit points. **Session**: 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.
- demonstrated a capacity to produce work of the standard of a professional.

ARCH 3106 **Professional Practice**

3 credit points. **Session**: 1. **Classes**: Lectures and tutorials. **Corequisite**: ARCH 2105. **Assessment**: A series of individual written exercises in the form of letters on topics covered during the lectures and individual contributions to tutorials, examination.

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. **Session**: 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 contracts, the management and administration of building contracts, and the 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 building project.

Outcomes

The unit enables students to apply, in a moot format, the information 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.

ARCH 3441 **Architecture Independent Study A**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives:

- To provide an opportunity to high achieving students to develop interest in a specific Architecture topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description:

This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Architecture. The student will meet with the supervisor weekly to discuss progress.

Outcomes:

- A reflective report on a selected topic demonstrating mastery of the topic.

ARCH 3442 **Architecture Independent Study B**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and a WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives

- To provide an opportunity to high achieving students to develop interest in a specific Architecture topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description

This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Architecture. The student will meet with the supervisor weekly to discuss progress.

Outcomes

- A reflective report on a selected topic demonstrating mastery of the topic.

ARCH 3443 **Architecture Independent Study C**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives

- To provide an opportunity to high achieving students to develop interest in a specific Architecture topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description

This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Architecture. The student will meet with the supervisor weekly to discuss progress.

Outcomes

- A reflective report on a selected topic demonstrating mastery of the topic.

ARCH 3444 **Architecture Independent Study D**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives

- To provide an opportunity to high achieving students to develop interest in a specific Architecture topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description

This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Architecture. The student will meet with the supervisor weekly to discuss progress.

Outcomes

- A reflective report on a selected topic demonstrating mastery of the topic.

ARCH 3551 **Architecture General Elective A**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives

This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

This unit of study is available to a minimum of 10 students to engage in a topic related to Architecture that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

ARCH 3552 **Architecture General Elective B**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives

This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

This unit of study is available to a minimum of 10 students to engage in a topic related to Architecture that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

ARCH 3553 **Architecture General Elective C**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives

This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

This unit of study is available to a minimum of 10 students to engage in a topic related to Architecture that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

ARCH 3554 **Architecture General Elective D**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives

This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

This unit of study is available to a minimum of 10 students to engage in a topic related to Architecture that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

ARCH 4003 **Dissertation and Research Methods A**

12 credit points. A/Prof Anna Rubbo. **Session**: 1, 2. **Prerequisite**: Completion of the Pass degree with a WAM of at least 70.

NB: Department permission required for enrolment. Bachelor of Design (Architecture) honours students only.

Students must submit an Honours application form. Entry into Honours in the Bachelor of Design (Architecture) requires you to have completed your pass degree with a Weighted Average Mark of at least 70.

Students enrol into 48 credit points by taking Design Computing Honours Research A and B in the first semester and C and D in the second semester.

ARCH 4004 **Dissertation and Research Methods B**

12 credit points. **Session**: 1, 2. **Corequisite**: ARCH 4003.

Bachelor of Design (Architecture)) honours.

ARCH 4005 **Dissertation and Research Methods C**

12 credit points. **Session**: 1, 2. **Corequisite**: ARCH 4004.

Bachelor of Design (Architecture) Honours

ARCH 4006 **Dissertation and Research Methods D**

12 credit points. **Session**: 1, 2. **Corequisite**: ARCH 4005.

Bachelor of Design (Architecture) Honours

ARCH 6096 **Studies in Innovative Construction**

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

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.

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 architectÇs 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.

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.

DECO 1001 **Digital Image Representation and Design**

3 credit points. Prof Mary Lou Maher. **Session**: 1. **Classes**: Lectures and tutorials. **Assessment**: Exercises in specific digital image techniques; photo restoration/modification; digital logo design; digital image gallery including report on digital image techniques.

NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

- To introduce representation techniques of digital images;
- To design and develop multi-layered digital images for design;
- To introduce animation and interactivity with digital images; and
- 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. Techniques and software for creating, editing, managing, web publishing and printing digital images are introduced.

Outcomes

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

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

4 credit points. Dr Ayca Tuzmen. **Session**: 2. **Classes**: Lectures and tutorials. **Assumed knowledge**: DECO 1001 or equivalent. **Prohibition**: DESC 9123. **Assessment**: Home page design; Personal design portfolio; and Group web design project.

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

- To introduce the software and languages of Web sites;
- To develop an understanding of effective navigation, layout, colour contrast, and styles for Web sites; and
- To introduce various media types and their formats on the WWW.

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 sites, 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; and
- skills in using software such as Dreamweaver, and in publishing on the WWW.

DECO 1003 **CAD Modelling**

4 credit points. Dr Andy Dong. **Session**: 2. **Classes**: Lectures and tutorials. **Assessment**: 2D CAD Modelling, 3D CAD modelling and animation.

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

- To introduce the basic concepts of CAD modeling and presentation; and
- 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

On successful completion of this unit of study you should be able to:

- develop an understanding of how 3D objects are represented in CAD models;
- acquire skills in using a CAD system for 2D and 3D objects;
- produce efficient design presentations and documentation;
- exercise critical judgment, and be capable of rigorous and independent thinking; and use appropriate information technology techniques to communicate your knowledge.

DECO 1004 **Understanding Design**

3 credit points. Prof John Gero. **Session**: 1. **Classes**: Lectures and tutorials. **Assessment**: 3 essays (1 x 40%, 2 x 30%).

NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Aims

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.

Objectives

To achieve the above aims, the unit will:

- have students understand the importance and generality of design as an activity by having them reflect on the nature of design across the various disciplines and its relation to other activities such as Science and Art.
- have students gain an awareness of the knowledge and processes involved in design and to apply such knowledge and processes in their approach to design, as for example in the Design Studio. This awareness is reinforced by the assignments that are designed to make students think about design objects in a more analytical fashion as well as assessing their understanding of material presented.
- focus on developing students' learning through providing feedback through the assignments so that student can apply lessons learnt from earlier assignments in later ones. The assignments intentionally begin with a familiar object (a chair) leading to the analysis of a virtual object (a Web site) in which the same type of descriptions and processes are applied. This is intended to make the students aware of the commonality of such descriptions and processes.
- have students appreciate the need for critical examination and both objective and subjective analysis and judgement.
- develop the abilities of students to present material in an appropriate and academically rigorous manner.

Description

Design is presented from both the designer's and the user's viewpoints emphasising the nature of design as a collaborative activity. The unit includes the following general subject matter:

- the nature of design;
- design methodology;
- cognitive models;
- user-centred models;
- 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 participants involved.

They should subsequently be able to apply this understanding to their particular area of design. They will demonstrate their understanding through the completion of three assignments.

Assessment

The assessment of this unit is based on essays allowing the students to demonstrate their understanding of design as an activity and their knowledge and analytical skills in analysing designs. The essays will also demonstrate the student's expressive capabilities and their academic reporting.

DECO 1011 **Design Computing Studio 1A**

10 credit points. Prof ML Maher. **Session**: 1. **Assessment**: Sketch design, site analysis, precedent studies, spatial layout and object design.

NB: Core unit for Bachelor of Design Computing students only.

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.
- 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.
- 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 modeling 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.

DECO 1021 **Design Computing Studio 1B**

10 credit points. Dr Rabee M. Reffat. **Session**: 2. **Assessment**: Potentials and prospects of virtual design environments, the role of metaphors on designing virtual environments, and designing and constructing virtual environments using an appropriate platform.

NB: Core unit for Bachelor of Design Computing students only.

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 1A. 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 physical 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.

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 2001 **3D Modelling and Photorealism**

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

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

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. Dr Kristy Beilharz. **Session**: 1. **Classes**: Lectures and tutorials. **Prohibition**: DESC 9068. **Assessment**: Tutorial exercise, multimedia presentation and development of a major multimedia project demonstrating understanding and implementation of interactive multimedia and interactive design principles.

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

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 Macromedia Flash and its scripting language, ActionScripting. The emphasis is on HCI, screen design, information organisation, interactive responsiveness, and developing clear navigation.

Outcomes

- An understanding of the concepts of designing interactive multimedia presentations.
- An understanding of design, layout, navigation and organisational principles.
- A basic understanding of human-computer interaction and modes of interaction with digital technologies.
- Skills in designing, developing, and implementing a CD-ROM product.

DECO 2003 **Knowledge-Based Design**

4 credit points. Prof John Gero. **Session**: 1. **Classes**: Lectures and tutorials. **Assumed knowledge**: SOFT 1001 or equivalent. **Assessment**: 1. Tutorial exercise; 2. Generative design expert system; 3. Group project for knowledge-based design evaluation.

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

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.

DECO 2004 **Product Modelling**

4 credit points. Dr Michael Rosenman. **Session**: 2. **Classes**: lectures and tutorials. **Assumed knowledge**: INFO 2005 and DECO 2003. **Assessment**: Essays, projects and group presentations.

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Aims

This unit of study aims to give the student an understanding of the role and structure of product models in the design process.

Objectives

To achieve the above aims, the unit will:

- develop an understanding of the need for product modelling in supporting required activities throughout the life-cycle of the product;
- develop an understanding that the representation of products is not solely graphics-based but requires an integrated electronic information model;
- develop an understanding that this applies not only to physical objects but to virtual ones too;
- develop an understanding of object-orientedness;
- introduce standard product models and their languages;
- to develop skills in the use of product modelling techniques;
- develop the abilities of students to present material in an appropriate and academically rigorous manner;
- develop the abilities of students to work in groups and collaborate in the acquisition of information and the presentation of results.

Description

This unit of study defines what a product model is and why product models are necessary. It emphasizes the concept of object-orientedness and the integration of the various types of information about a product in a single model. The unit presents material about CAD models, non-graphic information and databases. Students are exposed to international standards in product modelling other widespread methods of information representation and are required to use some of these in describing various products.

Outcomes

Students are expected to acquire:

- an understanding of the need for product models;
- an understanding of product modelling concepts and languages;
- skills in using product models in a design project.

Assessment

The assessment of this unit is based on both essays and projects. The essays will allow the students to demonstrate their understanding and their knowledge of product modelling concepts and languages. The essays will also demonstrate the student's expressive capabilities and their academic reporting. The projects will be both individual and group and will include group presentations.

DECO 2005 **Computer-Supported Collaborative Design**

4 credit points. Dr Ayca Tuzmen. **Session**: 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.

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

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 2602 **Evolutionary Design**

4 credit points. Prof Mary Lou Maher. **Session**: 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 unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

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. **Session**: 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 unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

The objectives of this unit 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.

DECO 2604 **Design Computing Prep Hons Research**

4 credit points. Prof Mary Lou Maher. **Session**: 2. **Prerequisite**: 96 credit points and minimum WAM of 65. **Assessment**: Research area summary report (40%), research proposal report (60%).

NB: Department permission required for enrolment.

Aims

- provide an overview of the Faculty's research projects in design computing;
- provide an overview of research methods in design computing;
- provide instruction on how to write a preliminary research proposal for a project in design computing.

Content

This is a seminar unit of study in which the academic staff in design computing and cognition will present their research projects to the potential honours students. The students will also be taught how to prepare a preliminary research project proposal and be introduced to some of the research methods used in design computing.

Objectives

A preliminary research proposal will demonstrate the student's ability to identify a research area and a preliminary research plan.

DECO 2605 **History of Animation**

4 credit points. Dr Kirsty Beilharz. **Session**: 1. **Classes**: Lecture. **Assessment**: Seminar presentation (30%), research report (70%).

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Aims

- development of animation for entertainment
- frame-based drawing animation
- frame-based digital animation
- 3D animation

Content

This unit of study will look at the history of animation starting with frame-based animation drawings and go through current digital techniques in digital image animation and 3D animation. The focus will be on the people and places that developed and promoted the different approaches to animation and how animation has been used in the entertainment industry. Students will participate in the research for developing the content of the lectures and will write a research report.

Objectives

- a presentation of a set of reading on a topic related to animation
- a research report looking in depth at one aspect of the history of animation.

DECO 2606 **Real Time 3D Multimedia**

6 credit points. Prof ML Maher. **Session**: 2. **Assumed knowledge**: Fundamental software development and digital multimedia skills. **Assessment**: Mastery Tasks (6 tasks, 5 marks each, 30%), Assignments (3 group works, 10 marks each, 30%) and Project (1 project, 40%).

NB: Permission required unless enrolled as an undergraduate in the Faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Aims

The aim of this unit is to introduce the principles of real-time 3D multimedia content development. It aims at providing a means for the students to integrate and relate previous studies and prepare for the final year Integrated Design Computing Studio. The students are encouraged to apply the skills and knowledge obtained in this course through active participation in concurrent digital competition.

By the end of this UOS, students will be able to:

- understand the principles of real-time 3D multimedia content development
- select appropriate software and platform for project-specific design and implementation.
- integrate and relate previous studies in design computing and digital media.
- apply real-time 3D graphics and computing in dynamic and interactive Web site production.

Content:

This UoS is structured in 5 parts, consisting of 12 lectures, 6 tutorials, 2 presentations and 2 consultations. It provides an introduction to the use of real-time 3D multimedia content. A theoretical perspective includes digital design, virtual dimension and virtual interaction. A practical perspective includes real-time multimedia platform, 3D multimedia content development software, data resources, behaviour building blocks, schematic, 3D layout and level management.

Topics include:

- Digital Design
- Virtual Dimension
- Virtual Interaction
- Real-time Multimedia Platform: DirectX, OpenGL, etc.
- 3D Multimedia Content Development Software: 3DS, DirectX, Virtools, etc
- Data Resources: 2D sprites, 3D sprites, 3D entities, behaviour graphs, characters, sounds, textures
- Behaviour Building Blocks: 3D transformations, cameras, characters, collisions, controllers, dynamics, logics, mesh modifications, particles, visuals and world environment
- Schematic: attribute, path, hierarchy, and parameter
- 3D layout and Level Manager

Objectives

- Objectives of the course include:
- Introduce the principles of real-time 3D multimedia content development.
- Introduce game-engine-based interactive multimedia platforms and software
- Enhance outcomes in Design Studio by integrating previous studies in audio & video editing, digital image representation, CAD and web-based software development.
- Prepare for the final year Integrated Design Computing Studio.
- Encourage participation in concurrent digital competition.
- Encourage imaginative, effective and confident self-representation by means of design computing knowledge and digital media.

This unit will contribute to the students in:

- Generic skills by means of collaborative activities.

- Analytical skills by literature review, software & Web site evaluation.

DECO 2607 Sound Design

4 credit points. Dr Densil Cabrera. **Session**: 1. **Assessment**: Two class tests (25% each), 1 project assignment (50%).

NB: Permission required unless enrolled in the Bachelor of Design Computing. Next preference to other students in the Architecture Faculty. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

- Understanding of the sound medium, assessed through tests in class;
- Ability to design with sound, assessed through project work.

Sound Design will develop knowledge and practical skills in the use of sound for computer applications. The unit of study will extend thinking and personal skills, so that students can apply the course content to new situations.

Content

This unit of study introduces sound as a design medium, with an emphasis on computer-based implementations. Consideration of real world acoustical phenomena and psychoacoustics provides some of the basis for the approach to sound design. The course introduces conceptual topics such as sound/image interaction, text and speech, auditory display, source streaming and segregation, functions for music, and spatial audio. It also covers technical and technological issues such as data formats and interfaces.

Objectives

Upon completing this unit of study, students will be expected to know about the nature of sound (from physical, technological, and psychological perspectives) and to be capable of using this knowledge in sound design for computer-based applications.

DECO 3001 Life-Cycle Integrated Design Comp Studio

12 credit points. Prof Mary Lou Maher. **Session**: 1. **Classes**: Studio and supporting lectures. **Assumed knowledge**: DECO (1002 and 1003 and 2003 and 2004) and SOFT 1001 and INFO 2005. **Assessment**: Design project brief, project plan, presentation using 3D modeling, technical specifications, and design evaluation.

NB: Core unit for Bachelor of Design Computing students only.

Objectives

The objective of this unit of study is to develop a life-cycle approach to designing an integrated computer-based design.

<hed6>Description

Life cycle integrated design addresses the use of a variety of software products across the life cycle of a design project through the planning and management of the design to account for ease of use and ease of maintenance. This unit of study considers the various approaches to integration of data and processes using technologies such as 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. Dr Andy Dong. **Session**: 2. **Classes**: Studio and supporting lectures. **Assumed knowledge**: DECO (1002 and 2001 and 2005) and or SOFT 1001. **Assessment**: Design project.

NB: Core unit for Bachelor of Design Computing students only.

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 3003 Design Computing Research Opportunity

6 credit points. Prof John Gero. **Session**: 2. **Classes**: Seminars, meetings. **Assumed knowledge**: Computer programming. **Prerequisite**: 96 credit points and minimum WAM of 65. **Assessment**: Two progress reports each 15% and final report worth 70%.

NB: Department permission required for enrolment. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Aims

The aim of the Design Computing Research Opportunity is to allow a student to participate in each phase of research activity:

- developing a research plan in conjunction with the staff member,
- proposal writing,
- conducting research,
- analyzing data, and
- presenting results in oral and written form.

At the end of the unit the student will have experience in developing research proposals, conducting research and presenting their results.

Content

Design Computing Research Opportunity offers the opportunity for a BDesComp student to work with an academic staff member on research-based intellectual collaborations. The student works on an existing research activity of the staff member. It can be one of the most important means for students to develop an understanding of research as an intellectual endeavour and to foster mentoring research relationships with academic staff.

Objectives

- the research proposal, which is the first progress report, will demonstrate the student's ability to work within an existing research
- the second progress report will identify the student's capacity to work on a research project within an existing research program and becomes a demonstration of the research skills being developed
- the final report will take the form of a research paper and is used to develop the student's skills in presenting research results

This unit will contribute to the students in:

- thinking skills through its focus on critical judgement, independent thinking and problem solving
- practical skills through data development and analysis and hypothesis testing.

DECO 3005 Advanced Interactive Multimedia Design

6 credit points. Dr Kirsty Beilharz. **Session**: 2. **Classes**: Seminars, online tutorials and reading modules. **Assumed knowledge**: DECO 1002 and 2002. **Prohibition**: May not be counted with DESC 9142. **Assessment**: Exercises and major design authoring project demonstrating understanding and implementation of interactive interface design principles.

NB: Permission required unless enrolled as an undergraduate in the faculty of Architecture. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

- To develop a comprehensive understanding of interactive multimedia;
- To extend fundamentals learned in Interactive Multimedia Design (DECO 2002) and Web-based Design Information Systems (DECO 1002);
- To understand how humans interact with computers;
- To develop interface design that elicits engagement and interaction;
- To develop an advanced knowledge of screen design principles and navigational methodologies.

Description

This unit aims to develop a comprehensive understanding of multimedia authoring, extending fundamentals learned in Interactive Multimedia Design and Web-based Design Information Systems. Students will investigate effective navigational and design strategies for engaging interactive multimedia interface design. Students will develop an understanding of 2D vector-based animation and navigational techniques applied to a project authored with Macromedia Flash. ActionScripting knowledge will be developed to extend the generative, interactive, and external data interfacing capabilities

of the authoring environment. Final projects will demonstrate implementation and understanding of aesthetic design principles, design architecture, and effective, efficient interactive interface design. Innovative applications of interactive multimedia, for example generative and real-time design and interactive navigational systems will extend the understanding of interface design. Students will develop further understanding of HCI and develop strategies to apply this understanding to interactive design projects. Delivery, integration of media, controlling audio and video, and a grammatical and conceptual understanding of scripting in Flash will be treated as an extension of these interactive capabilities.

Outcomes

- A well-developed understanding of human-computer interaction demonstrated through the structure and design of an interactive multimedia project;
- An understanding of efficient navigational and innovative interface design eliciting user interaction and demonstrated knowledge of responsive multimedia;
- An understanding of technical methods to link content and external data to the multimedia product.

DECO 3006 **Principles of 3D Animation**

6 credit points. Supervisor: Dr Kirsty Beilharz. Lecturer: Mr Roy Malhi. **Session**: 1. **Classes**: Lectures and tutorials. **Prohibition**: DESC 9019 or 9141. **Assessment**: Project work involving design and implementation demonstrating understanding of 3D modelling, motion, lighting, rendering and principles of animation in 3D.

NB: Department permission required for enrolment. First preference given to third year students in the Bachelor of Design Computing. Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

- To introduce the computer animation process in 3D
- To understand 3D modeling, texturing, rendering, and lighting
- To develop an understanding of motion, kinematics and basic animation

Description

This Elective forms an introduction to the 3D computer-based animation process from understanding 3D modelling, texturing, rendering and lighting to developing time-based sequences involving relative motion of objects, character animation, the skeleton, skinning, kinematics and polygons. The objective of this unit is to acquire basic animation skills, transfer traditional animation principles to computer graphics, and develop the skills to create an animated sequence in 3D. Basic knowledge will be related to foundational technical skills in AliasWavefront Maya and aims to serve as an introduction to further animation learning.

Outcomes

- To acquire an understanding of animation in relation to 3D computer graphic software To understand the concepts and implementation of modeling principles involving light, texture and polygonal shapes;
- Applied basic knowledge of animation to characters demonstrated in a significant project.

DECO 3441 **Design Computing Independent Study A**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives

- To provide an opportunity to high achieving students to develop interest in a specific Design Computing topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description

This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Design Computing. The student will meet with the supervisor weekly to discuss progress.

Outcomes

- A reflective report on a selected topic demonstrating mastery of the topic.

DECO 3442 **Design Computing Independent Study B**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives

- To provide an opportunity to high achieving students to develop interest in a specific Design Computing topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description

This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Design Computing. The student will meet with the supervisor weekly to discuss progress.

Outcomes

- A reflective report on a selected topic demonstrating mastery of the topic.

DECO 3443 **Design Computing Independent Study C**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives

- To provide an opportunity to high achieving students to develop interest in a specific Design Computing topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description

This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Design Computing. The student will meet with the supervisor weekly to discuss progress.

Outcomes

- A reflective report on a selected topic demonstrating mastery of the topic.

DECO 3444 **Design Computing Independent Study D**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives

- To provide an opportunity to high achieving students to develop interest in a specific Design Computing topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description

This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Design Computing. The student will meet with the supervisor weekly to discuss progress.

Outcomes

- A reflective report on a selected topic demonstrating mastery of the topic.

DECO 3551 **Design Computing General Elective A**

6 credit points. **Session**: 1, 2, Summer. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives

This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

This unit of study is available to a minimum of 10 students to engage in a topic related to Design Computing that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, and supervised computer lab time as needed to pursue the elective topic. The topic for this elective is proposed

by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

DECO 3552 **Design Computing General Elective B**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives

This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

This unit of study is available to a minimum of 10 students to engage in a topic related to Design Computing that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, and supervised computer lab time as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

DECO 3553 **Design Computing General Elective C**

6 credit points. **Session**: 1, 2. **Classes**: Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment.

Objectives

This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

This unit of study is available to a minimum of 10 students to engage in a topic related to Design Computing that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, and supervised computer lab time as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

DECO 3554 **Design Computing General Elective D**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives

This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

This unit of study is available to a minimum of 10 students to engage in a topic related to Design Computing that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, and supervised computer lab time as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

DECO 4001 **Design Computing Honours Research A**

12 credit points. Prof. John Gero. **Session**: 1, 2. **Prerequisite**: Completion of the Pass degree. Students in the Bachelor of Design Computing will require a WAM of at least 70.

NB: Department permission required for enrolment. Students in the Faculty of Science should apply for honours to their own faculty office.

Students must submit an Honours application form. Entry into Honours in the Bachelor of Design Computing requires you to have completed your pass degree with a Weighted Average Mark of at least 70.

Students enrol into 48 credit points by taking Design Computing Honours Research A and B in the first semester and C and D in the second semester.

DECO 4002 **Design Computing Honours Research B**

12 credit points. **Session**: 1, 2. **Corequisite**: DECO 4001.

Design Computing Honours.

DECO 4003 **Design Computing Honours Research C**

12 credit points. **Session**: 1, 2. **Corequisite**: DECO 4002.

Design Computing Honours.

DECO 4004 **Design Computing Honours Research D**

12 credit points. **Session**: 1, 2. **Corequisite**: DECO 4003.

Design Computing Honours.

DESA 1001 **Design Practice 1A**

12 credit points. **Session**: 1. **Classes**: Studio, seminars, lectures, workshop, labs. **Assumed knowledge**: HSC Mathematics, HSC English Standard. **Corequisite**: DESA 1101. **Assessment**: Exercises, projects, portfolio.

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 learn 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 studentsÇ 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 extension DESA 1101 Design Studies 1A.

There is a focus on developing studentsÇ 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

  NB: Core unit of study

Practical: Field studies

DESA 1002 **Design Practice 1B**

12 credit points. **Session**: 2. **Classes**: Studio, seminars, lectures, workshop, labs. **Assumed knowledge**: HSC Mathematics and HSC English Standard or equivalent. **Prerequisite**: DESA (1001 and 1101). **Corequisite**: DESA 1102. **Assessment**: Exercises, projects, portfolio.

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 1A.

Practical: Field studies

DESA 1101 **Design Studies 1A**

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

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 subsequently 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. **Session**: 2. **Classes**: Lectures, seminars, laboratories, web-based information. **Assumed knowledge**: HSC Mathematics and HSC English Standard or equivalent. **Prerequisite**: DESA (1001 and 1101). **Corequisite**: DESA 1002. **Assessment**: Exercises, Assignments, Quizzes, Examinations as required for feedback and with final Pass/Fail result.

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 1201 **Principles of ArchiCAD**

6 credit points. Prof ML Maher. **Session**: 1, 2. **Classes**: Initiating lecture, with self directed on-line information transfer primarily via WebCT thereafter. **Prohibition**: DESC 9100. **Assessment**: 1. CAD tutorial; 2. Personal modelling project; and 3. Oral test.

NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

- Introduce knowledge and skills required for computer aided production and presentation of 1) 2D draughting and 3D modelling, for design and documentation and 2) static and dynamic visualisations of constructed object designs;
- Develop computing skills in the use of object oriented 3D modelling tools to produce and display accurate models of domestic scale buildings and structures;
- Introduce issues, principles and practice of model organisation, production and presentation, including design analysis, model structuring, documentation and economy of means.

Description

ArchiCAD is an object-oriented CAD application developed especially for documenting and creating 3D visualisation of buildings. This unit of study introduces the use of object tools for modelling and displaying 3 dimensional building elements such as walls, slabs, columns, beams and roofs, structured by means of layers and storeys.

Outcomes

Competencies in the use of ArchiCAD software will be sufficient for students to be able to produce computer generated:

- Multilayered 2D design and construction drawings, complete with dimensions, notations and conventional drawing graphics;
- 3D parallel and perspective representations with shaded, coloured or rendered surfaces;
- Static and dynamic presentations that enhance and extend design communications.

DESA 1202 **Principles of AutoCAD**

6 credit points. Prof ML Maher. **Session**: 1, 2. **Classes**: Initiating lecture, with self directed on-line information transfer primarily via WebCT thereafter. **Prohibition**: DESC 9101. **Assessment**: 1. CAD tutorial; 2. Personal modelling project; and 3. Oral test.

NB: Permission required unless enrolled in the Bachelor of Design Computing or the Bachelor of Design (Architecture). Non Architecture students may apply directly to the Faculty of Architecture on a quota basis.

Objectives

- Introduce knowledge and skills required for computer aided production and presentation of 1) 2D draughting and 3D modelling, for design and documentation and 2) visualisations of constructed object designs;
- Develop computing skills in the use of object oriented 3D modelling tools to produce and display accurate models of domestic scale buildings and structures;
- Introduce issues, principles and practice of model organisation, production and presentation, including design analysis, model structuring, documentation and economy of means.

Description

AutoCAD is considered an industry standard CAD application for many design professions, combining both traditional drawing and object oriented CAD functionalities. This unit of study introduces the use of AutoCAD tools for drawing, modelling and visualisation, structured by means of layers and blocks.

Outcomes

Competencies in the use of AutoCAD software will be sufficient for students to be able to produce computer generated:

- Multilayered 2D design and construction drawings, complete with dimensions, notations and conventional drawing graphics;
- 3D wireframe, surface and solid models;
- 3D parallel and perspective representations with shaded, coloured or rendered surfaces;
- Computer based presentations that enhance and extend design communications.

DESA 1601 **Foundation Art Studio 1**

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

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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 of 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.

DESA 1602 **Foundation Art Studio 2**

3 credit points. Ms Jan Fieldsend. **Session**: 2. **Classes**: Practical studio work. **Assessment**: Attendance, work practice and practical studio work.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Objectives

This unit of study will introduce students to basic practical skills in a variety of art media and provide an awareness of visual arts in general.

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, photography or life drawing; 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 and an awareness of visual arts practices.

Practical: Studio practice.

DESA 2001 **Design Practice 2A**

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

Objectives

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 studentÇs 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. **Session**: 2. **Classes**: Studio, seminars, lectures, workshop, laboratories. **Assumed knowledge**: DESA 1101 and DESA 1102, or equivalent. **Prerequisite**: DESA (2001 and 2101). **Assessment**: Exercises, projects, portfolio, for feedback and final summative assessment.

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 2101 **Design Studies 2**

8 credit points. Dr Simon Hayman. **Session**: 1. **Classes**: Lectures, seminars, labaoratories, web-based information. **Prerequisite**: DESA 1101 and DESA 1102. **Assessment**: Exercises, Essays, Assignments, Quizzes, Examinations for feedback and final summative result.

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 2201 **Design, Ecology and Sustainability**

4 credit points. Dr Richard Lamb. **Session**: 1. **Classes**: The unit will be conducted over seven weeks, with classes (conventional lectures or group-presentation seminars) of either two or three hour individual duration. **Assumed knowledge**: DESA 1101 and DESA 1102 or equivalent. **Corequisite**: DESA 2101. **Assessment**: Short essay assignment: integrated with Design B1(40%), shared group research assignment (40%), self and group assessment of contribution to research task (20%).

Objectives

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.

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.

Outcomes

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.

Contribution of unit to programs taken by students

The unit fits into the overall structure of the dergree 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.

Practical: Investigations, field studies

DESA 2202 **Sustainable Interior Environments**

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

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 a 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 3001 Design Practice 3A and DESA 3002 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 students' 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 2206 **Innovative Building Structures**

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

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; and
- 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. **Session**: 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; and
- demonstrate an ability to prepare a piece of scholarly research on a selected aspect of sustainability.

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, 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 2208 **Introduction to Project Management**

4 credit points. Dr David Gunaratnam. **Session**: 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; and
- learn to apply the project management fundamentals to other project types and endeavours.

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, 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.

Textbooks

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

Reference books

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

DESA 2209 **Built Environment Project Management**

4 credit points. David Gunaratnam. **Session**: 1. **Prerequisite**: DESA 2208.

Aims

This unit of study builds on Introduction to Project Management, but more specifically focuses on the management of projects in the built environment. The major focus is to study how the project management fundamentals can be internalised and optimised for effective and efficient management of projects of different types in the built environment. Studies will concern conduct of the following:

- urban planning, renewal and masterplanning
- facility feasibility studies
- facility planning and design
- facility procurement process
- facility construction process
- facility hand over process and transition to facility asset management

Syllabus summary:

Studies leading to project initiation, project planning, project implementation and project hand-over and finalisation outcomes, with due emphasis on the application of internationally-recognised Standards (ie, PMBOK, ISO10006 and APMBoK); studies of the application of the above Standards to different class of projects or phases of development in the built environment; design of frameworks that can integrate the deliverables from different project phases; and development of a basic understanding of performance measurement and benchmarking of projects in the built environment.

Objectives

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

- apply project management principles to a range of simple projects within the above range
- provide input to the planning and management of more complex projects in the built environment.

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, personal attributes and practical skills

Attendance, Requirements, Assessment

At least 90% attendance at all classes is required. Assessment will be based on both coursework and written tests, details of which will be advised at the commencement of the course.

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.

Textbooks

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

DESA 2211 Architecture, Place and Society

4 credit points. A/Prof Anna Rubbo. **Session**: 1. **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, 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. **Session**: 2. **Prerequisite**: DESA 2211 or ARCH 2002 or permission of the coordinator. **Assessment**: Essay; group fieldwork assignment. 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, with 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 with 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; and
- 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; and
- 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.

Practical: Site visits.

DESA 2213 Housing for Health

4 credit points. Mr Colin James. **Session**: 1. **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; and
- 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; and
- Comprehension through report writing on the analyses of data, house fixing procedures and independent observations of other health risks, specifically for householdersÇ information requiring regular maintenance and user practices.

DESA 2301 Environmental Technologies

4 credit points. Dr Densil Cabrera. **Session**: 2. **Classes**: Lectures, seminars, laboratories, web-based information. **Assumed knowledge**: DESA 1101and DESA 1102 and DESA 2002, or equivalent. **Assessment**: Research Paper.

NB: 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; and
- evaluate and justify environmental management strategies which support design intentions and recognise the principles of ecological and environmental sustainability;

Practical: Investigations, field studies

DESA 2302 **Australian Architecture: 1788 – Present**

4 credit points. **Session**: 1. **Classes**: Lectures, seminars, labaoratories, web-based information. **Assumed knowledge**: DESA 1101, DESA 1102, DESA 2002 or equivalent. **Corequisite**: DESA 3001. **Assessment**: Research paper.

NB: 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 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; and
- demonstrate a high level of competence in preparing a design study based on research.

Practical: Investigations, Field studies.

DESA 2303 **Construction, Structures and Management**

4 credit points. Dr David Gunaratnam. **Session**: 2. **Classes**: Lectures, seminars, laboratories, web-based information. **Assumed knowledge**: DESA 1101 and DESA 1102 and DESA 2002, or equivalent. **Corequisite**: DESA 3002. **Assessment**: Research paper.

NB: Prerequisite for the Bachelor of Architecture program.

Objectives

Knowledge developed in DESA 2101 Design Studies 2, DESA 2001 Design Practice 2A and in 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; and
- apply the appropriate design aids and codes of practice at a high level of competence.

Practical: Investigations, Field studies

DESA 2305 **Australian Modernist Architecture**

4 credit points. Dr Harry Margalit. **Session**: 2. **Classes**: Lectures, tutorial discussions and field trips. Attendance of 90% at least is required for all components collectively. **Assessment**: Attendance, field trip, essay (student chosen topic drawn from course).

Objectives

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.

Outcomes

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; and
- An ability to record the buildings and sites visited through a field trip diary.

Head6>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; and
- 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 2608 **Advanced Art Studio 1**

4 credit points. Ms Jan Fieldsend. **Session**: 2. **Classes**: Practical studio work, lectures, development of ideas through group discussions, gallery visit, exhibition, group critique of artwork. **Assumed knowledge**: 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: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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.

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, object design.

Please note that some studios may not be offered each 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 Jan Fieldsend. **Session**: 2. **Classes**: Practical studio work, lectures, development of ideas through group discussions, gallery visit, exhibition, group critique of artwork. **Assumed knowledge**: 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: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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/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, object design.

Please note that some studios may not be offered each 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.

DESA 2610 **Designing with Colour 1**

4 credit points. Hon A/Prof Terry Purcell. **Session**: 1, 2, Summer. **Classes**: On-line, or on-line with 3 face-to-face workshop/seminars. **Assumed knowledge**: DESA 2612 or equivalent Photoshop skills. **Prerequisite**: Students must have completed 48 credit points towards their degree (except BArch). **Assessment**: Group work (formative assessment). Two assignments (50% each) (summative assessment).

Objectives
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 DESA 2612 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; and
- 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 DESA 2612 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.

Outcomes

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.

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.

DESA 2611 **Designing with Colour 2**

4 credit points. Hon A/Prof Terry Purcell. **Session**: 1, 2, Summer. **Classes**: On-line, or on-line with three 1-hour face-to-face workshop/ seminars. **Prerequisite**: DESA 2610 and completion of 48 credit points. **Assessment**: 2 assignments (50% each) (summative assessment); Group work (formative assessment).

Objectives

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 analysing 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.

Outcomes

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.

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.

DESA 2612 **Designing with Surfaces and Light**

3 credit points. Hon A/Prof Terry Purcell. **Session**: 1, 2, Summer. **Classes**: On-line delivery and group work. **Assessment**: One assignment (100%) (summative assessment); group work (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; and

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.

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.

DESA 2616 **Explorations in Mixed Media**

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

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Aims

In the twentieth century mixed media profoundly changed the form and content of visual arts. Explorations in Mixed Media examines these developments through practical classes, slide lectures and discussion. Collage, assemblage, montage, photocopy art and the traditional discipline of drawing 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, techniques 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; and
- 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; and
- develop the ability to plan and achieve a goal through a self directed final project.

Practical: Consumables fee applies.

DESA 2618 **Public Art**

4 credit points. Ms Jan Fieldsend. **Session**: 2. **Classes**: Lectures, field trips and art studio practice. **Assessment**: Participation 20%, Seminar 30%, Essay 50%.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Aims

The field of public art is rapidly growing and as such has generated much debate and interest. 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 (for example 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 the 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;
- develop the ability to plan and achieve a goal by researching and writing an essay and giving a seminar.

DESA 2619 **Site Specific Art**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 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%.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Aims

Over the past thirty years the relationship of art to site has been a major concern in the work of 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 urban planning and design 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 complements 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 critical debate; and
- 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; and
- develop the ability to plan and achieve a goal through a self directed final project.

DESA 2626 **Mathematics in Architecture**

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

NB: Department permission required for enrolment.

Objectives

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.

Outcomes

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

- Be aware of the rational tradition of mathematics in architecture;
- Be aware of the range of mathematical skills required for further areas of study; and
- 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 2629 **Photography**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio classes, slide lectures, gallery visits. **Assessment**: Attendance, studio skills, portfolio of completed assignments.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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.

DESA 2630 **Etching**

4 credit points. Ms Jan Fieldsend. **Session**: 1. **Classes**: Practical studio classes, discussion. **Assessment**: Attendance, studio skills and technique, portfolio of completed projects.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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.

DESA 2631 **Ceramics (wheel throwing)**

4 credit points. Ms Jan Fieldsend / Mark Jones. **Session**: 1, 2. **Classes**: Practical studio work. **Assessment**: Attendance, studio skills and technique, completed projects.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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; and
- have an awareness of historical and contemporary approaches to wheel made ceramics.

DESA 2632 **Digital Video**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio classes, tutorials. **Assessment**: Attendance, application, completed video work.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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.

DESA 2633 **General Drawing**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio classes. **Assessment**: Attendance, studio skills and techniques, portfolio of completed works.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Objectives
This course aims to provide students with the knowledge and aptitude required to use a wide range of fundamental 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.

DESA 2634 **Ceramics (handbuilding)**

4 credit points. Ms Jan Fieldsend / Mark Jones. **Session**: 1, 2. **Classes**: Practical studio classes. **Assessment**: Attendance, studio skills and completed projects.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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; and
- understand firing schedules – ie, bisque and glaze.

DESA 2635 **Painting (acrylic or oil)**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio classes. **Assessment**: Attendance, studio skills and technique.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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 a portfolio of work based on observation of the physical world, and to experiment with imaginative applications of acrylic or oil media.

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 or oil 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.

Practical: Consumables fee applies.

DESA 2636 **Sculpture**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio classes. **Assessment**: Attendance, studio skills and completed projects.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Objectives

This module provides students with knowledge, skills and confidence to use a range of materials and techniques necessary for three-dimensional works. 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: Consumables fee applies.

DESA 2637 **Graphic Design**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio classes, slide lectures. **Prerequisite**: Semester 1 – BDesign Computing students only. **Assessment**: Attendance, studio skills and portfolio of completed projects.

NB: In semester one this unit is limited to BDesComp students only (no permission required). In semester 2 enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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 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 audience engagement.

Practical: Consumables fee applies.

DESA 2638 **Screen Printing on Paper**

4 credit points. Ms Jan Fieldsend. **Session**: 2. **Classes**: Practical studio classes. **Assessment**: Attendance, studio skills and techniques, portfolio of completed projects, process journal.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Objectives

This module will introduce the student to a range of screen printing techniques with discussion and analysis of how screen printing functions as a contemporary visual medium. 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.

Practical: Consumables fee applies.

DESA 2639 **Screen Printing on Fabric**

4 credit points. Ms Jan Fieldsend. **Session**: N/A in 2004. **Classes**: Practical studio classes, slide lecture. **Assessment**: Attendance, studio skills, process journal, completed projects.

NB: Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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; 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 covers 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.

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.

Practical: Consumables fee applies.

DESA 2640 **Web Art and Design**

4 credit points. Ms Jan Fieldsend. **Session**: N/A in 2004. **Classes**: Practical studio classes. **Assessment**: Attendance, computer skills, process journal, completed project.

NB: Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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), students will learn to create Web sites using Dreamweaver and Photoshop 7.0 and publish them using an FTP program such as Fetch. Students will have an understanding of the complex place and construction web art.

Practical: Consumables fee applies.

DESA 2641 **Life Drawing**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio. **Assessment**: Attendance, application, portfolio of works.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

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: Consumables fee applies.

DESA 2642 **Experimental Photography**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio classes, slide lectures, demonstrations. **Prerequisite**: DESA 2629. **Assessment**: Attendance, application, portfolio of completed projects.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Objectives

This module builds on the skills learnt in Photography 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, printing of high quality, large-scale prints and have an awareness of photography as a contemporary visual medium.

Practical: Consumables fee applies.

DESA 2643 **Object Design**

4 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: Practical studio classes, lectures, discussion and demonstrations. **Assessment**: Participation and Exercises(20%), Research Project(s) (30%) Design development, documentation and manufacture of object (50%).

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Objectives

This unit aims to develop a critical awareness of the nature of objects which surround us. Issues explored include the cultural, historical and symbolic aspects of objects, their functional and aesthetic qualities as well as sustainability and social issues relating to their manufacture, use and disposal. The unit also aims to increase appreciation of the materiality of objects

focusing on timber as an example. The course introduces students to the wonderful diversity of timber species, environmental and ethical issues associated with their selection, and also emerging alternative materials. Students also develop skills in construction, use of tools and wood/plastics machinery and in so doing, build an awareness of industrial and craft practices and how they impact on the design process and outcome.

Outcomes

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

- An understanding of the inter-relationship between materials, processing and design objectives;
- Awareness and ability to use different theoretical approaches to object design history and its practice;
- Confidence in working safely with various timbers, tools and equipment;
- Design and manufacture of a finely crafted object.

Generic skills

On completing this unit students are expected to have developed the following skills:

- Knowledge: increased awareness of the design, sustainability issues and relative value of everyday objects;
- Thinking: ability to think critically about everyday objects and question the way we live and consume;
- Personal: improved visual and verbal communication through discussion, presentation of ideas and working with others;
- Practical; technical skills including use of hand and power tools.

Contribution of unit to programs taken by students

Object Design theory and practice contributes to the work undertaken for architecture and design degrees: the unit provides students with the opportunity to realise their designs as completed 3D objects which can be used and assessed over time and also to work at a small, personal scale encouraging greater attention to fine detail.

Practical: All students are required to complete a 3-hour ATSC Safety Certificate (Basic), either before enrolment or as part of the unit.

DESA 2644 **Ceramic Art and Design**

4 credit points. Ms Jan Fieldsend. **Session**: 1. **Classes**: Practical studio classes, slide lectures. **Prerequisite**: DESA (2631 or 2634). **Assessment**: Attendance, studio skills and techniques, completed projects.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Objectives

This unit aims to produce a number of individually designed ceramic works that develop and extend techniques learnt in DESA 2631 Ceramics (wheel throwing) or DESA 2634 Ceramics (hand building).

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 unit 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; and
- have explored various advanced surface treatments.

Practical: Consumables fee applies.

DESA 3001 **Design Practice 3A**

12 credit points. Ms Kristine Sodersten. **Session**: 1. **Classes**: Studio, seminars, lectures, workshop, laboratories. **Assumed knowledge**: DESA (1001 and 1101 and 1102), or equivalent. **Prerequisite**: DESA (2001 and 2002 and 2101). **Assessment**: Exercises, projects, portfolio for feedback and final summative assessment.

Objectives

This unit contributes to the progressive development of design education which commenced in the previous unit DESA 2001 Design Practice 2. This unit of study progresses the previous development of design education to the level of pre-professional and pre-research outcomes. It builds upon the previous units in Design Practice. It aims to engage the built environment at the scale of the city with increasing emphasis upon the solution of complex, medium scale design problems to a high level of resolution, and at a high level of competence. As design outcomes of this type are usually the result of collaboration between designers there is an increasing emphasis placed upon collaborative working within groups.

The unit addresses the competent application of advanced knowledge about inhabiting, designing and constructing the built environment to achieving design outcomes which respond to multiple levels of complex design issues, problems and opportunities.

The application of knowledge about inhabiting the built environment extends to the rudimentary evaluation of impacts of design actions upon internal and external environments and global scale ecological concerns. Designing knowledge is extended to competent evaluation of individual design processes and application of this understanding to become informed reflective practice. The study of precedents now includes remote or analogous precedents as well as direct and indirect precedents studied previously. There is also further development in acquiring expertise in design representation both for the purposes of design development and design implementation. The application of construction knowledge is progressed to include standard systems of construction for medium scale buildings and their adaptation for particular circumstances, as well as expertise in structural synthesis to be able to develop architectural structural strategies that support design outcomes for buildings of this scale. It includes a basic understanding of the legal and regulatory environment in which buildings are constructed.

Formative or feedback assessment (see Design Practice 2 for an explanation) will be used throughout the unit to inform students of their progress in learning. The unit will conclude with a final summative assessment task (see Design Practice 2 for an explanation).

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 highly developed ability to reflect upon, evaluate, understand and improve their own design processes;
- demonstrate a high level of competence in expressing design intent and design outcome though a design language which reflects upon appropriate direct, indirect and analogous precedent and responds to all the key issues identified in the design requirements;
- demonstrate expertise and a high level of competence in applying knowledge about inhabiting, designing and constructing the built environment to complex design problems which involve multiple levels of issues and opportunities including an ability to:

  Inhabiting the built environment
- devise appropriate design intentions and design outcomes which enhance the environmental quality of the built environment and people's experience of it, and demonstrate an understanding of this experience;
- devise, evaluate and justify environmental management strategies which support design intentions and recognise the principles of ecological and environmental sustainability;
- evaluate environmental impact of a building on its surroundings;

  Designing the built environment
- use with a high level of competence a range of graphical and modelling techniques for exploring and testing design development;
- demonstrate expertise at producing appropriate design representations and documentation using a wide range of manual and digital media which communicate the design

intent and its impacts upon the surrounding built environment to various relevant parties including the client, consultants, contractors, planning consent authorities and community groups;
Constructing the built environment
- devise, evaluate and justify integrated constructional and structural strategies and systems which support design intentions for a medium scale building;
- demonstrate a command of standard constructional systems and the ability to develop these standard systems to achieve design intentions for a medium scale building; and
- develop a design outcome which complies with the key aspects of the regulatory environment.

Practical: Field Studies.

DESA 3002 **Design Practice 3B**

12 credit points. Ms Kristine Sodersten. **Session**: 2. **Classes**: Studio, seminars, lectures, workshop, laboratories. **Prerequisite**: DESA 3001. **Assessment**: Exercises, projects, portfolio, for feedback and final summative assessment. Design Practice is taught in two parts as a consecutive sequence over two semesters.

See description for the unit DESA 3001 Design Practice 3A.

DESA 3441 **Design Architecture Independent Study A**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives
- To provide an opportunity to high achieving students to develop interest in a specific Design Architecture topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description
This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Design Architecture. The student will meet with the supervisor weekly to discuss progress.

Outcomes
- A reflective report on a selected topic demonstrating mastery of the topic.

DESA 3442 **Design Architecture Independent Study B**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives
- To provide an opportunity to high achieving students to develop interest in a specific Design Architecture topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description
This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Design Architecture. The student will meet with the supervisor weekly to discuss progress.

Outcomes
- A reflective report on a selected topic demonstrating mastery of the topic.

DESA 3443 **Design Architecture Independent Study C**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives
- To provide an opportunity to high achieving students to develop interest in a specific Design Architecture topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description
This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Design Architecture. The student will meet with the supervisor weekly to discuss progress.

Outcomes
- A reflective report on a selected topic demonstrating mastery of the topic.

DESA 3444 **Design Architecture Independent Study D**

6 credit points. **Session**: 1, 2. **Classes**: Weekly meetings by arrangement. **Prerequisite**: 48 credit points and WAM of at least 70. **Assessment**: Report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor and program coordinator with your request to enrol.

Objectives
- To provide an opportunity to high achieving students to develop interest in a specific Design Architecture topic;
- To develop skills in independent study;
- To develop advanced report writing skills.

Description
This elective is undertaken with an agreement between the student and a supervisor on an agreed topic related to Design Architecture. The student will meet with the supervisor weekly to discuss progress.

Outcomes
- A reflective report on a selected topic demonstrating mastery of the topic.

DESA 3551 **Design Architecture General Elective A**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives
This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description
This unit of study is available to a minimum of 10 students to engage in a topic related to Design Architecture that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:
Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

DESA 3552 **Design Architecture General Elective B**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives
This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description
This unit of study is available to a minimum of 10 students to engage in a topic related to Design Architecture that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:
Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

DESA 3553 **Design Architecture General Elective C**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives
This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description
This unit of study is available to a minimum of 10 students to engage in a topic related to Design Architecture that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:
Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

DESA 3554 **Design Architecture General Elective D**

6 credit points. **Session**: 1, 2. **Prerequisite**: 48 credit points.
NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by the elective supervisor, with your request to enrol.

Objectives
This elective allows a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description
This unit of study is available to a minimum of 10 students to engage in a topic related to Design Architecture that is organized by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic. The topic for this elective is proposed by a member of academic staff and approved by the Assoc Dean (Undergraduate).

Outcomes:
Students will develop an understanding of a special topic through reports, projects, and tutorial exercises.

DESC 2101 **Building Services Systems**

3 credit points. Dr D Leifer. **Session**: 1. **Classes**: Lectures, tutorials and site visits. **Prohibition**: May not be counted with DESC 9151. **Assessment**: One assignment (100%).

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. (The operation of systems necessarily includes an understanding of their design principles).

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;
- be aware of the role of building control systems for integrating and managing the operation of buildings on a day-to-day basis.

Content
Topics covered include:
- Strategic planning for services;
- Air conditioning and ventilation systems;
- Lifts and escalators;
- Hydraulics systems;
- Fire systems;
- Electrical services;
- Lighting;
- Security systems.

Textbooks
(the Assessment task assumes the use of this book)
Pat Parlour, Building Services: Engineering for Architects; Design at the early stages. ISBN 0 646 34260 6, Integral Publishing. PO Box 363 Pymble 2073. (Available in advance – at a substantial discount to students on this course – through the author). Contact me in then first instance by May 12th).

DESC 2102 **Architectural Structures and Materials**

5 credit points. Dr David Gunaratnam. **Session**: 2. **Classes**: Lectures, tutorials and site visits. **Corequisite**: ARCH 2107. **Assessment**: One design project (50%), one case study (20%) and a quiz (30%).

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; and
- 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.

DESP 1201 **Introductory Urban Design and Planning**

3 credit points. **Session**: 2. **Classes**: Lectures and seminars. **Assessment**: Written assignments.

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. **Session**: 1. **Classes**: Lectures, workshops and studio. **Assessment**: Proposals and reports on projects.

NB: Urban Design and Planning stream in the BDesign.

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; and
- 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; and
- 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. **Session**: 2. **Classes**: Lectures, workshops and studio. **Assessment**: Proposals and reports on projects.

Objectives

Students will be able to:

- prepare local area studies and site plans; and
- 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; and
- 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. **Session**: 2. **Classes**: Lectures, workshops and seminars. **Assessment**: Assignments on literature and cases.

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; and
- 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. **Session**: 1. **Classes**: Lectures, workshops and seminars. **Assessment**: Assignments and reports on cases.

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); and
- 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. **Session**: 2. **Classes**: Lectures, workshops and studio. **Assessment**: Assignments and reports on projects.

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; and
- 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.

4 Undergraduate degree regulations

This chapter contains the degree regulations governing undergraduate degrees across the University as well as specific resolutions of the Faculty of Architecture governing undergraduate degrees offered by this faculty. The regulations are arranged in the following order:

1. University of Sydney (Coursework) Rule
2. Bachelor of Design – BDesign *(last intake 2003)*
   The Bachelor of Design includes the specially designated streams:
   - Bachelor of Design (Architecture) – BDesign(Arch)
   - Bachelor of Design (Digital Media) – BDesign(DigitalMed)
   - Bachelor of Design (Urban Design and Planning) – BDesign(Arch/UrbDesPlan)
   - Bachelor of Design (Architecture/Digital Media) – BDesign(Arch/DigitalMed)
   - Bachelor of Design (Architecture/Urban Design and Planning) – BDesign(Arch/UrbDesPlan)
3. Bachelor of Design in Architecture – BDesArch
   The Bachelor of Design in Architecture includes the specially designated streams:
   - Bachelor of Design in Architecture (Allied Arts and Architecture) – BDesArch(AlliedArtsArch)
   - Bachelor of Design in Architecture (Digital Architecture) – BDesArch(DigitalArch)
   - Bachelor of Design in Architecture (Urban Design and Planning) – BDesArch(UrbDes&Plan)
4. Bachelor of Design Computing – BDesComp
5. Bachelor of Architecture – BArch

■ University of Sydney (Coursework) Rule 2000 (as amended)

Preliminary

Rules relating to Coursework Award Courses

Division 1Award course requirements, credit points and assessment
Division 2Enrolment
Division 3Credit, cross-institutional study and their upper limits
Division 4Progression
Division 5Discontinuation of enrolment and suspension of candidature
Division 6Unsatisfactory progress and exclusion
Division 7Exceptional circumstances
Division 8Award of degrees, diplomas and certificates
Division 9Transitional provisions

■ University of Sydney (Coursework) Rule 2000 (as amended)

Preliminary

1. Commencement and purpose of Rule

(1) 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

(1) 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 the standards required by the University for academic honesty;

(c) meets all examination, assessment and attendance requirements for the unit of study; and

(d) 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 with policies 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

(b) 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

(1) 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

(1) The relevant dean may permit a student 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 student 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

(1) 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

(1) In this Rule a reference to the Appeals Committee is a reference to the Senate Student Appeals Committee (Exclusions and Readmissions).

(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 student 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

(1) 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 the 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.

■ Bachelor of Design

Last intake 2002. Candidates are advised to refer to the 2003 handbook for Table A.

Resolutions of the Senate

Bachelor of Design

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

Requirements of the Pass degree

1. 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.

Streams

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

Requirements for the Honours degree

3. 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.

Resolutions of the Faculty

Bachelor of Design

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000, which sets out the requirements for all coursework courses, and the relevant resolutions of the Senate.]

Section 1

Units of study

1. The units of study which may be taken for the degree are set out in Table A, the table of units of study for the Bachelor of Design, together with:
(1) designation as Junior, Senior or Honours units of study;
(2) credit point values;
(3) assumed knowledge, corequisites and prerequisites;
(4) the semesters in which they are offered;
(5) the units with which they are mutually exclusive; and
(6) designation as core, stream or elective.
2. 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.
3. Except with the special permission of the Dean, the required units of study must be completed in the sequence prescribed.
4. A student who intends to proceed to the Bachelor of Architecture degree must complete the prerequisite units of study listed in Table A.

Requirements for the Pass degree

5. To be eligible for award of the Bachelor of Design a candidate must complete successfully units of study giving credit for a total of 144 credit points, including:
(1) 92 credit points from core units of study;
(2) either one or two streams as described in Resolution 12;
(3) no more than 14 credit points from Allied Arts electives;
(4) no more than 12 Junior and 8 Senior credit points from units of study offered by faculties other than the Faculty of Architecture; and
(5) the balance to be taken from any other unit of study listed in Table A, except that the student may, with the approval of the Dean, substitute instead other units of study.
6. Candidates proceeding to the Bachelor of Architecture are required to complete the designated prerequisite units of study listed in Table A.
7. Units of study completed at The University of Sydney Summer School, which correspond to units allowable under resolution 5, may be credited towards the course requirements.

Specially Designated Streams

8. All students will initially be enrolled in the Bachelor of Design (Architecture) stream.
9. A student may remain in the Bachelor of Design (Architecture) stream or may elect another stream prior to completing their second semester.
10. (1) The Faculty will provide at least 15 places for entry in each stream.
    (2) 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.
11. Students may transfer between streams.
12. The requirements for award of the designated streams in the Bachelor of Design are:
    (1) for the Bachelor of Design (Architecture), not less than 20 Senior credit points from the units of study listed in Table A for the Architecture stream;
    (2) for the Bachelor of Design (Digital Media), not less than 19 credit points from the units of study listed in Table A for the Digital Media stream;
    (3) for the Bachelor of Design (Urban Design and Planning), not less than 19 credit points from the units of study listed in Table A for the Urban Design and Planning stream;
    (4) for the Bachelor of Design (Architecture/ Digital Media), not less than 20 Senior credit points from the units of study listed in Table A for the Architecture stream and not less than 19 credit points from the units of study listed in Table A for the Digital Media stream;
    (5) for the Bachelor of Design (Architecture/Urban Design and Planning), not less than 20 Senior credit points from the units of study listed in Table A for the Architecture stream and not less than 19 credit points from the units of study listed in Table A for the Urban Design and Planning stream.

Requirements for the Honours degree

13. To qualify to enrol in the honours degree a student shall:
    (1) (a) have qualified for the award of the pass degree; or
    (b) be a pass graduate of the Bachelor of Design; or
    (c) be a pass graduate in a degree from another faculty or recognised tertiary institution, deemed by the Dean to be equivalent to the Bachelor of Design; and
    (2) have 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; and
    (3) have an approved thesis topic and supervisor. The thesis topic must be satisfactory in terms of research interests, resources and availability of supervision within the Faculty and must be agreed upon between the applicant and the supervisor. The supervisor shall be a member of the full-time or fractional academic or research staff of the Faculty. The supervisor 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.
14. Except with the permission of the Dean, the student shall be of not more than 4 years standing for the Pass degree.
15. A student may not graduate with the Pass degree while enrolled in the final year honours course except with the approval of the Dean.
16. Students shall complete the requirements for the honours course full time over two consecutive semesters.
17. To qualify for the award of the honours degree, students shall complete 48 credit points of honours units of study listed in Table A.
18. Students who fail or discontinue the honours course may not re-enrol in it, except with the approval of the Dean.
19. A student undertaking a thesis shall:
    (1) lodge with the Faculty two copies of the thesis embodying the results of an original research investigation carried out by the student;
    (2) 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
    (3) 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.
20. A student may lodge the thesis for examination bound in either a temporary or permanent form according to the following conditions:
    (1) temporary binding must be able to withstand ordinary handling and postage. The preferred form of binding is the 'Perfect Binding' system.
    (2) 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.
21. A student must lodge the final thesis in a permanent form according to the following conditions:
    (1) permanent binding must meet the requirements given in the University Calendar under the resolutions governing the degree of Doctor of Philosophy.
    (2) following examination and emendation if necessary, at least one copy (the Library copy) of the thesis must be bound in a permanent form.
    (3) if emendations are required, all copies of the thesis which are to remain available within the University must be amended.
22. In assessing a candidate's performance for honours the Dean shall appoint two examiners. The examiners shall report to the Dean.
23. 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 (1) or (2) are satisfied together with the following section (3):
    (1) 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
    (2) 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
    (3) the overall performance in accordance with resolution 24 below is 70 or greater.
24. 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.
25. 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.

Award of the degree

26. The Bachelor of Design Pass degree in a designated stream shall be awarded to a student who has completed the requirements specified in resolution 5.
27. The Bachelor of Design with Honours shall be awarded in a designated stream to eligible students, with the following grades:
    (1) Honours Class I (with a mark of at least 80); or
    (2) Honours Class II, Division 1 (with a mark of at least 75); or
    (3) Honours Class II, Division 2 (with a mark of at least 70).
28. 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.
29. 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.
30. The testamur for the Bachelor of Design shall specify and streams completed in order to qualify for the award, as well as the class of honours achieved and the medal, if awarded.

Section 2

Agency

31. The Dean gives agency for admission to the Bachelor of Design degree to the Bachelor of Design Program Committee.
32. In these resolutions the Dean gives agency 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.

Enrolment restrictions

33. 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.
34. Except with the express permission of the Dean a student must maintain full-time enrolment.
35. Candidates enrolling from 2003 may not enrol in any unit of study from the Faculty's Table of Graduate units of study.

Repeating a unit of study

36. Unless granted exemption by the Dean for previous satisfactory completion of components of a unit of study, a student who repeats that unit of study shall:
    (1) participate in the learning experiences provided for the unit of study; and
    (2) meet all examination, assessment and attendance requirements for the unit of study.
37. 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.

Cross Institutional Enrolment

38. Provided that permission has been obtained in advance, the Dean may permit a student to complete a unit of study at another institution and have that unit credited to his/her course requirements, provided that:
    (1) the unit of study content is not taught in any corresponding unit of study in the University; or
    (2) the student is unable for good reason to attend a corresponding unit of study at the University.

Discontinuation of enrolment

39. 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.

Suspension of candidature

40. A student who has successfully completed units of study may, with the permission of the Dean, suspend candidature for up to two semesters. At the end of that time the candidate may reapply to extend the suspension for a maximum of another two semesters. After that time candidature will be deemed to have lapsed and the student shall be required to reapply for admission to the degree.
41. 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.

Re-enrolment after an absence

42. 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.

Satisfactory progress

43. 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. A student who has failed a required unit of study more than once shall normally be presumed not to have made satisfactory progress.
44. The Dean will permit a student who has shown good cause to re-enrol.

Assessment

45. A student's work may be assessed by written and oral examinations, assignments, exercises and practical work or any combination of these.
46. 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.
47. 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.
48. 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.
49. (1) A student's Weighted Average Mark (WAM) shall be calculated using the formula:

$$WAM = \frac{\sum(M \times CPa \times CPw)}{\sum(CP \times CPw)}$$

where M is the mark achieved, CPa is the credit points attempted and CPw is the credit point weighting of any given unit of study. The weighting is determined by the Faculty administering the unit.

    (2) In the Faculty of Architecture, a weighting of 1 is given to Junior units and 3 for Senior and Graduate units.

Attendance requirements

50. A student who is absent without leave may be deemed not to have completed a particular unit of study or course.
51. 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.

Credit Transfer Policy

52. Credit may be granted for previous credentialled learning, at the discretion of the Dean.
53. Credit will not be granted for units of study completed more than 9 years prior to application, except with the permission of the Dean.
54. Credit shall not be granted for units of study gained with a 'Concessional Pass' or equivalent.
55. Credit may be granted as Specific Credit if the unit of study is considered to be directly equivalent to a unit of study in the Table of units of study for the degree, or as non specific credit.
56. The total amount of credit may not be greater than 96 credit points.
57. A student may apply to have credit granted on the basis of non-credentialled learning or experience that is equivalent to a unit of study in the Table of units of study for the degree. The Dean will determine the method of demonstrating the achievement of the equivalent academic standard.
58. All students, notwithstanding any credit transfer, must complete DESA 3001 and DESA 3002 and not less than 12 additional Senior credit points of units of study from Table A.

■ Bachelor of Design in Architecture

Resolutions of the Senate

Bachelor of Design in Architecture

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

Requirements of the Pass degree

1. 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.

Streams

2. The degree of Bachelor of Design in Architecture may also be awarded with the following streams:
    (1) Bachelor of Design in Architecture (Allied Arts in Architecture);
    (2) Bachelor of Design in Architecture (Digital Architecture); and
    (3) Bachelor of Design in Architecture (Urban Design and Planning).

Requirements for the Honours degree

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

Resolutions of the Faculty

Bachelor of Design in Architecture

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000, which sets out the requirements for all coursework award courses, and the relevant resolutions of the Senate.]

Section 1

Units of study

1. The units of study which may be taken for the degree are set out in Table A, the table of units of study for the Bachelor of Design in Architecture, together with:
   (1) designation as Junior, Senior or Honours units of study;
   (2) credit point values;
   (3) assumed knowledge, corequisites and prerequisites;
   (4) the semesters in which they are offered;
   (5) the units with which they are mutually exclusive; and
   (6) designation as core, stream or elective.
2. A candidate for the Bachelor of Design in Architecture shall complete the units of study prescribed by the Faculty, satisfying all requirements with regard to all required units of study and streams.
3. Except with the special permission of the Dean, the required units of study must be completed in the sequence prescribed.

Requirements for the Pass degree

4. To be eligible for award of the Bachelor of Design in Architecture a candidate must complete successfully units of study giving credit for a total of 144 credit points, including:
   (1) 92 credit points from core units of study;
   (2) not less than 20 Senior credit points from the units of study listed in Table A for the Architecture Electives;
   (3) a maximum of one stream as described in Resolution 9;
   (4) no more than 14 credit points from Allied Arts in Architecture electives except for candidates enrolled in the Allied Arts in Architecture stream;
   (5) no more than 12 Junior and 8 Senior credit points from units of study offered by faculties other than the Faculty of Architecture; and
   (6) the balance to be taken from any other unit of study listed in Table A, except that the student may, with the approval of the Dean, substitute instead other units of study. Candidates who have completed 96 credit points with a weighted average mark of at least 70 may, with the permission of the unit coordinator concerned, enrol in elective units from Table G, the Faculty's table of Graduate units of study.
5. Candidates proceeding to the Bachelor of Architecture are required to complete the designated prerequisite units of study listed in Table A.
6. Units of study completed at The University of Sydney Summer School, which correspond to units allowable under resolution 4, may be credited towards the course requirements.

Specially Designated Streams

7. (1) The Faculty will provide at least 15 places for entry in each stream per annum.
   (2) If demand for places in a stream is larger than the number of available places, entry will be determined by the Associate Dean (Undergraduate Studies) in consultation with the stream coordinator based on a portfolio and an interview.
8. Students may transfer between streams.
9. The requirements for award of the designated streams in the Bachelor of Design in Architecture are:
   (1) for the Allied Arts in Architecture stream, not less than 19 credit points from the units of study listed in Table A for the Allied Arts in Architecture stream.
   (2) for the Digital Architecture stream, not less than 19 credit points from the units of study listed in Table A for the Digital Architecture stream;
   (3) for the Urban Design and Planning stream, not less than 19 credit points from the units of study listed in Table A for the Urban Design and Planning stream.

Requirements for the Honours degree

10. To qualify to enrol in the honours program a student shall:
    (1) (a) have qualified for the award of the pass degree; or
    (b) be a pass graduate of the Bachelor of Design in Architecture; or
    (c) be a pass graduate in a degree from another faculty or recognised tertiary institution, deemed by the Dean to be equivalent to the Bachelor of Design in Architecture; and
    (2) have 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; and
    (3) have an approved thesis topic and supervisor. The thesis topic must be satisfactory in terms of research interests, resources and availability of supervision within the Faculty and must be agreed upon between the applicant and the supervisor. The supervisor shall be a member of the full-time or fractional academic or research staff of the Faculty. The supervisor 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.
11. Except with the permission of the Dean, the student shall be of not more than 4 years standing for the Pass degree.
12. A student may not graduate with the Pass degree while enrolled in the final year honours program except with the approval of the Dean.
13. Students shall complete the requirements for the honours program full time over two consecutive semesters.
14. To qualify for the award of the honours degree, pass degree students shall complete 48 credit points of honours units of study listed in Table A.
15. Students who fail or discontinue the honours program may not re-enrol in it, except with the approval of the Dean.
16. A student undertaking a thesis shall:
    (1) lodge with the Faculty two copies of the thesis embodying the results of an original research investigation carried out by the student;
    (2) 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
    (3) 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.
17. A student may lodge the thesis for examination bound in either a temporary or permanent form according to the following conditions:
    (1) temporary binding must be able to withstand ordinary handling and postage. The preferred form of binding is the 'Perfect Binding' system.
    (2) 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.
18. A student must lodge the final thesis in a permanent form according to the following conditions:
    (1) permanent binding must meet the requirements given in the University Calendar under the resolutions governing the degree of Doctor of Philosophy.
    (2) following examination and emendation if necessary, at least one copy (the Library copy) of the thesis must be bound in a permanent form.
    (3) if emendations are required, all copies of the thesis which are to remain available within the University must be amended.
19. In assessing a candidate's performance for honours the Dean shall appoint two examiners. The examiners shall report to the Dean.
20. The Dean shall, on the recommendation of the Board of Undergraduate Studies, award the degree of Bachelor of Design in Architecture with honours whenever the following sections (1) or (2) are satisfied together with the following section (3):
    (1) 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
    (2) 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
    (3) the overall performance in accordance with resolution 21 below is 70 or greater.
21. 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 in Architecture using a mark derived from weighting the mark for the Honours thesis at 70 per cent and the weighted average mark of the Pass degree at 30 per cent.

22. 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.

Award of the degree

23. The Pass degree of Bachelor of Design in Architecture shall be awarded to a student who has completed the requirements specified in resolution 4.
24. The Honours degree of Bachelor of Design in Architecture shall be awarded to eligible students, with the following grades:
    (1) Honours Class I (with a mark of at least 80); or
    (2) Honours Class II, Division 1 (with a mark of at least 75); or
    (3) Honours Class II, Division 2 (with a mark of at least 70).
25. 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.
26. A student for the Honours program who does not meet the requirements for award of Honours shall be awarded the Bachelor of Design in Architecture Pass degree in their designated stream.
27. The testamur for the Bachelor of Design in Architecture shall specify any stream completed in order to qualify for the award, as well as the class of honours achieved and the medal, if awarded.

Section 2

Agency

28. In these resolutions the Dean gives agency to the Board of Undergraduate Studies and the Associate Dean (Undergraduate Studies) for determination of the following matters, on the recommendation of the program coordinator where appropriate:
    (1) examination procedures and appointment of examiners;
    (2) supervision of candidature;
    (3) variations of candidature;
    (4) extension of candidature;
    (5) completion of candidature away from the University; and
    (6) any other matters as appropriate within these resolutions.

Enrolment restrictions

29. 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.
30. Except with the express permission of the Dean a student must maintain full-time enrolment.

Repeating a unit of study

31. Unless granted exemption by the Dean for previous satisfactory completion of components of a unit of study, a student who repeats that unit of study shall:
    (1) participate in the learning experiences provided for the unit of study; and
    (2) meet all examination, assessment and attendance requirements for the unit of study.
32. 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.

Cross Institutional Enrolment

33. Provided that permission has been obtained in advance, the Dean may permit a student to complete a unit of study at another institution and have that unit credited to his/her course requirements, provided that:
    (1) the unit of study content is not taught in any corresponding unit of study in the University; or
    (2) the student is unable for good reason to attend a corresponding unit of study at the University.

Discontinuation of enrolment

34. 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.

Suspension of candidature

35. A student who has successfully completed units of study may, with the permission of the Dean, suspend candidature for up to two semesters. At the end of that time the candidate may reapply to extend the suspension for a maximum of another two semesters. After that time candidature will be deemed to have lapsed and the student shall be required to reapply for admission to the degree.
36. 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.

Re-enrolment after an absence

37. 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.

Satisfactory progress

38. 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. A student who has failed a required unit of study more than once shall normally be presumed not to have made satisfactory progress.
39. The Dean will permit a student who has shown good cause to re-enrol.

Assessment

40. A student's work may be assessed by written and oral examinations, assignments, exercises and practical work or any combination of these.
41. In the first year of the Bachelor of Design in Architecture all core 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.
42. 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.
43. 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.
44. (1) A student's Weighted Average Mark (WAM) shall be calculated using the formula:

$$WAM = \frac{\sum(M \times CPa \times CPw)}{\sum(CP \times CPw)}$$

    where M is the mark achieved, CPa is the credit points attempted and CPw is the credit point weighting of any given unit of study. The weighting is determined by the Faculty administering the unit.
    (2) In the Faculty of Architecture, a weighting of 1 is given to Junior units and 3 for Senior and Graduate units.

Attendance requirements

45. A student who is absent without leave may be deemed not to have completed a particular unit of study or course.
46. 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.

Credit Transfer Policy

47. Credit may be granted for previous credentialled learning, at the discretion of the Dean.
48. Credit will not be granted for units of study completed more than 9 years prior to application, except with the permission of the Dean.
49. Credit shall not be granted for units of study gained with a 'Concessional Pass' or equivalent.
50. Credit may be granted as Specific Credit if the unit of study is considered to be directly equivalent to a unit of study in the Table of units of study for the degree, or as non specific credit.
51. The total amount of credit may not be greater than 96 credit points.
52. A student may apply to have credit granted on the basis of non-credentialled learning or experience that is equivalent to a unit of study in the Table of units of study for the degree. The Dean will determine the method of demonstrating the achievement of the equivalent academic standard.
53. All students, notwithstanding any credit transfer, must complete DESA 3001 and DESA 3002 and not less than 12 additional Senior credit points of units of study from Table A.

Transitional provisions

54. These resolutions shall apply to:
    (1) persons who commence their candidature after 1 January 2004; and

(2) persons who commenced their candidature prior to 1 January 2004 and who elect to proceed under these resolutions.

55. A candidate for the degree who commenced candidature prior to 1 January 2004 may complete the requirements in accordance with the resolutions in force at the time the candidate commenced, provided that the candidate shall complete the requirements by 1 January 2008 or such later date as the Faculty may, in special circumstances, approve.

■ Bachelor of Design Computing

Resolutions of the Senate

Bachelor of Design Computing

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

Requirements of the Pass degree

1. 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.

Requirements for the Honours degree

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

Resolutions of the Faculty

Bachelor of Design Computing

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000, which sets out the requirements for all coursework award courses, and the relevant resolutions of the Senate.]

Section 1

Units of study

1. The units of study which may be taken for the degree are set out in Table B, the table of the units of study for the Bachelor of Design Computing, together with:
   (1) designation as Junior, Senior or Honours units of study;
   (2) credit point values;
   (3) assumed knowledge, corequisites and prerequisites;
   (4) the semesters in which they are offered;
   (5) the units with which they are mutually exclusive; and
   (6) designation as core or elective;
2. A candidate for the Bachelor of Design Computing shall complete the units of study prescribed by the Faculty satisfying all requirements with regard to core units of study.
3. Except with the special permission of the Faculty, the core units of study must be completed in the sequence prescribed.

Requirements for the Pass degree

4. To be eligible for award of the Bachelor of Design Computing a candidate must complete successfully units of study giving credit for a total of 144 credit points, including:
   (1) 96 credit points from the core units of study;
   (2) at least 24 credit points of elective units from Table B;
   (3) at least 72 Senior credit points; and
   (4) candidates who have completed 96 credit points with a weighted average mark of at least 70 may, with the permission of the unit coordinator concerned, enrol in elective units from Table G, the Faculty's table of Graduate units of study.
5. Units of study completed at The University of Sydney Summer School, which correspond to units allowable under Resolution 4, may be credited towards the course requirements.

Requirements for the Honours degree

6. To qualify to enrol in the honours program a student shall:
   (1) (a) have qualified for the award of the pass degree; or
   (b) be a pass graduate of the Bachelor of Design Computing; or
   (c) be a pass graduate in a degree from another faculty or recognised tertiary institution, deemed by the Dean to be equivalent to the Bachelor of Design Computing; and
   (2) have 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; and
   (3) have an approved thesis topic and supervisor. The thesis topic must be satisfactory in terms of research interests, resources and availability of supervision within the Faculty and must be agreed upon between the applicant and the supervisor. The supervisor shall be a member of the full-time or fractional academic or research staff of the Faculty. The supervisor 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.
7. 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.
8. A student may not graduate with the Pass degree while enrolled in the final year honours program.
9. Students shall complete the requirements for the honours program full time over two consecutive semesters except with the approval of the Dean.
10. To qualify for the award of the honours degree, pass degree students shall complete 48 credit points of honours units of study listed in Table B.
11. Students who fail or discontinue the honours program may not re-enrol in it, except with the approval of the Dean.
12. A student undertaking a thesis shall:
   (1) lodge with the Faculty two copies of the thesis embodying the results of an original research investigation carried out by the student;
   (2) 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
   (3) 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.
13. A student may lodge the thesis for examination bound in either a temporary or permanent form according to the following conditions:
   (1) temporary binding must be able to withstand ordinary handling and postage. The preferred form of binding is the 'Perfect Binding' system.
   (2) 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.
14. A student must lodge the final thesis in a permanent form according to the following conditions:
   (1) permanent binding must meet the requirements given in the University Calendar under the resolutions governing the degree of Doctor of Philosophy.
   (2) following examination and emendation if necessary, at least one copy (the Library copy) of the thesis must be bound in a permanent form.
   (3) if emendations are required, all copies of the thesis which are to remain available within the University must be amended.
15. In assessing a candidate's performance for Honours the Dean shall appoint two examiners. The examiners shall report to the Dean.
16. 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 (1) or (2) are satisfied together with the following section (3):
   (1) 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
   (2) 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
   (3) the overall performance in accordance with resolution 17 below is 70 or greater.

17. 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.
18. 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.

Award of the degree

19. The Bachelor of Design Computing Pass degree shall be awarded to a student who has completed the requirements for the degree specified in resolution 4.
20. The Bachelor of Design Computing with Honours shall be awarded with the following grades:
    (1) Honours Class I (with a mark of at least 80);
    (2) Honours Class II, Division 1 (with a mark of at least 75); or
    (3) Honours Class II, Division 2 (with a mark of at least 70).
21. 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.
22. 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.

Section 2

Agency

23. In these resolutions the Dean gives agency to the Board of Undergraduate Studies and the Associate Dean (Undergraduate Studies) for determination of the following matters, on the recommendation of the program coordinator where appropriate:
    (1) examination procedures and appointment of examiners;
    (2) supervision of candidature;
    (3) variations of candidature;
    (4) extension of candidature;
    (5) completion of candidature away from the University; and
    (6) any other matters as appropriate within these resolutions.

Enrolment restrictions

24. 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.
25. Except with the permission of the Dean a student must maintain a full time enrolment.

Repeating a unit of study

26. Unless granted exemption by the Dean for previous satisfactory completion of components of a unit of study, a student who repeats that unit of study shall:
    (1) participate in the learning experiences provided for the unit of study; and
    (2) meet all examination, assessment and attendance requirements for the unit of study.
27. 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.

Cross Institutional Enrolment

28. Provided that permission has been obtained in advance, the Dean may permit a student to complete a unit of study at another institution and have that unit credited to his/her course requirements, provided that:
    (1) the unit of study content is not taught in any corresponding unit of study in the University; or
    (2) the student is unable for good reason to attend a corresponding unit of study at the University.

Discontinuation of enrolment

29. 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.

Suspension of candidature

30. A student who has successfully completed units of study may, with the permission of the Dean, suspend candidature for up to two semesters. At the end of that time the candidate may reapply to extend the suspension for a maximum of another two semesters. After that time candidature will be deemed to have lapsed and the student shall be required to reapply for admission to the degree.
31. 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 to the degree in accordance with procedures determined by the Dean.

Re-enrolment after an absence

32. 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.

Satisfactory progress

33. 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.
34. The Dean will permit a student who has shown good cause to re-enrol.

Assessment

35. A student's work may be assessed by written and oral examinations, assignments, exercises and practical work or any combination of these.
36. 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.
37. 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 or equivalent.
38. (1) A student's Weighted Average Mark (WAM) shall be calculated using the formula:

$$WAM = \frac{\sum(M \times CPa \times CPw)}{\sum(CP \times CPw)}$$

    where M is the mark achieved, CPa is the credit points attempted and CPw is the credit point weighting of any given unit of study. The weighting is determined by the Faculty administering the unit.
    (2) In the Faculty of Architecture, a weighting of 1 is given to Junior units, 3 for Senior units and 3 for Graduate units.

Attendance requirements

39. A student who is absent without leave may be deemed not to have completed a particular unit of study or course.
40. 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.

Credit transfer policy

41. Credit may be granted for previous credentialled learning, at the discretion of the Dean.
42. Credit will not be granted for units of study completed more than 9 years prior to application, except with the permission of the Dean.
43. Credit shall not be granted for units of study gained with a 'Concessional Pass' or equivalent.
44. Credit may be granted as Specific Credit if the unit of study is considered to be directly equivalent to a unit of study in the Table of units of study for the degree, or as non specific credit.
45. The total amount of credit may not be greater than 96 credit points.
46. A student may apply to have credit granted on the basis of non-credentialled learning or experience that is equivalent to a unit of study in the Table of units of study for the degree. The Dean will determine the method of demonstrating the achievement of the equivalent academic standard.
47. All students, notwithstanding any credit transfer, must complete DECO 3001 and DECO 3002 and not less than 12 additional Senior credit points of units of study from Table B.

■ Bachelor of Architecture

Resolutions of the Senate

Bachelor of Architecture

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000, which sets out

the requirements for all coursework courses, and the relevant Faculty Resolutions.]

Requirements of the Pass Degree

1. 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.

Requirements for the Honours Degree

2. 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.

Resolutions of the Faculty

Bachelor of Architecture

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000, which sets out the requirements for all coursework courses, and the relevant Resolutions of the Senate.]

Section 1

Admission

1. An applicant for admission to candidature for the degree of Bachelor of Architecture shall have:
   (1) completed all the requirements for the degree of Bachelor of Science (Architecture) or Bachelor of Design (Architecture) at 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;
   (2) 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 (Architecture) degree, if proceeding to candidature from the Bachelor of Science (Architecture) or the Bachelor of Design (Architecture), provided that in special circumstances a candidate may be exempted from these requirements with the approval of the Dean; and
   (3) satisfied the Architectural Experience Requirement or equivalent, as may be approved by the Dean.
2. Pursuant to 1(3) 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 (Architecture) with Honours or, by the date of enrolment, showing evidence of completion of one or more of the following:
   (1) professional work experience as an employee in architecture (minimum of 18 weeks recorded in the Architects Accreditation Council of Australia (AACA) Log Book);
   (2) field study in relation to architecture (including, but not limited to, international field study);
   (3) professional work experience in a related industry (minimum of 18 weeks appropriately recorded);
   (4) study at an Australia or overseas tertiary institution in a relevant discipline; or
   (5) a combination of methods (1)-(4) above.
3. A candidate proceeding from the Bachelor of Science (Architecture) or the Bachelor of Design (Architecture) 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 (Architecture), or shall be required to apply for admission for the degree.

Units of study

4. The units of study which may be taken for the degree are set out in the Table C, the table of units of study for the Bachelor of Architecture, together with:
   (1) credit point values;
   (2) assumed knowledge, corequisites and prerequisites;
   (3) the semesters in which they are offered;
   (4) the units with which they are mutually exclusive; and
   (5) designation as core or elective.
5. A candidate for the Bachelor of Architecture shall complete the units of study prescribed by the Faculty, satisfying all requirements with regard to core units of study.

Requirements for the Pass Degree

6. To be eligible for award of the Bachelor of Architecture a candidate must complete successfully units of study giving credit for a total of 96 credit points, including:
   (1) 70 credit points from the core units of study, and
   (2) 26 credit points from the elective units of study listed in Table C, or from the Table of Graduate units of study, except that students may, with the approval of the Dean, substitute instead other units of study. Students taking Graduate units must have the permission of the unit coordinator concerned.
7. Units of study completed at The University of Sydney Summer School, which correspond to units allowable under resolution 6, may be credited towards the course requirements.

Requirements for the Honours Degree

8. To be eligible for the award of Honours a candidate must complete the unit of study ARCF 6003 Advanced Study Report.
9. 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.
10. A student undertaking an Advanced Study Report shall:
    (1) lodge with the Faculty two copies of the Advanced Study Report embodying the results of an original research investigation carried out by the student.
    (2) 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
    (3) 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.
11. A student may lodge the Advanced Study Report for examination bound in either a temporary or permanent form according to the following conditions:
    (1) temporary binding must be able to withstand ordinary handling and postage. The preferred form of binding is the 'Perfect Binding' system.
    (2) 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.
12. A student must lodge the final thesis in a permanent form according to the following conditions:
    (1) permanent binding must meet the requirements given in the University Calendar under the Resolutions governing the degree of Doctor of Philosophy.
    (2) 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.
    (3) if emendations are required, all copies of the Advanced Study Report which are to remain available within the University must be amended.
13. The Dean shall appoint two examiners. The examiners shall report to the Dean.
    (1) 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, or14.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 (1) or (2) are satisfied together with the following section (3):
    (2) 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
    (3) the overall performance in accordance with resolution 15 below is 70 or greater.
15. 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.

16. 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.
17. 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.
18. 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.

Award of the degree

19. The Bachelor of Architecture Pass degree shall be awarded to a student who has completed the requirements specified for the degree in resolution 6.
20. The Bachelor of Architecture with Honours shall be awarded with the following grades:
    (1) Honours Class I (with a mark of at least 75);
    (2) Honours Class II, Division 1 (with a mark of at least 73); or
    (3) Honours Class II, Division 2 (with a mark of at least 70).
21. A candidate for the Honours program who does not meet the requirements for the award of Honours shall be eligible for the Bachelor of Architecture Pass degree.
22. 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.

Section 2

Agency

23. The Dean gives agency for admission to the Bachelor of Architecture degree to the Bachelor of Architecture Program Committee.
24. In these resolutions the Dean gives agency 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:
    (1) examination procedures and appointment of examiners;
    (2) supervision of candidature;
    (3) variations of candidature;
    (4) extension of candidature;
    (5) completion of candidature away from the University; and
    (6) any other matters as appropriate within these resolutions.

Enrolment restrictions

25. 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.
26. Except with the permission of the Dean a student must maintain a full time enrolment.

Repeating a unit of study

27. Unless granted exemption by the Dean for previous satisfactory completion of components of a unit of study, a student who repeats that unit of study shall:
    (1) participate in the learning experiences provided for the unit of study; and
    (2) meet all examination, assessment and attendance requirements for the unit of study.
28. 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.

Cross Institutional Enrolment

29. Provided that permission has been obtained in advance, the Dean may permit a student to complete a unit of study at another institution and have that unit credited to his/her course requirements, provided that:
    (1) the unit of study content is not taught in any corresponding unit of study in the University; or
    (2) the student is unable for good reason to attend a corresponding unit of study at the University.

Discontinuation of enrolment

30. 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.

Suspension of candidature

31. A student who has successfully completed 48 credit points of study may, with the permission of the Dean, suspend candidature for up to two semesters. At the end of that time the candidate may reapply to extend the suspension for a maximum of another two semesters. After that time candidature will be deemed to have lapsed and the student shall be required to reapply for admission to the degree.
32. 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.

Re-enrolment after an absence

33. 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.

Satisfactory progress

34. 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. A candidate who has failed a required unit of study more than once shall normally be presumed not to have made satisfactory progress.
35. The Dean will permit a student who has shown good cause to re-enrol.

Assessment

36. A student's work may be assessed by written and oral examinations, assignments, exercises and practical work or any combination of these.
37. 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.
38. 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.
39. (1) A student's Weighted Average Mark (WAM) shall be calculated using the formula:

$$WAM = \frac{\sum(M \times CPa \times CPw)}{\sum(CP \times CPw)}$$

    where M is the mark achieved, CPa is the credit points attempted and CPw is the credit point weighting of any given unit of study. The weighting is determined by the Faculty administering the unit.
    (2) In the Faculty of Architecture, a weighting of 1 is given to Junior units and 3 for Senior and Graduate units.

Attendance requirements

40. A student who is absent without leave may be deemed not to have completed a particular unit of study or course.
41. 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.

Credit transfer policy

43. Credit will not be granted for units of study completed more than 9 years prior to application, except with the permission of the Dean.
44. Credit will not be granted for units of study gained with a 'Concessional Pass' or equivalent.
45. Credit may be granted as Specific Credit if the unit of study is considered to be directly equivalent to a unit of study in the Table of units of study for the degree, or as non specific credit.
46. Credit will not be granted on the basis of units of study completed in the Bachelor of Science (Architecture), the Bachelor of Design (Architecture), or such equivalent degree except for units of study in excess of those used to satisfy the requirements of the degree, and then only if the unit of study is deemed to be common to both Tables of units of study.
47. The total amount of credit may not be greater than 48 credit points.
48. A student may apply to have credit granted on the basis of non-credentialled learning or experience that is equivalent to a unit of study in the Table of units of study for the degree. The Dean will determine the method of demonstrating the achievement of the equivalent academic standard.
49. Credit granted for graduate units of study from other degrees may not exceed 18 credit points.

Transitional provisions

50. These resolutions shall apply to:
    (1) persons who commence their candidature after 1 January 2004; and

(2) persons who commenced their candidature prior to 1 January 2004 and who elect to proceed under these resolutions.

51. A candidate for the degree who commenced candidature prior to 1 January 2004 may complete the requirements in accordance with the resolutions in force at the time the candidate commenced, provided that the candidate shall complete the requirements by 1 January 2008 or such later date as the Faculty may, in special circumstances, approve.

5 Graduate coursework degrees

■ Introduction

Courses

The following postgraduate coursework degrees are offered by the Faculty of Architecture at either the Graduate Certificate, Graduate Diploma or Master level:

- Architecture
- Design Science
- Heritage Conservation
- Housing Studies (*last admission 2002*)
- Urban Design
- Urban and Regional Planning

Streams

Some of the degrees require or allow streams to be completed. In order to complete a stream a student must study a minimum set of prescribed core and optional units of study which build an expertise in that area. The units of study are listed in Table G, the table of graduate units. The following degrees offer streams:

Architecture

- Architectural History, Theory and Criticism
- Architectural Design

Design Science

- Audio Design
- Building
- Building Services
- Design Computing
- Digital Media
- Facilities Management
- Film and Digital Video (*last admission 2004*)
- Illumination Design
- Sustainable Design

Master of Urban and Regional Planning

- Available without specialisation
- Heritage Conservation
- Housing Studies
- Urban Design

Admission

Students are normally expected to hold a bachelor's degree from this or another university. Where this degree is not directly relevant to the chosen field applicants may be asked to furnish evidence that they are suitably qualified for the course.

Articulation

Students are encouraged to enrol into the degree and stream that they intend to complete. If you wish to complete a master's you should apply for the master's program. However, the postgraduate degrees are articulated, allowing easy progression (or regression) from the graduate certificate to the graduate diploma or master's, or vice-versa. The main difference between the level of award is the total number of credit points required, as well as the number of core, optional and elective units of study required. A student who begins with a graduate certificate can easily upgrade to a higher award. A student who begins with a master's but decides not to continue may be able to graduate with a graduate diploma or graduate certificiate.

Graduation

Students who choose to articulate their program will only graduate with the highest qualification they achieve.

■ Degree requirements summary

The following summary is subordinate to the full set of resolutions of the Senate and Faculty at the end of this chapter. It does not contain all of the terms of candidature. Students are strongly advised to read the full resolutions and monitor their progress through their course.

Master's degrees 72 credit points selected from Table G, the Table of Graduate Units of Study, comprised of core, optional and elective units to the number specified in the following Table of Requirements. A full time student will finish the program in three semesters. Students for the honours degree complete the dissertation as 24 credit points of elective units.

Master of Urban and Regional Planning In addition to the core units, MURP students are required to complete either a Planning Report or a Planning Dissertation in their final semester. If taking the MURP with a stream, the Report or Dissertation must relate to that area of specialisation.

Graduate Diplomas 48 credit points from Table G, the Table of Graduate Units of Study, comprised of core, optional and elective units to the number specified in the following Table of Requirements. A full time student will finish the program in two semesters.

Graduate Certificates 24 credit points from Table G, the Table of Graduate Units of Study, comprised of core, optional and elective units to the number specified in the following Table of Requirements. A full time student will finish the program in one semester.

Core, optional and elective

In the Table G, the Table of Graduate units of study, units have been listed as core, optional or elective. The core and optional units are the set of units from which you must choose to satisfy the minimum requirements for the degree. Elective units may be chosen from anywhere in the Table of Graduate units, including those listed as core or optional for other programs. There is also a section of the Table of Graduate units listing elective units that are not specially designated as core or optional for any program. The following table defines the combinations of core, optional and elective units for each program.

Time Limits

At a maximum, you have 8 enrolled semesters within 6 calendar years to complete your degree, whichever expires first.

Credit for previous study

Credit may be granted for previous study. These rules apply:

- full credit will be granted to students 'upgrading' from a Graduate Certificate or Graduate Diploma to a higher degree in the same program, provided that no more than five years have elapsed since the award;
- for other students, a maximum of 12 credit points may be granted to the Graduate Certificate, and 18 to the Graduate Diploma or Masters;
- Credit to the graduate certificate must have been completed within the Faculty of Architecture;
- the study should have been completed in the last 9 years;
- credit may be granted for non-credentialled learning, subject to you satisfying the program coordinator of your competency, including the completion of tests or tasks to demonstrate that competency if required.

Study in other Faculties

Students in the Graduate Diploma and Masters programs may request permission to substitute up to 12 credit points worth of units of study with graduate units from other programs in the university or from other universities, provided that permission is requested in advance.

Application of older resolutions

Students who commenced their current course before 2004 remain subject to those resolutions. They may if they choose, complete their degree according to the 2004 resolutions.

Students who were enrolled in 2003 and upgrade their candidature to a higher course in 2004 will be subject to the 2004 resolutions unless the Dean decides otherwise.

Table of requirements

Program/stream	Grad Certificate			Graduate Diploma			Master's		
	Min. Core	Min. Options	Max. Elective	Min. Core	Min. Options	Max. Elective	Min. Core	Min. Options	Max. Elective
Certificate, Diploma, Master's in Architecture									
Architectural Design	24	0	0	36	0	12	36	18	18
Architectural History, Theory & Criticism	24	0	0	24	0	24	24	24	24
Certificate, Diploma, Master's in Design Science									
Audio Design	18	6	0	24	18	6	24	18	30
Building Design	24	0	0	30	0	18	36	0	36
Building Services	18	6	0	24	12	12	36	12	24
Design Computing	18	0	6	36	6	6	36	18	18
Digital Media	18	0	6	36	6	6	36	18	18
Facilities Management	24	0	0	24	12	12	24	24	24
Film & Digital Video	18	0	6	36	6	6	36	18	18
Illumination Design	24	0	0	24	12	12	24	12	36
Sustainable Design	18	6	0	24	12	12	24	18	30
Certificate, Diploma, Master's in Heritage Conservation	16	0	8	28	4	16	48	8	16
Certificate, Diploma, Master's in Housing Studies	16	0	8	24	0	24	24	0	48
Certificate, Diploma, Master's in Urban Design	16	4	4	32	8	8	52	12	8
Certificate, Diploma, Master's in Urban & Regional Planning	16	0	8	24	0	24	36	12*	24
Heritage Conservation	-	-	-	-	-	-	36	28*	8
Housing Studies	-	-	-	-	-	-	36	24*	12
Urban Design	-	-	-	-	-	-	36	28*	8

**MURP students must complete either a Report or a Dissertation*

■ Degrees and 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.

Architectural History Theory and Critisism

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.

Architectural Design

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 modelling.

Units of study in the Digital Media program are organised in a two-tiered structure comprising foundational and advanced levels. In most cases, foundational units are prerequisites or assumed knowledge for subsequent advanced units. The foundational tier aims to introduce conceptual knowledge across a representative range of Digital Media areas of learning. Advanced units develop this knowledge and experience further. Advanced units may be selected in clusters that foster a particular specialisation or focus. Students should observe the requirements for core, options and elective units of study when making a selection.

Digital Media Foundation units: Introduction to Design Computing & Digital Media (DESC 9139), 3D Modelling & Photorealism (DESC 9019), Digital Media Production (DESC 9091), Web Site Design (DESC 9123), Interactive Multimedia Design [formerly MMID] (DESC 9068)

Digital Media Advanced units: 3D Animation 1 (DESC 9092), 3D Animation 2 (DESC 9141), Compositing & Digital Effects (DESC 9156), Virtual Architecture (DESC 9103), Advanced Interaction Design [formerly AMA] (DESC 9142), Visual Perception & Digital Imaging (DESC 9155), Digital Media Design Studio [permission required] (DESC 9157), Sound Design for New Media (DESC 9117), Design Data Management (DESC 9095), Designing with CAD (DESC 9096), Digital Communication in Design (DESC 9097), How Designers Think (DESC 9099), Introduction to AutoCAD (DESC 9101), Introduction to ArchiCAD (DESC 9100), Data Mining (DESC 9120), Expert Systems (DESC 9122), Digital Video Design and Production (DESC 9125), Documentary Digital Video (DESC 9126), Internet Programming 1 (DESC 9132), Internet Programming 2 (DESC 9140).

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.

Sustainable Design

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.

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 Design

Good urban design depends on the abilities to:

- recognise and define urban design problems;
- investigate the evolution, structure, form and character of urban places;
- draw ideas, knowledge and skills from a range of disciplines and apply these to urban projects;
- generate strong, purposeful and visionary urban design initiatives (concepts, master plans, guidelines, strategies, etc);
- evaluate urban design programs, proposals and built works;
- work successfully in interdisciplinary design teams and with private and public organizations and communities;
- present proposals and information in clear, convincing and innovatory ways; and
- keep abreast with current urban design issues, methods, theories and ideas.

The Urban Design program aims to develop these abilities. They are necessary for the preparation and evaluation of urban design policies, frameworks, guidelines, master plans and concepts. A strong foundation in urban design is also essential for

development assessment. And it will enhance perspectives on related areas such as urban conservation and the provision and design of infrastructure. Further, there is a small but growing demand for urban design educators and media commentators. Graduates from the Sydney program work in all of the above areas in cities and towns across Australia and all other continents.

The core and optional units for the program are listed in the Table of Graduate units. Of the Options, PLAN 9048 Environmental Design and Planning is especially recommended for its coverage of ecological dimensions of urban development. ARCH 9051 Urban Design: the Impact of Modernisation is suggested for those wishing to extend their knowledge of urban design history. PLAN 9051 Urban Design and Development Control is a means of enhancing development assessment skills. And for those desiring to gain insights into the urbanism of another culture (perhaps essential in today's world) ARCH 9054 Japanese Architecture, Cities and Culture is strongly recommended.

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.

Table G: Table of Graduate units of study

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Students must complete the core and optional units listed for their degree and/or stream to the minimum specified in the Table of Requirements. Electives for all degrees and streams may be chosen from anywhere in the table.				
General Graduate elective units				
ARCF 9001	Modes of Enquiry and Methods of Research	6	*NB: Permission required unless enrolled in a research degree. This unit is compulsory for all MPhil and PhD students in the Faculty of Architecture. It must be taken at the first opportunity.*	1
ARCF 9002	Nature of Theory	6	*NB: Permission required unless enrolled in a research degree.*	2
ARCH 9039	General Elective 1	6	*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9040	General Elective 2	6	*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9041	General Elective 3	4	*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9042	General Elective 4	4	*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9043	General Elective 5	2	*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9044	General Elective 6	2	*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9058	General Elective 7	6	*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9059	General Elective 8	6	*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9045	Dissertation 1	12	**P** 48 credit points. **C** ARCH 9046. **N** May not be counted with ARCH (9031 or 9060), PLAN (9010, 9011, 9018). *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.*	1, 2
ARCH 9046	Dissertation 2	12	**C** ARCH 9045.	1, 2
DESA 9001	Graduate Art Studio (Graphic Design)	6	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1, 2
DESA 9002	Graduate Art Studio (Graphic Design 2)	6	**P** DESA 9001. *NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	2
DESA 9003	Graduate Art Studio (Photography)	6	*NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.*	1
DESC 9079	Statistics in Environmental Design	4		2
DESC 9089	History of Aust Building Construction	6		1
DESC 9105	Neural Network Architecture and Applicat	6		1
Certificate, Diploma and Master's of Architecture				
■ **Architectural Design Stream**				
Core units				
ARCH 9048	History of Modern Architecture Theories	6		1
ARCH 9049	Contemporary Architectural Theories	6		2
ARCH 9052	Graduate Architectural Design 1	12	*NB: Permission of coordinator required unless enrolled in the Graduate Certificate, Diploma or Master in Architecure (Architectural Design).*	1
ARCH 9053	Graduate Architectural Design 2	12	*NB: Permission of coordinator required unless enrolled in the Graduate Certificate, Diploma or Master in Architecure (Architectural Design).*	2
Optional units				
ARCH 9019	Aesthetic Assessment of Herit Landscapes	4	*NB: This unit of study is offered in odd numbered years only and not in 2004.*	N/A in 2004
ARCH 9022	Urban Design – Ideas and Methods	4		1
ARCH 9050	Globalisation & Architecture	6		2
ARCH 9051	Urban Design:The Impact of Modernisation	6		1
ARCH 9054	Japanese Architecture, Cities & Culture	4		2
ARCH 9061	Architecture in East Asia	6	**N** May not be counted with DESA 2203.	2
DESC 9019	3D Modelling and Photorealism	6	*NB: Permission required unless enrolled in the Design Computing, Digital Media or Film and Digital Video streams streams. Enrolment numbers are limited by teaching resources.*	1, 2

Table G: Table of Graduate units of study (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESC 9071	Organisational Analysis and Behaviour	6		1
DESC 9103	Virtual Architecture	6	**A** DESC 9097, DESC 9019 or DESC 9096.	2
■ **Architectural History, Theory and Criticism Stream**				
Core units				
ARCH 9048	History of Modern Architecture Theories	6		1
ARCH 9049	Contemporary Architectural Theories	6		2
ARCH 9050	Globalisation & Architecture	6		2
ARCH 9051	Urban Design:The Impact of Modernisation	6		1
Optional units				
ARCH 9019	Aesthetic Assessment of Herit Landscapes	4	*NB: This unit of study is offered in odd numbered years only and not in 2004.*	N/A in 2004
ARCH 9022	Urban Design – Ideas and Methods	4		1
ARCH 9052	Graduate Architectural Design 1	12	*NB: Permission of coordinator required unless enrolled in the Graduate Certificate, Diploma or Master in Architecure (Architectural Design).*	1
ARCH 9053	Graduate Architectural Design 2	12	*NB: Permission of coordinator required unless enrolled in the Graduate Certificate, Diploma or Master in Architecure (Architectural Design).*	2
ARCH 9054	Japanese Architecture, Cities & Culture	4		2
ARCH 9061	Architecture in East Asia	6	**N** May not be counted with DESA 2203.	2
DESC 9019	3D Modelling and Photorealism	6	*NB: Permission required unless enrolled in the Design Computing, Digital Media or Film and Digital Video streams streams. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9071	Organisational Analysis and Behaviour	6		1
DESC 9103	Virtual Architecture	6	**A** DESC 9097, DESC 9019 or DESC 9096.	2

Certificate, Diploma and Master's of Design Science

■ Audio Design Stream

Core units

DESC 9011	Audio Production	6	*NB: Permission required unless enrolled in the Audio stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9115	Digital Audio Systems	6	*NB: Permission required unless enrolled in the Audio stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9117	Sound Design for New Media	6	*NB: Permission required unless enrolled in the Audio, Digital Media or Film and Digital Media stream. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9138	Architectural and Audio Acoustics	6		1
Optional units				
DESC 9009	Audio Internship/Audio Project	6	*NB: Department permission required for enrolment.*	2
DESC 9042	Electrics Electronics & Electroacoustics	6		1
DESC 9090	Audio Systems and Measurement	6	**A** DESC 9138.	2
DESC 9116	Loudspeaker Design	6		2
DESC 9133	Architectural Acoustics Practice	6	**A** DESC 9138 or DESC 9012.	2
DESC 9134	Audio Seminar	6		2
DESC 9135	Digital Audio Production with Protools	6	*NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Audio Design stream.*	1
DESC 9136	Music Technologies	6	*NB: Permission required unless enrolled in the Audio stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9137	Spatial Audio and Virtual Sound Spaces	6		1

■ Building Stream

Core units

DESC 9014	Building Construction Technology	6		1
DESC 9074	Project Management	6		2
DESC 9096	Designing with CAD	6	**A** DESC 9100 or DESC 9101 or equivalent. *NB: Permission required unless enrolled in the Building, Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9118	Building Design Practice 1	6		1
DESC 9119	Building Design Practice 2	6	**P** DESC 9118 or equivalent.	1

Table G: Table of Graduate units of study (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESC 9145	Sustaining the Built Environment	6		1
DESC 9151	Building Services Systems Overviews	6	**N** May not be counted with DESC 2101.	1
PLAN 9020	Planning Procedures	4	*NB: Session 2 available subject to numbers.*	1, 2
PLAN 9048	Environmental Design and Planning	6		2
■ Building Services Stream				
Core units				
DESC 9014	Building Construction Technology	6		1
DESC 9040	Electrical Services	6	*NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9049	Financial and Managerial Accounting	6		2
DESC 9067	Mechanical Services	6	*NB: This unit of study is offered in even numbered years only.*	1
DESC 9074	Project Management	6		2
DESC 9151	Building Services Systems Overviews	6	**N** May not be counted with DESC 2101.	1
Optional units				
DESC 9001	Air-Conditioning Design	6	**P** DESC 9067. *NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9015	Building Energy Analysis	6		2
DESC 9047	Facilities Management 1	6		1
DESC 9048	Facilities Management 2	6		2
DESC 9050	Fire Protection Services	6	*NB: This unit of study is offered in even numbered years only.*	2
DESC 9059	Hydraulic Services	6	*NB: This unit of study is offered in even numbered years only.*	2
DESC 9063	Light Sources and Luminaires	4	**P** DESC 9072. *NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9072	Photo & Colorimetric Concepts & Mensurtn	4	*NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9077	Services Control Systems	4	**P** DESC 9067.	2
DESC 9084	Vertical Transportation Services	4		2
DESC 9085	Vision and Visual Perception	4	*NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9086	The Visual Field and Human Factors	4	**P** DESC 9085. *NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9096	Designing with CAD	6	**A** DESC 9100 or DESC 9101 or equivalent. *NB: Permission required unless enrolled in the Building, Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9111	Energy Management in Buildings	6		2
DESC 9112	Facilities Management 3	6		1
DESC 9146	Climate, Comfort and Sustainable Design	6		1
DESC 9148	Sustainable Building Design Practice	6		2
■ Design Computing Stream				
Core units				
DESC 9019	3D Modelling and Photorealism	6	*NB: Permission required unless enrolled in the Design Computing, Digital Media or Film and Digital Video streams streams. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9092	3D Animation 1	6	**A** DESC 9019. *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference to students in the Design Computing, Digital Media or Film and Digital Video stream.*	1, 2
DESC 9095	Design Data Management	6		2
DESC 9096	Designing with CAD	6	**A** DESC 9100 or DESC 9101 or equivalent. *NB: Permission required unless enrolled in the Building, Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9097	Digital Communication in Design	6	**A** DESC 9123. *NB: Permission required unless enrolled in the Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9123	Web Site Design	6	**A** DESC 9139. **N** DECO 1002. *NB: Permission required unless enrolled in the Design Computing or Digital Media streams. Enrolment numbers are limited by teaching resources.*	1, 2

Table G: Table of Graduate units of study (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESC 9132	Internet Programming 1	6	*NB: Permission required unless enrolled in the Design Computing or Digital Media streams. Enrolment numbers are limited by teaching resources.*	2
DESC 9139	Design Computing & Digital Media (Intro)	6	**N** DECO 1001, DECO 1011, DECO 1021. *NB: Permission required unless enrolled in the Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9140	Internet Programming 2	6		1
DESC 9158	Intranet Design Studio	12	**P** DESC (9095 and 9097 and 9123 and 9132 and 9139 and 9140). *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Design Computing stream. This unit is intended for Masters level students.*	2
DESC 9159	Interactive Products Design Studio	12	**P** DESC (9068 and 9097 and 9123 and 9132 and 9139 and 9140). *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Design Computing stream. This unit is intended for Masters level students.*	1
Optional units				
DESC 9099	How Designers Think	6		2
DESC 9100	Introduction to Archicad	4	**N** DESA 1201. *NB: It is strongly recommended that DESC 9100 & DESC 9101 are not taken in the same semester.*	1, 2
DESC 9101	Introduction to Autocad	4	**N** DESA 1202. *NB: It is strongly recommended that DESC 9100 & DESC 9101 are not taken in the same semester.*	1, 2
DESC 9103	Virtual Architecture	6	**A** DESC 9097, DESC 9019 or DESC 9096.	2
DESC 9120	Data Mining	6		1
DESC 9122	Expert Systems	6		2
■ **Digital Media Stream**				
Core units				
DESC 9019	3D Modelling and Photorealism	6	*NB: Permission required unless enrolled in the Design Computing, Digital Media or Film and Digital Video streams streams. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9068	Interactive Multimedia Design	6	**A** DESC (9091 or 9123). **P** Preference given to Design Computing and Digital Media students. **N** DECO 2002. *NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9091	Digital Media Production	6	**C** DESC 9139 Design Computing & Digital Media Intro. *NB: Permission required unless enrolled in the Digital Media stream. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9092	3D Animation 1	6	**A** DESC 9019. *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference to students in the Design Computing, Digital Media or Film and Digital Video stream.*	1, 2
DESC 9123	Web Site Design	6	**A** DESC 9139. **N** DECO 1002. *NB: Permission required unless enrolled in the Design Computing or Digital Media streams. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9139	Design Computing & Digital Media (Intro)	6	**N** DECO 1001, DECO 1011, DECO 1021. *NB: Permission required unless enrolled in the Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.*	1, 2
Optional units				
DESC 9095	Design Data Management	6		2
DESC 9096	Designing with CAD	6	**A** DESC 9100 or DESC 9101 or equivalent. *NB: Permission required unless enrolled in the Building, Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9097	Digital Communication in Design	6	**A** DESC 9123. *NB: Permission required unless enrolled in the Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9099	How Designers Think	6		2
DESC 9100	Introduction to Archicad	4	**N** DESA 1201. *NB: It is strongly recommended that DESC 9100 & DESC 9101 are not taken in the same semester.*	1, 2
DESC 9101	Introduction to Autocad	4	**N** DESA 1202. *NB: It is strongly recommended that DESC 9100 & DESC 9101 are not taken in the same semester.*	1, 2
DESC 9103	Virtual Architecture	6	**A** DESC 9097, DESC 9019 or DESC 9096.	2
DESC 9117	Sound Design for New Media	6	*NB: Permission required unless enrolled in the Audio, Digital Media or Film and Digital Media stream. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9120	Data Mining	6		1
DESC 9122	Expert Systems	6		2
DESC 9125	Digital Video Design and Production	6	*NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	1, 2

Table G: Table of Graduate units of study (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESC 9126	Documentary Digital Video	6	**A** DESC 9125. *NB: Permission required unless enrolled in the Film and igital Video stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9127	Film Production	6	*NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9129	Screen Studies	6	*NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9132	Internet Programming 1	6	*NB: Permission required unless enrolled in the Design Computing or Digital Media streams. Enrolment numbers are limited by teaching resources.*	2
DESC 9140	Internet Programming 2	6		1
DESC 9141	3D Animation 2	6	**P** DESC 9092. *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference to students in the Digital Media or Film and Digital Video stream.*	1, 2
DESC 9142	Advanced Interaction Design	6	**A** DESC 9068 and DESC 9123. *NB: Permission required unless enrolled in the Digital Media stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9155	Visual Perception and Digital Imaging	6	**P** DESC 9091 Digital Media Production. *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Digital Media stream.*	2
DESC 9156	Digital Compositing and Visual Effects	6	**P** DESC 9091 or DESC (9092 and 9125 and 9117). *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Digital Media stream.*	1, 2
DESC 9157	Digital Media Design Studio	12	**P** DESC (9019 and 9068 and 9091 and 9123 and 9139). **C** DESC 9142. *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Digital Media stream. This unit is intended for Masters level students.*	1
■ **Facilities Management Stream**				
Core units				
DESC 9047	Facilities Management 1	6		1
DESC 9048	Facilities Management 2	6		2
DESC 9049	Financial and Managerial Accounting	6		2
DESC 9071	Organisational Analysis and Behaviour	6		1
DESC 9074	Project Management	6		2
Optional units				
ARCH 9026	Development Finance	4		2
ARCH 9028	Conservation Methods and Practices	12		1
DESC 9014	Building Construction Technology	6		1
DESC 9077	Services Control Systems	4	**P** DESC 9067.	2
DESC 9088	Housing Asset Management	8		1
DESC 9111	Energy Management in Buildings	6		2
DESC 9112	Facilities Management 3	6		1
PLAN 9020	Planning Procedures	4	*NB: Session 2 available subject to numbers.*	1, 2
■ **Film and Digital Video Stream**				
Core units				
DESC 9019	3D Modelling and Photorealism	6	*NB: Permission required unless enrolled in the Design Computing, Digital Media or Film and Digital Video streams streams. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9092	3D Animation 1	6	**A** DESC 9019. *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference to students in the Design Computing, Digital Media or Film and Digital Video stream.*	1, 2
DESC 9117	Sound Design for New Media	6	*NB: Permission required unless enrolled in the Audio, Digital Media or Film and Digital Media stream. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9125	Digital Video Design and Production	6	*NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9127	Film Production	6	*NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9129	Screen Studies	6	*NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	1, 2

Table G: Table of Graduate units of study (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Optional units				
DESC 9068	Interactive Multimedia Design	6	**A** DESC (9091 or 9123). **P** Preference given to Design Computing and Digital Media students. **N** DECO 2002. *NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9124	Advanced Film Production	6	**A** DESC 9127 and DESC 9130. *NB: Permission required unless enrolled in the Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9126	Documentary Digital Video	6	**A** DESC 9125. *NB: Permission required unless enrolled in the Film and igital Video stream. Enrolment numbers are limited by teaching resources.*	1
DESC 9128	Time, Memory and Identity	6	**A** DESC 9129. *NB: Permission required unless enrolled in the Film and Digital Video stream. Enrolment numbers are limited by teaching resources.*	2
DESC 9130	Script Writing/Directing	6		1
DESC 9141	3D Animation 2	6	**P** DESC 9092. *NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference to students in the Digital Media or Film and Digital Video stream.*	1, 2
■ **Illumination Design Stream**				
Core units				
DESC 9063	Light Sources and Luminaires	4	**P** DESC 9072. *NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9064	Lighting Design	8	*NB: This unit of study is offered in even numbered years only.*	1
DESC 9072	Photo & Colorimetric Concepts & Mensurtn	4	*NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9085	Vision and Visual Perception	4	*NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9086	The Visual Field and Human Factors	4	**P** DESC 9085. *NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9106	Daylight in Buildings	4	*NB: This unit of study is offered in even numbered years only.*	1
Optional units				
DESC 9019	3D Modelling and Photorealism	6	*NB: Permission required unless enrolled in the Design Computing, Digital Media or Film and Digital Video streams streams. Enrolment numbers are limited by teaching resources.*	1, 2
DESC 9040	Electrical Services	6	*NB: This unit of study is offered in odd numbered years only. Not available in 2004.*	N/A in 2004
DESC 9049	Financial and Managerial Accounting	6		2
DESC 9074	Project Management	6		2
DESC 9077	Services Control Systems	4	**P** DESC 9067.	2
DESC 9111	Energy Management in Buildings	6		2

Table G: Table of Graduate units of study (continued)

Unit of study		CP		A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
DESC 9151	Building Services Systems Overviews	6	**N**	May not be counted with DESC 2101.	1
PLAN 9048	Environmental Design and Planning	6			2
DESC 9152	Lighting Design Masterclass	6	**A**	Lighting design fundamentals. *NB: Department permission required for enrolment. This unit of study is offered in even numbered years only.*	1
DESC 9153	Lighting Internship	6	**A**	Lighting design fundamentals. *NB: Department permission required for enrolment. Graduate Diploma or Masters students only.*	1, 2
DESC 9154	Lighting Design Software	6	**A** **P**	Lighting design fundamentals. 24 credit points. *NB: Graduate Diploma or Masters only. This unit of study is offered in even numbered years only.*	1
DESC 9160	Lighting Photography	6	**P**	24 credit points. *NB: This unit of study is offered in odd numbered years only. Not available in 2004. Available to Graduate Diploma and Masters students only.*	N/A in 2004
DESC 9161	Theatre and Performance Lighting	6	**A** **P**	fundamentals of lighting. 24 credit points. *NB: Department permission required for enrolment. This unit of study is offered in even numbered years only. Available to Graduate Diploma and Masters students only.*	2
■ **Sustainable Design Stream**					
Core units					
DESC 9145	Sustaining the Built Environment	6			1
DESC 9146	Climate, Comfort and Sustainable Design	6			1
DESC 9147	Sustainable Building Design Principles	6			2
DESC 9148	Sustainable Building Design Practice	6			2
Optional units					
DESC 9015	Building Energy Analysis	6			2
DESC 9064	Lighting Design	8		*NB: This unit of study is offered in even numbered years only.*	1
DESC 9106	Daylight in Buildings	4		*NB: This unit of study is offered in even numbered years only.*	1
DESC 9111	Energy Management in Buildings	6			2
DESC 9149	Sustainable Design Workshop	6			1, 2
DESC 9150	Sustainability Research Project	6			1, 2
DESC 9151	Building Services Systems Overviews	6	**N**	May not be counted with DESC 2101.	1
PLAN 9048	Environmental Design and Planning	6			2

Certificate, Diploma and Master's of Heritage Conservation

Core units					
ARCH 9003	Interpretation of Cultural Environments	4			1
ARCH 9007	Transformation of Cultural Environments	4			2
ARCH 9014	Professional Placement	8			2
ARCH 9028	Conservation Methods and Practices	12			1
ARCH 9031	Research Report	12		*NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. Available to Masters students only.*	1, 2
PLAN 9020	Planning Procedures	4		*NB: Session 2 available subject to numbers.*	1, 2
PLAN 9021	Planning Law	4	**P**	PLAN 9020 Planning Procedures.	2
Optional units					
ARCH 9015	Trad Bldg Methods & Conserv of Materials	4		*NB: This unit of study is offered in even numbered years only.*	2
ARCH 9016	Conservation of Finishes & Mod Services	4		*NB: This unit of study is offered in odd numbered years only and not in 2004.*	N/A in 2004
ARCH 9019	Aesthetic Assessment of Herit Landscapes	4		*NB: This unit of study is offered in odd numbered years only and not in 2004.*	N/A in 2004
PLAN 9044	Planning Methods	4			1
PLAN 9048	Environmental Design and Planning	6			2

Table G: Table of Graduate units of study (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
Certificate, Diploma and Master's of Urban Design				
Core units				
ARCH 9001	Urban Design Studio A	12	*NB: Permission of coordinator required unless enrolled in the Master, Grad Dip or Grad Cert of Urban Design. It is recommended that unit ARCH 9022 Urban Design – Ideas and Methods or ARCH 9021 Urban Design – Morphology, is taken either before or concurrently with this studio.*	1, 2
ARCH 9002	Urban Design Studio B	12	**P** ARCH 9001.	1, 2
ARCH 9021	Urban Design – Morphology	4		2
ARCH 9022	Urban Design – Ideas and Methods	4		1
ARCH 9026	Development Finance	4		2
ARCH 9060	Urban Design Report	12	**P** ARCH 9001. **N** May not be counted with ARCH (9031, 9045 or 9046) or PLAN (9010, 9011 or 9018). *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban Design and Masters of Urban & Regional Planning students in the Urban Design stream only.*	1, 2
PLAN 9027	Foundations of Environmental Planning	4		1
Optional units				
ARCH 9003	Interpretation of Cultural Environments	4		1
ARCH 9019	Aesthetic Assessment of Herit Landscapes	4	*NB: This unit of study is offered in odd numbered years only and not in 2004.*	N/A in 2004
ARCH 9048	History of Modern Architecture Theories	6		1
ARCH 9049	Contemporary Architectural Theories	6		2
ARCH 9050	Globalisation & Architecture	6		2
ARCH 9051	Urban Design:The Impact of Modernisation	6		1
ARCH 9052	Graduate Architectural Design 1	12	*NB: Permission of coordinator required unless enrolled in the Graduate Certificate, Diploma or Master in Architecure (Architectural Design).*	1
ARCH 9054	Japanese Architecture, Cities & Culture	4		2
ARCH 9055	Housing Cultural Studies	6	**N** ARCH 9006.	1
ARCH 9057	Housing & Urban & Regional Development	6	**N** ARCH 9032.	2
ARCH 9061	Architecture in East Asia	6	**N** May not be counted with DESA 2203.	2
PLAN 9028	Land Use, Infrastructure/ Transport Plan	4		2
PLAN 9045	Economic Tools and Community Development	6		2
PLAN 9048	Environmental Design and Planning	6		2
PLAN 9051	Urban Design and Development Control	4		1
Certificate, Diploma and Master's of Urban and Regional Planning				
All students are required to complete a Report or Dissertation in addition to the core units.				
■ **All streams**				
Core units				
PLAN 9005	Economic Applications in Planning	4		2
PLAN 9020	Planning Procedures	4	*NB: Session 2 available subject to numbers.*	1, 2
PLAN 9021	Planning Law	4	**P** PLAN 9020 Planning Procedures.	2
PLAN 9027	Foundations of Environmental Planning	4		1
PLAN 9028	Land Use, Infrastructure/ Transport Plan	4		2
PLAN 9031	History and Theory in Urban Planning	4		2
PLAN 9032	Argumentation/Discourse-Plan Procedure	4		2
PLAN 9044	Planning Methods	4		1
PLAN 9051	Urban Design and Development Control	4		1

Table G: Table of Graduate units of study (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
■ Without specialisation				
Optional units				
PLAN 9010	Planning Dissertation 1	12	**P** WAM of 70 and completion of all core requirements: PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). **N** May not be counted with PLAN 9018, ARCH (9031, 9045, 9046 or 9060). *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9011 Planning Dissertation 2, either in the same or following semester.*	1, 2
PLAN 9011	Planning Dissertation 2	12	**C** PLAN 9010. *NB: This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9010 Planning Dissertation 1, either in the same or preceding semester.*	1, 2
PLAN 9018	Planning Report	12	**P** PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). *NB: Department permission required for enrolment. Submit an Independent Study Approval form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. MURP students taking the Urban Design stream should enrol in ARCH 9060 Urban Design Report.*	1, 2
PLAN 9045	Economic Tools and Community Development	6		2
PLAN 9048	Environmental Design and Planning	6		2
PLAN 9049	Development Project Planning and Design	6		1
■ Heritage Conservation Stream				
Optional units				
ARCH 9003	Interpretation of Cultural Environments	4		1
ARCH 9028	Conservation Methods and Practices	12		1
PLAN 9010	Planning Dissertation 1	12	**P** WAM of 70 and completion of all core requirements: PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). **N** May not be counted with PLAN 9018, ARCH (9031, 9045, 9046 or 9060). *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9011 Planning Dissertation 2, either in the same or following semester.*	1, 2
PLAN 9011	Planning Dissertation 2	12	**C** PLAN 9010. *NB: This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9010 Planning Dissertation 1, either in the same or preceding semester.*	1, 2
PLAN 9018	Planning Report	12	**P** PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). *NB: Department permission required for enrolment. Submit an Independent Study Approval form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. MURP students taking the Urban Design stream should enrol in ARCH 9060 Urban Design Report.*	1, 2
■ Housing Studies Stream				
Optional units				
ARCH 9055	Housing Cultural Studies	6	**N** ARCH 9006.	1
ARCH 9056	Housing Policy and Assistance	6		1
ARCH 9057	Housing & Urban & Regional Development	6	**N** ARCH 9032.	2
PLAN 9010	Planning Dissertation 1	12	**P** WAM of 70 and completion of all core requirements: PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). **N** May not be counted with PLAN 9018, ARCH (9031, 9045, 9046 or 9060). *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9011 Planning Dissertation 2, either in the same or following semester.*	1, 2
PLAN 9011	Planning Dissertation 2	12	**C** PLAN 9010. *NB: This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9010 Planning Dissertation 1, either in the same or preceding semester.*	1, 2
PLAN 9018	Planning Report	12	**P** PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). *NB: Department permission required for enrolment. Submit an Independent Study Approval form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. MURP students taking the Urban Design stream should enrol in ARCH 9060 Urban Design Report.*	1, 2
PLAN 9050	Housing for Health (Advanced)	6		2

Table G: Table of Graduate units of study (continued)

Unit of study		CP	A: Assumed knowledge P: Prerequisite Q: Qualifying C: Corequisite N: Prohibition	Session
■ Urban Design Stream				
Optional units				
ARCH 9001	Urban Design Studio A	12	*NB: Permission of coordinator required unless enrolled in the Master, Grad Dip or Grad Cert of Urban Design. It is recommended that unit ARCH 9022 Urban Design – Ideas and Methods or ARCH 9021 Urban Design – Morphology, is taken either before or concurrently with this studio.*	1, 2
ARCH 9002	Urban Design Studio B	12	**P** ARCH 9001.	1, 2
ARCH 9021	Urban Design – Morphology	4		2
ARCH 9022	Urban Design – Ideas and Methods	4		1
ARCH 9060	Urban Design Report	12	**P** ARCH 9001. **N** May not be counted with ARCH (9031, 9045 or 9046) or PLAN (9010, 9011 or 9018). *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban Design and Masters of Urban & Regional Planning students in the Urban Design stream only.*	1, 2
PLAN 9010	Planning Dissertation 1	12	**P** WAM of 70 and completion of all core requirements: PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). **N** May not be counted with PLAN 9018, ARCH (9031, 9045, 9046 or 9060). *NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9011 Planning Dissertation 2, either in the same or following semester.*	1, 2
PLAN 9011	Planning Dissertation 2	12	**C** PLAN 9010. *NB: This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9010 Planning Dissertation 1, either in the same or preceding semester.*	1, 2

■ Graduate units of study

ARCF 9001 Modes of Enquiry and Methods of Research

6 credit points. Prof. Gary Moore. **Session**: 1. **Classes**: Contact time of one 3-hour lecture/seminar per week, plus ca 6 hours of individual study per week during the semester. **Assessment**: Assessment is based on (1) evidence of having done and understood the readings as evidenced by critical contributions to class discussions, and (2) a preliminary research proposal between 2500–3000 words and no more than 15 pages. (Final research proposals for partial satisfaction of probationary requirements will remain the responsibility of the student in association with your Supervisor.) In assessing submissions, attention will be placed on evidence of development in four areas: (1) grasp of the subject matter of different modes of inquiry, research approaches and research methods, (2) the organisation of knowledge about research and scholarship, (3) ability to critically evaluate methods used in studies and (4) original thinking regarding appropriate modes of inquiry and research methodology for the research problems and questions under investigation. All submissions are to conform to the style and format of the Publication Manual of the APA (latest ed.) or equivalent style guide in the discipline of the student. Students are expected to complete the unit with at least a credit grade.

NB: Permission required unless enrolled in a research degree. This unit is compulsory for all MPhil and PhD students in the Faculty of Architecture. It must be taken at the first opportunity.

Content

The unit will be run as a seminar with mini-lectures, presentations by other members of the academic staff about research and scholarship methods in which they are most expert, critical review of readings, and discussions based on the seminar material, readings and research pre-proposals.

Within the Faculty, there are five disciplinary areas, each of which hold regular informal research seminars presented by PhD students and research staff. Students will be encouraged to attend on a regular basis that group or groups to which their research relates.

Objectives and Learning Outcomes

The primary purpose of this seminar is to provide students with an understanding of different modes of inquiry and different ways of conducting research and scholarship relevant to the five disciplines of the Faculty (architecture and the allied arts, architectural science, design computing and cognition, environment behaviour and society, and urban and regional planning and policy). These major modes fall into three clusters: computationally based methods, text-based methods and field-based methods – and include quantitative and qualitative approaches, scientific and post-modern approaches, and exploratory, confirmatory and developmental research. Specific methods explored will include experimental, laboratory and a variety of quasi-experimental, survey and ethnographic research approaches, text-, historical and archival-based scholarship, and computational axiom-, conjecture- and simulation-based approaches.

A secondary purpose is introduce students to a range of practical skills for planning and conducting research and scholarship, including selecting worthwhile topics, planning the research, designing the study and preparing to collect and analyse information, presenting the final written thesis or dissertation and preparing papers for presentation and publication.

A third purpose is to sharpen critical skills for reading, evaluating and interpreting research and scholarship.

Upon successfully completing the seminar, students are expected to have an understanding of the range of modes of inquiry and methods of research and scholarship used across the disciplines associated with this Faculty.

Textbooks

Groat, L, & Wang, D. (2002). Architectural Research Methods. New York: Wiley. ISBN 0–471–33365–4 (cloth & pbk).
Leedy, P.D. (1997). Practical Research: Planning and Design (6th ed.). Upper Saddle River, NJ: Prentice-Hall/Merrill. ISBN 0–13–241407 (pbk.).

Indicative Major Readings:

Alreck, P.L., & Settle, R.B. (1995). The Survey Research Handbook (2nd ed.). Chicago: Irwin.
Barzun, J., & Graff, H.F. (1992). The Modern Researcher (4th ed.). New York: Harcourt Brace Jovanovich.
Berkofer, R. (1995). Beyond the Great Story: History as Text and Discourse. Cambridge, MA: Harvard University Press.
Booth, W.C., Colomb, G.G., & Williams, J.M. (1996). The Craft of Research. Chicago: University of Chicago Press.
Campbell, D.T., & Stanley, J.C. (1973). Experimental and Quasi-Experimental Designs for Research (rev. ed.). Chicago: Rand McNally.
Denzin, N.K., & Lincoln, Y.S. (1994). Handbook of Qualitative Research. Thousand Oaks, CA: Sage.
De Vaus, D.A. (2001). Research Design in Social Research. London: Sage (incl. web links to detailed information of different aspects of field research design/methodology).
De Vaus, D.A. (2002). Surveys in Social Research (5th ed.). Sydney: Allen & Unwin.
Grimm, L.G., & Yarnold, P.R. (Eds.) (2000). Reading and Understanding More Multivariate Statistics. Washington, DC: American Psychological Association.
Hart, C. (1998). Doing a Literature Review: Releasing the Social Science Imagination. London: Sage Publications.
Jenkins, K. (1995). On 'What is History?' London: Routledge.
Judd, C., Smith, E., & Kidder, L.H. (1991). Research Methods in Social Relations (6th ed.). New York: Holt, Rinehart and Winston.
Lincoln, Y.S., & Guba, E.G. (1985). Naturalistic Inquiry. Thousand Oaks, CA: Sage.
Lubar, S., & Kingery, W.D. (Eds.) (1993). History and Things: Essays on Material Culture. Washington, DC: Smithsonian Institution Press.
Miles, M., & Huberman, A.M. (1994). Qualitative Data Analysis: A Sourcebook of New Methods (2nd ed.). Thousand Oaks, CA: Sage.
Patton, M.Q. (1990). Qualitative Evaluation and Research Methods (2nd ed.). Newbury Park, CA: Sage.
Peil, M. (1982). Social Science Research Methods: An African Handbook. London & Sydney: Hodder and Stoughton.
Robson, C. (1993). Real World Research: A Resource for Social Scientists and Practitioner-Researchers. Cambridge, MA: Blackwell.
Schlereth, T.J. (Ed.) (1985). Material Culture: A Research Guide. Lawrence, KS: University Press of Kansas.
Simon, H.A. (1996). The Sciences of the Artificial (3rd ed.). Cambridge, MA: MIT Press.
Yin, R. (1994). Case Study Research: Design and Methods. London: Sage.
Yin, R. (2003). Applications of Case Study Research (rev. ed.). Newbury Park, CA: Sage.
Zeisel, J. (1981). Inquiry by Design: Tools for Environment-Behavior Research. Cambridge, England: Cambridge University Press.

ARCF 9002 Nature of Theory

6 credit points. Professors Gary Moore, Edward Blakely and Andrew Benjamin. **Session**: 2. **Classes**: One seminar/week. **Assessment**: Class contribution and two papers.

NB: Permission required unless enrolled in a research degree.

Content

The purposes of this seminar are (1) to show incoming research students how to trace the intellectual roots of their discipline and find the relevant theoretical literature in their field so that they can build their research thesis or dissertation on strong theoretical grounds, and (2) to provide incoming research students with an understanding of the different theoretical perspectives and their philosophical presuppositions that underlie research in the disciplines covered by the Faculty (eg, but not limited to architectural history and theory, architectural science, environment behaviour and society, and urban and regional planning and policy). The seminar will examine a number of different ways of conceptualising theory, and their philosophical presuppositions, and will look at a range of 'paradigms' and specific concepts.

The seminar will also look at a range of theoretical perspectives and specific theories pertinent to research in the disciplines of the Faculty. In the first year of offering, the focus will be on field- and text-based research – ie, research with an empirical field or historical-theoretical component. The range of theoretical perspectives will include but not be limited to positivism, modernity and postmodernity, interactionalism, transactionalism and phenomenology, complex systems theory and chaos theory.

The seminar will also examine the nature of theory, the history and philosophy of science of theory, similarities and differences between explanatory and prescriptive theories and strategies for theory development, and will ask the question whether it is possible to have theories that are both explanatory that contribute to knowledge and normative that contribute towards policy, planning or design.

As part of these examinations, students will debate a number of philosophical and theoretical issues including but not limited to theoretical approaches to knowledge, the analysis and evaluation of explanatory and normative theories, and critiques of current conceptualisations and theories in relation to their bodies of knowledge in the field.

Objectives and Learning Outcomes

The primary objective is to enable students to understand the theoretical roots of their discipline, to appreciate the similarities and differences between different theoretical stances to research across the disciplines of the Faculty, to examine the applicability

of current theoretical directions and particular theories to architectural, environmental, and urban policy, planning, consulting and design, and to be prepared to use and develop specific theories in their own research work. Upon successful completion of this seminar, students are expected to have a critical understanding of the range of theoretic perspectives in use and capable of being in use across the disciplines associated with this Faculty.

Submissions and Assessment

There will be two submissions – a paper exploring the theoretical intellectual roots of the discipline in which the student is working, and a paper critiquing one or more of the major theoretical directions or the major theoretical literature that shapes the directions in the field.

Assessment will be based equally on understanding of the readings and seminars as evidenced by class contributions, and each of the two papers. Topics are to be approved ahead of time. Papers are to conform to the style and format of the Publication Manual of the APA (latest ed.), MLA Style Guide, or equivalent style guide in the discipline of the student. Students are expected to complete the unit without an incomplete and to have at least a credit grade.

Textbooks

Indicative Major Readings:

As the syllabus is developed, the major readings will be drawn from the below or similar texts:

Alexander, C. (1977). A Pattern Language: Towns, Buildings, Construction. Oxford University Press, 1977.

Alexander, C. (1979). The Timeless Way of Building. New York: Oxford University Press.

Altman, I., & Christianson, C. (TBC). The Intellectual History of Environment-Behaviour Studies. New York: Plenum.

Altman, I., & Rogoff, B. (1987). World views in psychology: Trait, interactional, organismic and transactional. In D. Stokols & I. Altman (Eds.), Handbook of Environmental Psychology, Vol. 1. New York: Wiley. Chapter 1, pp. 24–32.

Blakely, E.J. (2001). Competitive advantage for the 21st Century city, Journal of the American Planning Association, 67(2).

Bollens, S. (1999). Urban Peace-Building in Divided Societies: Belfast and Johannesburg. Boulder, CO and Oxford, UK: Westview Press.

Castells, M. (1977). The Urban Question: A Marxist Approach. Chichester, England: Wiley.

Conrads, U. (Ed.) (1970). Programs and Manifestoes on Twentieth-Century Architecture. Cambridge, Mass: MIT Press.

Dahlberg, G., Moss, P., & Pence, A. (1999). Theoretical perspectives: Modernity and postmodernity, power and ethics. Beyond Quality in Early Childhood Education and Care: Postmodern Perspectives. London and Philadelphia: Routledge Falmer. Chapter 2, pp. 19–42.

Fainstein, S., & Campbell, S. (2002). Readings in Planning Theory. London: Blackwell.

Forrester, J.W. (1969). Urban Dynamics. Cambridge, Mass: MIT Press.

Gero, J.S., & Maher, M.L. (1997). A framework for research in design computing. In B. Martens, H. Linzer & A Voigt (Eds.), ECAADE'97. Vienna: Osterreichischer Kunst und Kulturverlag (CD-ROM), Topic 1, Paper 8.

Hall, P. (2000). Cities of Tomorrow (3rd edition). London: Blackwell.

Hanson, N.R. (1958). Patterns of Discovery: An Inquiry into the Conceptual Foundations of Science. London: Cambridge University Press.

Harvey, D. (1989). The Condition of Postmodernity. Oxford: Blackwell.

Hays, K.M. (Ed.) (1998). Architecture Theory Since 1968. Cambridge, Mass: MIT Press.

Hill, J. (Ed.) (2001). Architecture: The Subject is Matter. New York: Routledge.

Hillier, B., & Hanson, J. (1984). The Social Logic of Space. New York: Cambridge University Press.

Kaplan, A. (1964). The Conduct of Inquiry: Methodology for Behavioural Science. New York: Harper & Row, and San Francisco: Chandler.

Kohler, W. (1929, 1959). Psychology as a new science. Gestalt Psychology. New York: Liveright/Mentor. Chapter 2, pp. 24–41.

Kuhn, T.S. 1962, 1970). The Structure of Scientific Revolutions. Chicago & London: University of Chicago Press, and Toronto: University of Toronto Press.

Lang, J. (1987). Creating Architectural Theory. New York: Van Nostrand Reinhold.

LeShan, L., & Margenau, H. (1982). Einstein's Space & Van Gogh's Sky: Physical Reality and Beyond. New York: Macmillan.

Mandelbaum, S., Mazza, L., & Burchell, R. (1996). Explorations in Planning Theory. Newark, NJ: Rutgers University Center for Urban Policy Research.

Meadows, D.H. (1997, 1999). Leverage points: Places to intervene in a system. Hartland, VT: Sustainability Institute, and Whole Earth, np.

Merton, R.K. (1968). On sociological theories of the middle range. Social Theory and Social Structure (Rev ed). New York: Free Press. Chapter 2, pp. 39–72.

Moore, G.T. (1997). Toward enviroment-behavior theories of the middle range: Their structure and their relation to normative design theories. Advances in Environment, Behavior and Design (Vol. 4). New York: Plenum. Chapter 1, pp. 1–40.

Nesbitt, K. (1996). Theorizing a New Agenda for Architecture. Princeton, NJ: Princeton Architectural Press.

O'Connor, K., Daly, M., Stimpson, R. (2001). Australia's Changing Economic Geography: A Society Dividing. New York: Oxford University Press.

Papineau, D. (1979). Theory and Meaning. Oxford: Clarendon Press.

Pepper, S.C. (1966). World Hypotheses. Berkeley: University of California Press.

Perez-Gomez, A. (1983). Architecture and the Crisis of Modern Science. Cambridge, Mass: MIT Press.

Platt, J.R. (1964). Strong inference. Science, 146, 347–353.

Popper, K.R. (1965). The Logic of Scientific Discovery. New York: Harper & Row.

Riggs, P.J. (1992). Whys and Ways of Science: Introducing Philosophical and Sociological Theories of Science. Melbourne: Melbourne University Press.

Seamon, D. (1980). A Geography of the Lifeworld. London: Croom Helm.

Simon, H.A. (1996). The Sciences of the Artificial (3rd ed.). Cambridge, MA: MIT Press.

Somol, R.E. (Ed.) (1997). Autonomy and Ideology: Positioning an Avant-Garde in America. New York (?): Monacelli Press.

Toulmin, S. (1960). The Philosophy of Science. New York: Harper.

Toulmin, S. (1961). Foresight and Understanding: An Enquiry into the Aims of Science. New York: Harper.

Toulmin, S. (1990). Cosmopolis: The Hidden Agenda of Modernity. Chicago: University of Chicago Press.

Upton, D. (1991). Architectural history or landscape history? Journal of Architectural Education, 44(4), 195–199.

ARCH 9001 **Urban Design Studio A**

12 credit points. Mr Barrie Shelton. **Session**: 1, 2. **Classes**: Studio work, presentations and critiques. **Assessment**: Design and design-related projects and assignments, 100%.

NB: Permission of coordinator required unless enrolled in the Master, Grad Dip or Grad Cert of Urban Design. It is recommended that unit ARCH 9022 Urban Design – Ideas and Methods or ARCH 9021 Urban Design – Morphology, is taken either before or concurrently with this studio.

Objectives

Students will be expected to demonstrate appropriate (professional-level) problem recognition, investigative, analytical, interpretative, deisgn and presentation skills and abilities on projects of an urban scale. Assessment may also embrace abilities to prepare and interpret project briefs, program proposals and work in groups.

Content

These studios are the heart of the urban design program. Values, knowledge and skills acquired in other units and from previous experience are supplemented and enhanced, and applied creatively to both the investigation and development phases of design projects at an urban scale. These may be concerned with the generation of strategies, frameworks, concepts, master plans, public space improvements, or other uban design purposes. They are chosen carefully to expose students to a range of contexts (central city, suburban, institutional campuses, etc) and contemporary issues concerning urban form, activity, transport and the implementation of projects.

Students are expected to extend their presentation methods by developing illustrative, writing and verbal skills appropriate to urban design. It is usual for the backgrounds of those enrolled in the studios to span at least architecture, planning and landscape architecture, with inter-disciplinary group work and essential part. Visionary and innovative approaches are encouraged.

Outcomes

The central aim of this unit is to develop abilities and skills (investigation, analysis and interpretation, design development and presentation) which will enable students to carry out urban design projects such as the preparation of strategies, frameworks, concepts and master plans in a professional and visionary manner.

ARCH 9002 **Urban Design Studio B**

12 credit points. Mr Barrie Shelton. **Session**: 1, 2. **Classes**: Studio work, presentations and critiques. **Prerequisite**: ARCH 9001. **Assessment**: Design and design-related projects and assignments, 100%.

Objectives

Students will be expected to demonstrate appropriate (professional-level) problem recognition, investigative, analytical, interpretative, deisgn and presentation skills and abilities on projects of an urban scale. Assessment may also

embrace abilities to prepare and interpret project briefs, program proposals and work in groups.

Content

These studios are the heart of the urban design program. Values, knowledge and skills acquired in other units and from previous experience are supplemented and enhanced, and applied creatively to both the investigation and development phases of design projects at an urban scale. These may be concerned with the generation of strategies, frameworks, concepts, master plans, public space improvements, or other uban design purposes. They are chosen carefully to expose students to a range of contexts (central city, suburban, institutional campuses, etc) and contemporary issues concerning urban form, activity, transport and the implementation of projects.

Students are expected to extend their presentation methods by developing illustrative, writing and verbal skills appropriate to urban design. It is usual for the backgrounds of those enrolled in the studios to span at least architecture, planning and landscape architecture, with inter-disciplinary group work and essential part. Visionary and innovative approaches are encouraged.

Outcomes

The central aim of this unit is to develop abilities and skills (investigation, analysis and interpretation, design development and presentation) which will enable students to carry out urban design projects such as the preparation of strategies, frameworks, concepts and master plans in a professional and visionary manner.

ARCH 9003 **Interpretation of Cultural Environments**

4 credit points. Dr Richard Lamb. **Session**: 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; and
- 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.

ARCH 9007 **Transformation of Cultural Environments**

4 credit points. Dr Richard Lamb. **Session**: 2. **Classes**: Lectures and seminars. **Assessment**: Essay (30%), position paper (20%), seminar presentation (25%) and participation in class discussion (25%).

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 9014 **Professional Placement**

8 credit points. Trevor Howells. **Session**: 2. **Classes**: Work placement. **Assessment**: 5000 word (minimum) report.

Objectives

The unit of study will allow students the opportunity to experience aspects of professional conservation practice, develop a critical appreciation of the interaction between theoretical concepts and their practical application in the practice of heritage conservation, and identify potential research topics as a consequence of placement.

Content

The unit has no structured content but rather assistance is provided by the department in finding a suitable placement. It is anticipated that professional placement will extend from 4 to 6 weeks' full-time engagement with one or two organisations.

Non-placement alternative: should it not be possible for either the department or the student to arrange a suitable professional placement then, after consultation, an alternative study program will be devised which meets the academic objectives of this unit. This alternative also applies to students with previous experience.

Students who do not have a placement or an agreed non-placement alternative are advised to withdraw by the census date (31 August).

Outcomes

At the successful completion of the unit the student will demonstrate a critical appraisal of the role of theoretical concepts applied to professional practice and identify potential research topics.

The intended outcomes, achieved through inquiry, individual study, research and practical work experience, will be demonstrated by each student upon the successful completion of the report. The assignment has been constructed to allow the student to demonstrate an understanding of the theoretical content of degree coursework as applied to aspects of professional practice. Assessment criteria based on unit outcomes are used for the examination of the assignment.

ARCH 9015 **Trad Bldg Methods & Conserv of Materials**

4 credit points. Mr Trevor Howells. **Session**: 2. **Classes**: Lectures and site visits. **Assessment**: Assignment (50 %) and seminar: presentation (25%), report (25%).

NB: This unit of study is offered in even numbered years only.

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, pisé, 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 9016 **Conservation of Finishes & Mod Services**

4 credit points. Mr Howells. **Session**: N/A in 2004. **Classes**: Lectures and site visits. **Assessment**: Assignment (50 per cent) and seminar: presentation (25 per cent), report (25 per cent).

NB: This unit of study is offered in odd numbered years only and not in 2004.

Objectives
The unit will develop an understanding of traditional decorative finishes and their conservation, and of the requirements of modern services in historic structures and how they may be appropriately inserted.
Content
The unit will consist of the following: conservation of traditional finishes (plasterwork, painted surfaces, stencilling, wallpapers, embossed papers and materials, and other composite materials) and introduction of modern services (including electrical, communication systems, ventilation, hydraulic installations (water, gas and other liquids), mechanical systems (lifts, escalators) and lighting).
Outcomes
At the conclusion of the unit the student will successfully demonstrate a detailed knowledge of the appropriate techniques of investigation, methods of conservation of traditional finishes, and an understanding of the needs of various modern services systems and the techniques of insertion of modern services.

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 identified fields and focuses on the major forms of traditional finishes and modern services in historic structures. The assignment has been constructed to allow the student to demonstrate a detailed understanding of a selected finish and the methods of its traditional use as well as the techniques for inserting services. Assessment criteria based on unit outcomes are used for the examination of the assignment.

ARCH 9019 **Aesthetic Assessment of Herit Landscapes**

4 credit points. Dr Lamb. **Session**: N/A in 2004. **Classes**: Lectures and seminar. **Assessment**: Major project (50%), minor assignments (30%) seminar (20%) and fieldwork.
NB: This unit of study is offered in odd numbered years only and not in 2004.

Objectives
This course will develop skills in the visual and aesthetic assessment of landscapes, and expertise in developing innovative methods for the assessment of the aesthetic qualities of historic landscapes, the commonplace and vernacular.
Content
The four main areas considered in this course are:
- principles of environmental perception: levels of aesthetic experience, perception, memory, emotion and affect; the structuring of visual experience; problems with individual difference;
- traditional methods of assessment: elite, professional and intuitive methods; scenic quality and character; problems with the picturesque;
- psychophysical and quantitative methods: visual quality assessment and parametric approaches; problems with consensus; and
- innovative methods of particular relevance to conservation: structural and compositional analysis; the aesthetic interpretation of the past; problems with the aesthetics of ugly heritage, the vernacular and the commonplace.

Outcomes
Students will develop skill in the application of methods of assessment of landscapes and be able to demonstrate the acquisition of an understanding, at the intermediate level, of research methods and findings in areas relevant to landscape assessment.

Students are assessed by means of seminars which test their knowledge of the literature and techniques of landscape assessment and field assignments which demonstrate their ability to develop methods of assessment of aesthetics which are relevant to the practice of heritage conservation.

ARCH 9021 **Urban Design – Morphology**

4 credit points. Mr Barrie Shelton. **Session**: 2. **Classes**: Lectures and discourse sessions. **Assessment**: Written and illustrated assignments and class presentation.

Objectives
The aim of this unit is to nurture an appreciation of urban morphological history. It is also to develop abilities concerned with the recognition, investigation and explanation of urban forms in terms of their physical characteristics and the circumstances that shaped them – social, economic, technological, cultural etc. Further, it is to develop an awareness of current issues associated with these forms and the ability to make judgements about them in contemporary urban design – retention, modification, transformation, obliteration.
Content
The unit explores the evolution ofurban form with an emphasis upon built form typologies. Most designed components of our cities conform in their general characteristics to identifiable typologies. These reflect both the cultural values and the technological, economic and social circumstances of their times. They have been laid down, modified, overlaid and juxtaposed over particular landforms to result in usually complex and often disctinct local patterns and forms (urban morphology). The ability to recognise, investigate and respond to these is at the heart of urban design. The development of an historical knowledge, and of sensibilities and skills in the recording and interpretation of urban pattern and form for design purposes is the unit's primary aim. As such it examines the characteristics and dimensions of major urban typologies (especially those still visible in today's cities) their origins and interrelationships, and issues surrounding their interpretation and treatment in the contemporary city.
Outcomes
- recognise major structures and patterns, and key building and spatial types in the urban environment;
- to record and describe them graphically and in words;
- to investigate and explain their origins; and
- to discuss informatively their place in contemporary practice.

ARCH 9022 **Urban Design – Ideas and Methods**

4 credit points. Mr Barrie Shelton. **Session**: 1. **Classes**: Lectures, seminars/workshops. **Assessment**: Written and illustrated assignments, class presentation.

Objectives
Students will demonstrate an understanding of the concepts involved with illustrated reports and class presentations covering both theory and application. This unit offers key skills and knowledge for use in urban design studios. It is useful for the analysis and interpretation of urban form for physical planning purposes. It is also useful for the study of urban context for architectural design ends.
Content
During the first half of the Twentieth Century much of the influential literature on urban design/city planning was geared to the generation of new types of urban structure and building form for the construction of new cities and replacement of worn-out fabric in existing ones.

Later decades (particularly the 1960's and 1970's) were more circumspect with the most influential literature exploring the existing structure, form and character of cities as a basis for new design. In the process, the metaphor for the city changed from that of 'machine' (to be 'engineered') to 'text' (to be 'read'). Hence, terms such as 'language', 'legibility', and 'meaning' come to the fore in urban design. At the same time there was a drift in sensitivity – form the pursuit of 'universal' to 'place' based solutions. This change generated a spate of urban design primers in the 1980's which have in turn been challenged by more recent viewpoints. The unit reviews the content of the period's key works with an emphasis on the methods promoted (or implied) for use in examining city form and generationg design concepts.
Outcomes
Students are expected to develop a critical understanding of the key concepts of the last century that have contributed to the designer's understanding of urban spatial structure and built form. They are also expected to gain a working knowledge of associated methods for investigating and interpreting urban form, and generating design solutions.

ARCH 9026 **Development Finance**

4 credit points. Assoc Prof Peter Phibbs. **Session**: 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.

ARCH 9028 **Conservation Methods and Practices**

12 credit points. Mr Trevor Howells. **Session**: 1. **Classes**: Lectures and site visits. **Assessment**: Three 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 of the Australia 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.

ARCH 9031 **Research Report**

12 credit points. Discuss with your program coordinator. **Session**: 1, 2. **Classes**: Independent research. **Assessment**: 10 000 (maximum) word report (90 per cent), research proposal (10 per cent). Each student has an academic supervisor for the research report.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. Available to Masters students only.

Content

The report is a substantial piece of research conducted over one semester. It takes the form of report (up to 10,000 words) on an approved subject of your choice. The report is an opportunity to advance your knowledge and skills in a particular area.

Objectives and learning outcomes

The objective of the report is to allow you to develop research and analytic skills by undertaking an in depth study of your own selection. The expected learning outcomes of the report include the ability to:

- Think critically about a problem and develop an appropriate research methodology or analytical approach to address it;
- Identify and access appropriate sources of information, research and literature relevant to the issues;
- Undertake relevant primary and secondary research;
- Present your findings in a way that demonstrates academic and professional competence.

Report Guidelines

A report generally includes:

- A literature review to delineate a problem;
- A statement of research aims or objectives, as well as research questions;
- An explanation of research methods;
- Presentation and analysis of data;
- Discussion of conclusions.

Restrictions

Permission to continue the Report may be subject to a satisfactory research proposal being approved by your supervisor by week 3 of semester.

Submission and Assessment

Reports are due at the end of the first week of exams for the semester in which you are enrolled. The assessment is based solely on the submission of your report. The report is generally marked by one examiner who is not your supervisor.

ARCH 9039 **General Elective 1**

6 credit points. **Session**: 1, 2.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

Objectives

This elective allows an individual to pursue an agreed topic with a member of academic staff or for a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

For individual study arrangements – this is an opportunity to develop independent study skills. The unit is undertaken with an agreement between the student and a supervisor on a topic related to the supervisor's expertise. The student will meet with the supervisor regularly to discuss progress.

For group study arrangements – the unit of study is available to engage in a topic that is organised by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic.

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and/or tutorial exercises.

ARCH 9040 **General Elective 2**

6 credit points. **Session**: 1, 2.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

Objectives

This elective allows an individual to pursue an agreed topic with a member of academic staff or for a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

For individual study arrangements – this is an opportunity to develop independent study skills. The unit is undertaken with an agreement between the student and a supervisor on a topic related to the supervisor's expertise. The student will meet with the supervisor regularly to discuss progress.

For group study arrangements – the unit of study is available to engage in a topic that is organised by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic.

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and/or tutorial exercises.

ARCH 9041 **General Elective 3**

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

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

Objectives

This elective allows an individual to pursue an agreed topic with a member of academic staff or for a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description
For individual study arrangements – this is an opportunity to develop independent study skills. The unit is undertaken with an agreement between the student and a supervisor on a topic related to the supervisor's expertise. The student will meet with the supervisor regularly to discuss progress.

For group study arrangements – the unit of study is available to engage in a topic that is organised by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic.

Outcomes:
Students will develop an understanding of a special topic through reports, projects, and/or tutorial exercises.

ARCH 9042 **General Elective 4**

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

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

Objectives
This elective allows an individual to pursue an agreed topic with a member of academic staff or for a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description
For individual study arrangements – this is an opportunity to develop independent study skills. The unit is undertaken with an agreement between the student and a supervisor on a topic related to the supervisor's expertise. The student will meet with the supervisor regularly to discuss progress.

For group study arrangements – the unit of study is available to engage in a topic that is organised by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic.

Outcomes:
Students will develop an understanding of a special topic through reports, projects, and/or tutorial exercises.

ARCH 9043 **General Elective 5**

2 credit points. **Session**: 1, 2.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

Objectives
This elective allows an individual to pursue an agreed topic with a member of academic staff or for a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description
For individual study arrangements – this is an opportunity to develop independent study skills. The unit is undertaken with an agreement between the student and a supervisor on a topic related to the supervisor's expertise. The student will meet with the supervisor regularly to discuss progress.

For group study arrangements – the unit of study is available to engage in a topic that is organised by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic.

Outcomes:
Students will develop an understanding of a special topic through reports, projects, and/or tutorial exercises.

ARCH 9044 **General Elective 6**

2 credit points. **Session**: 1, 2.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

Objectives
This elective allows an individual to pursue an agreed topic with a member of academic staff or for a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description
For individual study arrangements – this is an opportunity to develop independent study skills. The unit is undertaken with an agreement between the student and a supervisor on a topic related to the supervisor's expertise. The student will meet with the supervisor regularly to discuss progress.

For group study arrangements – the unit of study is available to engage in a topic that is organised by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic.

Outcomes:
Students will develop an understanding of a special topic through reports, projects, and/or tutorial exercises.

ARCH 9045 **Dissertation 1**

12 credit points. **Session**: 1, 2. **Classes**: Research. **Prerequisite**: 48 credit points. **Corequisite**: ARCH 9046. **Prohibition**: May not be counted with ARCH (9031 or 9060), PLAN (9010, 9011, 9018).

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

ARCH 9045 and ARCH 9046 Dissertation 2 are only available to candidates for the masters degree with honours, with permission from an appropriate supervisor. Planning students should take PLAN 9010 and 9011 Planning Dissertations 1 & 2. Students enrol either full time over one semester (ARCH 9045 and 9046) or part time over two semesters (ARCH 9045 then 9046). The units are not assessed separately – a single dissertation is required. The appointment of a supervisor will depend on the topic chosen for the dissertation by the student. Students and their supervisors should complete an Independent Study Approval form and return it to the Student Administration Centre to effect enrolment.

Objectives
The aim of the dissertation is twofold:

- 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; and
- 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.

The dissertation should 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.

Form
Three typed A4 sized copies of the dissertation are required to be presented for examination. These may be in either temporary or permanent binding. If in temporary binding they must be able to withstand ordinary handling and postage. The preferred method is 'perfect binding'; spring back, ring back or spiral binding is not permitted. Students are required to submit one copy in permanent binding on acid free paper for the library, including any emendations recommended by the examiners. For more detail see the requirements for the PhD thesis in the Postgraduate Research Studies Handbook.

ARCH 9046 **Dissertation 2**

12 credit points. **Session**: 1, 2. **Corequisite**: ARCH 9045.

ARCH 9045 and ARCH 9046 Dissertation 2 are only available to candidates for the masters degree with honours, with permission from an appropriate supervisor. Planning students should take PLAN 9010 and 9011 Planning Dissertations 1 & 2. Students enrol either full time over one semester (ARCH 9045 and 9046) or part time over two semesters (ARCH 9045 then 9046). The units are not assessed separately – a single dissertation is required. The appointment of a supervisor will depend on the

topic chosen for the dissertation by the student. Students and their supervisors should complete an Independent Study Approval form and return it to the Student Administration Centre to effect enrolment.

Objectives

The aim of the dissertation is twofold:

- 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; and
- 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.

The dissertation should 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.

Form

Three typed A4 sized copies of the dissertation are required to be presented for examination. These may be in either temporary or permanent binding. If in temporary binding they must be able to withstand ordinary handling and postage. The preferred method is 'perfect binding'; spring back, ring back or spiral binding is not permitted. Students are required to submit one copy in permanent binding on acid free paper for the library, including any emendations recommended by the examiners. For more detail see the requirements for the PhD thesis in the Postgraduate Research Studies Handbook.

ARCH 9048 History of Modern Architecture Theories

6 credit points. **Session**: 1. **Classes**: Lectures. **Assessment**: One 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; and
- understand history as a work of interpretation rather than 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; and
- a historical understanding of the differences between text and building.

ARCH 9049 Contemporary Architectural Theories

6 credit points. **Session**: 2. **Classes**: Lectures.

Objectives

The objectives of this unit are:

- to provide the various historical developments that initiated the idea of autonomy in architecture; and
- 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 the themes endemic for modern architectural theories;
- the importance of aesthetic theories for architecture;
- the relationship between history and theory; and
- the genesis of the historical avant-garde in architectural theories.

ARCH 9050 Globalisation & Architecture

6 credit points. A/Prof Anna Rubbo. **Session**: 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 ways 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; and
- strategies to enable a more effective professional practice in such areas.

ARCH 9051 Urban Design:The Impact of Modernisation

6 credit points. Dr Peter Armstrong and Mr Barrie Shelton. **Session**: 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.

ARCH 9052 **Graduate Architectural Design 1**

12 credit points. Prof Tom Heneghan. **Session**: 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 of coordinator required unless enrolled in the Graduate Certificate, Diploma or Master in Architecure (Architectural Design).

Objectives
The objectives of this unit are:
- to investigate formal/spatial dimensions of a hybrid building;
- to interpret program as a conceptual paradigm; and
- 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; and
- spatial and formal visibility of architecture in the city.

ARCH 9053 **Graduate Architectural Design 2**

12 credit points. Prof Tom Heneghan. **Session**: 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 of coordinator required unless enrolled in the Graduate Certificate, Diploma or Master in Architecure (Architectural Design).

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'; and
- 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 organisations;
- strategies to synthesise urban life and urban form based on a given context; and
- the essentiality of psychological space, program, movement, light quality, and tactility in the strategies presented for a city edge.

ARCH 9054 **Japanese Architecture, Cities & Culture**

4 credit points. Mr Barrie Shelton. **Session**: 2. **Classes**: Lectures and seminars. **Assessment**: Written and illustrated assignments and class presentation.

Objectives
Students will demonstrate an understanding of the knowledge and ideas involved through the preparation of critical assignments (usually illustrated) and class discussions / presentations.

Content
Australia's links with Asia continue to grow. In the design world this means more professional contact and cooperation in consulting and education. This unit is premised on the belief that such cooperation depends on cross-cultural appreciation – of differing values and approaches. In this context, the unit explores the links between the wider Japanese culture and characteristics and qualities apparent in Japanese cities and architecture, past and present. To do this (and accommodate three distinct contributions) it is split into three segments: the first part stresses cultural traditions and a 'way of seeing' that contrast with those of the West: later parts stress Twentieth Century developments and the influence of Western ideas, and the review of contemporary work respectively. Though the focus is on Japan, wider roles of the unit are a) to highlight the importance of understanding built form against a wider cultural backcloth and b) to enable students to be more critical of their own values and viewpoints as shaped by their own culture.

Outcomes
Students are expected to develop a broad appreciation of modern Japanese architecture and cities. In particular, they will develop a knowledge of the links between Twentieth Century work and Japanese cultural, urban and architectural design traditions; and of the more recent influence Western ideas – from the Meiji period on. In addition, they will become critically acquainted with outstanding examples of recent work.

This unit:
- will broaden the student's knowledge of architectural and urban history;
- introduce a range of ideas which can only enhance approaches to architectural and urban design, and to urban and conservation planning; and
- develop a better understanding of design and planning in cross cultural contexts.

ARCH 9055 **Housing Cultural Studies**

6 credit points. Mr Colin James. **Session**: 1. **Classes**: Lectures and seminars. **Prohibition**: ARCH 9006. **Assessment**: One assignment and one exercise.

Objectives
By the end of this unit of study a student should:
- Have a capability of developing reading, writing and referencing skills to support a research question;
- Understand the many geographical and cultural influences on the provision and form of housing; and
- Be able to focus an in-depth analysis on cultural concepts and present findings to colleagues.

Contents
This course provides a cultural context for comparative housing studies. The first part involves the student in historical and political perspectives of housing in Australia. This commences with a projected national future for housing and then regresses back in time from the context today to the colonial beginnings of European settlement in Sydney. A written assignment is required at this stage in which the student assesses the future of housing with references to the present and past. (For overseas students this may be a comparative study resourced with additional seminars.)

Outcomes
- To develop a sense of the historical context of Australian housing and how this affects future housing provisions (Assignment topic);
- To understand the implications of house form from various world cultures in multi-cultural societies; and
- To explore the 'meaning of home' from a cultural viewpoint and express the findings in both social housing and home ownership (assignment topic).

ARCH 9056 **Housing Policy and Assistance**

6 credit points. A/Prof Peter Phibbs. **Session**: 1. **Classes**: Lectures and seminars. **Assessment**: One assignment and one exercise.

Objectives
By the end of this unit of study a student should:
- understand the extent and nature of government influences in the housing systems;
- be familiar with recent history of housing policy in Australia and how it has shaped the Australian housing system;
- understand a comparative perspective on housing policy approaches using European and regional examples;
- be able to conduct an analysis of housing assistance measures, including approaches for particular groups – for example housing for indigenous people and communities, housing models for people with support needs;
- be familiar with recent policy initiatives in social and affordable housing in Australia; and
- have knowledge of current issues affecting the governance and management of housing services delivery in Australia.

Contents

This is one of three interrelated units of study on housing issues offered by the Faculty, the others being Housing Culture Studies and Housing and Urban Regional Development. This unit focuses on the role of governments in housing, especially the provision of housing assistance. The field of housing policy studies is extensive with a strong interdisciplinary base that provides a variety of theoretical and practical perspectives on housing issues facing professional housing workers, planners and architects working in Australia or abroad. The course includes a comparative and historical perspective to increase awareness of differences in housing markets and housing needs, and to promote discussion of alternative approaches to housing policy. The course will provide opportunities for students to discuss the policy making process and policy choices with practitioners working in different agencies and to analyse the drivers, objective and impacts of recent local housing policy initiatives.

Outcomes

- To provide a conceptual framework for understanding the rationale for, and scope of, government intervention in housing markets;
- To increase awareness of similarities and differences in international approaches to housing policy and their impacts;
- To recognise the institutional, political and cultural framework underpinning the development of different national housing policies; and
- To develop understanding of how housing policy and housing assistance options work and their impacts across different markets and client groups.

ARCH 9057 **Housing & Urban & Regional Development**

6 credit points. Mr Colin James. **Session**: 2. **Classes**: Seminars, group work. **Prohibition**: ARCH 9032. **Assessment**: Two assignments (50% each).

Objectives

By the end of this unit of study you should:

- Understand the basic structure and operation of housing markets, including factors affecting supply and demand for housing;
- Be familiar with important policy objectives for housing within the broader context of sustainable urban or regional development, such as sustainability, affordability and appropriateness of design;
- Understand the relationships between these policy objectives and the land use planning framework; and,
- Be able to conduct a basic housing needs assessment and identify appropriate policy or planning strategies to address these needs.

Contents

This unit introduces you to the key policy and planning issues associated with the 'production' and 'consumption' of housing. These range from the physical location and sustainable design of new housing, through to the dynamics of the housing market, and the contribution of housing strategies to urban and regional revitalisation. The unit will also develop your skills in designing strategic planning and policy responses to encourage more affordable, appropriate and environmentally sustainable housing outcomes for urban and regional Australia.

Outcomes

The unit aims to familiarise you with the basic structure and operation of housing markets, and the Australian housing industry. You will also gain an understanding of the key policy objectives for housing, including environmental sustainability, affordability, and appropriate design; as well as the regulatory framework for implementing these objectives through the land use planning system.

ARCH 9058 **General Elective 7**

6 credit points. **Session**: 1, 2.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

Objectives

This elective allows an individual to pursue an agreed topic with a member of academic staff or for a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

For individual study arrangements – this is an opportunity to develop independent study skills. The unit is undertaken with an agreement between the student and a supervisor on a topic related to the supervisor's expertise. The student will meet with the supervisor regularly to discuss progress.

For group study arrangements – the unit of study is available to engage in a topic that is organised by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic.

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and/or tutorial exercises.

ARCH 9059 **General Elective 8**

6 credit points. **Session**: 1, 2.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol.

Objectives

This elective allows an individual to pursue an agreed topic with a member of academic staff or for a group of students to pursue a topic proposed by a member of academic staff in a formal learning environment.

Description

For individual study arrangements – this is an opportunity to develop independent study skills. The unit is undertaken with an agreement between the student and a supervisor on a topic related to the supervisor's expertise. The student will meet with the supervisor regularly to discuss progress.

For group study arrangements – the unit of study is available to engage in a topic that is organised by a member of academic staff. This allows a member of staff to teach a topic of special interest or for a visiting academic to teach a subject related to their specialty. Students will participate in lectures, tutorials, or other activities as needed to pursue the elective topic.

Outcomes:

Students will develop an understanding of a special topic through reports, projects, and/or tutorial exercises.

ARCH 9060 **Urban Design Report**

12 credit points. Barrie Shelton. **Session**: 1, 2. **Classes**: Independent investigation. **Prerequisite**: ARCH 9001. **Prohibition**: May not be counted with ARCH (9031, 9045 or 9046) or PLAN (9010, 9011 or 9018). **Assessment**: Urban design report approx 10,000 words (100%).

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban Design and Masters of Urban & Regional Planning students in the Urban Design stream only.

Content

The Urban Design Report is a substantial project involving research conducted over one semester. It will usually take the form of an illustrated report (up to 10,000 words) on an approved urban design subject of the student's choice. The subject may be of a practical bent (eg, review or preparation of an urban design project) or more theoretical (eg, review of a conceptual viewpoint), or it may occupy the middle ground (eg, exploration of a contemporary issue or review/testing of a method). If of a more practical nature, its theoretical underpinning should be explicit. If more theoretical, it should refer to its practical implications.

The report is an opportunity to advance knowledge and skills in a particular area of urban design and so develop a 'professional edge'

Aim, objectives and learning outcomes

The aim of the Report is to enhance abilities and knowledge essential to the practice of urban design.

These include the abilities:

- to define and address a practical or theoretical urban design problem;
- to conduct such a project in an acceptable investigatory manner;
- to think critically about the subject;
- to identify, access and use appropriate and up-to-date information sources, including relevant theory and methods; and

- to present the report, including appropriate illustrations, in a manner that shows both academic and professional competence.

The report must demonstrate the above.

Restrictions>

Permission to continue the Urban Design Report is subject to the approval of a satisfactory research proposal by week 3 of the semester in which the student is enrolled.

Submission and assessment

The Urban Design report is to be submitted by the Friday of the penultimate week of the examinations period for the semester in which the student is enrolled. It will be assessed by two examiners, of which one is not the supervisor.

ARCH 9061 **Architecture in East Asia**

6 credit points. Dr Peter Armstrong. **Session**: 2. **Prohibition**: May not be counted with DESA 2203. **Assessment**: Assessment will be a series of analytical studies in drawn and written form.

Objectives

The unit 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 unit 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 are traced, with cultural interaction and patterns of influence shown in terms of both architecture and its social context.

Outcomes

On successful completion 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;
- To understand the ongoing influence of building traditions in contemporary culture.

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, personal attributes and practical skills.

Practical: Investigations, field work.

DESA 9001 **Graduate Art Studio (Graphic Design)**

6 credit points. Ms Jan Fieldsend. **Session**: 1, 2. **Classes**: 3hrs per week. Practical studio classes, slide lectures. **Assessment**: Attendance, portfolio of studio exercises, research and final project using digital media and presented in either digital or print form.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

The unit offers a systematic approach to understanding and utilising the processes of designing for visual communications. A series of studio lectures and practical sessions provides students with an introduction to design history and basic skills for applying the principles of design. The unit addresses the elements of design, page composition and use of typography and image. As research, students will be required to apply weekly studio exercises created with hand-generated media to a specific contemporary design context using digital software.

Objectives

The unit objective is for students to develop an understanding of the basic principles and processes of visual communication which will provide a basis for digital media design. These will be applied to a range of design contexts using different graphic techniques and media.

Outcomes

The outcomes involve the application of design principles to a range of design situations using hand-generated media. Students apply these exercises to a finished print outcome, using digital processes. The final project submission will demonstrate an understanding of design purpose, suitability and style in a contemporary context. Students will be asked to evaluate design effectiveness and address the use of new technologies in a specified area of visual communication in a digital media presentation.

DESA 9002 **Graduate Art Studio (Graphic Design 2)**

6 credit points. Ms Jan Fieldsend. **Session**: 2. **Classes**: twelve studio sessions (3 hours each). **Prerequisite**: DESA 9001. **Assessment**: Attendance, completion of three studio projects, each addressing the application and integration of type and image in a specified design context.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Objectives

Students will build on the knowledge and skills gained from completion of Graphic Design I.

On completion of Graphic Design 2, students will be able to apply the elements and principles of visual communication in a design context. These include typography, image generation and manipulation, layout and the use of colour and other graphic elements. Students will apply design process in the sending of specific messages to defined audiences to prompt actions. They will be able to demonstrate the application of typefaces and images for print and screen design discuss and evaluate the effectiveness of contemporary design practice and its relationship to design history.

Content

The course offers a systematic approach to understanding and applying design principles in the communication of specified design objectives. There are three studio projects – each project will include a lecture series, a written brief, and the discussion of research methodologies, project specifications and presentation requirements. Emphasis is placed on the juxtaposition of type and manipulated image in different contexts. Students will learn to address issues of suitability, legibility and readability in the dynamic application of type for both print and screen. Students will be required to generate original images based on individual visual research using photography, illustration and other methods. It is anticipated that students will have access to, and be familiar with, digital graphic design programs in order to complete the projects.

Outcomes

The outcomes include presentation of three projects, each addressing an understanding of design purpose, suitability and style in a contemporary context. The first project will be designing for print media, the second is screen-based and the third is self-selected, focusing on students' specific area of research. Students will be able to evaluate design effectiveness and address the use of new technologies in visual communication.

DESA 9003 **Graduate Art Studio (Photography)**

6 credit points. Ms Jan Fieldsend. **Session**: 1. **Classes**: Practical studio classes, slide lectures, class discussions, gallery visits, one to one tutor crit sessions. **Assessment**: Attendance/darkroom practice 15%, test on darkroom practice and techniques 20%, presentation of ideas that reflects upon the relationship of photography to your coursework program 15%, creative ideas/images 20%, technical skills 20%, presentation of finished work 10%.

NB: Department permission required for enrolment. Enrolment numbers are limited by space and equipment constraints. Students should submit written permission from the Art Workshops with their request to enrol. A materials fee applies to some Art Workshops units.

Aims

This practical unit aims to give students an understanding of how photography functions as a contemporary visual medium, including it's historical development and it's different applications in such areas as visual arts, architecture, mass media and digital media. Students will gain knowledge of the principles and practice of camera operations and the production of high quality black and white negatives and prints in small studio style classes. Students will begin to think about ways in which the photographs produced in this unit of study can be used in or relate to their coursework program. For example how darkroom based photography relates to digital media or exploring the connections between architecture and photography. This module

covers the use of 35mm. SLR camera, image composition, use of lighting, film developing, printing photographs and experimental techniques. Photographs of a wide range of subjects such as still lives, land and cityscapes and portraits will be produced. Practical work includes darkroom and studio work and gallery visits.

Objectives

On the successful completion of this unit you will be able to;

i) demonstrate your knowledge of camera operations, film and print developing through darkroom practice and the production of a portfolio of black and white prints.

ii) use an understanding of photography practice and theory to inform decision making in your creative process as well as entering into thoughtful debate.

iii) reflect on your art practice through class and tutor crit sessions and from this point realistically evaluate your own work.

iv) gain an awareness of how photography theory and practice relates your coursework.

Generic Skills

this unit of study you will;

i) have a body of knowledge in the field of photography.

ii) be able to exercise critical judgement, realistic self evaluation and imaginative thinking as outlined in the aims.

iii) be able to apply technical and conceptual skills as appropriate to photographic practice and furthermore develop your ideas about how these skills may be applied to new situations such as in your coursework program.

iv) develop the ability to plan and achieve a goal through a self directed final project.

DESC 9001 **Air-Conditioning Design**

6 credit points. Mr David Rowe. **Session**: N/A in 2004. **Classes**: Lectures. **Prerequisite**: DESC 9067. **Assessment**: 5 assignments (20% each).

NB: This unit of study is offered in odd numbered years only. Not available in 2004.

Objectives

The unit will provide students with skills in the design of air-conditioning systems.

Contents

The unit extends studentsÇ ability to design basic air-conditioning systems for buildings. It covers air-conditioning system selection; design for energy efficiency; quality of indoor air; air distribution; piped services; water treatment; and air-conditioning system components such as fans, coils, filters and heat rejection equipment.

Outcomes

Students should gain the ability to make rational system and component selection decisions and to have practised the design of an air-conditioning system through the set of assignment projects.

Assignments lead students through the processes of air-conditioning system selection, heat load estimation, and the design of air distribution, refrigerant and heat rejection systems.

DESC 9009 **Audio Internship/Audio Project**

6 credit points. Dr Densil Cabrera. **Session**: 2. **Classes**: Studio work under supervision of an experienced practitioner. **Assessment**: Report (60%) and practical demonstration (40 %).

NB: Department permission required for enrolment.

Objectives

The objectives of this unit are to give an appreciation of the approaches that practitioners take in determining what sound they want and how they obtain it in audio recording, PA and broadcasting.

Content

The unit provides experience in the audio profession where theory and concepts learned in the program can be applied in real-world time frames and budgets using the available equipment.

Outcomes

On completion of this unit students will be expected to be able to apply the 'tricks' of the profession to a variety of situations in order to obtain high quality sound and other results required in the industry. They should also be able to deal with clients, musicians, etc. on a professional basis.

DESC 9011 **Audio Production**

6 credit points. Mr Michael Bates. **Session**: 1. **Classes**: Lectures and studio work. **Assessment**: A project and accompanying report.

NB: Permission required unless enrolled in the Audio stream. Enrolment numbers are limited by teaching resources.

The practice of audio production is a form of constructing discourse, with its own poetics – ie, its own grammar, its own conceptual shorthand, its own languages, and a multiplicity of genre, structures and forms that it sources and references albeit often tacitly or transparently.

This unit will look at the current tools and techniques, as well as the underlying strategies, processes and inherent philosophies involved in the various audio production modes. It will compare and contrast broadcast and other media production methods and ideologies including music recording, radio production, sound for picture, and new media, with reference to live sound reinforcement and location recording practices.

The unit will examine various sound design philosophies, conventional and 'non-conventional' production models, different definitions by and of producers and provide by way of context a brief history of the impact on production practice by technological change. The producer's role in the process of the creation of meaning will be examined in cultural as well as technical contexts of compositional practices.

The unit will encourage debate about and a demystification of current production processes and will aim at developing and extending production techniques towards an individual aesthetic.

Objectives

Students will achieve a basic familiarity and proficiency with:

1. Mixing consoles;
2. The fundamentals of multi track recording;
3. Digital Editing;
   And:
4. Demonstrate an ablilty to communicate their ideas, and articulate the reasons for their choices of production methods;
5. Work successfully within a group dynamic.

Assessment

Students are expected to work in groups to produce an audio project in one or more of the following areas: drama, feature, documentary, sound composition, or music recording.

They will be expected to:

1. Participate in the workshops.
2. Complete any class exercises/constructions requested by their due dates.
3. Students will be given additional readings to discuss in classes.
4. Students will submit a script, composition or otherwise detailed proposal for recording and postproduction with detailed raison d'aitre of production values.
6. Produce and present on Audio CD a completed project, including documentation, evidence of background research, a commentary on the production and production outcomes, track sheets, mixing notes. It may be an adaptation or original work. Themes will be discussed in class.

DESC 9014 **Building Construction Technology**

6 credit points. A/Prof Warren Julian. **Session**: 1. **Classes**: Lectures. **Assessment**: 4 assignments (20%, 30%, 25%, and 25%).

Objectives

- To provide students with a knowledge of the environment in which professional engineers operate in the building industry;
- to introduce an understanding of the design and construction of building elements, the fundamentals of heat transfer and effects of external conditions on indoor comfort, and the fundamentals of vertical transportation within buildings;
- to explore the requirements of the Building Code of Australia (BCA); and
- to discuss influences on the indoor environment such as services coordination and vibration.

Content

Students are provided with an appreciation of building construction technology relevant to the work of the building services engineer. The course emphasises aspects of the built environment that are of concern to the building services engineer, particularly in the early design stages.

Outcomes

It is expected that students will acquire an understanding of requirements of the BCA and statutory regulations; a knowledge of principles for the design and construction of building structural elements; space requirements for the integration of

services into the building fabric; and heat transfer through the building skin including solar effects on buildings.

Assignments will test studentsÇ understanding of BCA requirements, processes of structural system selection, interaction between the external and internal environments, and principles of vertical transportation.

DESC 9015 **Building Energy Analysis**

6 credit points. Mr Bruce Forwood. **Session**: 2. **Classes**: Lectures, seminars. **Assessment**: 3 assignments.

Objectives

To acquaint students with the range of analytical and design tools available for low energy building design; to provide the opportunity for students to become proficient at using some of these tools.

Content

Among the techniques and tools explored are: climate data analysis; graphical and model techniques for solar studies; steady state and dynamic heat flow analysis; simplified methods for sizing passive solar elements; computer models of thermal performance; modelling ventilation; estimating energy consumption. Emphasis is given to tools which assist the design of the building fabric rather than building systems.

Outcomes

At the end of the unit it is expected that students will:

- be aware of the importance of quantitative analysis in the design of low energy buildings;
- have an understanding of the theoretical basis of a range of analytical techniques;
- be familiar with the range of techniques available for building energy analysis;
- be able to apply many of these to design analysis;
- be familiar with the range of thermal analysis computer software available; and
- be able to use a software package to analyse the thermal performance of a typical small scale building.

All of the assignments are designed to provide students with hands-on experience of each of the analysis tools.

DESC 9019 **3D Modelling and Photorealism**

6 credit points. Dr Kirsty Beilharz. **Session**: 1, 2. **Classes**: Lectures supplemented by tutorials. **Assessment**: Assessment is based on assignments that are intended to develop and demonstrate understanding of 3D modelling and photo-rendering.

NB: Permission required unless enrolled in the Design Computing, Digital Media or Film and Digital Video streams streams. Enrolment numbers are limited by teaching resources.

Objectives

- An introduction to graphics technologies and photo-rendering;
- Understand specifications of 3D geometric entities within a sophisticated modelling package;
- Assign colour and texture information to geometric entities;
- Generate complex photorealistic images;
- Develop skills processing images;
- Develop an awareness of future developments in modelling and visualization.

Description

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. This unit of study develops conceptual understanding and practical application of these techniques using commercial modelling and rendering packages.

Outcomes

- Conversance with 3D modelling and photo-rendering terminology.
- The ability 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 Edition), Addison-Wesley, Reading, Massachusetts;

Watt, A. (1989) Fundamentals of Three-Dimensional Computer Graphics, Addison-Wesley, Reading, Massachusetts.

DESC 9040 **Electrical Services**

6 credit points. A/Prof Warren Julian. **Session**: N/A in 2004. **Classes**: Lectures. **Assessment**: 4 assignments (25 per cent each).

NB: This unit of study is offered in odd numbered years only. Not available in 2004.

Objectives

- To present basic principles of electricity and magnetism as necessary for an understanding of the application of electrical services in buildings;
- to introduce students to the applications of these principles to electrical distribution in buildings;
- to outline the principles of electric motors, transformers and switchboard design; and
- to introduce elementary principles of illumination and daylighting.

Content

An understanding of electrical services is an essential requirement for building services practitioners involved in the design professions and the construction and building management industries. The course is designed to provide an introduction to these services for recent graduates or diplomates in engineering, architecture or science and for people involved at a professional level in the building industry who do not possess a background in electrical engineering.

Outcomes

It is expected that students will gain basic knowledge of components of the electricity generating and distribution network external to and within buildings; the types and use of cables and enclosures in and around buildings; methods of assessment of loads and cable sizes; principles of operation of transformers and motors and the design of switchboards and earthing, emergency evacuation lighting and early warning information systems; an introduction to the fundamental principles of lighting design for interior and exterior applications; and a basic understanding of data transmission via copper wire and optical fibre.

Assignments will test acquired skills in electrical load estimation and the design of simple electrical distribution and artificial and day lighting systems.

DESC 9042 **Electrics Electronics & Electroacoustics**

6 credit points. Dr Densil Cabrera. **Session**: 1. **Classes**: Modified lectures and laboratory tutorials. **Assessment**: Written assignments (50%) and practical tests (50%).

Objectives

- To give an understanding of electronic devices and terms, measurement units used in audio electronics, and basic DC and AC circuits;
- to demonstrate simple audio circuit characteristics (eg, amplifier/filter characteristics), and simple construction/ maintenance techniques;
- to give practice at reading schematics and circuit diagrams and using audio test equipment; and
- to examine safety aspects of using electrical/electronic equipment.

Content

This unit will give students an understanding of electronics and electronic terms, and experience at using test equipment. Students will learn basic electric theory, electronic components and devices, measurement units, interpretation of schematics and circuit diagrams, use of audio test equipment, basic circuit construction and maintenance, fault-finding and safety issues.

Outcomes

By the end of the unit students will be expected to:

- be able to recognise electronic components as used in audio electronic circuits, and state their function;
- use appropriate units when discussing audio electronic concepts;
- understand the effect of frequency on various electronic devices and circuits;
- given a schematic or circuit diagram of a circuit, be able to explain its general operation, and pinpoint such elements as inputs, outputs, power supply and gain elements;
- be able to use appropriate test equipment correctly to find a simple fault in a circuit, and to analyse sound level and frequency distribution of a sound in a given space;
- be able to construct and test a simple circuit, given a circuit diagram, and to explain and verify the circuitÇs operation; and
- be able to state important precautions to be taken when operating or handling audio components, and safety considerations when dealing with electrical systems.

Students will demonstrate their understanding of the theoretical component of the unit by performance in the written test, and will be required to demonstrate competence in using test equipment.

DESC 9047 **Facilities Management 1**

6 credit points. Dr David Leifer. **Session**: 1. **Classes**: Lectures. **Assessment**: 2 assignments 50% each.

Objective

To give students the tools with which to establish a strategic Facility plan for an organization.

Content

This unit is an introduction to Facility Management: FM is a management discipline, and as such relies on the central topics of business finance, information systems, and of course management per se.

The teaching proceeds from an examination of the purpose of organisations and how the facility assists (or hinders) it achieving its goals. Indeed, explaining this understanding is the subject of the first coursework assignment.

In this first half of the course we will scrutinize what we mean by 'facilities' and consider how these might change as a consequence of technology.

In the second half of the unit we will consider the overlap between the corporate purpose and space need, and the implications for the facility manager. In this regard, Occupational Health and Safety issues are germane.

The second coursework assignment will require attendees to map future corporate needs against the ability of the facility to deliver using appropriate tools to do so.

This unit directly corresponds with AFMA Competencies:

- AFM 1: Manage Facilities, Improve Facility Performance; Manage Risk.
- AFM 2: Develop Strategic Facility Response; Manage Facility Portfolio
- AFM 3: Develop Strategic Facility Response;

This unit Indirectly Corresponds with AFMA Competencies:

- AFM 1: Manage Delivery of Services; Manage Projects.
- AFM 2: Manage Finance.
- AFM 3: Change Management

DESC 9048 **Facilities Management 2**

6 credit points. Dr David Leifer. **Session**: 2. **Classes**: Lectures. **Assessment**: Two assignments of 50% each.

Objective

To give students an understanding of the key sectors of operational facility management, and tools to establish facility management programs.

Content

This unit reviews and develops the learning achieved in DESC 9047 FM1. The first part of the course looks at external constraints on Corporate priorities. This includes the theoretical issues influencing why an organisation locates where it does. It considers the legislative planning framework that might constrain free choice. Space usage is a major commitment for organisations, and the unit discussed workplace options.

Tools for monitoring workplace effectiveness are reviewed.

The second part of the unit will take an overview of four of the major facility operational areas that are amenable to management; Security, Cleaning, Energy, and Repairs & Maintenance, which between them consume the major portion of facilities costs.

Finally the establishment of management practices, policies and procedures will be discussed, and the basis for the second coursework assignment set.

This unit directly corresponds with AFMA Competencies:

- AFM 1: Manage Facilities; Improve Facility Performance; Manage Risk
- AFM 2: Manage Finance; Manage Facility Portfolio

This unit Indirectly Corresponds with AFMA Competencies:

- AFM 1: Manage Delivery of Services; Implement Procurement Outsourcing.
- AFM 2: Develop Strategic Facility Response; Manage Facility Portfolio.
- AFM 3: Develop Strategic Facility Response.

DESC 9049 **Financial and Managerial Accounting**

6 credit points. Dr David Leifer. **Session**: 2. **Classes**: Lectures. **Assessment**: Two assignments (50% each).

Objective

To give students an understanding of financial decision making processes, and an ability to use financial measures in a business context.

Content

Facilities Management is a subset of business management: As such, no 'management' can be exercised without first matching the need for resources against the resources available. This necessarily involves the financial and accounting information systems of the organisation, and the 'tools' necessary to extract information in order to make informed decisions. The unit covers Managerial Accounting in its first half and Cost Accounting in the second.

Students will learn how to interpret the standard historical information regarding organizations via the Balance Sheet, Profit & Loss Statement, and Cash Flow Forecast. Students will gain an appreciation of the underlying assumptions behind these performance measures and will learn how to interpret this information in order to recognize good and poorly performing businesses.

Students will also gain an appreciation of accounting as a forward looking managerial tool for controlling the conduct of an organisation. This will include an understanding of the budgeting process and how it can be utilized to achieve the Facility Management mission.

This unit directly corresponds with AFMA Competencies:
AFM 1: Manage Facilities; Improve Facility Performance;
AFM 2: Manage Facility Portfolio
AFM 3: Facilitate Communication

This unit indirectly corresponds with AFMA competencies:
AFM 1: Manage Risk.
AFM 2: Manage Finance; Develop Strategic Facility Response.

DESC 9050 **Fire Protection Services**

6 credit points. A/Prof Warren Julian. **Session**: 2. **Classes**: Lectures and computer laboratory. **Assessment**: 5 assignments (20% each).

NB: This unit of study is offered in even numbered years only.

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.

DESC 9059 **Hydraulic Services**

6 credit points. A/Prof Warren Julian. **Session**: 2.

NB: This unit of study is offered in even numbered years only.

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 9063 **Light Sources and Luminaires**

4 credit points. A/Prof. Warren Julian. **Session**: N/A in 2004. **Classes**: Lectures and demonstrations. **Prerequisite**: DESC 9072. **Assessment**: 3 assignments (equally weighted) and examination (30%).

NB: This unit of study is offered in odd numbered years only. Not available in 2004.

Objectives

To understand the major light source families; the performance properties of lamps; the various methods of light control; and the design, testing and manufacture of luminaires.

Content

The various methods employed in the production of light and the performance criteria applied to the sources are discussed. Topics covered include: a historical outline of the development of sources; the practical requirements of light sources; black-body radiation; the sun; the sky; gaseous discharges; electro-luminescence; chemiluminescence; incandescent lamps; the

halogen cycle; fluorescence; tubular fluorescent lamps; various high pressure and low pressure discharge lamps. Practical lamps are discussed in terms of luminous efficacy, spectral output, colour rendering, life, supply requirements, control gear, cost, etc.

The design, manufacture, testing and the provision of data on luminaires are discussed. Topics covered include: the requirements of luminaires; methods of light control; the properties of optical systems; refractors; reflectors and diffusers; luminance control techniques; manufacture of luminaires and auxiliaries; codes and provision of photometric data for indoor and outdoor luminaires; the calculation of utilisation factors; luminaire luminances; computerised testing; machine readable photometric data.

Laboratory exercises will demonstrate some lamp characteristics and luminaires are photometered and photometric data calculated.

Outcomes

The student will know the bases of light production and the characteristics of practical lamps, how luminaires operate, how to design reflector systems and relevant safety and other standards.

Students will discover some of the outcomes through laboratory exercises and will demonstrate them in the assignments and examination.

DESC 9064 **Lighting Design**

8 credit points. Prof Warren Julian. **Session**: 1. **Classes**: Lectures and studio. **Assessment**: 5 assignments (3 x 16.7 per cent and 2 x 25 per cent).

NB: This unit of study is offered in even numbered years only.

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 9067 **Mechanical Services**

6 credit points. Mr David Rowe. **Session**: 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).

NB: This unit of study is offered in even numbered years only.

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 9068 **Interactive Multimedia Design**

6 credit points. Dr Kirsty Beilharz. **Session**: 2. **Classes**: Lectures and tutorials. **Assumed knowledge**: DESC (9091 or 9123). **Prerequisite**: Preference given to Design Computing and Digital Media students. **Prohibition**: DECO 2002. **Assessment**: Includes analytical tasks; demonstrated knowledge applied to project work.

NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.

Objectives

- Develop a solid grasp of multimedia authoring and interface design, distinguished by an understanding of aesthetic design principles, design architecture, and interactive interface design.
- Examine different destination contexts and delivery media.
- Understand 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, and media resource efficiency).
- Implement advanced interactivity methods, including: data handling; game design, entertainment and education – user feedback; and interactive navigation.
- Develop a grammatical and conceptual understanding of scripting, treated as an extension of interactive capabilities (through Frame Actions, object-oriented Actions, media and movie control, and using variables and expressions to act on dynamic conditions).
- Learn contextual sound and video control, handling, synchronisation and streaming, include imported media, 2D animation (motion, position, colour, tweening shape).
- Package and optimise projects for presentation or publication.

Description

This unit of study introduces the broad range of technologies that make up multimedia systems and their integration. The course practice involves a focus on interactive multimedia presentation involving graphics, sound, motion and human-computer interaction. 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 with an Internet focus.

Outcomes

- A thorough methodology for designing interactive experience, integrating multimedia.

- A conceptual understanding of human-computer interaction.
- Demonstrated interactive interface design using current software application skills.

Textbooks

Sanders, William B. (2003) Flash MX. Complete Course. Seybold Seminars, Wiley Publishing, Inc., USA.

DESC 9071 **Organisational Analysis and Behaviour**

6 credit points. Dr David Leifer. **Session**: 1. **Classes**: Lectures. **Assessment**: Two assignments (50% each).

Objective

To impart an understanding to students of how individuals, work groups, and organisations interact, and guidance on consequent management concerns.

Content

Organisations exist because individuals can achieve far more when they work together than they can singly. However, individuals have to subordinate their own actions and motives to that of the organisation. This course examines the social science theories that offer explanations allowing organisations to harness the best from the individuals that comprise it. The physical workplace effects individuals, hence organisations.

This course examines five areas:

- The individual in an organisation;
- Groups in an organisation;
- The structure of the organisation;
- The way organisations evolve and change;
- Organizational management.

Textbooks

Buchanan.D & Huczynski.A, Organizational Behaviour: an introductory text, Prentice Hall, 3rd ed. 1997

DESC 9072 **Photo & Colorimetric Concepts & Mensurtn**

4 credit points. Prof. Warren Julian. **Session**: N/A in 2004. **Classes**: Lectures and laboratory classes. **Assessment**: 2 assignments (equally weighted), 2 laboratory work exercises, examination (30%).

NB: This unit of study is offered in odd numbered years only. Not available in 2004.

Objectives

To understand the basic photometric and colorimetric terms, quantities and relationships and be able to apply these in practical and theoretical situations.

Content

This unit introduces the rational system of measurement of lighting qualities and provides the bases for photometric and colorimetric calculations. Topics include: the development of the system of measurement of luminous flux; luminous intensity; illuminance; luminance; reflectance; luminance factor; transmittance; mention of refraction, diffraction and reflection laws; relationships between luminous qualities; basic calculations involved with diffuse surfaces; inverse square law; cosine law; interreflections; Munsell Colour System; CIE Colour System; graphical representation of photometric data; measuring instruments; accuracy; repeatability; colorimetric calculations (chromaticity coordinates Yxy, L*A*B*, Luv, correlated colour temperature, colour rendering indices); the integrating sphere; goniophotometry; distribution photometry. Various measurement and calculation techniques are applied in the laboratory exercises which support the unit.

Outcomes

The student will know the basic photometric and colorimetric systems used in Australian and other national and international standards.

Students will discover some of the outcomes through laboratory exercises and will demonstrate them in the assignments and examination.

DESC 9074 **Project Management**

6 credit points. Dr David Leifer. **Session**: 2. **Classes**: Lectures. **Assessment**: Two assignments (50% each).

Objective

To give the student an understanding of current project planning techniques. To present an overview of a range of modern project delivery concepts and contracts/

Content

Creating and occupation of modern buildings involve the participation of many specialist professionals and contractors, who are required to carry out their tasks on time, within cost, and to the specified quality. An understanding of Project Management is therefore an essential requirement for successful practice by designers and managers engaged in creating and using buildings.

The ability to manage depends upon the availability of appropriate information. Collecting, storing, and maintaining information has resourcing costs. Information needs have to be assessed, and systems produced to ensure that the correct data is collected, stored correctly, and up-dated.

The information has to be presented in a logical form to assist in management. The most frequently used tools are Gantt Charts, and Critical Path Networks. Students will acquire knowledge of the use of these tools in order to fulfill the coursework requirements.

This unit presents:

- An awareness of the design and operation of databases and query languages.
- The resources available to establish, operate and maintain information systems.
- Information need in terms of FM operations, Key Performance Indicators, and Continuous Improvement.
- Information systems and Quality Assurance considerations.
- The range and types of reports required from the information systems also needs prior consideration.

This unit directly corresponds with AFMA competencies:
AFM 1: Manage Facilities; Improve Facility Performance;
AFM 2: Manage Facility Portfolio
AFM 3: Develop Strategic Facility Response; Facilitate Communication

This unit indirectly corresponds with AFMA competencies:
AFM 1: Manage Delivery of Services; Manage Risk.
AFM 2: Manage Finance; Develop Strategic Facility Response.

DESC 9077 **Services Control Systems**

4 credit points. Mr David Rowe. **Session**: 2. **Classes**: Lectures and demonstrations. **Prerequisite**: DESC 9067. **Assessment**: 8 assignments (3 x 5 per cent, 2 x 30 per cent, 3 per cent, 7 per cent, 15 per cent).

Objectives

The unit will provide knowledge of electric control circuits and electric and pneumatic control elements as applied to the design of automatic control systems for air handling and refrigeration systems, and create an understanding of the selection and application of electronic, programmable logic and direct digital control systems.

Content

Automatic control is an essential part of all air-conditioning systems. Satisfactory performance requires not only a well-designed control system but also an air-conditioning system designed to be controllable. This unit addresses practical application of automatic controls to common types of air-conditioning systems. Automatic control principles discussed are applicable to systems other than air-conditioning.

Outcomes

It is expected that students will gain a knowledge of the capabilities and limitations of electric, electronic, pneumatic and computer-based control systems for HVAC applications with an understanding of the types of controllers available to perform automatic control functions; and that they will be able to design automatic control systems for HVAC applications and to prepare and understand control diagrams.

Assignments will test the knowledge gained by students in the above areas.

DESC 9079 **Statistics in Environmental Design**

4 credit points. Dr Simon Hayman. **Session**: 2. **Classes**: Lectures. **Assessment**: 1 assignment.

Objectives

The unit aims to demonstrate the range of statistical tools that can be applied to the analysis of problems in environmental design and person-environment studies, to explore the appropriateness of data collection and analysis techniques, and to provide statistical support for research programs.

Content

Many problems in environmental design and person-environment studies require data collection and analysis. Many such data, especially those concerned with human response, can only be effectively analysed with statistics. This unit covers data gathering, descriptive, inferential and predictive statistics as well as an introduction to multi-variate techniques. The use of computer-based tools is encouraged.

Outcomes
Students should be familiar with a range of statistical tools, be able to demonstrate the application of these tools to a problem in environmental design and/or person-environment studies and be able to utilise appropriate data collection and analysis techniques.

The assignment draws upon a research case study in either environmental design or person-environment studies for primary data. Data description, exploration and analysis will be carried out to find appropriate techniques for the research questions posed.

DESC 9084 **Vertical Transportation Services**
4 credit points. A/Prof Warren Julian. **Session**: 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 modern 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 9085 **Vision and Visual Perception**
4 credit points. A/Prof. Warren Julian. **Session**: N/A in 2004. **Classes**: Lectures. **Assessment**: 3 assignments of equal value.
NB: This unit of study is offered in odd numbered years only. Not available in 2004.

Objectives
To introduce the student to the processes involved in seeing and the perception and appreciation of the luminous environment.

Content
An introduction to the science and art of illumination, examining how individuals maintain contact with and gather information about their environment via their sensory systems, and how this information is dealt with by the brain to create complex perception and awareness of the environment. After a brief general overview of human sensory systems the physiological and psychological processes in seeing are discussed. Topics covered are: the dual nature of light; the physiology of the eye and its musculature; light detection; the visual anomalies; contrast sensitivity; colour vision; adaptation; brightness and lightness. The processes involved in image detection and recognition are discussed including: edge detection; lightness determination; the association of the characteristics of patterns; camouflage; stereopsis; the importance of the visual attributes of tasks, such as alphabets; expectation. Some of the characteristics of seeing are explored in the laboratory, particularly the size-contrast-luminance relationship.

Outcomes
At the conclusion of the unit the student will have a knowledge of the anatomy, physiology and neurology of the visual system related to sight, including anomalies and age-related effects; the processes involved in vision; the distinguishing features of seeing; the physical, psychological and psychophysical processes involved in image detection, figure-ground, colour, form, texture and appreciation.

The assignments will allow the student to demonstrate the achievement of this knowledge some of the work is related to their private environments.

DESC 9086 **The Visual Field and Human Factors**
4 credit points. A/Prof. Warren Julian. **Session**: N/A in 2004. **Classes**: Lectures and laboratory exercises. **Prerequisite**: DESC 9085. **Assessment**: 2 assignments (equally weighted), 2 laboratory reports, examination (30%).
NB: This unit of study is offered in odd numbered years only. Not available in 2004.
<head>Objectives

To show the basis for the standards and practices used in lighting analysis and design.

Content
Development of material dealt with in the unit Vision and Visual Perception to examine full-field vision and the human factors involved in lighting the visual field. Topics covered include: the definition of the visual field with regard to size, luminance, contrast and time; the extension of threshold studies to practical task situations; the evaluation of visual tasks with regard to difficulty and complexity; the development of measures of discomfort and disability glare; the illuminance and glare scales used in practical standards; methods for the assessment of tasks and environments; experimental techniques of evaluation, such as multi-dimensional scaling. Laboratory exercises on the assessment of environments in physical and psychophysical terms are used to support the lectures and demonstrations.

Outcomes
The student will know the bases of the light-technical recommendations in Australian and other national and international standards. They will discover some through laboratory exercises and will demonstrate them in the assignments and examination.

DESC 9088 **Housing Asset Management**
8 credit points. Dr David Leifer. **Session**: 1. **Classes**: Lectures. **Assessment**: Two assignments (50% each).

Objective
To give students the tools to establish an asset maintenance system for mass housing.

Content
This unit will examine the objectives of both private and public mass rental housing providers and consider the role that the built assets play. The buildings per se are a means to ends, as well as a 'product' in their own right. This examination will involve financial considerations of capital and operating costs. Also, 'market' research needs to be considered to ensure that the 'customers get what they want' as their needs and circumstances change over time.

The second half of the unit will look at the principles and practices of managing the fabric of housing. The mechanics of maintenance, and the background systems that have to be out in place in order to keep this aspect of operations under control.

The special considerations of Heritage buildings will be explored.

DESC 9089 **History of Aust Building Construction**
6 credit points. Emeritus Prof HJ Cowan. **Session**: 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 9090 **Audio Systems and Measurement**
6 credit points. Dr Densil Cabrera. **Session**: 2. **Classes**: Lecture, laboratory. **Assumed knowledge**: DESC 9138. **Assessment**: Laboratory, project.

Objectives
- Students will learn to make and understand a wide range of acoustical and electroacoustical measurements, assessed through laboratory work;
- Students will learn major aspects of sound system design, assessed through project work;
- Students will work in small groups in laboratory and project work;
- Audio Systems and Measurement will develop knowledge and practical skills in electroacoustics; and

- The laboratory and project work will extend thinking and personal skills, so that students can apply the course content to new situations.

Outcomes

Upon completing Audio Systems and Measurement, students will be expected to understand the implementation and limitations of a wide range of acoustical measurement techniques, such as sound pressure, sound intensity, sound power, source directivity, reverberation, intelligibility, echo interference, subjective quality, and component distortion. Students will also be expected to be able to design sound reinforcement systems, and to model system performance using various theoretical techniques.

DESC 9091 **Digital Media Production**

6 credit points. Dr Kristy Beilharz. **Session**: 1, 2. **Classes**: Lectures and tutorials. **Corequisite**: DESC 9139 Design Computing & Digital Media Intro. **Assessment**: Includes analytical tasks; using capturing, editing and production skills and demonstrated knowledge of digital media production applied to a folio of digital elements.

NB: Permission required unless enrolled in the Digital Media stream. Enrolment numbers are limited by teaching resources.

Objectives

- Develop knowledge of the background of digital media;
- Understand design concepts for digital media;
- Develop an understanding of digital media types and processes;
- Develop an understanding and skills needed to prepare media for integration in different outputs – CD-ROM, the Internet, DVD, etc.

Description

This unit of study provides foundational knowledge and understanding of digital media formats and production. It prepares the student with production skills that will be implemented and integrated in related interactive multimedia design and Web site design units of study.

Outcomes

- An in-depth understanding and practical experience in the production of digital media for interactive multimedia on CD-ROM and Internet-based applications.
- The ability to critically assess the resources needed and technical demands required for a digital multimedia project.
- An understanding of production processes.
- Skills and samples demonstrating basic image, sound and video production.

DESC 9092 **3D Animation 1**

6 credit points. Dr Kirsty Beilharz. **Session**: 1, 2. **Classes**: Lectures and tutorials. **Assumed knowledge**: DESC 9019. **Assessment**: Project work involving design and implementation of animation, rendering, lighting and modelling.

NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference to students in the Design Computing, Digital Media or Film and Digital Video stream.

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 skeleton based animation in the context of 3 dimensions using industry standard technologies.

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.

DESC 9095 **Design Data Management**

6 credit points. Dr A Tuzmen. **Session**: 2. **Classes**: Lectures and tutorials. **Assessment**: Design and implementation of databases using spreadsheet, relational database, and semantic product modelling paradigms.

Objectives

- Introduce the theoretical bases of database management systems;
- Teach the design of data models and their implementation in database management systems; and
- 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; and
- 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; and
- 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. Prof Mary Lou Maher. **Session**: 2. **Classes**: Studio and lectures. **Assumed knowledge**: DESC 9100 or DESC 9101 or equivalent. **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 unless enrolled in the Building, Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.

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; and
- 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; and
- 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).

DESC 9097 **Digital Communication in Design**

6 credit points. Dr Ayca Tuzmen. **Session**: 1. **Classes**: Lectures, tutorials, group projects. **Assumed knowledge**: DESC 9123. **Assessment**: Case study (50%), collaborative project (50%).

NB: Permission required unless enrolled in the Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.

Objectives

- To provide a high level understanding of networks and protocols;
- To understand in more depth the differences between asynchronous and synchronous CMC; and
- 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; and
- Have an understanding of the effective use of CMC in design.

DESC 9099 **How Designers Think**

6 credit points. Prof. John Gero. **Session**: 2.

Objectives

The aim of this unit is to introduce the cognitive science approach to the understanding of how designers think. Knowledge about how designers think underlies the development of modern computational support tools for designers.

Content

Knowledge structures and methods of protocol analysis of human designers are covered. Results from such studies of designers are presented and models of designing developed from these results including cognitive structures pertinent to designing.

DESC 9100 **Introduction to Archicad**

4 credit points. Mr Paul Murty. **Session**: 1, 2. **Classes**: On-line tutorials and project notes. **Prohibition**: DESA 1201. **Assessment**: Tutorial submission (20%), modelling project (80%).

NB: It is strongly recommended that DESC 9100 & DESC 9101 are not taken in the same semester

Objectives

- To provide an overview of the ArchiCAD working environment;
- To introduce the basics of CAD modelling and 3D animation; and
- 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; and
- An understanding of CAD and CAD file formats.

DESC 9101 **Introduction to Autocad**

4 credit points. Mr Paul Murty. **Session**: 1, 2. **Classes**: On-line tutorials and project notes. **Prohibition**: DESA 1202. **Assessment**: Tutorial submission (20%), modelling project (80%).

NB: It is strongly recommended that DESC 9100 & DESC 9101 are not taken in the same semester

Objectives

- To provide an overview of the AutoCAD working environment;
- To introduce the basics of CAD modelling and documentation; and
- 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 AutoCAD 2000 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; and
- An understanding of CAD and CAD file formats.

DESC 9103 **Virtual Architecture**

6 credit points. Prof. Mary Lou Maher. **Session**: 2. **Classes**: Lectures and tutorials. **Assumed knowledge**: DESC 9097, DESC 9019 or DESC 9096. **Assessment**: Essay (30%), Virtual Architecture design (70%).

Objectives

- To understand the different types of virtual architecture;
- To develop design principles in creating new virtual architecture; and
- 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; and
- An appreciation of different design styles for virtual architecture.

Textbooks

Maher, M. L., Simoff, S. and Cicognani, A. (1999) Understanding Virtual Design Studios, Springer Verlag, London

DESC 9105 **Neural Network Architecture and Applicat**

6 credit points. Dr David Gunaratnam. **Session**: 1. **Classes**: Lectures and tutorials. **Assessment**: 3 assignments (2 x 30%, one 40%). Students have the option of selecting a problem, from a domain of interest to them, for the 40 per cent assignment.

Objectives

The unit aims to:

- introduce students to a number of neural network computational models available for solving a variety 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; and
- present the basis for a number of the leaerning algoithms 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 Perception, Radial Basis Function, Kohonen, Probabilistic and Generalised regression networks along with 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; and
- 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 9106 **Daylight in Buildings**

4 credit points. Dr Simon Hayman. **Session**: 1. **Classes**: Lectures. **Assessment**: Design or research study.

NB: This unit of study is offered in even numbered years only.

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

DESC 9111 **Energy Management in Buildings**

6 credit points. Dr David Leifer. **Session**: 2. **Assessment**: Two assignments (50% each).

Objective

To give students an understanding of energy consumption issues in buildings through both design and through operation. To give students an awareness of energy auditing, and current energy conservation techniques.

Content

This unit is primarily concerned with the management and control of electrical power delivered via the grid.

We start with the commercial electricity sales environment; the rental of transmission lines, the rental of the Utility company's infrastructure, the Non-Fossil Fuel Obligation, and Tariff structures.

We will concentrate on the processes and the considerations involved in undertaking an energy audit, which will also be the focus of Assessment assignment 1. The options for demand management, including outsourcing will be examined.

Passive Energy design, which 'locks in' future energy usage will be presented. Active energy systems and their fundamentals – lighting, air conditioning, hot water, ventilation, vertical transportation, and machinery, will be reviewed.

Finally methods of assessing energy performance including computer simulation will be covered.

DESC 9112 **Facilities Management 3**

6 credit points. Dr David Leifer. **Session**: 1. **Classes**: Lectures. **Assessment**: Two assignments (50% each).

Objectives

To give students tools to assess the financial viability of carrying out facility management tasks through in-house or out-sourced labour. To expose students to the range of service contracts available.

Content

This unit deals with facilities services delivery.

Initially Facility Managers must identify and define the services that are needed, and that their employers are willing to endorse to sustain the facilities for which they are responsible. Facility Managers then have to assess the best means of having those services delivered. The advantages and disadvantages of in-house and outsourced servicing need to be considered.

An understanding of Workplace Relations will be essential as most FM tasks are labour intensive. Dealing with direct in-house labour demands more of the Facility Manager than out-sourced labour.

Whatever the decisions on in-sourcing or out-sourcing, work specifications need to be developed, and means of performance measurement derived. Allocating the responsibility for supervision and policing of the work has to be defined.

If in-house, work needs to be programmed and resourced. If out-sourced, then various forms of contracting will need to be considered, and a tendering process undertaken.

Change management is needed in moving from one form of servicing to another.

This unit directly corresponds with AFMA competencies:

AFM 1: Manage Delivery of Services; Implement Procurement Outsourcing

AFM 2: Manage Workplace Relations

AFM 3: Manage Change

This unit indirectly corresponds with AFM competencies:

AFM 1: Manage Facilities; Improve Facility Performance; Manage Risk.

AFM 2: Manage Finance; Develop Strategic Facility Response; Manage Workplace Portfolio.

AFM 3: Develop Strategic Facility Response.

DESC 9115 **Digital Audio Systems**

6 credit points. Dr Densil Cabrera. **Session**: 1. **Classes**: Ten lectures (3 hours each) Three laboratory sessions (3 hours each). **Assessment**: Three assignments: 70% Three laboratory reports: 30%.

NB: Permission required unless enrolled in the Audio stream. Enrolment numbers are limited by teaching resources.

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 9116 **Loudspeaker Design**

6 credit points. Dr Densil Cabrera. **Session**: 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; and
- Objective and subjective testing of systems.

DESC 9117 **Sound Design for New Media**

6 credit points. Mr Michael Bates. **Session**: 1, 2. **Classes**: Lectures, computer lab, and studio sessions. **Assessment**: Project work (50%), written assignment (35%), class attendance and participation (15%).

NB: Permission required unless enrolled in the Audio, Digital Media or Film and Digital Media stream. Enrolment numbers are limited by teaching resources.

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; and
- 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; and
- 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.

Textbooks

Chion, Michele Audio Vision. Columbia U. Press 1994
Altman, Rick (ed) Sound Theory/Sound Practice NY Routledge 1992
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 Interiority 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

DESC 9118 **Building Design Practice 1**

6 credit points. Dr Simon Hayman. **Session**: 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. It is suitable for those with little or no building design experience.

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 Simon Hayman. **Session**: 1. **Classes**: Lectures and seminars. **Prerequisite**: DESC 9118 or equivalent. **Assessment**: Assignment.

Objectives

This unit develops the performance-based approach presented in Building Design Practice 1 with more complex and interacting issues. It is suitable for those with building design experience and 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 9120 **Data Mining**

6 credit points. Prof. John Gero. **Session**: 1. **Classes**: Lectures and tutorials. **Assessment**: Exercises and an assignment.

Objectives

- To understand the concepts and methods of data mining; and
- 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 9122 **Expert Systems**

6 credit points. Dr Mike Rosenman. **Session**: 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; and
- 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; and
- 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.
Jackson, P. (1999) Introduction to Expert Systems, Addison-Harlow, England.
Hayes-Roth F, Waterman D A and Lenat D B (1983). Building Expert Systems, Addison-Wesley, Reading, Mass.

DESC 9123 **Web Site Design**

6 credit points. Dr Ayca Tuzmen. **Session**: 1, 2. **Classes**: On-line exercises and tutorials. **Assumed knowledge**: DESC 9139. **Prohibition**: DECO 1002. **Assessment**: Home page design (20%), web design portfolio (80%).

NB: Permission required unless enrolled in the Design Computing or Digital Media streams. Enrolment numbers are limited by teaching resources.

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 sites; and
- 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; and
- Skills in using Web site design and publishing software.

DESC 9124 **Advanced Film Production**

6 credit points. Mr John Buckmaster. **Session**: 2. **Classes**: One 3-hour class per week plus a Saturday film shoot. **Assumed knowledge**: DESC 9127 and DESC 9130. **Assessment**: Assessment is largely project based, it consists of the following tasks: (1) Group film project (60%); (2) 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: Permission required unless enrolled in the Film and Digital Video stream. Enrolment numbers are limited by teaching resources.

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 an optical print or video.

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

Altman, Sound Theory Sound Practice, Routledge, 1986
Pincus Edward & Steven Ascher, The Film Makers Handbook, Penguin Books, 1983

DESC 9125 **Digital Video Design and Production**

6 credit points. Dr Mike Rosenman. **Session**: 1, 2. **Classes**: Lectures and tutorials. **Assessment**: Includes analytical tasks; using capturing, editing and production skills and demonstrated knowledge of digital video design and production applied to a major assessment incorporating all stages of digital video production.

NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.

Objectives

- Acquire digital production skills demonstrated by a final project;
- Understand issues associated with video quality and compression;
- Develop knowledge of output formats (codecs) for digital Video;
- Understand the steps involved in digital video production;
- Develop skills for shooting digital video.

Description

This unit of study presents the student with a foundational perspective of the art and technology of digital video. Through practical exercises, the student will learn about core technologies associated with digital video production: video compression, audio synchronization, interfacing and capturing. Upon these basic skills, students will apply their knowledge to digital editing, transitions, digital video effects and batch rendering.

Outcomes

- Students will emerge with a video clip demonstrating the stages of digital video production, capturing, compositing, editing and rendering of digital video;
- Students will accrue knowledge and understanding of essential processes, practices and formats used in digital video design and production.

Textbooks

Altman, Sound Theory Sound Practice, Routledge, 1986
Media 100 Digital video System User Guide, 1998
Adobe After Effects

DESC 9126 **Documentary Digital Video**

6 credit points. Mr John Buckmaster. **Session**: 1. **Classes**: Thirteen 3 hour sessions with videotaping and editing work of the student's projects occurring outside of class time. **Assumed knowledge**: DESC 9125. **Assessment**: Students must present a group paper on a documentary maker – 20%. Students must pitch their group documentary idea and present a paper edit- 20%. Documentary project – 60%.

NB: Permission required unless enrolled in the Film and igital Video stream. Enrolment numbers are limited by teaching resources.

Objectives

This course will instruct students in the use of digital video and non-linear digital editing for documentary making. Documentary making has become a hugely popular area in film making in the last twenty years. The low cost of the digital video format has let to a proliferation in new video making techniques. This course will introduce the techniques of video making non-linear digital editing for documentary making.

Content

This course will examine the following topics: scripting and story boarding; camera techniques for documentary making: interview techniques; finding the voice-using ingredients, pace, style and content; editing techniques for documentary making; styles of documentary construction.

Outcomes

Students will have gained knowledge in the following areas: narrative construction in documentary making; camera skills and techniques; editing skills for documentary making both analytical and technical. Students will produce a short documentary of up to twelve minutes length.

Textbooks

Leslie Devereaux & Roger Hillman 1986, Fields of Vision, University of California Press.
Ross Lansell, 1982The Documentary Film in Australia, Cinema Papers

DESC 9127 **Film Production**

6 credit points. Mr John Buckmaster. **Session**: 1. **Classes**: One 3-hour class per week plus a Saturday film shoot. Class participation. **Assessment**: Three project-based 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: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.

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

Altman, 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 9128 **Time, Memory and Identity**

6 credit points. Mr John Buckmaster. **Session**: 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 (50%).
NB: Permission required unless enrolled in the Film and Digital Video stream. Enrolment numbers are limited by teaching resources.

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)

DESC 9129 **Screen Studies**

6 credit points. Mr John Buckmaster. **Session**: 1, 2. **Classes**: Weekly, 3-hour sessions. **Assessment**: Three assignments: – A 2500 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.
NB: Permission required unless enrolled in the Digital Media or Film and Digital Video stream. Enrolment numbers are limited by teaching resources.

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. Film history and theory is discussed with reference to the current nature of the industry and other disciplines such as semiotics and anthropology. 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

Altman, Sound Theory Sound Practice, Routledge, 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. Mr John Buckmaster. **Session**: 1. **Classes**: One 3-hour lecture or workshop per week over thirteen weeks. **Assessment**: 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 running 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

Altman, Sound Theory Sound Practice, Routledge, 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, New York:Delta 1979.

King, Viki, Wow to write a movie in twenty one days: the inner movie method. 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 9132 **Internet Programming 1**

6 credit points. Dr A Tuzmen. **Session**: 2. **Classes**: Lectures and tutorials. **Assessment**: Exercises and an assignment.

NB: Permission required unless enrolled in the Design Computing or Digital Media streams. Enrolment numbers are limited by teaching resources.

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; and
- to learn Javascripting.

Content

Software development is introduced through an overview of Javascripting and its use in creating interactive Web sites. Students will then learn structured programming and will be introduced to object-oriented programming techniques in the context of the development of Web site 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 site design and control.

DESC 9133 **Architectural Acoustics Practice**

6 credit points. Dr Densil Cabrera. **Session**: 2. **Classes**: Lectures. **Assumed knowledge**: DESC 9138 or DESC 9012. **Assessment**: Two projects – 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; and
- 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 9134 **Audio Seminar**

6 credit points. Dr Densil Cabrera. **Session**: 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 9135 **Digital Audio Production with Protools**

6 credit points. Mr Michael Bates. **Session**: 1. **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: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Audio Design stream.

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.

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 9136 **Music Technologies**

6 credit points. Mr Michael Bates. **Session**: 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.

NB: Permission required unless enrolled in the Audio stream. Enrolment numbers are limited by teaching resources.

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; and

- 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 9137 **Spatial Audio and Virtual Sound Spaces**

6 credit points. Dr Densil Cabrera. **Session**: 1. **Assessment**: Two assessment tasks – a theoretical exercise-based assignment, and a practical production-based assignment. The practical assignment will be flexible enough to accommodate a wide range of student interests.

Content

- Stereophonic, surround sound and binaural sound production techniques;
- Theory of auditory space;
- Spatial sound representation via single channel systems;
- Beyond localisation: spatial sound quality;
- Impulse response theory, measurement and prediction, and convolution;
- Auralisation for architectural design;
- Virtual sound space synthesis;
- Hybrid real/virtual sound spaces; and
- Interactive sound spaces and Internet applications.

Outcomes

Students will acquire:

- strong theoretical foundations in spatial audio;
- experience in spatial audio systems (physical and computational);
- an appreciation of spatial audio potential of emerging technologies; and
- an ability to integrate spatial audio into their broader practice.

DESC 9138 **Architectural and Audio Acoustics**

6 credit points. Dr Densil Cabrera. **Session**: 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; and
- 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 9139 **Design Computing & Digital Media (Intro)**

6 credit points. Dr Andy Dong. **Session**: 1, 2. **Classes**: Lectures and studio. **Prohibition**: DECO 1001, DECO 1011, DECO 1021. **Assessment**: In-class participation demonstrated through ability to answer questions and lead discussions; Fortnightly assignments; and a major Final report.

NB: Permission required unless enrolled in the Design Computing or Digital Media stream. Enrolment numbers are limited by teaching resources.

Objectives

- Develop the student's knowledge of the field of design computing and digital media;
- Introduce disciplinary areas of design computing including digital design representations, computer programming and computer-mediated collaborative design;
- Introduce topics in the social contexts of design computing;
- Present a broad perspective on the use of computers and digital media for Designing.

Description

Design computing is an interdisciplinary field that incorporates design, computing science and cognitive science. This unit of study provides a comprehensive and strategic overview of the theory and practice of design computing and the role of digital media in design computing. The unit offers the student a broad perspective on the use of computers and digital media for designing, for embedding computation and digital media in designed objects, for interacting with products, and for studying the process of designing.

Outcomes

Students develop a basic working knowledge of computing theory and practice on the tools and technologies supporting design computing and digital media including operating systems, programming languages, networks, storage devices, input devices, output devices, and categories of design computing software. Students' knowledge of design computing will be assessed through a final report on the use of design computing in an emerging field. Familiarity with the disciplinary areas in design computing will be demonstrated through bi-weekly assignments.

Textbooks

William J. Mitchell and Malcolm McCullough, Digital Design Media, Second Edition.

DESC 9140 **Internet Programming 2**

6 credit points. **Session**: 1. **Classes**: Lectures and tutorials. **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; and
- to learn Perl.

Content

The ability to use Web sites as interfaces to other programs such as databases and spreadsheets relies on extracting information from the page. Similarly producing dynamic Web sites that include information calculated by other programs enhances the utility of the 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 learn Perl programming/scripting in the context of the development of dynamic Web sites. 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 site design.

DESC 9141 **3D Animation 2**

6 credit points. Dr Kirsty Beilharz. **Session**: 1, 2. **Classes**: Lectures and extensive tutorials. **Prerequisite**: DESC 9092. **Assessment**: Project work involving design and implementation.

NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference to students in the Digital Media or Film and Digital Video stream.

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. This unit of study augments and extends those processes and that theory introduced in 3D Animation 1 and introduces compositing, advanced Nurb and Particle animation techniques.

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 9142 **Advanced Interaction Design**

6 credit points. Lecturer to be advised. (Interim: Dr Kirsty Beilharz). **Session**: 1. **Classes**: Lectures and tutorials. **Assumed knowledge**: DESC 9068 and DESC 9123. **Assessment**: Major multimedia project evaluating understanding of interaction, navigation and multimedia design; minor project; and research paper.

NB: Permission required unless enrolled in the Digital Media stream. Enrolment numbers are limited by teaching resources.

Objectives

- Develop multimedia development methodologies;

- Extend understanding and implementation of interactivity and navigation design;
- Develop strategies for management of digital media;
- Understand the scope of interfacing technologies – haptic, physical, virtual;
- Develop an understanding of human cognitive and motor capabilities;
- Advance skills in authoring and programming multimedia;
- Understand integrated multimedia systems.

Description

Students in this unit of study will be introduced to multimodal VI and develop conceptual knowledge of HCI. In addition, key areas learned and practised in this unit are authoring, integration of media and interactive interface design that extend from DESC 9068 Interactive Multimedia Design. The unit will address cross-cultural aspects of design and perceptions of quality. Human cognitive and motor capabilities will be considered in the design of multimedia. Effective communication through multimedia and general principles of information design will be explored. Principles of effective design for computational media and developing an engaging interactive user interface are the main focuses. The scope of exploration will extend to digital interface devices and site-specific multimedia installation.

Outcomes

- A broad understanding of available technologies and methodologies for integrating multimedia.
- Demonstrated principles of interactivity and design communication through the authoring of an interactive multimedia project using current development software and interface devices.

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 9145 **Sustaining the Built Environment**

6 credit points. Mr Bruce Forwood. **Session**: 1. **Classes**: Lectures, seminars. **Assessment**: Written assignments.

Aims

The unit will aim to heighten student's awareness of the major environmental and resource issues facing the planners and designers of the built environment; introduce and explore concepts of ecological sustainable development as they apply to the built environment and debate the roles that designers and planners should play in the development of a sustainable future.

Content

An environmental history of 20th century urban growth and development; the impact of climate change and environmental degradation upon the planning and design of the built environment; energy and resource flows in the built environment; the dimensions of ecological sustainable development; urban and regional planning perspectives on a sustainable built environment; the roles of governments, industries and professions in creating a sustainable built environment; the role of architects in creating a sustainable built environment.

Objectives

Students will be expected to take part in structured discussions relating to the design and planning of a sustainable built environment and prepare a personal response to the issues raised in these discussions and other course material.

The unit will broaden students understanding of the significance of sustainable architectural practice and planning upon creating a sustainable future built environment.

DESC 9146 **Climate, Comfort and Sustainable Design**

6 credit points. Mr Bruce Forwood. **Session**: 1. **Classes**: Lectures, seminars. **Assessment**: Written assignment, project.

Aims

To establish the importance of climate and human thermal comfort as external and internal influences upon the form and substance of sustainable buildings; introduce a basic understanding of the thermal and other processes which create climate and influence human thermal interactions with their environment; introduce techniques for analysing and interpreting climates and specifying appropriate thermal dimensions for the spaces within sustainable buildings.

Content

- Climate: the meaning of the concept of climate; the elements of climate – solar energy, the atmosphere, longwave radiation, the carbon cycle, the water cycle, winds, the earth's energy balance; the causes and likely impacts of global climate change; the influence of climate upon built form; the consequences of climate change upon building design practice; climate data and its interpretation.
- Thermal Comfort: energy balance of the human body and its thermal environment; thermal spatial dimensions and their impact upon human thermal sensations; traditional methods for defining and measuring thermal comfort; cultural and climatic influences upon thermal comfort; the Adaptive Model of thermal comfort and its application to sustainable design of buildings.
- Buildings as environmental filter.

Objectives

Students will be expected to demonstrate competence in understanding the operation of climates at global and local scales and in interpreting and analysing climate data for building design purposes; their ability to define appropriate thermal dimensions for buildings and their ability to apply this knowledge and these skills to a simple design exercise.

The unit will broaden students understanding of the significance of considering climate and thermal comfort as essential design criteria for creating a more sustainable built environment.

DESC 9147 **Sustainable Building Design Principles**

6 credit points. Mr Bruce Forwood. **Session**: 2. **Classes**: Lectures, seminars. **Assessment**: Written assignment, project.

Aims

To develop an understanding and knowledge of the principles underlying sustainable building design practice, in particular those principles which relate to the environmental attributes of the building fabric, the creation of healthy and comfortable interior environments, the selection of appropriate building materials and the minimisation of embodied and operational energy consumption.

Content

Environmental and health impacts of building materials; indoor air quality; embodied energy of building materials; understanding energy flows between buildings and their environment; the principles of passive solar heating strategies in cold and temperate climates; strategies for controlling solar and other loads on the building fabric; principles of cooling by natural ventilation; low energy mechanical cooling strategies; hybrid and mixed-mode cooling strategies.

Objectives

Students will be expected to demonstrate their knowledge of the relevant properties of building materials and construction elements which impact upon the environmental performance of buildings and to demonstrate their competence at applying this knowledge to the formulation of appropriate sustainable design strategies.

DESC 9148 **Sustainable Building Design Practice**

6 credit points. Mr Bruce Forwood. **Session**: 2. **Classes**: Lectures, seminars. **Assessment**: Written assignment, project.

Aims

To explore the implications of applying sustainable building design principles on design practice; to evaluate and critique the sustainability of current design practice through an examination of current theory and professional ethics and the exploration of case studies; to explore the development of new sustainable design paradigms.

Content

The response of architectural practice to the rise of environmentalism in the 20th century; the emergence of passive solar architecture; ecologically sustainable design [ESD] and its impact upon current design practice; real and perceived barriers to a more sustainable design practice; impact of education and theory on practice; expressing the values of sustainability in built form; towards a new sustainable design paradigm

Objectives

Students are expected to demonstrate an ability to critique current building design practice in relation to sustainable design principles; to demonstrate their knowledge of key recent buildings which their designers claim to be sustainable and their ability to evaluate these claims; to enunciate a personal position

on the impact of applying sustainable design principles on future design practice.

The unit will broaden students understanding of the principles of sustainable building design and and their impact upon future design practice.

DESC 9149 **Sustainable Design Workshop**

6 credit points. Mr Bruce Forwood. **Session**: 1, 2. **Classes**: Project work – private study. **Assessment**: Project.

Aims

The unit of study provides an opportunity for applying the principles of sustainable design practice to a particular design project.

Content

The exploration of sustainable design principles in response to a design brief and the demonstration that the resulting design solution satisfies the intended sustainable design criteria.

Objectives

Students are expected to demonstrate an ability to respond to the requirements of a design brief in order to produce a building design which demonstrably embodies the principles of sustainable design.

The unit will broaden students' understanding of the principles of sustainable building design and their impact upon future design practice.

DESC 9150 **Sustainability Research Project**

6 credit points. Mr Bruce Forwood. **Session**: 1, 2. **Classes**: Project work – private study. **Assessment**: Project.

Aims

The unit will provide an opportunity for students to undertake supervised research on a topic related to Sustainable Design.

Content

The unit provides students with the opportunity for intensive study of a particular aspect of sustainable building design. The study may take the form of a state of the art review, case studies, modelling, field study or a position paper on a particular issue.

Students undertaking a masters dissertation could use this unit to explore and develop a potential topic.

Objectives

Students are expected to demonstrate their ability to undertake, document and report upon a small piece of structured research related to Sustainable Design.

The unit will broaden students understanding of the principles of sustainable design.

DESC 9151 **Building Services Systems Overviews**

6 credit points. A/Prof Warren Julian. **Session**: 1. **Classes**: Intensive mode. **Prohibition**: May not be counted with DESC 2101. **Assessment**: Assignments.

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); and
- 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.

DESC 9152 **Lighting Design Masterclass**

6 credit points. A/Prof Warren Julian. **Session**: 1. **Classes**: Intensive studios. **Assumed knowledge**: Lighting design fundamentals.

NB: Department permission required for enrolment. This unit of study is offered in even numbered years only.

Content

A studio-based program of advanced lighting design conducted by experienced practicing lighting designers. Application of lighting knowledge to the design of a lighting solution and its presentation in a form suitable for non-expert clients.

Objectives and learning outcomes

The student will learn how lighting design is conducted in a studio environment, from the brief, to understanding site conditions, to preliminary design, to the final design and client presentation skills.

DESC 9153 **Lighting Internship**

6 credit points. A/Prof Warren Julian. **Session**: 1, 2. **Classes**: Fieldwork. **Assumed knowledge**: Lighting design fundamentals. **Assessment**: Log book signed by lighting designer; pass/fail only.

NB: Department permission required for enrolment. Graduate Diploma or Masters students only.

Content

A program of practical experienced gained in lighting design practice. The student must complete at least 120 hours of full or part-time experience, supervised by a practicing lighting designer. A log book of work undertaken, signed by the supervisor must be submitted on completion.

Objectives and learning outcomes

The student will experience lighting design practice under the guidance of an experienced lighting designer. Teamwork and design skills and office/ job management will also be gained.

DESC 9154 **Lighting Design Software**

6 credit points. A/Prof Warren Julian. **Session**: 1. **Classes**: Intensive. **Assumed knowledge**: Lighting design fundamentals. **Prerequisite**: 24 credit points. **Assessment**: Four assignments of equal value.

NB: Graduate Diploma or Masters only. This unit of study is offered in even numbered years only.

Students will be learn how to use software for the design of interior and exterior lighting. Rendering software will also be discussed and demonstrated. Assignments requiring the use of software, such as AGI, will demonstrate the achievement of the objectives.

Content

Types of software including product design, photometry, etc but emphasizing interior and exterior lighting design. Data formats. Availability of data. Exporting and importing (eg, with AutoCAD). Basics of AGI and exterior software. Workshops and tutorials.

Objectives and learning outcomes

Students will understand lighting design software; understand limitations and calculation models; gain some experience in its use and understand the import and export of data.

DESC 9155 **Visual Perception and Digital Imaging**

6 credit points. Dr Kirsty Beilharz & Hon. Assoc. Terry Purcell. **Session**: 2. **Classes**: Lectures & studio tutorials. **Prerequisite**: DESC 9091 Digital Media Production. **Assessment**: Includes analytical tasks and using capturing, software skills and knowledge about visual perception applied to a folio of digital images.

NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Digital Media stream.

Objectives

- Develop an understanding of the human visual sensory system;
- Understand how we perceive texture and surfaces according to light;
- Utilise knowledge of colour perception in design and imaging;
- Understand digital handling of light and colour in capture and computational devices;
- Develop skills to compose and manipulate digital images with particular relation to colour, light and visual perception.

Description

This unit of study investigates human visual perception, optical sensory systems and the way we interpret light through surface, texture and colour. This knowledge is applied to the digital capture of images and software manipulation building on the foundations of visual perception.

Visual perception involves surface and light: light in the environment, its relation to design, visual sensory systems, adaptation, textured and patterned surfaces, refraction, illumination and reflection. Colour perception and its influence on design and digital image composition is explored: metameric and complementary colours, partative and subtractive colour mixing, colour systems, hue, saturation, contrast, light levels, perceptual affects of adjacent colour, backgrounds, distance and environmental factors influencing visual images. Emotional, schematic and structural design effects of colour are considered.

Human visual perception is related to photographic and digital capture. Aperture, depth of field, colour temperature, white balance, how digital devices (cameras, scanners, monitors) handle light and colour will be discussed. The computational focus of this unit of study relates manipulation and management of digital images, light, colour and visual effects to our perception. The student will learn colour management processes and adjustment methodologies for hue, saturation, levels, blur, clarification and skills for image composition, framing and presentation.

Outcomes

A folio of images captured and processed according to knowledge of visual perception and technical skills in digital imaging.

DESC 9156 **Digital Compositing and Visual Effects**

6 credit points. Roy Malhi. **Session**: 1, 2. **Classes**: Lectures and lab tutorials. **Prerequisite**: DESC 9091 or DESC (9092 and 9125 and 9117). **Assessment**: Project work demonstrating knowledge of media integration, resulting from production processes considered during the unit of study.

NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Digital Media stream.

Objectives

- Develop knowledge of digital imagery, motion graphics, visual effects, sound synchronization and digital video;
- Understand media types and functions;
- Develop an in-depth understanding of the digital image and visual effects production process;
- Develop skills using compositing, 3D animation, image editing, vector imaging, sound editing, video editing and burning (production) software applications;

Description

Digital compositing is the integrated result of at least two source images or components. This unit of study focuses on developing an understanding of media types and functions. Students will expand media creation skills, utilising previous and newly acquired knowledge to develop a flowing, unified result.

Outcomes

Students will produce an integrated sequence from multiple images with synchronised sound, demonstrating understanding of the digital image and visual effects production process (output on VHS, CD, DV or DVD).

DESC 9157 **Digital Media Design Studio**

12 credit points. To be advised (interim: Dr Kirsty Beilharz). **Session**: 1. **Classes**: Lectures and studio. **Prerequisite**: DESC (9019 and 9068 and 9091 and 9123 and 9139). **Corequisite**: DESC 9142. **Assessment**: Report relating to digital media interaction; development and management project documentation; major product design and presentation.

NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Digital Media stream. This unit is intended for Masters level students.

Objectives

- To integrate knowledge of interaction, human-computer interaction and multimedia technologies in the design of a major project;
- To extend the scope of foundational courses and apply in-depth knowledge to the innovative solution of a multimedia communication issue, digital media design scenario or installation-based interactive media on a significant scale;
- To develop management plan preparation and design process documentation skills.

Description

This unit of study provides a concentrated digital media design studio experience in which the student has available knowledge, expertise and scope to develop a major project integrating many of the areas addressed during the Degree. This is an opportunity to explore new and emerging technologies and the effects for developing digital media alongside augmenting and applying conceptual understanding of human-computer interaction. Entertainment, public performance applications and contextualised outcomes for digital media development will be encouraged. Emphasis will be placed on cultivating user interaction and engagement.

Outcomes

- Students will integrate knowledge accrued across a range of units of study in an integrated outcome;
- An augmented understanding of design problem solution, design development management and production strategies;
- An extended knowledge and application of human-computer interaction;
- An innovative solution or installation-based digital media experience.

DESC 9158 **Intranet Design Studio**

12 credit points. Prof. ML Maher. **Session**: 2. **Classes**: Studio. **Prerequisite**: DESC (9095 and 9097 and 9123 and 9132 and 9139 and 9140). **Assessment**: Report on intranet design and technology, an intranet design, and reflective report on the intranet design process and product.

NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Design Computing stream. This unit is intended for Masters level students.

Objectives

To integrate knowledge of the design of Web sites, client-side scripting, server side programming, and database management through the design and implementation of an intranet that provides secure access to static and dynamic Web sites.

Description

This unit of study provides a design studio experience for the design of intranets. This brings together the visual design of the user experience of Web sites within a coherent Web site with the program and database design of the information storage and retrieval of the intranet content. The intranet design project will be focused on the needs of a design team that requires access to project information contained in multiple formats.

Outcomes

- An understanding of client-server applications;
- An understanding of design considerations for life-cycle intranet design;
- Skills in designing and implementing an intranet of html, javascript, css, cgi languages, and sql databases.

DESC 9159 **Interactive Products Design Studio**

12 credit points. Dr Andy Dong. **Session**: 1. **Classes**: Studio. **Prerequisite**: DESC (9068 and 9097 and 9123 and 9132 and 9139 and 9140). **Assessment**: One significant design project; interim assessments related to final project; in-class participation demonstrated through ability to answer questions, lead discussions and critique peers' work.

NB: Department permission required for enrolment. Enrolment numbers are limited by teaching resources. First preference given to students in the Design Computing stream. This unit is intended for Masters level students.

Description

This unit of study introduces students to tools and methodologies for researching, developing, marketing and introducing new products with an emphasis on interactive computing products. Students form small product design teams of 4–5 members to execute the design. They will step through the product design process in detail, from need-finding to product testing to prototyping, learning about the available tools and techniques to execute each process step along the way. At the conclusion of the unit of study, students will present their products in a trade show. The teaching style for the unit incorporates several techniques including lectures, the case method, and design studios.

Objectives

- Introduce students to tools and methodologies for researching, developing, marketing and introducing new products with an emphasis on interactive computing products;
- Learn about the available tools and techniques to execute a product design process in detail from need-finding to product testing to prototyping;
- Develop practical interdisciplinary skills required for successful product design;
- Ground practice in interactive product design with theory through case readings, discussions of best practices in product design in industry, and the research literature on new product introduction.

Outcomes
Students can expect to depart the unit of study understanding product design processes as well as useful tools, techniques and organizational structures that support the orchestration of craft, business strategy and social dynamics in designing products. The students will develop a 'looks-like works-like' prototype of an interactive computing product, which could become part of the student's portfolio. Through reflections on the product design process and the social dynamics of the product design teams, the students will gain an understanding how to tune the process and organizational structures to suit the product and the culture of the stakeholders in the design process.

DESC 9160 **Lighting Photography**

6 credit points. A/Prof Warren Julian. **Session**: N/A in 2004. **Classes**: Intensive and fieldwork. **Prerequisite**: 24 credit points. **Assessment**: Portfolio of completed photographs with notes on techniques used and an evaluation of the outcome.

NB: This unit of study is offered in odd numbered years only. Not available in 2004. Available to Graduate Diploma and Masters students only.

Content
This unit introduces lighting photography by considering the principles of photography; issues in architectural photography and how lighting can be photographed. The photography of interior and exterior lighting is covered, including landscape and floodlighting.

Objectives and learning outcomes
The student will be able to photograph interior and exterior lighting.

DESC 9161 **Theatre and Performance Lighting**

6 credit points. A/Prof Warren Julian. **Session**: 2. **Classes**: Intensive plus theatre workshops. **Assumed knowledge**: fundamentals of lighting. **Prerequisite**: 24 credit points. **Assessment**: Preparation of a lighting design for a performance.

NB: Department permission required for enrolment. This unit of study is offered in even numbered years only. Available to Graduate Diploma and Masters students only.

Content
The unit is targeted at people interested in lighting design for theatre and other entertainment applications, to gain an insight into 'theatre' lighting design as well as a working understanding of the associated technical elements of theatre lighting. The unit covers not only theatre lighting design techniques, but, also other 'event' lighting design from small low budget to large scale performances.

The unit of study has practical 'hands on' workshops where students are expected to participate. Work shops include, rigging, focusing and plotting for scenes in a play. DMX addressing, data system layout for use with moving lights and programming moving lights for theatre and other events.

1. Introduction to Theatre lighting design:
- Theatre orientation – The internal 'workings' of a Theatre. The building, the equipment and the jargon used;
- People and their role: The promoter, the Producer, the Director, the Stage Manager, the Lighting Designer, the Lighting Programmer, the Board Operator.

2. Lighting equipment (lanterns)
- What are the options
- How they are used
- Why they are used
- When they are used

3. Lighting Design techniques
- Use of colour
- Lighting angles
- Dimmers
- Conventional (proscenium) stages
- Thrust stage
- Theatre in the round
- Lighting control (conventional board)

4. Design options for:
- A play
- A musical
- Opera
- Ballet and dance
- Corporate event
- Large scale 'event' lighting
- Theatre
- Rock & Roll
- Dance Parties
- Mechanical construction – rigging, power patching
- Lighting boards – soft patching and cueing options, groups – sub masters. How to set up a bard to suit your way of working etc.

5. Work shop practical: Lighting design for a play

Students will work on a lighting design for a 2 scene play selecting lanterns mounting positions, colours and dimming channels. Cues will be constructed and played back during a technical rehearsal for students to assess results.

6. Moving Lights
- Introduction – DMX protocol
- Moving light capabilities
- System layout design
- Addressing

7. Programming moving lights
- Types of board and software options
- For 'Theatre'
- For other 'Events'

8. System Power layout design considerations
- Power distribution
- Data distribution for DMX

9. Theatre lighting techniques used in commercial applications

Objectives and learning outcomes
The student will gain practical 'hands on' experience of theatre lighting by participating in workshops on rigging, focusing and plotting for scenes in a play, DMX addressing, data system layout for use with moving lights and programming moving lights for theatre and other events.

PLAN 9005 **Economic Applications in Planning**

4 credit points. A/Prof Peter Phibbs. **Session**: 2. **Classes**: Lectures. **Assessment**: 2 assignments (25%) and an open book examination (50%).

Objectives
On completion of the unit students should be able to:
- explain the following economic terms 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 privatisation;
- evaluate a simple cost-benefit analysis;
- explain the terms shadow pricing, intangibles, and the social discount rate as they relate to cost-benefit analysis; and
- 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 9010 **Planning Dissertation 1**

12 credit points. Dr Nicole Gurran. **Session**: 1, 2. **Classes**: Independent study + 7 meetings. **Prerequisite**: WAM of 70 and completion of all core requirements: PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). **Prohibition**: May not be counted with PLAN 9018, ARCH (9031, 9045, 9046 or 9060). **Assessment**: Students must present an approved research proposal within three weeks of the start of semester.

NB: Department permission required for enrolment. Submit an Independent Study Approval Form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9011 Planning Dissertation 2, either in the same or following semester.

Overview
The planning dissertation is a substantial piece of research conducted full time over one semester (by enrolment in PLAN 9010 and 9011), or part time over two semesters (by consecutive enrolment in these units). It takes the form of a document (up to 20,000 words) on an approved urban and regional planning subject of your choice. Students electing to do a stream in the MURP program must select a topic relevant to their chosen stream. There is also an option for students to prepare a shorter document suitable for publication in a refereed journal. The planning dissertation is an opportunity to advance your knowledge and skills in a particular area and so develop a 'professional edge'. For those intending to undertake further academic study, the dissertation also provides an opportunity for you to develop your research skills.
Objectives and learning outcomes
The objective of the dissertation is to allow you to develop higher order research and analytic skills by undertaking an in depth study of your own selection. The expected learning outcomes of the dissertation include the ability to:
- Think critically about a planning problem and develop an appropriate research methodology or analytical approach to address it;
- Identify and access appropriate sources of information, research and literature relevant to urban and regional planning issues;
- Undertake primary and secondary research;
- Present your findings in a way that demonstrates academic and professional competence.

Dissertation Guidelines
A dissertation generally includes:
- A literature review to delineate a problem or gap in knowledge;
- A statement of research aims or objectives, as well as research questions and / or hypotheses;
- Explanation of research methods;
- Presentation and analysis of data;
- Discussion of conclusions;
- An abstract.

Restrictions
Permission to continue the Planing Dissertation is subject to a satisfactory research proposal which must be approved by your supervisor by week 3 of semester.
Submission and Assessment
The assessment is based solely on the submission of your dissertation. The dissertation will be marked by two examiners (neither of whom will be your supervisor). Dissertations are due at the end of the first week of exams for the semester in which you are enrolled.

Note that only one submission is required for both Planning Dissertation 1 and 2. It is not possible to complete Dissertation 1 independenly of Dissertation 2. Students who intend a shorter project should enrol in PLAN 9018 Planning Report.

PLAN 9011 **Planning Dissertation 2**

12 credit points. Dr Nicole Gurran. **Session**: 1, 2. **Classes**: Independent or group study. **Corequisite**: PLAN 9010. **Assessment**: Independent Dissertation of up to 20,000 words (100%).
NB: This unit is for Masters of Urban & Regional Planning students only. It MUST be taken in conjunction with PLAN 9010 Planning Dissertation 1, either in the same or preceding semester.
Overview
The planning dissertation is a substantial piece of research conducted full time over one semester (by enrolment in PLAN 9010 and 9011), or part time over two semesters (by consecutive enrolment in these units). It takes the form of a document (up to 20,000 words) on an approved urban and regional planning subject of your choice. Students electing to do a stream in the MURP program must select a topic relevant to their chosen stream. There is also an option for students to prepare a shorter document suitable for publication in a refereed journal. The planning dissertation is an opportunity to advance your knowledge and skills in a particular area and so develop a 'professional edge'. For those intending to undertake further academic study, the dissertation also provides an opportunity for you to develop your research skills.
Objectives and learning outcomes
The objective of the dissertation is to allow you to develop higher order research and analytic skills by undertaking an in depth study of your own selection. The expected learning outcomes of the dissertation include the ability to:
- Think critically about a planning problem and develop an appropriate research methodology or analytical approach to address it;
- Identify and access appropriate sources of information, research and literature relevant to urban and regional planning issues;
- Undertake primary and secondary research;
- Present your findings in a way that demonstrates academic and professional competence.

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- A literature review to delineate a problem or gap in knowledge;
- A statement of research aims or objectives, as well as research questions and / or hypotheses;
- Explanation of research methods;
- Presentation and analysis of data;
- Discussion of conclusions;
- An abstract.

Submission and Assessment
The assessment is based solely on the submission of your dissertation. The dissertation will be marked by two examiners (neither of whom will be your supervisor). Dissertations are due at the end of the first week of exams for the semester in which you are enrolled.

Note that only one submission is required for both Planning Dissertation 1 and 2. It is not possible to complete Dissertation 1 independenly of Dissertation 2. Students who intend a shorter project should enrol in PLAN 9018 Planning Report.

PLAN 9018 **Planning Report**

12 credit points. Dr Nicole Gurran. **Session**: 1, 2. **Classes**: Independent study + 7 meetings. **Prerequisite**: PLAN (9005 and 9020 and 9021 and 9027 and 9028 and 9031 and 9032 and 9044 and 9051). **Assessment**: Planning Report of approx 10,000 words (100%).
NB: Department permission required for enrolment. Submit an Independent Study Approval form, signed by your proposed supervisor, with your request to enrol. This unit is for Masters of Urban & Regional Planning students only. MURP students taking the Urban Design stream should enrol in ARCH 9060 Urban Design Report.
Content
The planning report is a substantial piece of research conducted over one semester. It takes the form of report (up to 10,000 words) on an approved urban and regional planning subject of your choice. Please note however that students electing to do a stream in the MURP program should select a topic relevant to their chosen stream.) The planning report is therefore an opportunity to advance your knowledge and skills in a particular area and so develop a 'professional edge'.
Objectives and learning outcomes
The objective of the planning report is to allow you to develop research and analytic skills by undertaking an in depth study of your own selection. The expected learning outcomes of the report include the ability to:
- Think critically about a planning problem and develop an appropriate research methodology or analytical approach to address it;
- Identify and access appropriate sources of information, research and literature relevant to urban and regional planning issues;
- Undertake primary and secondary research relevant to problems in planning practice;
- Present your findings in a way that demonstrates academic and professional competence.

Planning Report Guidelines
A planning report generally includes:
- A literature review to delineate a planning problem or gap in knowledge;
- A statement of research aims or objectives, as well as research questions;
- An explanation of research methods;
- Presentation and analysis of data;
- Discussion of conclusions.

Restrictions
Permission to continue the Planing Report is subject to a satisfactory research proposal which must be approved by your supervisor by week 3 of semester.

Submission and Assessment
Planning reports are due at the end of the first week of exams for the semester in which you are enrolled. The assessment is based solely on the submission of your planning report. The report will be marked by one examiner (NOT your supervisor).

PLAN 9020 **Planning Procedures**
4 credit points. A/Prof Peter Phibbs. **Session**: 1, 2. **Classes**: Lectures, seminars, group work. **Assessment**: 2 Assignments.
NB: Session 2 available subject to numbers.

Objectives
This unit aims to prepare you for professional practice as a strategic or development assessment planner. It focuses on social, economic and environmental principles for contemporary practice; and the legal frameworks for land use planning and environmental management in NSW.

Content
This unit familiarises the student with the legal and policy context for urban and regional planning in Australia, and develops core skills in preparing, interpreting, and implementing planning instruments. Delivered over an intensive three days, the unit introduces contemporary social, economic, and environmental principles for planning practice, outlines the legislative and institutional framework for environmental planning in Australia, and introduces key mechanisms for controlling development. Emerging issues, particularly the implications of contemporary legislative and policy developments relating to natural resource management, biodiversity conservation, native title, housing, and the NSW plan making system, are also discussed. Guest speakers include industry professionals from the public and private sector. Assessments are based on contemporary case studies and contribute to a portfolio of professional work.

Outcomes
By the end of this unit of study the student will:
- Understand the social, economic, and enviromental principles underpinning contemporary planning practice;
- Appreciate key legal and institutional processes for environmental planning in Australia and internationally;
- Be familiar with the various planning state, regional, and local planning instruments in NSW, and undersand when and how they apply to planning proposals;
- Be able to assess the social, economic, and environmental impacts of basic planning proposals, and identify appropriate processes to address these;
- Justify these recommendations in professional planning reports;
- Understand the principles, techniques and requirements for public participation in environmental planning and assessment; and
- Understand the ethical responsibilities of land use planners, including respect for diversity and the importance of social equity, in guiding decision making processes and assessing planning proposals.

PLAN 9021 **Planning Law**
4 credit points. A/Prof Peter Phibbs. **Session**: 2. **Classes**: Seminars and workshops. **Prerequisite**: PLAN 9020 Planning Procedures. **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; and
- 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 9027 **Foundations of Environmental Planning**
4 credit points. Mr Martin Payne. **Session**: 1. **Classes**: Lectures and workshops. **Assessment**: Two assignments.

Objectives
The unit is primarily concerned with concepts relating to planning for natural and built environments. It emphasises conceptual knowledge, with examples and case studies to demonstrate the application of concepts in practice. Students are encouraged to think independently, creatively and critically in developing understanding and practical knowledge about environmental planning.

Contents
The unit is in three modules.

Concepts of the environment and environmental planning:
- Different environmental concerns and adapting issues (defense, sanitation, security, material wellbeing, hazards, civic functions, urban places, natural environments etc);
- The emergence of government with environmental reforms;
- Types of environmental studies, plans and planning instruments; and
- Urban form, access, densities and the distribution of activities.

Environmental Assessment:
- Environmental impacts – social, economic, natural etc;
- Theory and practice of environmental impact assessment;
- Recognition of the limitations with impact assessment, and possible remedies;
- Environmental studies and assessment statements;
- The structure of environmental arguments and impact statements;
- Procedures for preparing and assessing impact statements;
- Political and economic factors influencing environmental assessment;
- Case study- review of a major EIS.

Urban Development:
- Environmental studies, metropolitan planning and the roles of governments;
- infrastructure planning and urban form;
- differing perspectives on planned and natural environments;
- various roles of planning in managing urban growth and protecting the environment; and
- Case study – planned metropolitan growth.

Outcomes
On completion, each student will:
- understand the flexible and evolving forms of environmental planning;
- be able to review an environmental impact statement; and
- be able to prepare basic urban development plans.

PLAN 9028 **Land Use, Infrastructure/Transport Plan**
4 credit points. Mr Martin Payne. **Session**: 2. **Classes**: Lectures and workshops (intensive format). **Assessment**: 3 assignments.

Objectives
This is a core unit of the Urban & Regional Planning program, taught as an 'intensive' on three days. It is independent of other units, but relates to PLAN 9027 Foundations of Environmental Planning.

The main aim is to understand basic concepts, and to be able to use these concepts in practical planning situations. The unit covers a range of themes relating to the urban development and the built environment, which will provide students with a comprehensive understanding, and capability to respond to a wide range of situations.

The unit develops critical, creative, independent thinking, and engenders a problem-solving approach. It also develops skills with structuring responses to problems, preparing reasoned proposals, and with preparing reports.

Contents
The unit is in three modules.

Infrastructure provision and urban development:
- types infrastructure (defense, economic, sanitation, civic, transport etc);

- roles of infrastructure in shaping urban form;
- emergent technologies and changes is the built form;
- infrastructure planning and urban development policies;
- innovative infrastructure and environmental initiatives.

Land use and transportation planning:

- effects of emergent technologies (rail, electricity, lifts, IC engines, IT etc);
- land use activities, urban form and transport infrastructure;
- practical and 'modeling' based approaches;
- orthodox approaches to accommodating car travel;
- traffic restraint;
- transport systems management;
- local area traffic management.

Contemporary issues relating to urban form and urban development:

- travel demand management (pricing, restraint measures etc);
- transit supportive urban form and development;
- transport development corridors;
- management of congestion and balanced modes;
- better-structured, 'compact' urban form;
- neo-traditional criticism and principles;
- innovative public transport;

Outcomes

Each student will be able prepare reviews, studies and proposals demonstrating:

- Awareness of the main concepts relating to land use, infrastructure and transportation planning, their use, strengths and limitations;
- Capability to use key concepts in a valid and useful manner;
- Skill with preparing short planning reports on practical issues; and
- A critical and reflective approach.

PLAN 9031 History and Theory in Urban Planning

4 credit points. Dr Nicole Gurran. **Session**: 2. **Classes**: Lectures, seminars, group work. **Assessment**: Three written assignments.

Objectives

This unit enables students to:

- Understand how the practice of urban and regional planning has evolved in Australia and interanationally, from the nineteenth century to the present;
- Appreciate different vies about the role of and outcomes of urban planning and of the planning profession;
- Recognise various cultural perspectives and needs relating to the natural and built environment, and the implications of these for planning practice;
- Undertake basic historical research about urban development and planning; and
- Access and engage with key sources of and planning literature and research.

Content

This unit examines how the legacy of urban planning history, ideas and theory can add to our understanding of contemporary practice. It focuses on three key debates that have dominated the profession since its inception. How should planning be conceptualised? What should be the normative goals of planning practice? What is the contribution of planning theory to practice? These debates are introduced through an historical examination of urban settlements, environmental management, and governance, both internationally and within Australia. The unit also explores key junctures in planning theory form the early city 'visionarie' to contemporary postmodern critiques.

Outcomes

By introducing the historical origins and intellectual traditions of urban planning, the unit aims to prepare students for reflective professional practice or future academic research within discipline.

PLAN 9032 Argumentation/Discourse-Plan Procedure

4 credit points. Mr Martin Payne. **Session**: 2. **Classes**: Lectures and workshops. **Assessment**: Three assignments.

Objectives

The unit is concerned primarily with reasoning skills, in particular with constructing useful understanding and knowledge about practical planning situations. It is based on important educational objectives of the University, teaching basic conceptual knowledge, and how to use concepts in a practical and sound manner. Emphasis is given to developing skills with independents, creative and critical thinking, and to adopting a reflective approach for formulating and responding to practical planning problems.

Contents

This unit is in three modules.

- The first module begins by discussing various roles of theory in planning, and limitations with theory, 'rational approaches', and considering planning as 'problem-solving'. The 'wicked' nature of planning problems and the need for argumentation are developed.
- Planning arguments and stories are discussed, especially key concepts and structures, and their roles in constituting forms of practical understanding and the need for a critical and reflective practice is advanced. The forms of argument statements, statements of environmental effects, and development approvals. This module ends discussing the basic role of argumentation in professional and scholarly planning discourse.
- The final module is concerned with applications of argumentation concepts. In particular, attention is given to collaborative procedures and inclusionary discourse, and arguments in implementation and policy analyses. The roles of case studies in planning practice are discussed, along with requirements for formulating tractable tasks and envisaging study methods by which cases can be constructed. The unit ends by addressing skills involved in presenting simple arguments.

Outcomes

On completion of the study unit each student should be able to:

- Review and interpret planning documents in a critical and constructive manner;
- Use basic concepts relating to arguments and stories;
- Prepare basic reviews, arguments, stories and other forms of discourse;
- Formulate a basic topic for study, and prepare a short report on how such a study could be undertaken; and
- Make a short oral presentation.

PLAN 9044 Planning Methods

4 credit points. A/Prof Peter Phibbs. **Session**: 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 practical problems.

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; and
- 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 9045 Economic Tools and Community Development

6 credit points. A/Prof Peter Phibbs. **Session**: 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

On completion of the unit students will be able to:

- apply theoretical concepts and methods to practical problem;
- think creatively and critically about planning issues;
- use the available computer and information technology; and
- apply technical skills in a sound and useful manner.

PLAN 9048 **Environmental Design and Planning**

6 credit points. Mr Payne and Mr Forwood. **Session**: 2.

Objectives

The unit teaches knowledge and skills relevant to designing and planning the built environment. It engenders capability with designing buildings, places and urban form, having regard to a range of environmental design, planning and sustainability considerations.

Description

The unit covers a range of related concepts and topics:

- designing for user comfort, quality built environments, and sustainability;
- key environmental design factors (air flow and ventilation; natural and artificial lighting; solar provisions; noise; energy efficiency, waste management etc);
- urban ecology and landscapes;
- natural environments and urban systems;
- innovative hydraulic systems;
- sustainable architectural and urban design;
- social dimensions of environmental design;
- lighting public places for safety, amenity and enclosure;
- designing secure and manageable public places;
- implementing ESD with instruments, guidelines and approvals; and
- environmental studies and development approval.

Outcomes

The key attributes engendered by the unit are:

- to be able to use concepts and methods in a sound and creative manner;
- to be able to solve relevant design problems;
- to be able to apply appropriate technical skills and knowledge; and
- to be able to produce appropriate reports and designs.

PLAN 9049 **Development Project Planning and Design**

6 credit points. A/Prof Peter Phibbs. **Session**: 1. **Classes**: Intensive module, run over a three-day period; lecures, seminars, group work. **Assessment**: Three assignments: (1) development project reading report (20%); (2) critical essay (30%); (3) draft project design (50%).

Objectives

This unit is designed to fill a significant gap in the evolution of the urban and regional planning syllabus. Development project assistance is a multi billion dollar industry with Australia alone contributing significantly through projects and technical assistance in Africa, Asia (east, south and north) and the Pacific. Additionally are the programs of the multilateral agencies like the World and Asian Development Banks and those of the largest donor countries of Japan, United States and European nations. There are many parallels between urban and regional plan making and the design of development projects. Indeed, some planning consultancies are primarily engaged in international development assistance work. Differences in context, approach, content and implementation place particular demands on development project designers that are not addressed in standard land use planning texts. Additionally, expenditure of large sums of public money has brought with it demands for quality assurance (QA) assessment at each stage of the development project activity cycle. An introduction to QA methodology and practice is a necessary component of development project design.

Content

International development assistance is a huge business employing large numbers of Australian consultants, contractors and supplying companies together with those of partner governments. Planners contribute to the design, implementation and evaluation of development projects in most of the neighbouring countries of Asia and the Pacific. Development project design is conditioned by several key elements including: components of the project activity cycle, thematic policy goals and essential quality assurance requirements. This unit is designed for planners who may work in the field of international development.

Outcomes

By the end of this unit of study you should have:

- An understanding of the role and scope of development assistance project planning;
- An ability to undertake the studies required at each stage of the development project activity cycle;
- Familiarity with the fundamentals of development project design;
- Ability to comply with design conditions imposed by the key policy themes of: poverty, gender equity, environmental and sustainability focused development objectives;
- Familiarity with the scope and character of urban and regional planning project design and implementation in the Asia-Pacific region; and
- An understanding of quality assurance assessment methodology in development project assessment.

The unit is a new option within the Urban and Regional Planning Program and reflects the increasing internationalisation of Australian planning practice. It caters to the needs of local and international students intending to work on urban and regional planning projects within a development assistance context.

PLAN 9050 **Housing for Health (Advanced)**

6 credit points. Mr Col James. **Session**: 2. **Classes**: Intensive mode. **Assessment**: 2 assignments and report (assignment 1: 10%, Assignment 2: 60%).

Objectives

By the end of this unit a student should:

- Have an understanding of recommended texts and reporting on health-housing theory;
- Be able to complete specific tasks in the measurement of performance of household plumbing and eletrical services and fittings against stated standards;
- Be familiar with Healthhabitat data sheets and logging into Healthhabitat analysis programs to deliver work sheets for licensed plumbers and electricians; and
- Be able to write a report specificlly analysing data, house fixing procedures and independent observations of other health risks, to give householders information on best household user practices and regular maintenance requirements.

Contents

This unit is an investigation of 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; and reducing trauma. Upon completion of the basic Housing for Health unit, advanced and postgraduate students will select one of the nine healthy living practices for deeper research and investigation and presentation of a report.

Outcomes

The unit aims to demonstrate the health implications of housing design. Students will develop skills in the measurement analysis of design features which have health outcomes. The unit will also develop skills in reporting and communicating results and recommendations to householders.

PLAN 9051 **Urban Design and Development Control**

4 credit points. Mr Martin Payne. **Session**: 1. **Classes**: Lectures, class discussions and presentations, site visits and monitoring and presentation of assignments. **Assessment**: 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 asesthetic 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 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.

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.

■ Postgraduate coursework resolutions

Resolutions of the Senate

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000, which sets out the requirements for all coursework courses, and the relevant Faculty Resolutions.]

Master's degrees, graduate diplomas and graduate certificates in the Faculty of Architecture

Section 1

1. 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 *(final admission 2002);*
- 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 *(final admission 2002*);
- 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 *(final admission 2002);*
- Graduate Certificate in Urban Design;
- Graduate Certificate in Urban and Regional Planning.

2. Requirements for the master's degrees, graduate diplomas and graduate certificates

1. To qualify for the Pass award candidates must:
   (a) complete successfully units of study prescribed by the Faculty giving a total credit of:
   (i)72 credit points for a master's degree;
   (ii) 48 credit points for a graduate diploma; or
   (iii) 24 credit points for a Graduate Certificate; and
   (b) satisfy the requirements for all other relevant by-laws, rules and resolutions of the University.

3. Specialisation

(1) 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;
- facilities management;
- film and digital video *(final admission 2004);*
- illumination design; and
- sustainable design.

(2) 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 specialisation the subject area shall be specified on the testamur:
- heritage conservation;
- housing studies; and
- urban design.

(3) 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; and
- architectural design.

4. Requirements for the master's degree with honours

To qualify for the award of the master's degree with honours a student must complete the honours requirements published in the Faculty Resolutions relating to the course.

Resolutions of the Faculty

Master's degrees by coursework, graduate diplomas and graduate certificates in the Faculty of Architecture

[These Resolutions must be read in conjunction with The University of Sydney (Coursework) Rule 2000, which sets out the requirements for all coursework courses, and the relevant Resolutions of the Senate.]

Section 1

1. Admission to Candidature

(1) An applicant for admission to candidature for the degree of master, graduate diploma or graduate certificate of Architecture (Architectural Design) shall:
   (a) hold a professional degree in architecture or closely allied built design field (where there is evidence of architectural design experience); or
   (b) hold a degree in a related field and submit a portfolio of work indicating relevant architectural design interests and capacities to the satisfaction of the stream coordinator.

(2) An applicant for admission to candidature for the degree of master, graduate diploma or graduate certificate of Urban Design shall:
   (a) hold a professional degree in architecture or landscape architecture or urban planning (where there is evidence of design experience); or
   (b) hold a degree in a related field and submit a portfolio of work indicating relevant design interests and capacities to the satisfaction of the stream coordinator.

(3) (a) An applicant for admission to candidature for a degree of master not otherwise specified shall:
   (i) hold a Bachelor's degree of The University of Sydney or hold qualifications deemed by the Dean to be equivalent; or
   (ii) hold or have qualified for the award of the graduate diploma; or
   (iii) hold or have qualified for the award of the graduate certificate with a weighted average mark of at least 70 in all units attempted for the award.

(4) (a) An applicant for admission to candidature for a graduate diploma not otherwise specified shall:
   (i) hold a Bachelor's degree of The University of Sydney or hold qualifications deemed by the Dean to be equivalent; or
   (ii) hold or have qualified for the award of the graduate certificate with a weighted average mark of at least 70 in all units attempted for the award.

(5) (a) An applicant for admission to candidature for a graduate certificate not otherwise specified shall:
   (i) hold a Bachelor's degree of The University of Sydney or hold qualifications deemed by the Dean to be equivalent; or
   (ii) furnish evidence which satisfies the Dean that he or she is qualified to enter upon the prescribed units of study.

(6) The number of students admitted to the programs may be limited in accordance with University policies depending on available teaching resources.

2. Units of study

(1). The units of study which may be taken for the degree are set out in Table G, the table of graduate units of study, together with:
   (a) credit point values;
   (b) assumed knowledge, corequisites and prerequisites;
   (c) the semesters and modes in which they are offered;
   (d) the units with which they are mutually exclusive;
   (e) designation as core, optional or elective; and
   (f) enrolment quotas and other restrictions on availability.

(2). A candidate 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, optional and elective units of study.

(3). 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. 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 Table G, the Faculty's table of graduate units of study, meeting the requirements specified in the table of requirements for the relevant program.

(2) To qualify for the award of the Graduate Diploma a candidate must complete 48 credit points selected from Table G, the Faculty's table of graduate units of study, meeting the requirements specified in the table of requirements for the relevant program.

(3) To qualify for the award of the Graduate Certificate a candidate must complete 24 credit points from Table G, the Faculty's table of graduate units of study, meeting the requirements specified in the table of requirements for the relevant program.

(4) Candidates may substitute graduate units of study from outside the Faculty's table of graduate units of study to the limits shown in the table of credits and substitutions for graduate units of study.

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 Dissertation (24 credit points) is available only to candidates for Master's degrees who have achieved a weighted average mark of at least 70 in all other coursework required to be completed towards award of the degree.

Table of requirements

	Grad Certificate			Graduate Diploma			Master's		
Program/stream	Min. Core	Min. Options	Max. Elective	Min. Core	Min. Options	Max. Elective	Min. Core	Min. Options	Max. Elective
Certificate, Diploma, Master's in Architecture									
Architectural Design	24	0	0	36	0	12	36	18	18
Architectural History, Theory & Criticism	24	0	0	24	0	24	24	24	24
Certificate, Diploma, Master's in Design Science									
Audio Design	18	6	0	24	18	6	24	18	30
Building Design	24	0	0	30	0	18	36	0	36
Building Services	18	6	0	24	12	12	36	12	24
Design Computing	18	0	6	36	6	6	36	18	18
Digital Media	18	0	6	36	6	6	36	18	18
Facilities Management	24	0	0	24	12	12	24	24	24
Film & Digital Video	18	0	6	36	6	6	36	18	18
Illumination Design	24	0	0	24	12	12	24	12	36
Sustainable Design/Energy Conservation	18	6	0	24	12	12	24	18	30
Certificate, Diploma, Master's in Heritage Conservation	16	0	8	28	4	16	48	8	16
Certificate, Diploma, Master's in Housing Studies	16	0	8	24	0	24	24	0	48
Certificate, Diploma, Master's in Urban Design	16	4	4	32	8	8	52	12	8
Certificate, Diploma, Master's in Urban & Regional Planning	16	0	8	24	0	24	36	12*	24
Heritage Conservation	-	-	-	-	-	-	36	28*	8
Housing Studies	-	-	-	-	-	-	36	24*	12
Urban Design	-	-	-	-	-	-	36	28*	8

**MURP students must complete either a Report or a Dissertation*

5. Award of the certificate, diploma or master's degree

(1) A candidate who enrols in the following semester in a higher level course in the same articulated program will not graduate until the completion of the highest award attempted.

(2) A candidate who has completed the requirements for a course and who does not enrol in the following semester in a higher level articulated course in the same program will graduate from that course.

Section 2

6. Cross Institutional Enrolment

(1) Provided that permission is obtained in advance, the Dean may permit a student to complete a unit of study at another institution and have that unit credited to his/her course requirements, provided that:

(a) the unit of study content is not taught in any corresponding unit of study in the University; or

(b) the student is unable for good reason to attend a corresponding unit of study at the University; and

(c) the total credit points does not exceed the maximum allowable credit for the program as listed in the table of credits and substitutions.

7. Restrictions on enrolment

(1) Except with the permission of the Dean, a student may not enrol in units of study with a total value of more than 30 credit points in any one semester.

(2) Candidates may not enrol in undergraduate units of study.

8. Suspension of candidature

(1) Unless suspension of candidature has been approved by the Dean, a student is required to re-enrol each calendar year.

(2) A student who has completed units of study may, with the permission of the Dean, suspend candidature for up to two semesters. At the end of that time the student may reapply to extend the suspension for a maximum of another two semesters. After that time the candidature will be deemed to have lapsed and the student shall be required to reapply for admission to the degree.

9. Re-enrolment after an absence

(1) Except where the Dean determines otherwise in any particular case, a candidate 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.

10.Satisfactory progress

(1) The Dean may require a candidate:

(a) 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; and/or
(b) 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.

11. Time limits

(1) A candidate for the master's degree, graduate diploma or graduate certificate may proceed either full- or part-time.
(2) 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.
(3) All candidates must complete the requirements for the master's degree, graduate diploma or graduate certificate within 6 calendar years of first enrolment.

12. Assessment

(1) 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.

13. Credit transfer policy

(1) The total amount of credit that may be granted is listed in the table of credits and substitutions for graduate units of study.
(2) 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;
(3) Credit shall not be granted for units of study completed more than 9 years prior to commencement.
(4) Credit shall not be granted for units of study gained with a 'Concessional Pass' or equivalent.
(5) 'Substitution' means credentialled learning from a recognised tertiary institution taken outside the Faculty's Table of Graduate units of study, while enrolled in the relevant program, including study in another faculty and cross institutional study. In all cases the approval of the Associate Dean (Graduate Studies) must be sought before commencement of such study.

Table of credits and substitutions for graduate units of study

Award course Level	Maximum credit points	
	Credit	Substitution
Master's degrees	18*	12
Graduate diplomas	18*	12
Graduate certificates	12†	–

**Not more than 12 credit points of which can be credited towards the core unit requirements.*
†Credit will be granted only for units from the Faculty's table of Graduate units of study completed prior to commencement of candidature

14. Transitional provisions

(1) These resolutions shall apply to:
(a) persons who commence their candidature after 1 January 2004; and
(b) persons who commenced their candidature prior to 1 January 2004 and who elect to proceed under these resolutions.
(2) A candidate for the degree who commenced candidature prior to 1 January 2004 may complete the requirements in accordance with the resolutions in force at the time the candidate commenced, provided that the candidate shall complete the requirements by 1 January 2009 or such later date as the Faculty may, in special circumstances, approve.

6 Postgraduate research information

■ Research Degrees

The Faculty of Architecture offers three research degrees, The Doctor of Science (Architecture), Doctor of Philosophy and the Master of Philosophy (Architecture). As well as the information in this book candidates should also aquire a copy of the Postgraduate Research Studies Handbook available free from the Student Administration Centre or on line at

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.

Doctor of Philosophy (PhD)

This research degree is awarded for a thesis considered to be a substantial, original contribution to the discipline concerned. Entry requirements include a research 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.

Doctor of Science (Architecture) (DScArch)

This degree is awarded for published work which, in the opinion of the examiners, has generally been recognised by scholars in the field concerned as a distinguished contribution to knowledge or creative achievement. The candidate shall be a graduate of at least five years standing. If the candidate is not a graduate of The University of Sydney he or she must have been a full time member of academic staff of the University for at least 3 years or had a similar significant involvement in the teaching and research of the University. The university resolutions describing the degree appear at the end of this chapter.

Requirements of your candidature

All students are required to make timely progress with their research and to submit their theses on time. Students commencing from 2001 have the following time limits:
PhD – full-time candidature: 8 semesters
PhD – part-time candidature: 16 semesters
MPhil – full-time candidature: 4 semesters
MPhil – part-time candidature: 10 semesters

It is important that you keep in regular contact with your supervisor, ideally meeting once a week especially during crucial periods of your candidature. To ensure that students progress satisfactorily, all research students are placed on probation for two semesters and are required to fulfil certain criteria. These are listed below. Once the requirements have been completed satisfactorily, candidature will proceed on a permanent basis.

Any change in candidature (such as suspension or change in supervisor) must be agreed with your supervisor and notified in writing to the Student Services Manager.

PhD Committee

A PhD Committee is established for each candidate during their probationary year and consists of your supervisor and one or more other members of the academic staff selected by your supervisor in consultation with you. The role of the PhD Committee is to act both as a resource concerning PhD candidature and as an assessment committee for your probationary requirements. As part of the PhD Committee you need to select an associate supervisor, if one has not already been appointed.

Probationary requirements

The requirements for satisfactory completion of the probationary period include:
(a) the submission of a satisfactory Research Proposal to the candidate's PhD committee;
(b) the presentation of the Research Proposal to the candidate's committee at a public seminar;
(c) demonstration of adequate English language competency to the candidate's committee;
(d) completion of the unit of study ARCF 9001 Modes of Enquiry and Methods of Research Scholarship in the first or second semester of enrolment;
(e) satisfactory completion of a structured first year as determined by the Associate Dean (Graduate Studies) in consultation with supervisors in disciplinary areas;
(f) a recommendation from the candidate's supervisor, on the advice of the candidate's committee, that the probationary requirements have been met.

ARCF 9001 **Modes of Enquiry and Methods of Research**

6 credit points. Prof. Gary Moore. **Session**: 1. **Classes**: Contact time of one 3-hour lecture/seminar per week, plus ca 6 hours of individual study per week during the semester. **Assessment**: Assessment is based on (1) evidence of having done and understood the readings as evidenced by critical contributions to class discussions, and (2) a preliminary research proposal between 2500–3000 words and no more than 15 pages. (Final research proposals for partial satisfaction of probationary requirements will remain the responsibility of the student in association with your Supervisor.) In assessing submissions, attention will be placed on evidence of development in four areas: (1) grasp of the subject matter of different modes of inquiry, research approaches and research methods, (2) the organisation of knowledge about research and scholarship, (3) ability to critically evaluate methods used in studies and (4) original thinking regarding appropriate modes of inquiry and research methodology for the research problems and questions under investigation. All submissions are to conform to the style and format of the Publication Manual of the APA (latest ed.) or equivalent style guide in the discipline of the student. Students are expected to complete the unit with at least a credit grade.

NB: Permission required unless enrolled in a research degree. This unit is compulsory for all MPhil and PhD students in the Faculty of Architecture. It must be taken at the first opportunity.

Content

The unit will be run as a seminar with mini-lectures, presentations by other members of the academic staff about research and scholarship methods in which they are most expert, critical review of readings, and discussions based on the seminar material, readings and research pre-proposals.

Within the Faculty, there are five disciplinary areas, each of which hold regular informal research seminars presented by PhD students and research staff. Students will be encouraged to attend on a regular basis that group or groups to which their research relates.

Objectives and Learning Outcomes

The primary purpose of this seminar is to provide students with an understanding of different modes of inquiry and different ways of conducting research and scholarship relevant to the five disciplines of the Faculty (architecture and the allied arts, architectural science, design computing and cognition, environment behaviour and society, and urban and regional planning and policy). These major modes fall into three clusters: computationally based methods, text-based methods and field-based methods – and include quantitative and qualitative approaches, scientific and post-modern approaches, and exploratory, confirmatory and developmental research. Specific methods explored will include experimental, laboratory and a variety of quasi-experimental, survey and ethnographic research approaches, text-, historical and archival-based scholarship, and

computational axiom-, conjecture- and simulation-based approaches.

A secondary purpose is introduce students to a range of practical skills for planning and conducting research and scholarship, including selecting worthwhile topics, planning the research, designing the study and preparing to collect and analyse information, presenting the final written thesis or dissertation and preparing papers for presentation and publication.

A third purpose is to sharpen critical skills for reading, evaluating and interpreting research and scholarship.

Upon successfully completing the seminar, students are expected to have an understanding of the range of modes of inquiry and methods of research and scholarship used across the disciplines associated with this Faculty.

Textbooks

Groat, L, & Wang, D. (2002). Architectural Research Methods. New York: Wiley. ISBN 0–471–33365–4 (cloth & pbk).
Leedy, P.D. (1997). Practical Research: Planning and Design (6th ed.). Upper Saddle River, NJ: Prentice-Hall/Merrill. ISBN 0–13–241407 (pbk.).

Indicative Major Readings:

Alreck, P.L., & Settle, R.B. (1995). The Survey Research Handbook (2nd ed.). Chicago: Irwin.
Barzun, J., & Graff, H.F. (1992). The Modern Researcher (4th ed.). New York: Harcourt Brace Jovanovich.
Berkofer, R. (1995). Beyond the Great Story: History as Text and Discourse. Cambridge, MA: Harvard University Press.
Booth, W.C., Colomb, G.G., & Williams, J.M. (1996). The Craft of Research. Chicago: University of Chicago Press.
Campbell, D.T., & Stanley, J.C. (1973). Experimental and Quasi-Experimental Designs for Research (rev. ed.). Chicago: Rand McNally.
Denzin, N.K., & Lincoln, Y.S. (1994). Handbook of Qualitative Research. Thousand Oaks, CA: Sage.
De Vaus, D.A. (2001). Research Design in Social Research. London: Sage (incl. web links to detailed information of different aspects of field research design/methodology).
De Vaus, D.A. (2002). Surveys in Social Research (5th ed.). Sydney: Allen & Unwin.
Grimm, L.G., & Yarnold, P.R. (Eds.) (2000). Reading and Understanding More Multivariate Statistics. Washington, DC: American Psychological Association.
Hart, C. (1998). Doing a Literature Review: Releasing the Social Science Imagination. London: Sage Publications.
Jenkins, K. (1995). On 'What is History?' London: Routledge.
Judd, C., Smith, E., & Kidder, L.H. (1991). Research Methods in Social Relations (6th ed.). New York: Holt, Rinehart and Winston.
Lincoln, Y.S., & Guba, E.G. (1985). Naturalistic Inquiry. Thousand Oaks, CA: Sage.
Lubar, S., & Kingery, W.D. (Eds.) (1993). History and Things: Essays on Material Culture. Washington, DC: Smithsonian Institution Press.
Miles, M., & Huberman, A.M. (1994). Qualitative Data Analysis: A Sourcebook of New Methods (2nd ed.). Thousand Oaks, CA: Sage.
Patton, M.Q. (1990). Qualitative Evaluation and Research Methods (2nd ed.). Newbury Park, CA: Sage.
Peil, M. (1982). Social Science Research Methods: An African Handbook. London & Sydney: Hodder and Stoughton.
Robson, C. (1993). Real World Research: A Resource for Social Scientists and Practitioner-Researchers. Cambridge, MA: Blackwell.
Schlereth, T.J. (Ed.) (1985). Material Culture: A Research Guide. Lawrence, KS: University Press of Kansas.
Simon, H.A. (1996). The Sciences of the Artificial (3rd ed.). Cambridge, MA: MIT Press.
Yin, R. (1994). Case Study Research: Design and Methods. London: Sage.
Yin, R. (2003). Applications of Case Study Research (rev. ed.). Newbury Park, CA: Sage.
Zeisel, J. (1981). Inquiry by Design: Tools for Environment-Behavior Research. Cambridge, England: Cambridge University Press.

Guidelines for your research proposal

The first year of the MPhil and PhD is probationary. You need to demonstrate that you are capable of carrying out doctoral- or master's-level research at The University of Sydney and to satisfy the probationary requirements listed in the Faculty resolutions and set by your supervisor. During this year students are expected to demonstrate the capacity to undertake research at a doctoral or master's degree level. This is done through the development, submission, presentation and assessment of a formal research proposal. The thesis research proposal is presented to your PhD committee. It is on the basis of your research proposal that your committee makes a recommendation concerning your continuing candidature.

The research proposal should be 7,000 to 12,000 words long (15–25 pages) and include the following:

(a) the area and focus of the proposed research, along with a set of aims and objectives and the importance of the research
(b) critical literature review that establishes the background of the proposed research and identifies gaps that this research proposal will address
(c) an indication of the ability to make progress with the research
(d) research plan including research design, details of methods, management plan and time lines tied to the objectives, and
(e) potential outcomes if the research is successful.

Your formal research proposal should demonstrate adequate language skills and your ability to successfully complete such a program. Research proposals will be presented at a public research seminar.

Criteria used to evaluate research proposals

The general criteria used to evaluate student research proposals are as follows:

(a) Are the aims and objectives clearly stated, feasible and consistent with the Faculty's research interests?
(b) Does the student demonstrate knowledge of the key areas of the research literature?
(c) Is the research plan viable?
(d) Is the proposed methodology sound and feasible?
(e) Do the potential outcomes merit the research proposal?
(f) Are there adequate resources available to enable the candidate to complete the proposed research?
(g) Do the proposal and its written and oral presentation indicate a satisfactory command of English, sufficient to enable the applicant to undertake MPhil or PhD research at The University of Sydney?

The major part of the research must be completed within the University, although a period of six months' leave may be granted by the Associate Dean (Graduate Studies) to enable fieldwork to be completed.

Annual progress report

You are required to submit a progress report annually (usually in October), regardless of when you commenced your candidature. This is reviewed by your supervisor and the Associate Dean (Graduate Studies) and you will be notified of the result of this review, when any problem areas or training needs will be identified.

Interviews

During your first year, around the time of the annual progress review, you will be interviewed by the Associate Dean (Graduate Studies) to discuss your general progress, facilities, resources, and supervision.

Suspension of candidature

If you need to suspend your candidature, you should put your request in writing (stating the reasons) to your supervisor, who will then make a recommendation via the Student Administration Manager to the Associate Dean (Graduate Studies) for approval. You will receive written confirmation of the suspension. Suspension of candidature is by semester and except with the approval of the Associate Dean, you may suspend your candidature for a total of two full-time semesters only. During suspension you will not be liable for HECS, therefore your HECS exemption scholarship will be suspended, as will scholarship payments. You will be granted an extension to your candidature equivalent to the length of the suspension. International students may be required to leave the country whilst their candidature is suspended and should seek advice from the International Office before taking any action.

Leave of absence

If you need to take a break from your research for less than a semester, a leave of absence may be granted. You should follow the same procedure as for suspension (see above). You will not be granted an extension to your candidature for a leave of absence but, you may, if not quite finished by the due date, apply for an extension equivalent to the length of absence.

Extension

If, at the end of your candidature, you need extra time to put the finishing touches to your thesis you may apply in writing for an extension. This should be sent to the Student Services Manager in the first instance.

■ 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 and the quality of those spaces created, 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. (Researchers: Forwood, Hayman)

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 degree resolutions

The Doctor of Philosophy is a degree of the University and follows the resolutions published in the University Calendar. The Master of Philosophy (Architecture) is a degree of the Faculty and follows the same general principles as the PhD, but has more specific Faculty requirements.

Master of Philosophy (Architecture)

Resolutions of the Senate

1. Admission requirements

An applicant for admission to candidature for the degree of Master of Philosophy (Architecture) shall:

(1) be a graduate of The University of Sydney or hold qualifications deemed by the Dean to be equivalent; and

(2) have completed any additional requirements at a standard acceptable to the Dean as set out in the Resolutions of the Faculty.

2. Requirements of the course

A candidate for a research degree shall proceed by research and submission of a thesis.

3. Time limits

(1) A candidate for the MPhil(Arch) must complete a minimum of 4 semesters full-time, or 6 semesters part-time, except a candidate with the equivalent of first or second class honours in the qualifying degree may complete a minimum of 2 semesters full-time.

(2) A candidate for the MPhil(Arch) has a maximum candidature of 7 semesters if full-time and 10 semesters if part-time.

4. Award of the degree

(1) The Dean awards the degree whenever:
- (a) the examiners of a thesis have recommended without reservation that the degree be awarded and the Associate Dean (Graduate Studies) concurs; or
- (b) all of the examiners of a thesis have recommended the degree be awarded or awarded subject to emendations to all copies of the thesis which are to remain available in the University and the Associate Dean (Graduate Studies) concurs; or
- (c) the Dean accepts the recommendation of the Associate Dean (Graduate Studies) that the degree be awarded subject to emendations despite reservations expressed by one of the examiners.

(2) The Dean may permit an unsuccessful candidate to prepare for re-examination if, in the Dean's opinion, the candidate's work is of sufficient merit and the Associate Dean (Graduate Studies) has so recommended. The recommendation to permit a candidate to prepare for re-examination shall not be available for a thesis presented for re-examination.

Faculty resolutions – Master of Philosophy (Architecture)

1. Admission to candidature

The Dean may admit to candidature a person who has:

(1) qualifications equivalent to those required of a graduate of The University of Sydney

(2) submitted a Statement of Research Interest in an area that the Faculty can supervise

(3) met the English language requirement as set by the Faculty.

2. Appointment of supervisor and committee

(1) The Dean shall appoint a member of the full-time or fractional academic or research staff of the department of the Faculty in which the candidate is proceeding towards a research master's degree to act as supervisor of the candidate for a research master's degree. 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 organisation.

(2) For each candidate the Dean shall appoint a committee, on advice of the supervisor, to assist in the progress of the candidature prior to the presentation of the research proposal.

3. Probationary period

(1) A candidate for the MPhil (Arch) is on probation for a minimum of one semester and a maximum of 2 semesters.

(2) The criteria for satisfactory completion of probation include:
- (a) the submission of a satisfactory Research Proposal to the candidate's committee
- (b) the presentation of the Research Proposal to the candidate's committee at a public seminar
- (c) demonstration of adequate English language competency to the candidate's committee
- (d) completion of the unit Modes of Inquiry and Methods of Research
- (e) satisfactory completion of a structured first year as determined by the Associate Dean (Graduate Studies) in consultation with supervisors in disciplinary areas
- (f) a recommendation from the candidate's supervisor, on the advice of the candidate's committee, that the probationary requirements have been met.

(3) A candidate who has not satisfied the probationary requirements at the end of 12 months will have the candidature terminated.

4. Satisfactory progress

(1) Once a year, the candidate will be interviewed by the Associate Dean (Graduate Studies) and the relevant head of department (unless one is the supervisor) to discuss facilities, resources, and supervision. If arrangements are not satisfactory, the Associate Dean (Graduate Studies) will advise on supervisory arrangements and facilities.

(2) Candidates are required to submit an annual progress report to the Associate Dean (Graduate Studies). If progress is not satisfactory, the Dean may terminate the candidature.

5. Suspensions of candidature

(1) Candidates wishing to seek suspension of their candidature must seek formal permission to do so from the Dean.
(2) Except with approval of the Dean, a candidate for a research degree in the Faculty may only suspend candidature for periods totalling no more than the equivalent of two semesters full-time.

6. Coursework

A candidate for the MPhil(Arch) is permitted or may be required to enrol in a maximum of 24 credit points of coursework.

7. Thesis requirements

(1) Not earlier than the minimum period of candidature, candidates proceeding by research shall:
  (a) lodge with the Faculty three copies of a thesis embodying the results of an original investigation carried out by the candidate;
  (b) state in the thesis, generally in the preface and specifically in the notes, the sources from which the information was derived, the extent to which the candidature 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 candidate's 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 candidate indicates the work so incorporated.
(2) A thesis submitted for examination shall be accompanied by a certificate from the candidate's supervisor stating, whether in the supervisor's opinion, the form of presentation of the thesis is satisfactory.

8. Form of a thesis

(1) A thesis submitted for examination may be bound in either a temporary or permanent form.
(2) Temporary binding must be able to withstand ordinary handling and postage. The preferred form of binding is the 'perfect binding' system; spring back, ring-back or spiral binding is not permitted.
(3) The cover of a temporarily bound thesis must have a label showing the candidate's name, name of the degree, title of the thesis and the year of submission.
(4) The requirements for permanent binding are given in the University's Statutes and Regulations, under the statutes governing the degree of Doctor of Philosophy.
(5) Following examination and emendation if necessary, at least one copy (The University of Sydney Library copy) of the thesis, on archival paper, must be bound in a permanent form.
(6) If emendations are required, all copies of the thesis which are to remain available within the University must be amended.

9. Examination of a thesis

For candidates proceeding by research the Dean shall appoint two examiners, at least one of whom shall be external to the University. The examiners shall report to the Dean.

Doctor of Philosophy

The PhD is a University degree and follows the resolutions of the Academic Board. They are printed in full in the Postgraduate Studies Research Handbook and may be found at www.usyd.edu.au/su/calendar

The Faculty has resolutions additional to those of the Academic Board:

Faculty resolutions

In addition to the resolutions of the Senate and Academic Board the Faculty resolves that:

1. A candidate for a research degree shall proceed by research and submission of a thesis.

2. Admission to candidature

The Dean may admit to candidature a person who has:
(1) a master's degree or a bachelor's degree with first or second class honours
(2) submitted a Statement of Research Interest in an area that the Faculty can supervise
(3) met the English language requirement as set by the Faculty.

3. Appointment of committee

For each candidate the Dean shall appoint a committee, on advice of the supervisor, to assist in the progress of the candidature prior to the presentation of the Research Proposal.

4. Probationary period

(1) A candidate for the PhD is on probation for two semesters.
(2) The criteria for satisfactory completion of probation include:
  (a) the submission of a satisfactory Research Proposal to the candidate's committee
  (b) the presentation of the Research Proposal to the candidate's committee at a public seminar
  (c) demonstration of adequate English language competency to the candidate's committee
  (d) completion of the unit Modes of Inquiry and Methods of Research
  (e) satisfactory completion of a structured first year as determined by the Associate Dean (Graduate Studies) in consultation with supervisors in disciplinary areas
  (f) a recommendation from the candidate's supervisor, on the advice of the candidate's committee, that the probationary requirements have been met.
(3) A candidate who has not satisfied the probationary requirements at the end of 2 semesters will have the candidature terminated.
(4) A PhD candidate who has not satisfied the probationary requirements at the end of two semesters may be permitted to transfer their candidature to the MPhil(Arch).

5. Satisfactory progress

(1) Once a year, the candidate will be interviewed by the Associate Dean (Graduate Studies) and the relevant head of department (unless one is the supervisor) to discuss facilities, resources, and supervision. If arrangements are not satisfactory, the Associate Dean (Graduate Studies) will advise on supervisory arrangements and facilities.
(2) Candidates are required to submit an annual progress report to the Associate Dean (Graduate Studies). If progress is not satisfactory, the Faculty may terminate the candidature.

6. Suspension of candidature

(1) Candidates wishing to seek suspension of their candidature must seek formal permission to do so from the Dean.
(2) Except with approval of the Dean, a candidate for a research degree in the Faculty may only suspend candidature for periods totalling no more than the equivalent of two semesters full-time.

7. Coursework

A candidate for the degree of Doctor of Philosophy is permitted or may be required to enrol in a maximum of 24 credit points of coursework.

Doctor of Science (Architecture)

Extract from The University of Sydney (Amendment Act) Rule 1999 (as amended)

Division 3: Higher Doctorates

65.Applicability of this Division

This Division applies to the following degrees:
(a) Doctor of Science in Agriculture
(b) Doctor of Agricultural Economics
(c) Doctor of Science in Architecture
(d) Doctor of Letters
(e) Doctor of Dental Science
(f) Doctor of Science in Economics
(g) Doctor of Letters in Education
(h) Doctor of Engineering
(i) Doctor of Laws
(j) Doctor of Medicine
(k) Doctor of Music
(l) Doctor of Science
(m) Doctor of Letters in Social Work
(n) Doctor of Veterinary Science.

66.Published works

(1) The Academic Board may, on the recommendation of the faculty or board of studies concerned, award the appropriate degree of doctor for published work which, in the opinion of the examiners, has been generally recognised by scholars in the field concerned as a distinguished contribution to knowledge or creative achievement.

(2) Without limiting the generality of Rule 66(1), the published work may be regarded as a distinguished contribution to knowledge if:
  (a) it represents a significant advance in knowledge in its chosen field; or
  (b) it has given rise to or is a major part of a significant debate in scholarly books and journals among recognised scholars in its chosen field; or
  (c) it has directly given rise to significant changes in the direction of research or of practice of a newer generation of recognised scholars in its chosen field.

67. Application procedure

(1) An applicant for admission to candidature must satisfy the eligibility for admission criteria in Rules 68, 69 and 70 and be considered under the preliminary assessment procedure specified in Rule 72 before being permitted to enrol as a candidate for the degree.
(2) An applicant should submit to the Registrar:
  (a) an application which states the degree being applied for; gives details of academic qualifications held; and gives details of association with the University;
  (b) a list of the published work which it is proposed to submit for examination; and
  (c) a description of the theme of the published work and, where there is a large number of publications whose dates range over a period of time and which contain some range of subject matter, a statement of how these are related to one another and to the theme.

68. Eligibility for admission

(1) An applicant for admission to candidature for the degree of doctor shall either have qualified for the award of a degree of The University of Sydney and have met the specific requirements of Rule 68(2), or shall satisfy the requirements of Rule 69.
(2) (a) An applicant for the degree of Doctor of Dental Science must have qualified for the award of the degree of Bachelor of Dental Surgery.
  (b) An applicant for the degree of Doctor of Medicine must have qualified for the award of the degree of Bachelor of Medicine.
  (c) An applicant for the degree of Doctor of Music must have qualified for the award of the degree of Bachelor of Music, or for the award of the degree of Bachelor of Arts including a 3 year sequence of courses in Music.
  (d) An applicant for the degree of Doctor of Veterinary Science must have qualified for the award of the degree of Bachelor of Veterinary Science.

69. Awards to non-graduates

(1) The Academic Board, on the recommendation of the faculty or board of studies concerned, may admit as a candidate for the degree of doctor an applicant, not being a graduate of The University of Sydney, who:
  (a) is either a graduate of another university or institution or is a person who is accepted by that faculty or board of studies and by the Academic Board as having standing equivalent to that required of a graduate of the University; and
  (b) in the case of an applicant for one of the degrees of doctor referred to in Rule 68(2), is accepted by the faculty or board of studies concerned as having standing equivalent to that required in that Rule; and
  (c) has been a full-time member of the academic staff of the University for at least 3 years, or has had such a similar significant involvement with the teaching and research of the University as the Academic Board, on the recommendation of the faculty or board of studies concerned, considers equivalent.
(2) A candidate admitted under Rule 68 must be a graduate of at least 5 years' standing before the degree of doctor can be awarded.
(3) A candidate admitted under Rule 69(1) must have held the qualification by virtue of which he or she was admitted for at least 5 years before the degree of doctor can be awarded.

70. Nature of work to be submitted

(1) The publications submitted for examination shall be a record of original research undertaken by the candidate, who shall state the sources from which the information was derived, the extent to which the work of others has been made use of, and the portion of the work claimed as original.
(2) The publications submitted for the degree of Doctor of Letters shall include at least one substantial work.
(3) A major musical work or works of the candidate's own composition may be submitted for the degree of Doctor of Music.
(4) If the publications submitted, whether published in the candidate's sole name or under conjoint authorship, record work carried out conjointly, the candidate shall state the extent to which the candidate was responsible for the initiation, conduct or direction of such conjoint research, however published.
(5) Where the principal publications, as distinct from any supporting papers, incorporate work previously submitted for a degree in this or in any other university, the candidate shall clearly indicate which portion of the publications was so submitted.

71. Preliminary assessment

(1) The dean of the faculty or chairperson of the board of studies concerned shall appoint, in respect of each application made, a committee normally comprising 5 persons being:
  (a) the dean of the faculty or chairperson of the board of studies concerned;
  (b) the head of the department and the professor most closely associated with the field of the applicant's work; and
  (c) other persons appointed by the dean or chairperson.
(2) The committee shall consider whether the applicant is eligible for admission to candidature, whether the published work is in a field appropriate for the nominated degree and which the faculty is competent to examine at that level and, if so, shall make an assessment of the prima facie worthiness for examination of the published work in terms of Rule 66 of these resolutions.
(3) The committee, if it finds that a prima facie case exists, shall recommend to the faculty or board of studies concerned that it recommend to the Academic Board:
  (a) the admission to candidature if not qualified under Rule 68; and
  (b) the appointment of at least three examiners of whom at least 2 shall be external examiners.
(4) The Academic Board may appoint further examiners in addition to those recommended by the faculty or board of studies.

72. Enrolment

After the Academic Board has admitted the applicant, if necessary, and appointed examiners, the applicant shall submit to the Registrar five copies of the published work and of the description of the theme of the published work and shall enrol as a candidate at the next enrolment period.

73. Examination

(1) Each examiner shall make a separate report as to whether the published work meets the requirements as specified in Rule 66 of being generally recognised by scholars in the field concerned as a distinguished contribution to knowledge.
(2) The reports of the examiners shall be considered by the committee appointed under Rule 71(1) and a recommendation made to the faculty or board of studies concerned which shall take note of the terms of Rule 66.
(3) The faculty or board of studies may:
  (a) recommend to the Academic Board that the degree be awarded;
  (b) recommend to the Academic Board that the degree not be awarded;
  (c) recommend to the Academic Board the appointment of a further examiner or examiners.
(4) In making its report to the Academic Board under Rule 73, the faculty or board of studies shall transmit the names of the examiners and the substance of their reports.
(5) The Academic Board shall determine the result of the candidature.
(6) On the award of the degree the Registrar shall lodge one bound copy of the published work with the University Librarian.

7 Study in the Faculty of Architecture

Appeals against academic decisions

The university policy regarding student appeals against academic decisions can be found in both the Calendar and on the University's Web site, through the Central Policy Index. The desire of the University as expressed in the policy is that most problems be resolved informally at the local level between the student and the academic concerned. In cases where this is not possible the problem is escalated up the ranks until a resolution is achieved, firstly to the Head of School, then the Dean and so on. The objective is to resolve problems openly, fairly and to everyone's satisfaction.

There are many non-academic 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 Administration Centre in the Faculty of Architecture.

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.

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.

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 University Counselling Service, and the University Health Service, are all available for consultation and can give advice on appropriate action to take.

Assessment methods and posting of results

In Bachelor of Design, 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 BDesign 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.

Assumed knowledge

There are no formal prerequisites for students wishing to enrol in the BDesign 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.

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.

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.

BArch – entry requirements

Although most students entering the BArch are proceeding from the BDesign, the Faculty reserves some places for applicants who have academic standing equivalent to the BDesign 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.

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. Requests for new and replacement swipe cards should be made to the Student Administration Centre. Lost cards should be notified immediately to Security Services on (02) 9351 3487.

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 Administration Centre

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.

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.

Credit from previous study

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.

Darkrooms and plan printing equipment

Darkrooms, plan printing equipment and an artiscope are available for student use.

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.

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.

Drawing board deposit

BDesign students are asked to pay a deposit for use of a drawing board (to be paid to the Student Administration Centre by the second week of semester). The Faculty will retain part of the deposit to cover the cost of maintenance of the boards during the degree and for protective coverings and the rest of the deposit will be refunded at the end of third year if the board is in good condition.

English language

Currently the IELTS score that you have to achieve before entering the Faculty is 7 (the TOEFL equivalent is 600). This is necessary to ensure that you can cope with the standard of teaching in the Faculty.

Enrolment confirmation

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. You are charged fees on the basis of your enrolment so it is in your interests to make sure this information is correct.

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 Administration 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 vary your enrolment via MyUni or apply at the Faculty's Student Administration Centre to obtain the appropriate approval. Your record at the University will not be correct unless you do this and you could incur a financial liability for tuition fees in units you have not sat. It is not sufficient to inform the teaching or tutoring staff that you discontinued a unit.

Enrolment – Suspension of candidature

Candidates may apply for suspension of their candidature due to work pressures, illness or other unforseen circumstances. Applications should be made in writing to the Faculty's Student Administration 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.

Enrolment Variations

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 after the census date but before the end of the lectures for that unit of study shall be recorded as 'Discontinue Fail' 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 for semester 1 or the 31 August for semester 2.

(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.

All variations to enrolment should be conducted on-line through MyUni or forwarded to the Faculty's Student Administration Centre staff.

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.

Laboratories

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.

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.

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 Administration 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 Administration 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) unless noted otherwise in the unit of study outline:

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.

Library

Located on Level 4 of the Wilkinson Building, 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.

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.

Plagiarism and Academic Honesty

Academic honesty is a core value of the University. 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 represents a form of fraud. The Academic Board Resolution on Academic Honesty in Coursework sets out principles, procedures and a code of practice for academic honesty in submitted work in the University. This document is available at db.usyd.edu.au/policy/policy–index.stm

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 RAIA 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.

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.

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.

Student Administration 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. All matters to do with your enrolment should be dealt with at the Student Administration Centre.

Study options after completion of the BDesign and BDesComp

Upon completion of the BDesign degree there are several options available to students for further study within the Faculty of Architecture. Students enrolled on the BDesign 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.

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

Timetables

Timetables for all coursework degrees 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.

Upgrade of candidature

Students who have completed the Graduate Certificate requirements and have a weighted average mark (WAM) of at least 70, 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.

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.

8 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 close to the Camperdown/Darlington campus 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
Email: accomm@stuserv.usyd.edu.au
Web: www.usyd.edu.au/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

Local applicants for undergraduate courses and programs of study

Citizens and permanent residents of Australia and citizens of New Zealand are considered local applicants for the purpose of admission and enrolment. If you are in this group and you wish to apply for admission into an undergraduate course, you would generally apply through the Universities Admissions Centre (UAC) by the last working day of September of the year before enrolment. Go to www.uac.edu.au for more information.

Note that some faculties, such as Pharmacy, the Sydney Conservatorium of Music and Sydney College of the Arts, have additional application procedures.

Local applicants for postgraduate courses and programs of study

Citizens and permanent residents of Australia and citizens of New Zealand are considered local applicants for the purpose of admission and enrolment. Application is direct to the faculty (not to the department, Student Centre or the Admissions Office) which offers the course in which you are interested. Application forms for postgraduate coursework, postgraduate research and the Master's qualifying or preliminary program, or for non-award postgraduate study can be found at www.usyd.edu.au/su/studentcentre/applications/applications.html.

Please note that not all faculties use these application forms for admission into their courses. Some faculties prefer to use their own specially tailored application forms rather than the standard ones. Please contact the relevant faculty.

International applicants for all course types (undergraduate and postgraduate)

All applicants other than Australian citizens, Australian permanent residents and citizens of New Zealand are considered to be international applicants. In the vast majority of cases applicants apply for admission through the University's International Office. All of the information international applicants need, as well as downloadable application forms, is available from the Web site of the International Office, www.usyd.edu.au/io.

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 currently enrolled students find casual and part-time work during their studies and 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/cas–emp

Centre for Continuing Education

The Centre for Continuing Education offers a wide range of short courses for special interest, university preparation and professional development. Subject areas include IT, business, languages, history and culture, overseas study tours, creative arts and social sciences. Courses are open to everyone.

The Centre will be relocating at the end of 2003. Please refer to the Centre's Web site for up-to-date information on location/contact details, or phone the existing general enquiry number (02) 9351 2907 for redirection.

Mackie Building, KO1
The University of Sydney
NSW 2006 Australia Ph: (02) 9351 2907
Fax: (02) 9351 5022
Email: info@cce.usyd.edu.au
Web: www.cce.usyd.edu.au

Centre for English Teaching

CET offers a range of English language courses including Academic English, General English, Business English and IELTS preparation. The University is now also an IELTS testing centre. The English programs help international students to reach the required English levels for entry to degrees at the University. At the end of their language training, students have the opportunity to take the CET university direct entry test (e-test).

Level 2, Building F, 88 Mallett St
University of Sydney (MO2)
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 Information Officer for information about children's services for students and staff of the University who are parents.

Child Care Information Officer
Level 7, Education Building, A35
Phone: (02) 9351 5667
Fax: (02) 9351 7055
Email: childc@stuserv.usyd.edu.au
Web: www.usyd.edu.au/childcare

The Co-op Bookshop

In addition to providing the required course textbooks, the Co-op Bookshop stocks a wide range of supplementary material, including recommended readings, course notes, study aids and reference books.

We also house an extensive range of general books including fiction, non-fiction, academic and professional titles.

A one-off membership fee of $25 entitles discounts on most books.

Software for students and academics is available at up to 70% off the usual RRP.

The Co-op is situated in the Sydney University Sports and Aquatic Centre, just off City Road.

Phone: (02) 9351 3705 or (02) 9351 2807
Fax: (02) 9660 5256
Email: sydu@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/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 note taking, 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 7040
Fax: (02) 9351 3320TTY: (02) 9351 3412
Email: disserv@stuserv.usyd.edu.au
Web: www.usyd.edu.au/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 CentreLevel 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

The Fees Office provides information on how to pay fees, where to pay fees and if payments have been received. The Fees Office also has information on obtaining a refund for fee payments.

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
Email: fao@stuserv.usyd.edu.au
Web: www.usyd.edu.au/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;
- enables a member of the public to obtain access to documents held by the University;
- enables a member of the public to ensure that records held by the University concerning his or her personal affairs are not incomplete, incorrect, out of date or misleading.
  (Note that a 'member of the public' includes staff and students of the University)

It is a requirement of the Act that applications be processed and a determination made within a specified time period, generally 21 days. Determinations are made by the University's Registrar.

While application may be made to access University documents, some may not be released in accordance with particular exemptions provided by the Act. There are review and appeal mechanisms which apply when access has been refused.

The University is required to report to the public on its FOI activities on a regular basis. The two reports produced are the Statement of Affairs and the Summary of Affairs. The Statement of Affairs contains information about the University, its structure, function and the kinds of documents held. The Summary of Affairs identifies the University's policy documents and provides information on how to make an application for access to University documents.

Further information and copies of the current reports may be found at www.usyd.edu.au/arms/foi.

Graduations Office

The Graduations Office is responsible for organising graduation ceremonies and informing students of their graduation arrangements.

Student Centre
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 and PELS

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

Information Technology Services (ITS)

Information Technology Services oversees the University's computing infrastructure. Students can contact ITS either through the ITS Helpdesk (www.helpdesk.usyd.edu.au) on(02) 9351 6000, located in the University Computer Centre (Building H08), or through the University Access Labs (www.usyd.edu.au/su/is/labs/). The access labs on main campus are located in:

- Fisher Library (Level 2)
- Carslaw (Room 201)
- Education (Room 232)
- The Link Building (Room 222)
- Pharmacy (Room 510)

Other labs are available at the Law, Orange, Westmead and Cumberland campuses.

The labs allow students free access to computers, including office and desktop publishing software and storage, at-cost Internet access, printing facilities and the opportunity to host their own Web site.

Each student is supplied with an account, called a 'Unikey' or 'extro' account, which allows access to a number of services including:

- Free Email: (www-mail.usyd.edu.au);
- Access to the Internet both from home and from the access labs (www.helpdesk.usyd.edu.au/services.html);
- Online course material (www.groucho.ucc.usyd.edu.au:9000/webct/public/home.pl);
- Student facilities via the intranet (www.intranet.usyd.edu.au), including exam results and seating, student timetables and bulletin boards; and
- Free courses in Microsoft Word and Excel, Photoshop, Internet use and html.

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 orientation and assistance with finding accommodation for new arrivals and psychological counselling and welfare advice for international students and their families. 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 3699
Fax: (02) 9351 2795
Email: studyabroad@io.usyd.edu.au
Web: www.usyd.edu.au/io/studyabroad

Exchange

Phone: (02) 9351 3699
Fax: (02) 9351 2795
Email: exchange@io.usyd.edu.au
Web: www.usyd.edu.au/io/exchange

Koori Centre and Yooroang Garang

The Koori Centre provides programs, services and facilities to encourage and support the involvement of Aboriginal and Torres Strait Islander people in all aspects of tertiary education at The University of Sydney. The Centre provides tutorial assistance, access to computers, an Indigenous Research library, study rooms, an orientation program at the beginning of the year and assistance in study and learning skills. In particular the Koori Centre aims to increase the successful participation of Aboriginal and Torres Strait Islander people in undergraduate and postgraduate degrees, develop the teaching of Aboriginal Studies, conduct research in the field of Aboriginal Education, and establish working ties with schools and communities.

Close collaboration is also maintained with Yooroang Garang, School of Indigenous Health Studies in the Faculty of Health Sciences on the University's Cumberland campus. Yooroang Garang provides advice, assistance and academic support for Indigenous Health Sciences students, as well as preparatory undergraduate and postgraduate courses in Aboriginal Health and Community.

Koori Centre

Ground Floor, Old Teachers College, A22
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 2046 (General Enquiries)
Toll Free: 1800 622 742
Community Liaison Officer (02) 9351 7003
Fax: (02) 9351 6923
Email: koori@koori.usyd.edu.au
Web: www.koori.usyd.edu.au

Yooroang Garang

T Block, Level 4
Cumberland Campus, C42
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 9393
Toll Free: 1800 000 418
Fax: (02) 9351 9400
Email: yginfo@fhs.usyd.edu.au
Web: www.yg.fhs.usyd.edu.au

Language Centre

The Language Centre provides multimedia teaching rooms for Faculty of Arts courses. Technical support for teaching staff is available on site. Student self-access facilities for curriculum materials, access to multilingual satellite television broadcasts and a broadcast copying service are also provided by the centre. The centre maintains a resource collection of multimedia language materials in 140+ languages and has three language laboratories, four audiovisual classrooms, two access computer labs and one student audiovisual study room.

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

Learning Centre

The Learning Centre helps students to develop the generic learning and communication skills which are necessary for university study and beyond. The Centre is committed to helping students 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 include an Individual Learning Program, a special program for international students, faculty-based workshops, computer-based learning resources, 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/lc

Library

Students are welcome to use any of the 19 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 Web page, 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

Expected to close in December 2003 and collection transferred to other libraries in the University.

Burkitt-Ford Library
Sir Edward Ford Building, A27
Phone: (02) 9351 4364
Fax: (02) 9351 7125
Email: burkittford@library.usyd.edu.au

Camden Library
University Farms, Werombi Rd, Camden, C15
Phone: (02) 9351 1627
Fax: (02) 4655 6719
Email: camden@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@library.usyd.edu.au

Fisher Library
Eastern Ave, F03
Phone: (02) 9351 2993
Fax: (02) 9351 4328
Email: fishinf@library.usyd.edu.au

Health Sciences Library
East St, Lidcombe, C42
Phone: (02) 9351 9423
Fax: (02) 9351 9421
Email: library@fhs.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

Madsen Library
Madsen Building, F09
Phone: (02) 9351 6456
Fax: (02) 9351 6459
Email: madsen@library.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 5593
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

Schaeffer 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
Fax: (02) 9351 1372
Email: library@conmusic.usyd.edu.au

Mathematics Learning Centre

The Mathematics Learning Centre assists students to develop the mathematical knowledge, skills and confidence that are needed for studying their first level mathematics or statistics units at university. The Centre runs bridging courses in mathematics at the beginning of the academic year (fees apply). The Centre also provides on-going support during the year through individual assistance and small group tutorials to eligible students.

Level 4, Carslaw Building, F07
The University of Sydney
NSW 2006 Australia
Phone: (02) 9351 4061
Fax: (02) 9351 5797
Email: mlc@stuserv.usyd.edu.au
Web: www.usyd.edu.au/mlc

Part-time, full-time

Undergraduate students

Undergraduate 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.

Postgraduate students (coursework)

Whether a postgraduate coursework student is part-time or full-time is determined solely by credit-point load for all coursework programs. A student is classed as enrolled full-time in a semester if he/she is enrolled in units of study which total at least 18 credit points. Anything under this amount is considered a part-time study load. Please note that classes for some coursework programs are held in the evenings (generally 6–9 pm).

Postgraduate students (research)

Full-time candidates for research degrees do not keep to the normal semester schedule, instead they work continuously throughout the year except for a period of four weeks' recreation leave. There is no strict definition of what constitutes full-time candidature but, generally speaking, if you have employment or other commitments that would prevent you from devoting at least the equivalent of a 35-hour working week to your candidature (including attendance at the University for lectures, seminars, practical work and consultation with your supervisor as may be required) you should enrol as a part-time candidate. If in doubt you should consult your faculty or supervisor.

International students

International students who are resident in Australia are normally required under the terms of their entry visa to undertake full-time candidature only.

Privacy

The University is subject to the NSW Privacy and Personal Information Protection Act 1998 and the NSW Health Records and Information Privacy Act 2002. Central to the both Acts are the sets of Information Protection Principles (IPPs) and Health Privacy Principles which regulate the collection, management, use and disclosure of personal and health information. In compliance with the Privacy and Personal Information Protection Act the University developed a Privacy Management Plan which includes the University Privacy Policy. The Privacy Management Plan sets out the IPPs and how they apply to functions and activities carried out by the University. Both the Plan and the new University Privacy Policy were endorsed by the Vice-Chancellor on 28 June 2000.

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, the Health Records and Information Privacy Act or the Privacy Management Plan should be directed to:

Tim Robinson: (02) 9351 4263; or Anne Picot: (02) 9351 7262
Email: foi@mail.usyd.edu.au

Scholarships for undergraduates

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/scholarships

Student Centre

Ground Floor, Carslaw Building, F07
The University 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
Web: www.usyd.edu.au/su/studentcentre

Student identity cards

The student identity card functions as a library borrowing card, a transport concession card (when suitably endorsed) and a general identity card for a range of purposes within the University. The card must be carried at all times on the grounds of the University and must be shown on demand. Students are required to provide a passport-sized colour photograph incorporating head and shoulders only for lamination to this card. Free lamination is provided at a range of sites throughout the University during the January/February enrolment/pre-enrolment period. Cards that are not laminated, or do not include a photograph, will not be accepted. New identity cards are required for each year of a student enrolment.

The Student Intranet

The University is continually increasing the amount of information and services for students it provides through the Web. The new Student Intranet (intranet.usyd.edu.au/student/) gathers information and services together in one place and organises them by the use of tabs.

Categories such as 'MyStudy' provide links to courses and units of study information, student administration matters (eg, exam results, Web Enrolment Variations, etc.) and links to online learning courses – and of course the study-related services available to all students provided by the Library. Communication services – such as access to free student Email:, the online phone directory and face-to-face services provided by the Student Centre, International Office and ITS Help Desk – is another category.

The Services category provides access to student services such as Child Care, Counselling, I.T. Help and guidance in the use of the online Student Administration services. While Student Life focuses on campus life – accommodation, employment, sporting facilities, political life and where to eat and drink.

News and Events and Campuses provide links to what is happening right across the large and diverse learning community that is The University of Sydney.

MyUni is the personalised section of the intranet. All staff and students are provided with access to MyUni through a login name and password. MyUni enables them to receive delivery of personal information such as exam results, enrolment variations and seat numbers. MyUni is a portal from which students and staff can complete tasks that were previously only able to be done in person, offline.

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, Counselling Service, Disability Services, Financial Assistance Office, Learning Centre and Mathematics Learning Centre. The Web site is at www.usyd.edu.au/stuserv.

The Sydney Summer School

Most faculties at the University offer units of study from undergraduate degree programs during January/February. There are also some units of study available from postgraduate coursework programs from some faculties. As the University uses its entire HECS quota in first and second semester, these

units are full fee-paying for both local and international students and enrolment is 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 5 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, on the summer school Web site (www.summer.usyd.edu.au) and is usually circulated to students with their results notices. A small Winter School is also run from the Summer School office. This has mainly postgraduate offerings with a few undergraduate units of study. Information can be found on the summer school Web site.

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.

University Health Service

The University Health Service provides full general practitioner services and emergency medical care to all members of the University community. Medical centres on the Camperdown and Darlington Campuses offer general practioners, physiotherapy and some specialist services.

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

The Students' Representative Council is the organisation which represents undergraduates both within the University and in the wider community. All students enrolling in an undergraduate course automatically become members of the SRC.

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) 9351 0691 Mallett St
(02) 9351 1291 Pitt St – Conservatorium
Fax: (02) 9660 4260
Email: postmaster@src.usyd.edu.au
Web: www.src.usyd.edu.au

Sydney University Postgraduate Representative Association (SUPRA)

SUPRA is an organisation that provides services to and represents the interests of postgraduate students.

All postgraduate students at The University of Sydney are members of SUPRA.

Raglan Street Building, G10
University of Sydney
NSW 2006 Australia
Phone: (02) 9351 3715
Freecall: 1800 249 950
Fax: (02) 9351 6400
Email: supra@mail.usyd.edu.au
Web: www.usyd.edu.au/supra/

Sydney University Sport

Sydney University Sport provides 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: admin@susport.usyd.edu.au

University of Sydney Union

University of Sydney Union
Foyer, Holme Building, A09
Science Rd, The University of Sydney
NSW 2006 Australia
Phone: 1800 013 201 (Switchboard)
Fax: (02) 9563 6216
Email: info@usu.usyd.edu.au
Web: www.usydunion.com

Abbreviations and Glossary

■ Abbreviations

Listed below are the more commonly used acronyms that appear in University documents and publications.

A	
AARNet	Australian Academic Research Network
AAT	Administrative Appeals Tribunal
AAUT	Australian Awards for University Teaching
ABC	Activity Based Costing
ABS	Australian Bureau of Statistics
ABSTUDY	Aboriginal Study Assistance Scheme
ACER	Australian Council for Educational Research
AGSM	Australian Graduate School of Management
ANZAAS	Australian and New Zealand Association for the Advancement of Science
APA	Australian Postgraduate Awards
APAC	Australian Partnership for Advanced Computing
APAI	Australian Postgraduate Awards (Industry)
APA-IT	Australian Postgraduate Awards in Information Technology
APDI	Australian Postdoctoral Fellowships Industry
APEC	Asia-Pacific Economic Co-operation
APF	Australian Postdoctoral Fellowship
AQF	Australian Qualifications Framework
ARC	Australian Research Council
ARCA	Australian Research Council Act
ASDOT	Assessment Fee Subsidy for Disadvantaged Overseas Students
ATN	Australian Technology Network
ATO	Australian Taxation Office
ATP	Australian Technology Park
ATPL	Australian Technology Park Limited
AUQA	Australian Universities Quality Agency
AusAID	Australian Agency for International Development
AUTC	Australian Universities Teaching Committee
AVCC	Australian Vice-Chancellors Committee
B	
BAA	Backing Australia's Ability
BAC	Budget Advisory Committee
BITLab	Business Intelligence Lab
BLO	Business Liaison Office
BOTPLS	Bridging for Overseas Trained Professionals Loans Scheme
C	
CAF	Cost Adjustment Factor
CAUT	Committee for Advancement of University Teaching
CDP	Capital Development Program
CDP-IT	Capital Development Program - Information Technology
CEP	Country Education Profile
CEQ	Course Experience Questionnaire
CFO	Chief Financial Officer
CHASS	College of Humanities and Social Sciences
CHS	College of Health Sciences
CIO	Chief Information Officer
CPI	Consumer Price Index
CPSU	Community and Public Sector Union
CRC	Cooperative Research Centre
CREO	Centre for Regional Education, Orange
CRICOS	Commonwealth Register of Institutions and Courses for Overseas Students
CRRI	Centre for Rural and Regional Innovation
CSIRO	Commonwealth Scientific and Industrial Research Organisation

CST	College of Sciences and Technology
CUSTD	Committee for University Teaching and Staff Development
D	
DAC	Data Audit Committee
DEST	Commonwealth Department of Education, Science and Training
DET	NSW Department of Education and Training
D-IRD	Discovery-Indigenous Researchers Development Program
DISR	Department of Industry, Science and Resources
DoFA	Department of Finance and Administration
DVC	Deputy Vice-Chancellor
E	
EB	Enterprise Bargaining
EFTSU	Equivalent Full Time Student Unit
EIP	Evaluations and Investigations Program
ELICOS	English Language Intensive Course of Study
EMU	Electron Microscope Unit
ESOS Act	Education Services for Overseas Student Act
F	
FlexSIS	Flexible Student Information System
FMO	Facilities Management Office
FOS	Field of Study
FTE	Full Time Equivalent (Staff)
G	
GATS	General Agreement on Trade in Services
GCCA	Graduate Careers Council of Australia
GDS	Graduate Destination Survey
GPOF	General Purpose Operating Funds
GSA	Graduate Skills Assessment
GST	Goods and Services Tax
GWSLN	Greater Western Sydney Learning Network
H	
HDR	Higher Degree Research
HECS	Higher Education Contribution Scheme
HEEP	Higher Education Equity Program
HEFA	Higher Education Funding Act 1988
HEIP	Higher Education Innovation Programme (DEST)
HEO	Higher Education Officer
HERDC	Higher Education Research Data Collection
I	
IAS	Institute of Advanced Studies
ICT	Information and Communication Technology
IGS	Institutional Grants Scheme (DEST)
IO	International Office
IP	Intellectual Property
IPRS	International Postgraduate Research Scholarships
IREX	International Researcher Exchange Scheme
ISFP	Indigenous Support Funding Program
ISIG	Innovation Summit Implementation Group
ISSU	International Student Services Unit
IT	Information Technology
ITC	Information Technology Committee
ITL	Institute for Teaching and Learning
ITS	Information Technology Services
J	
JASON	Joint Academic Scholarships On-line Network
L	
LBOTE	Language Background Other Than English
M	
MBA	Master of Business Administration
MISG	Management Information Steering Group
MNRF	Major National Research Facilities Scheme
MOU	Memorandum of Understanding
MPG	Major Projects Group

MRB	Medical Rural Bonded Scholarship Scheme
N	
NBCOTP	National Bridging Courses for Overseas Trained Program
NCG	National Competitive Grant
NESB	Non-English-Speaking Background
NHMRC	National Health and Medical Research Council
NOIE	National Office for the Information Economy
NOOSR	National Office for Overseas Skill Recognition
NRSL	Non-Recent School Leaver
NSW VCC	New South Wales Vice-Chancellors' Conference
NTEU	National Tertiary Education Industry Union
O	
OECD	Organisation for Economic Co-operation and Development
OLA	Open Learning Australia
OLDPS	Open Learning Deferred Payment Scheme
OPRS	Overseas Postgraduate Research Scholarships
P	
PAYE	Pay As You Earn
PAYG	Pay As You Go
PELS	Postgraduate Education Loans Scheme
PSO	Planning Support Office
PVC	Pro-Vice-Chancellor
Q	
QA	Quality Assurance
QACG	Quality Advisory and Coordination Group
R	
R&D	Research and Development
R&R	Restructuring and Rationalisation Program
RC	Responsibility Centre
REG	Research and Earmarked Grants
REP	Research Education Program
RFM	Relative Funding Model
RIBG	Research Infrastructure Block Grant (DEST)
RIEF	Research Infrastructure Equipment and Facilities Scheme
RISF	Restructuring Initiatives Support Fund
RMO	Risk Management Office
ROA	Record of Achievement
RQ	Research Quantum
RQU	Recognition Quality Unit (Higher Education Division – DEST)
RRTMR	Research and Research Training Management Reports
RSL	Recent School Leaver
RTS	Research Training Scheme (DEST)
S	
SCA	Sydney College of the Arts
SCEQ	Sydney Course Experience Questionnaire
SCM	Sydney Conservatorium of Music
SCR	Science Capability Review
SDF	Strategic Development Fund
SDVC	Senior Deputy Vice-Chancellor
SEG	Senior Executive Group
SES	Socioeconomic Status
SI	Scholarship Index
SNA	Safety Net Adjustment
SPIRT	Strategic Partnerships with Industry – Research and Training Scheme
SRC	Students' Representative Council
SSR	Student/Staff Ratio
SUPRA	Sydney University Postgraduate Students' Representative Association
SUSport	Sydney University Sport
SUSU	Sydney University Sports Union (now SUS)
SUWSA	Sydney University Women's Sports Association (now SUS)
T	
TAFE	Technical and Further Education
TFN	Tax File Number
TMUI	Treasury Measure of Underlying Inflation

TPI	Teaching Performance Indicator
U	
UAC	Universities Admissions Centre
UMAP	University Mobility in Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPA	University Postgraduate Awards
V	
VCAC	Vice-Chancellor's Advisory Committee
VET	Vocational Education and Training
W	
WIT	Western Institute of TAFE
WRP	Workplace Reform Program
WTO	World Trade Organization

■ Glossary

This glossary describes terminology in use at the University of Sydney.

AAM (Annual Average Mark)

This mark is calculated using the unit of study credit point value for each Semester and for the year. This mark may also be calculated cumulatively for every currently enrolled student, based on all unit of study completions to the end of the last completed semester, as a cumulative measure of progression.

The formula for this calculation is:

$$AAM = \frac{\sum(marks \times creditPointValue)}{\sum(creditPointValue)}$$

The 'marks' used in this formula are the actual marks obtained by the student in each unit of study, as recorded on the student's record, including any marks of less than 50, and in the case of a failing grade with no mark, the mark defaults to 0. Pass/Fail assessed subjects and credit transfer subjects (from another institution) are excluded from these calculations, however the marks from all attempts at a unit of study are included. (Effective from 1 January 2004.)

Academic Board

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 program of teaching sessions offered over a year. Currently the cycle runs from the enrolment period for Semester 1 through to the completion of the processing of results at the end of Semester 2. (See also Stage.)

Academic dishonesty

A student is suspected of presenting another person's ideas, findings or written work as his or her own by copying or reproducing them without due acknowledgement of the source and with intent to deceive the examiner. Academic dishonesty also covers recycling, fabrication of data, engaging another person to complete an assessment or cheating in exams.

Academic record

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

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

For the purposes of FlexSIS, an academic year indicates the current calendar year in which the student is currently enrolled. An academic year indicates a calendar 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

Governed by the University's admission policy, this 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, TAFE 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

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.)

AGSM (Australian Graduate School of Management)

From 1999 The University of Sydney entered into a joint venture with the University of New South Wales leading to the formation of a new Australian Graduate School of Management (AGSM). The new joint venture AGSM is derived from the Graduate

School of Business at The University of Sydney and the existing AGSM at the University of New South Wales.

Students enrolled at the new joint venture AGSM are students of both The University of Sydney and the University of New South Wales. The agreement for reporting enrolments, load and staff at the joint venture requires that The University of Sydney report all student enrolments and staff numbers, but that only one third of both the Student load (EFTSU) and full-time equivalent staff (FTE) be attributed to The University of Sydney.

Annual Progress Report

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 the 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 it is 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 the 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 *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

Attendance is classified as full-time, part-time or external. The type of attendance in which a student is classified depends on the student's mode of attendance and the student load.

The mode of attendance is a classification of whether a student is internal, external or multi-modal in accordance with the definition provided by DEST.

Internal mode of attendance

When all units of study for which the student is enrolled are undertaken through attendance at the University on a regular basis. It also refers to the case when the student is undertaking a higher degree course for which regular attendance is not required, but attends the University on an agreed schedule for purposes of supervision and/or instruction.

External mode of attendance

When all units of study for which the student is enrolled involve special arrangements whereby lesson materials, assignments, etc, are delivered to the student, and any associated attendance at the University is of an incidental, irregular, special or voluntary nature.

Multi-modal mode of attendance

When at least one unit of study is undertaken on an internal mode of attendance and at least one unit of study is undertaken on an external mode of attendance.

Students with an external mode of attendance are classified as being external for the type of attendance.

Students with either an internal or multi-modal mode of attendance are classified as being full-time or part-time depending on the load associated with the courses in which they are enrolled. According to the definition provided by DEST, a student whose enrolment in all courses generates 0.373 EFTSU or higher for a semester is classified as full-time, otherwise the student is classified as part-time.

Attendance mode

A DEST 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.)

Attendance status

Full or part time.

AusAID

Australian Agency for International Development.

AUSTUDY

Replaced by Youth Allowance. (See *Youth Allowance*.)

Award course

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. A bachelor's degree course normally requires three or four years of full-time study or the part-time equivalent. Bachelor degree refers to Bachelor (Graduate Entry), Bachelor (Honours) end on, and Bachelor which comprises Bachelor (Pass) and Bachelor (Honours) concurrent. (See also Award course.)

Barrier

An instruction placed on a student's FlexSIS record that prevents the student from re-enrolling or graduating. (See also *Deadlines (fees)*, *Suppression of results*.)

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

A program, named in recognition of the Aboriginal people of the land on which the University is located, designed to increase the

successful participation of Aboriginal and Torres Strait Islanders in degree courses in all faculties at The University of Sydney.

Applicants seeking admission under the Program are assessed under a broad set of criteria embracing relevant educational background, work and life experience and motivation. An essential aspect of the Program is the provision of academic support.

All applicants are assessed prior to enrolment and on the basis of those assessments may be recommended for alternative study options, including enrolment in a reduced course load in the first year of their degree and concurrent enrolment in an Academic Skills course run by the Koori Centre.

An intensive Orientation Program is conducted immediately prior to the commencement of the academic year and students may request additional tutoring in particular subject areas.

CAF (Cost Adjustment Factor)

The amount by which the Commonwealth increases payments to institutions each year towards increases in salary and non-salary costs.

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 (Sydney Conservatorium of Music), Cumberland (Health Sciences), Mallett Street (Nursing), Orange (Faculty of Rural Management and Centre for Regional Education), Rozelle (Sydney College of the Arts), St James (Law) and Surry Hills (Dentistry).

Cancellation

For non-payment of fees.

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 some 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.*)

College of Health Sciences

Consists of the Faculties of Dentistry; Health Sciences; Medicine; Nursing; and Pharmacy.

College of Humanities and Social Sciences

Consists of the Faculties of Arts; Economics and Business; Education; Law; the Sydney College of the Arts; and the Sydney Conservatorium of Music.

College of Sciences and Technology

Consists of the Faculties of Agriculture, Food and Natural Resources; Architecture; Engineering; Rural Management; Science; and Veterinary Science.

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 and continuing enrolments

Enrolments are classified as commencing or continuing in accordance with the definition provided by DEST. In general, an enrolment is classified as commencing if a student has enrolled in a particular degree or diploma for the first time between 1 September of the year prior to the current year and 31 August of the current year. There are a number of exceptions to this general rule, of which the most important are:

(a) an enrolment in the LLB is not classified as commencing if the student was previously enrolled in a combined law degree; and,

(b) an enrolment in an Honours degree (Bachelor or Master) is not classified as commencing if the student was previously enrolled in the corresponding Pass degree.

Commencing student

A student enrolling for the first time in an award course at The University of Sydney. The DEST 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/Darlington Campus, compulsory subscriptions depend on the level of study.

Undergraduate

The University of Sydney Union, Students' Representative Council (SRC) and Sydney University Sport.

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

This form is issued to each student after enrolment showing the course and the units of study in which the student is enrolled, 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.

Conjoint ventures

Two or more institutions co-operate to provide a unit or course of study to postgraduate coursework students. Arrangements exist between individual departments at The University of Sydney and individual departments at UNSW and UTS whereby students enrolled for a degree at one institution complete one or more units of study at the other institution to count towards the award program at their 'home' institution.

Continuing professional education

A process which 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

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 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*.)

Cotutelle scheme

Agreement between The University of Sydney and a French university for joint supervision and examination of a PhD student as part of an ongoing co-operative research collaboration. If successful, the student receives a doctorate from both universities with each testamur acknowledging the circumstances under which the award was made.

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 enrolment status

A student's enrolment status in a course is either 'enrolled' or 'not enrolled'. A course enrolment status of 'not enrolled' is linked to a not enrolled reason.

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 are 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

Rules which 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 transfer which 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

A DEST code.

Coursework

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 university or tertiary institution (recognised by The University of Sydney) 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)*.)

Credit points

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 the number and level of credit points required for graduation.

Cross-institutional enrolment

An enrolment in units of study at one university 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)

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 variation*.

Deadlines (fees)

The University has deadlines for the payment of fees (eg, HECS, compulsory subscriptions, course fees). 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 Sydney 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 or school

The Senate Resolutions define a department or school as consisting of such of the members of the teaching staff and the research staff of the University and such other persons or classes of persons as are appointed to it or assigned to it by the Senate or the Vice-Chancellor on the recommendation of the faculty or college board concerned.

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.

Increasingly, as departments merge into larger schools, the term department is also used to describe the constituent parts of a school. Alternatively, the term Discipline is used. DEST uses the term Academic Organisational unit (AOU) and for reporting purposes each AOU is assigned a Field of Education classification.

DEST

The Department of Education, Science and Training (DEST) is the Commonwealth Government department responsible for higher education. The University is required to provide DEST with information about its students several times a year and, annually, information about staff, finance, research and space allocation. Among other things, the Government uses this information in its funding deliberations.

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.

Disciplinary action

Undertaken as the result of academic or other misconduct – eg, plagiarism, cheating, security infringement, criminal activity.

Discipline codes

A four-letter code for each area of study available at the University (eg, CHEM Chemistry, ECON Economics).

Discipline group

A DEST 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 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

A mode of learning which 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. (See *Award course*, *Doctorate*, *PhD*.)

Doctorate

A high-level postgraduate award 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. (See also Award course, PhD.)

Double degree

Completing a second degree while enrolment is suspended from the first degree – eg, students enrolled in the Bachelor of Engineering may transfer to the Bachelor of Science, complete the requirements for the BSc and then resume the Bachelor of Engineering.

Downgrade

Where a student is enrolled in a PhD and where the research they are undertaking is not at an appropriate level for a PhD and the institution recommends that the student downgrade their degree to a Master's by Research course, or where the student, for personal or academic reasons, seeks to revert to a Master's by Research course. There would be no interval between the candidature for the PhD and Master's degree unless the interval was covered by a period of suspension.

With a downgrade, the research undertaken by the student while enrolled for the PhD would either be continued in the Master's by Research degree or modified to meet the requirements of the Master's program.

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

See *EFTSU*.

Embedded courses/programs

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 – eg, the Graduate Certificate in Information Technology, Graduate Diploma in Information Technology and Master of Information Technology sequence.

Enrolment

A student enrols 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

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 variable for students both with relation to course and unit of study. (See *Course enrolment status* and *unit of study enrolment status*)

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*.)

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 time set each semester for the conduct of formal examinations.

Examiner (coursework)
The person assessing either the written/oral examination, coursework assignments, presentations, etc of a student or group of students.

Exchange student
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
A 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*.)

Exemption
A decision made at a sub-unit of study level to allow a student to complete a unit of study without also completing all the prescribed components of coursework and/or assessment. (See also *Credit*, *Waiver*.)

Expulsion
The ultimate penalty of disciplinary action is to expel the student from the University. The effect of expulsion is:
- the student is not allowed to be admitted or to re-enrol in any course at the University;
- the student does not receive their results;
- the student is not allowed to graduate; and
- the student does not receive a transcript or testamur.

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
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 formal part of the University's academic governance structure, consisting mainly of academic staff members and headed by a dean, which is responsible for all matters concerning the award courses that it supervises. Usually, a faculty office administers the faculty and student or staff inquiries related to its courses. The University Calendar sets out the constitution of each of the University's faculties. (See also Board of studies, Supervising faculty.)

Fail
A mark of less than 50% which is not a concessional pass. This grade may be used for students with marks of 46–49 in those faculties which do not use PCON. (See also *Results*.)

Fee-paying students
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 Senior Deputy Vice-Chancellor.

Flexible learning
See *Distance and Flexible Learning*.

Flexible Start Date
Full fee-paying distance students are not restricted to the same enrolment time frames as campus-based or HECS students.

FlexSIS
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.

FTE (Full-time equivalent)
This is a measurement of staff resources and relates to the amount of time a staff member devotes to his/her current duties (ie, the job in which a staff member is working at the reference date of 31 March).

A staff member can have either a full-time, fractional full-time or casual work contract. A full-time work contract has an FTE of 1.0. A fractional full-time work contract has a value less than 1.0 (eg, 0.5).

Casual FTE values are calculated in the following manner:

$$Lecturng = \frac{ContactHours}{243}$$

$$Tutoring\backslash\text{Demonstrating} = \frac{ContactHours}{675}$$

$$Marking(\text{sin}gleActivity)\backslash\text{Research}\backslash\text{Other} = \frac{ContactHours}{1820}$$

The denominator values of the above equations represent the hours worked by one full-time staff member in each of the occupation groups – ie, Lecturing, Tutoring/Demonstrating, etc., as imputed by DEST.

Full-time student
See *Attendance status*, *EFTSU*.

Funding Category
Funding Category comprises the following:
(1) Funded from Operating Grant*,
(2) Fee-paying local postgraduates,
(3) Fee-paying local undergraduates,
(4) Fee-paying international students,
(5) Non-fee exchange international students,
(6) Non-award (local fee-paying),
(7) Research outside time limits,
(8) Funded by employer.

**Refers to HECS liable students, local students enrolled under the Research Training Scheme, and local disadvantaged students enrolled in an enabling course or holding a Commonwealth-funded merit-based undergraduate HECS-exemption scholarship.*

GPOF (General Purpose Operating Funds)
GPOF (General Purpose Operating Funds) includes:
General income – eg, Commonwealth and State base operating grants, fee income and miscellaneous income;
Other (Non-DEST) activities include commercial and other internal business activities not receiving a base operating grant allocation;
Specific Operating allocations includes PVC Research allocations (major equipment, etc.); and
Research infrastructure allocations.

Grade
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 student who has completed all the requirements for an award course but has not yet graduated. (See also Graduation, Potential graduand.)

Graduate
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
A list of all graduates of the University. (See also *Graduation*.)

Graduation
The formal conferring of awards either at a ceremony or in absentia. (See also *In absentia*, *Potential graduand*.)

Graduation Ceremony
A ceremony where the Chancellor confers awards upon graduands. The Registrar publishes the annual schedule of graduation ceremonies.

Head of Department
The head of the academic unit which has responsibility for the relevant unit of study, or equivalent program leader.

HECS (Higher Education Contribution Scheme)
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 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. These are all determined annually by the Commonwealth Government.

HECS census date
The date at which a student's enrolment, load and HECS liability are finalised before this information is reported to DEST. The following dates apply:
- Semester 1: 31 March
- Semester 2: 31 August.

Higher Doctorates
See *Award course*.

Higher Education Officer (HEO)
General staff are employed under a ten level Higher Education Officer award structure. The structure, introduced at The University of Sydney in October 1993, applies to general staff in all Australian universities.

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 I, Class II, Class III) and sometimes there are two divisions within Class II.

HSC
The NSW Higher School Certificate (HSC), 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
Latin for 'in the absence of'. Awards are conferred in absentia when graduands do 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 Sydney 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
A record of a student's academic record for the University's own internal use. It includes the student's name, student identifier (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*.)

Joining fee
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*.

Legitimate co-operation
Any constructive educational and intellectual practice that aims to facilitate optimal learning outcomes through interaction between students.

Liability status code
A code used by DEST to identify the liability status of a student (eg, 10 – HECS liable deferred, 11 – HECS liable upfront with discount, 13 – PELS, 19 – Local UG full fee paying, 20 – Local PG full fee paying, 22 – International fee paying, etc.)

Life membership
Under some circumstances (eg, after five full-time years of enrolments and contributions) students may be granted life membership of various organisations. This means they are exempt from paying yearly fees. (See also Compulsory subscriptions.)

Load
The sum of the weights of all the units of study in which a student is enrolled. Each unit of study (subject) in which a student may enrol is assigned a weight. This is determined by the proportion of a full year's work represented by the unit of study in the degree or diploma for which the student is a candidate. These weights can be aggregated in a number of different ways (by student, degree/course, department, faculty) to give student load. Student load is measured in terms of Equivalent Full-Time Student units (EFTSU).

A full-time research student is counted as 1.0 EFTSU while a part-time research student is counted as 0.5 EFTSU. (See also *EFTSU*, *HECS*.)

Local student
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 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 simultaneously.

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 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.

Misconduct
(a) Conduct on the part of a student which is prejudicial to the good order and government of the University or impairs the reasonable freedom of other persons to pursue their studies or research in the University or to participate in the life of the University; and
(b) Refusal by a student to give satisfactory particulars of the student's identity in response to a direction to do so by a prescribed officer and any other form of wilful disobedience to a reasonable direction of a prescribed officer.

Mixed Mode
See *Attendance mode*.

Mode
See *Attendance mode* and *Delivery mode*.

Model income
Income allocated to Colleges through the University's funding model.

Mutually exclusive units of study
See *Prohibited combinations of units of study.*

MyUni
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
A course 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.)

Non-standard session
A teaching session other than the standard February and August sessions – eg, Summer School, in which units of study are delivered and assessed in an intensive mode during January of each year, is an example of a non-standard session. (See also *Semester*, *Session*.)

Not enrolled reason
These reasons include: potential enrolment, did not re-enrol, not continuing, cancelled, on leave (suspended), transferred, under examination, completed.

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*.

PeopleSoft HRMS
The University's Human Resources (HR) IT system.

PELS (Postgraduate Education Loans Scheme)
An interest-free loans facility for eligible students who are enrolled in fee-paying, postgraduate non-research courses. It is similar to the deferred payment arrangements available under the Higher Education Contribution Scheme (HECS).

Permanent home address
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. 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. In University Statistics publications, entries headed PhD include other Doctorates by advanced coursework and research, such as the S.J.D. and Ed.D. (See also *Award course*, *Doctorate*.)

Plagiarism
Presenting another person's ideas, findings or work as one's own by copying or reproducing them without the acknowledgement of the source.

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
A student who has been identified as being eligible to graduate on the satisfactory completion of their current studies. (See also *Graduand*, *Graduation*.)

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 unit of study that is required to be completed before another unit of study can be attempted. Prerequisites can be mandatory (compulsory) or advisory. (See also *Assumed knowledge*, *Corequisite*, *Waiver*, *Qualifier*.)

Prizes
Awarded by the University, a faculty or a department for outstanding academic achievement.

Probationary candidature
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*.

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
An academic attainment recognised by the University.

Qualifier
A mandatory (compulsory) prerequisite unit of study which must have a grade of Pass or better. (See also Assumed knowledge, Corequisite, Prerequisite, Waiver.)

Recycling
The submission for assessment of one's own work, or of work which substantially the same, which has previously been counted towards the satisfactory completion of another unit of study, and credited towards a university degree, and where the examiner has not been informed that the student has already received credit for that work.

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 candidature
Master's by research, PhD and other doctorates such as Doctor of Juridical Studies (SJD), but not Higher Doctorates – eg, DSc.

Research course
See Course (*research*).

Research/coursework higher degrees
A student's candidature in a higher degree is deemed to be by Research if 66% or more of the workload over the length of the degree is by research. Otherwise the candidature is deemed to be by Coursework.

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.)Research supervisor

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.–†no more than one sixth of the total credit points for a course can '.
F	Fail	A mark of 0-49. 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 (i.e. within the first four weeks of enrolment).
DNF	† 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	† 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: (a) 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: (a) 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 (e.g. Honours).

RTS (Research Training Scheme)
The RTS provides Commonwealth-funded higher degree by research (HDR) students with an 'entitlement' to a HECS exemption for the duration of an accredited HDR course, up to a maximum period of four years' full-time equivalent study for a Doctorate by research and two years' full-time equivalent study for a Masters by research.

Scholarships
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*.

Semester
A half-yearly teaching 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 (non-standard teaching period) must be given special permission by the Academic Board. (See also *Session, Non-standard teaching period*.)

Semester address
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 governing body of the University. (See the University Calendar for more details of its charter and powers.)

Senate appeals
Senate appeals are held for those students who, after being excluded by a 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
Any period of time during which a unit of study is taught. A session differs from a semester in that it need not be a six-month teaching period, but it cannot be longer than six months. Each session maps to either Semester 1 or 2 for DEST reporting purposes. 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. (See also Semester, Non-standard teaching period.)

Session address
See *Semester address*.

SID (Student Identifier)
A 9-digit number which uniquely identifies a student at the University.

Space allocation
Departmental space has been measured in accordance with space inventory classifications adopted by DEST. Departmental space includes academic staff studies, non-academic staff offices, special purpose teaching rooms such as laboratories, studios, computer terminal rooms, seminar rooms under 35m2, common rooms, workshops, departmental storage spaces, departmental libraries, research space including laboratories and office accommodation, postgraduate rooms and a variety of special purpose departmental rooms. Where space is shared by a number of departments it is apportioned according to use. Departmental spaces do not include general teaching spaces over $35m^2$.

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
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
Financial support of a student by a company or government body. Sponsors are frequently invoiced directly.

SRS
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 (equivalent to year/s of enrolment)
For the purposes of administration, a course may be divided into stages to be studied consecutively. Part-time students progress through a course more slowly and would often enrol in the same stage more than once.

Stream
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, a library borrower's bar code and a passport-style photo. 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 Load
See *Load*.

Student/Staff Ratios (SSR)
These are calculated on a departmental/faculty basis by dividing the student load attributable to a particular department/faculty by

the full-time equivalent academic staff employed to teach in or on behalf of that department/faculty.

Student type

Student type can be Local, International – Fee Paying, International – Study Abroad, International – Incoming Exchange, International – Sponsored Award.

Study Abroad Program

A scheme administered by the International 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. The program covers a broad spectrum of courses in Liberal Arts, Agriculture, Architecture, Economics, Education, Engineering, Health Sciences, Law, Music, Nursing and Science. (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 faculty which has the responsibility for managing the academic administration of a particular course – ie, the interpretation and administration of course rules, 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

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.*)

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

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 certificate of award provided to a graduate usually at a graduation ceremony.

Thesis

A major work that is the product of an extended period of supervised independent research.† means the earliest date at which a research student can submit the thesis. '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.*

Tuition fees

Tuition fees may be charged to students in designated tuition fee-paying courses. Students who pay fees are not liable for HECS.

UAC

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)

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

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, discontinued or cancelled).

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 to be outstanding.

UPA

University Postgraduate Award.

Upgrade

Where a student is enrolled in a Master's by research course and where the research they are undertaking is at such a standard that

either the University recommends that the student upgrade their degree to a PhD or the student seeks to upgrade to a PhD and this is supported by the University. There would be no interval between the candidature for the Master's degree and the PhD unless the interval was covered by a period of suspension.

With an upgrade, the research undertaken by the student while enrolled for the Master's by research degree would either be continued in the PhD or modified to meet the requirements for a PhD program.

USYDnet

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 and Principal

The chief executive officer of the University, responsible for its leadership and management. The Vice-Chancellor and Principal 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, Exemption*.)

WAM (Weighted Average Mark)

This mark uses the unit of study credit point value in conjunction with an agreed 'weight'. The formula for this calculation is:

$$WAM = \frac{\sum(marks \times creditPointValue \times levelWeight)}{\sum(creditPointValue \times levelWeight)}$$

The 'marks' used in this formula are the actual marks obtained by the student in each unit of study, as recorded on the student's record, including any marks of less than 50, and in the case of a failing grade with no mark, the mark defaults to 0. Pass/Fail assessed subjects and credit transfer subjects (from another institution) are excluded from these calculations, however the marks from all attempts at a unit of study are included.

Faculty resolutions may also include specific formulae for the purpose of calculating progression between years, or for calculating entrance into an honours year. If such a formula is not specified in the faculty resolutions, the formula outlined above is used. (Effective from 1 January 2004.)

YAM (Yearly Average Mark)

This term has been renamed AAM (Annual Average Mark). See AAM in this Glossary.

YFE (Year of First Enrolment)

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, TAFE or university, and undertaking at least 15 hours a week face-to-face contact. Youth Allowance replaces AUSTUDY.

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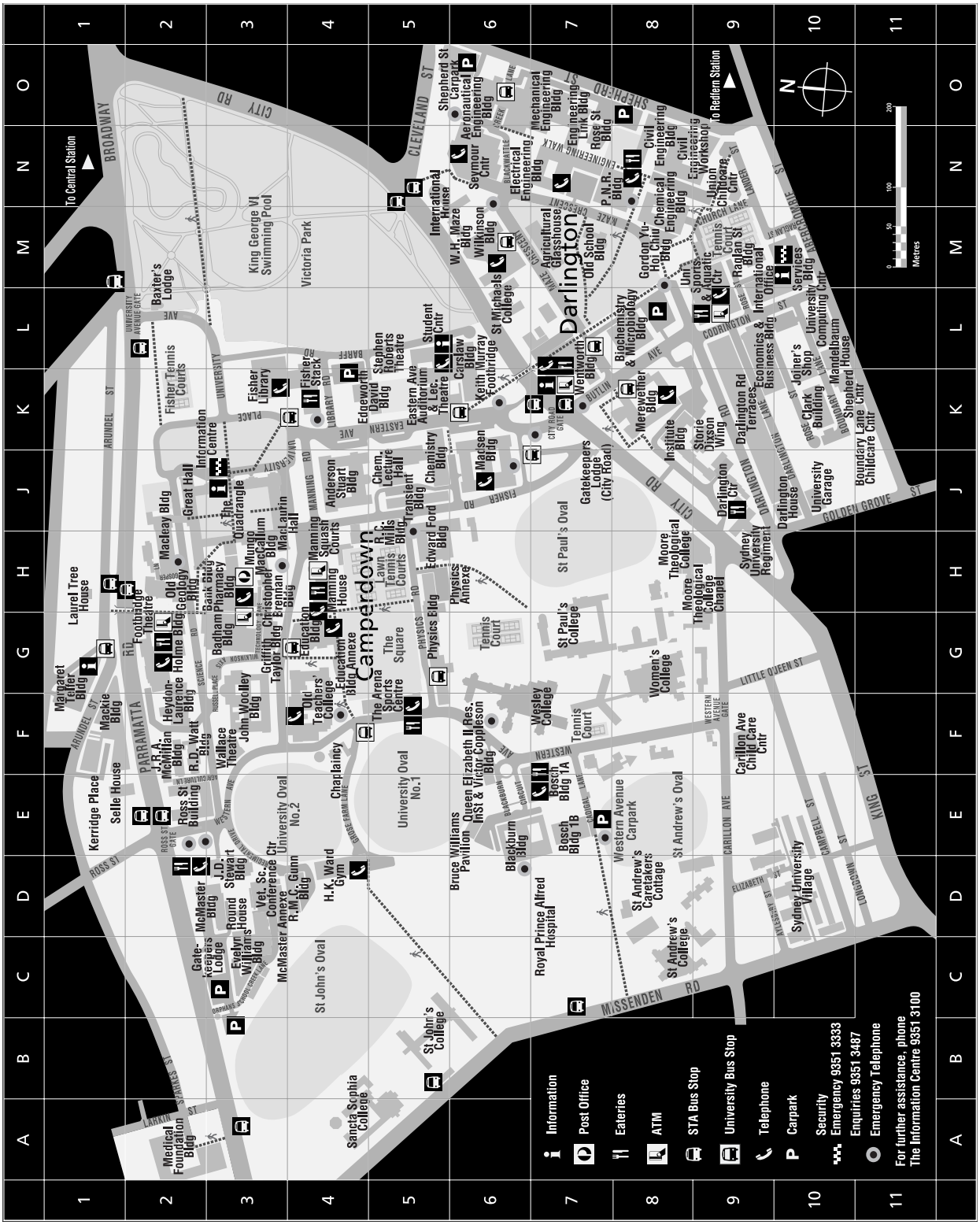

University Buildings

O6 Aeronautical Engineering Building
J4 Anderson Stuart Building
G3 Badham Building
H3 Bank Building
L2 Baxter's Lodge
L8 Biochemistry and Microbiology Building
E6 Blackburn Building
E7 Bosch Building 1A
E7 Bosch Building 1B
E6 Bruce Williams Pavilion
L6 Carslaw Building
F4 Chaplaincy
M8 Chemical Engineering Building
J5 Chemistry Building
H3 Christopher Brennan Building
N8 Civil Engineering Building
N9 Civil Engineering Workshop
K10 Clark Building
J9 Darlington Centre
J10 Darlington House
K9 Darlington Road Terraces
K5 Eastern Avenue Auditorium and Lecture Theatre Complex
L9 Economics and Business Building
K4 Edgeworth David Building
G4 Education Building
G4 Education Building Annexe
H5 Edward Ford Building
N7 Electrical Engineering Building
N7 Engineering Link Building
C3 Evelyn Williams Building
K3 Fisher Library
K4 Fisher Library Stack
C3 Gatekeeper's Lodge
J7 Gatekeeper's Lodge (City Road)
M8 Gordon Yu-Hoi Chui Building
J2 Great Hall
G3 Griffith Taylor Building
D4 H.K.Ward Gymnasium
F2 Heydon-Laurence Building
G2 Holme Building
K8 Institute Building
N5 International House
F2 J.R.A.McMillan Building
D3 J.D.Stewart Building
F3 John Woolley Building
F1 Mackie Building
H3 MacLaurin Hall
H2 Macleay Building
G1 Margaret Telfer Building
J6 Madsen Building
H4 Manning House
H4 Manning Squash Courts
D3 McMaster Annexe
D3 McMaster Building
O6 Mechanical Engineering Building
A2 Medical Foundation Building
K8 Merewether Building
H3 Mungo MacCallum Building
H2 Old Geology Building
M7 Old School Building
F4 Old Teachers' College
H3 Pharmacy Building
H6 Physics Annexe
G5 Physics Building
N8 P.N.R.Building
E6 Queen Elizabeth II Research Institute
H5 R.C.Mills Building
F2 R.D.Watt Building
D4 R.M.C.Gunn Building
M9 Raglan Street Building
N7 Rose Street Building
E2 Ross Street Building
G2 Science Road Cottage
E1 Selle House
M10 Services Building
N6 Seymour Centre
K10 Shepherd Centre
O6 Shepherd Street Carpark
L5 Stephen Roberts Theatre
K9 Storie Dixson Wing
F5 The Arena Sports Centre
J3 The Quadrangle
J5 Transient Building
L10 University Computing Centre
J10 University Garage
M9 University Sports and Aquatic Centre
D3 Veterinary Science Conference Centre
E6 Victor Coppleson Building
F3 Wallace Theatre
K7 Wentworth Building
E7 Western Avenue Carpark
M6 W.H.Maze Building
M6 Wilkinson Building

Academic Colleges (offices)

H5 Health Sciences
F4 Humanities and Social Sciences
N8 Sciences and Technology

Childcare Centres

K11 Boundary Lane
F9 Carillon Avenue
H1 Laurel Tree House
N9 Union

Colleges and Residential Accommodation

J10 Darlington House
K9 Darlington Road Terraces
N5 International House
L10 Mandelbaum House
A4 Sancta Sophia College
C8 St Andrew's College
B5 St John's College
L6 St Michael's College
G7 St Paul's College
E1 Selle House
D10 Sydney University Village
F7 Wesley College
G8 Women's College

Computer Access Centres (ITS)

G3 Brennan
G4 Education
K3 Fisher
N7 Link
L6 McGrath (Carslaw)
H3 Pharmacy

Cultural Venues

G2 Footbridge Theatre
H2 Macleay Museum
J3 Nicholson Museum
N6 Seymour Centre
K7 Sir Hermann Black Gallery
M6 Tin Sheds Gallery
J2 War Memorial Art Gallery

Faculties (offices)

F2 Agriculture
M6 Architecture
H3 Arts
K8 Economics and Business
G4 Education
N7 Engineering
H5 Medicine
H3 Pharmacy
L6 Science
D3 Veterinary Science

Libraries

M6 Architecture
G3 Badham
H5 Burkitt-Ford
K3 Curriculum Resources
N8 Engineering
K3 Fisher
J6 Madsen
L6 Mathematics
E7 Medical
N6 Music
H6 Physics
H5 Schaeffer Fine Arts

Retail

H3 Australia Post Office
H3 Bank Building
J9 Darlington Centre
G2 Holme Building
H4 Manning House
F5 The Arena Sports Centre
M9 University Copy Centre
K7 University Health Service
M9 University Sports and Aquatic Centre
M9 University Co-op Bookshop
D3 Veterinary Hospital and Clinic
K7 Wentworth Building

Security

M10 Emergency Services
M10 Lost Property
J3 Information Centre
M10 Traffic and Parking

Sports and Recreational Venues

K2 Fisher Tennis Courts
D4 HK Ward Gymnasium
H5 Lawn Tennis Courts
H4 Manning Squash Courts
F5 The Arena Sports Centre
G5 The Square
E5 University Oval No1
E3 University Oval No2
M9 University Sports and Aquatic Centre

Unions and Associations (offices)

K7 Students' Representative Council (SRC)
M9 Sydney University Postgraduate Representative Association (SUPRA)
M9 Sydney University Sport
G2 University of Sydney Union

University Administration and Services

F3 Business Liaison Office
F1 Careers Centre
G1 Cashier
F1 Centre for Continuing Education
H3 Chancellor
L10 Computing Centre
H3 Development, Alumni Relations and Events
M10 Development Services
H2 Executive Offices
J3 Information Centre
L10 Information Technology Services
L9 International Office
G1 Personnel
M10 Printing Services (UPS)
H2 Publications Office
H3 Research Office
M10 Room Bookings and Venue Management
F1 Scholarships Unit
L5 Student Centre
G1 Student Housing
G4 Student Services Unit
K8 Summer School
C3 Veterinary Hospital and Clinic
H2 Vice-Chancellor