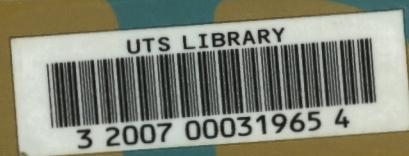


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Faculty of Design,  
Architecture and Building  
Handbook  
1996



U|T|S|

# Faculty of Design, Architecture and Building Handbook **1996**

The University attempts to ensure that the information contained in the handbook is correct as at 6 November 1995. The University reserves the right to vary any matter described in the handbook at any time without notice.



**Equal opportunity**

It is the policy of the University of Technology, Sydney to provide equal opportunity for all persons regardless of sex, race, marital status, family responsibilities, disability, sexual preference, age, political conviction or religious belief.

**Free speech**

The University supports the right to freedom of speech and the rights of its members to contribute to the diversity of views presented in our society.

**Non-discriminatory language**

UTS has adopted the use of non-discriminatory language as a key strategy in providing equal opportunity for all staff and students. Guidelines for the use of non-discriminatory language have been developed and all members of the University community are encouraged to use them.

**Editorial and production:**

Corporate Responsibilities Unit  
University Secretary's Division

**Design:**

UTS News and Design Services

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# ADDRESSES AND TELEPHONE NUMBERS

## POSTAL ADDRESS

PO Box 123  
Broadway  
New South Wales 2007 Australia

## TELEPHONE

(02) 330 1990  
International: +61 2 330 1990  
Fax: (02) 330 1551

**From July 1996**

**(02) 9514 2000**

**International: +61 2 9514 2000**

**Fax: (02) 9514 1551**

**All other numbers listed in this publication with a prefix of 330 will have a new prefix of 9514 e.g. 330 5555 will become 9514 5555.**

## STREET ADDRESSES

### City campus

- Broadway  
No. 1 Broadway, Ultimo
- Harris Street, Ultimo  
Building 6  
702–730 Harris Street  
Bon Marche Building  
755 Harris Street  
645 Harris Street
- Haymarket  
Corner Quay Street and Ultimo Road  
Haymarket, Sydney
- Blackfriars  
Blackfriars Street, Chippendale

- Smail Street  
3 Smail Street, Ultimo
- Wembley House  
839–847 George Street, Sydney
- Bulga Ngurra  
23–27 Mountain Street, Ultimo
- 82–84 Ivy Street, Chippendale

### Kuring-gai campus

Eton Road  
Lindfield  
(PO Box 222, Lindfield NSW 2070)

### St Leonards campus

- Dunbar Building  
Corner Pacific Highway and  
Westbourne Street, Gore Hill
- Clinical Studies, Centenary Lecture  
Theatre and West Wing  
Reserve Road, Royal North Shore  
Hospital
- Gore Hill Research Laboratories  
Royal North Shore Hospital

### Yarrawood conference and research centre

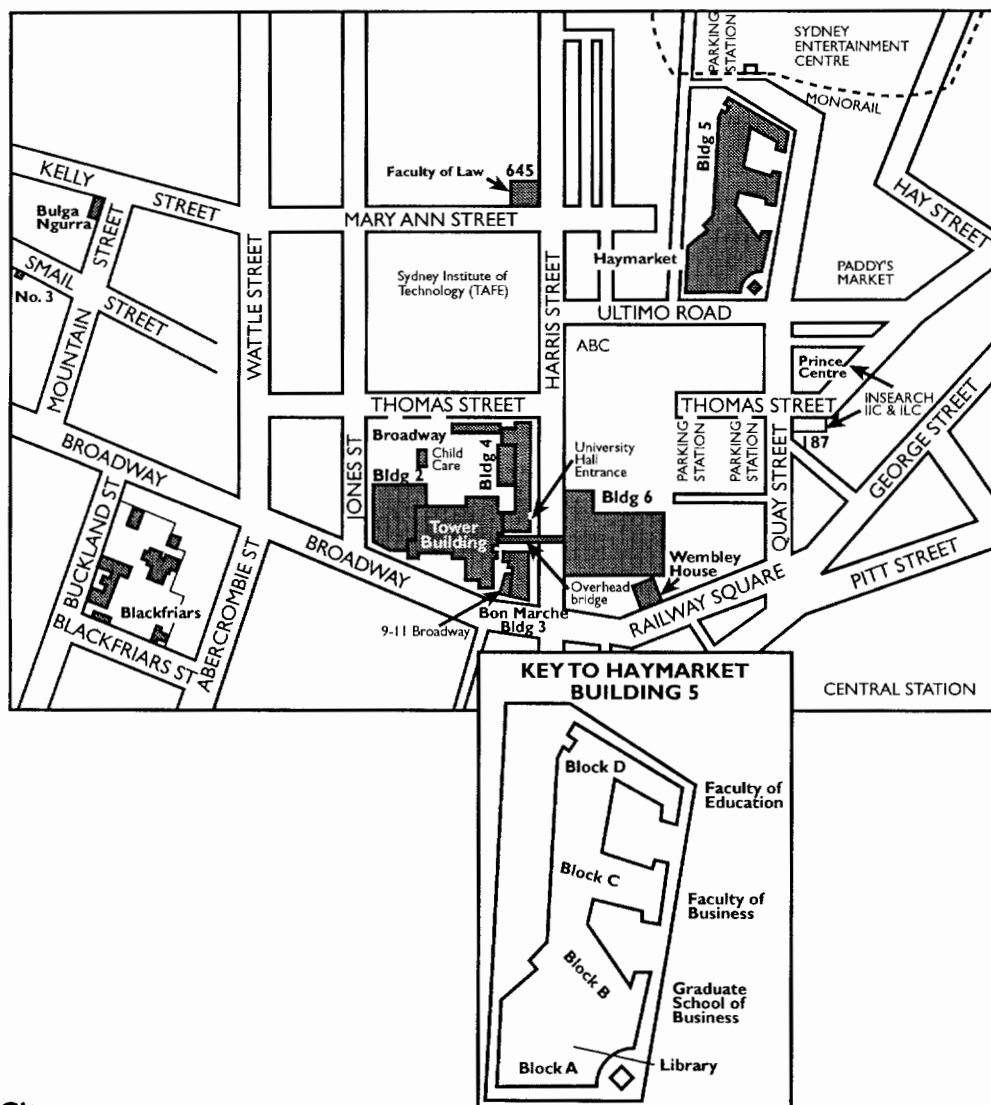
Hawkesbury Road  
Yarramundi 2753

### Stroud

Lot AFP 161894  
The Bucketts Way  
Booral 2425

# CAMPUS MAPS

## CITY CAMPUS



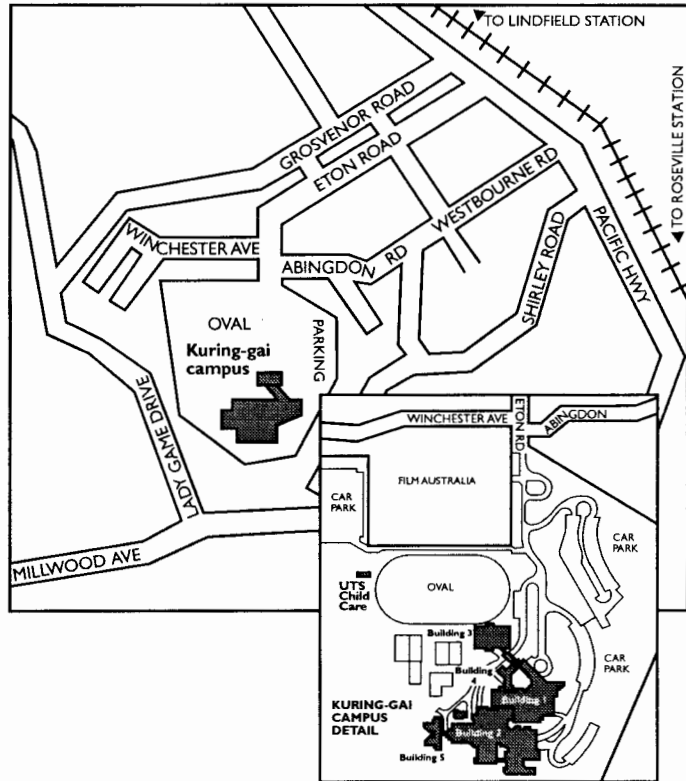
### City campus

- Broadway  
No. 1 Broadway, Ultimo
- Harris Street, Ultimo  
Building 6  
702–730 Harris Street  
Bon Marche Building  
755 Harris Street  
645 Harris Street
- Haymarket  
Corner Quay Street and Ultimo Road  
Haymarket, Sydney
- Blackfriars  
Blackfriars Street, Chippendale
- Smail Street  
3 Smail Street, Ultimo
- Wembley House  
839–847 George Street, Sydney
- Bulga Ngurra  
23–27 Mountain Street, Ultimo
- 82–84 Ivy Street, Chippendale

## Kuring-gai campus

Eton Road  
Lindfield  
(PO Box 222, Lindfield  
NSW 2070)

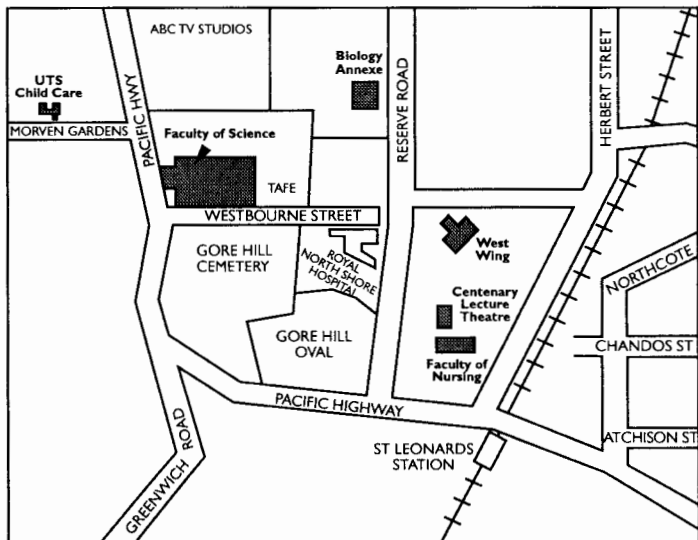
## KURING-GAI CAMPUS



## ST LEONARDS CAMPUS

### St Leonards campus

- Dunbar Building  
Corner Pacific  
Highway and  
Westbourne Street,  
Gore Hill
- Clinical Studies,  
Centenary Lecture  
Theatre and West Wing  
Reserve Road, Royal  
North Shore Hospital
- Gore Hill Research  
Laboratories  
Royal North Shore  
Hospital



# PRINCIPAL DATES FOR 1996<sup>1</sup>

## AUTUMN SEMESTER

### January

- 9 Release of HSC results
- 12 Formal supplementary examinations for 1995 Spring semester students
- 12 Closing date for changes of preference to the Universities Admissions Centre (UAC) from 1995 NSW HSC applicants (by 6.00 p.m.)
- 15–30 Enrolment of students at City campus
- 26 Australia Day – public holiday
- 26 Public school holidays end
- 31 Enrolment of new undergraduate students at City campus including UAC and direct applicants (and 1–5 February)

### February

- 1–5 Enrolment of new undergraduate students at City campus including UAC and direct applicants (and 31 January)
- 6–23 Enrolment of students at City campus

### March

- 4 Classes begin
- 15 Last day to enrol in a course or add subjects
- 29 Last day to change to 'pay now/up-front' HECS payment
- 29 Last day to apply for leave of absence without incurring student fees/charges<sup>2</sup>
- 29 Last day to withdraw from a subject without financial penalty<sup>2</sup>
- 31 HECS census date

### April

- 1 Public school holidays begin
- 5 Good Friday – public holiday
- 8 Easter Monday – public holiday
- 9 Graduation period begins
- 12 Last day to withdraw from a course or subject without academic penalty<sup>2</sup>
- 8–12 Vice-Chancellors' Week (non-teaching)

- 12 Public school holidays end
- 25 Anzac Day – public holiday
- 26 Provisional examination timetable available
- 30 Last day to apply to graduate in Spring semester 1996

### May

- 1 Applications available for selected undergraduate courses for Spring semester
- 7 Graduation period ends
- 13 Applications available for postgraduate courses
- 17 Examination Masters due
- 31 Final examination timetable available
- 31 Closing date for selected undergraduate applications for Spring semester

### June

- 10 Queen's Birthday – public holiday
- 14 Last teaching day of Autumn semester
- 14 Closing date for postgraduate applications for Spring semester
- 15–28 Formal examination period (and 1–5 July)

### July

- 1 Public school holidays begin
- 1–5 Formal examination period (and 15–28 June)
- 5 Autumn semester ends
- 8–12 Vice-Chancellors' Week (non-teaching)
- 12 Public school holidays end
- 15–19 Formal alternative examination period for Autumn semester students
- 19 Release of Autumn semester examination results
- 22 Formal supplementary examinations for Autumn semester students
- 22–26 Confirmation of Spring semester programs
- 25–26 Enrolment of new and readmitted students and students returning from leave/concurrent study



## SPRING SEMESTER

### July

29 Classes begin

### August

- 1 Applications available for undergraduate courses
- 2 Last day to withdraw from full-year subjects without academic penalty<sup>2</sup>
- 5 Applications available for postgraduate courses
- 9 Last day to enrol in a course or add subjects
- 23 Last day to apply for leave of absence without incurring student fees/charges<sup>2</sup> (Spring enrolments only)
- 30 Last day to change to 'pay now/up-front' HECS payment
- 30 Last day to withdraw from a subject without financial penalty<sup>2</sup>
- 30 Last day to apply to graduate in Autumn semester 1997
- 31 HECS census date

### September

- 6 Last day to withdraw from a course or subject without academic penalty<sup>2</sup>
- 20 Provisional examination timetable available
- 27 Closing date for undergraduate applications via UAC (without late fee)
- 27 Closing date for inpUTS Special Admission Scheme applications
- 30 Public school holidays begin
- 30 Graduation period begins
- 30 Vice-Chancellors' Week (non-teaching) begins
- 30 Closing date for postgraduate applications (in some faculties)

### October

- 4 Vice-Chancellors' Week (non-teaching) ends
- 4 Graduation period ends
- 7 Labour Day – public holiday
- 11 Public school holidays end
- 11 Examination Masters due
- 25 Final examination timetable available
- 31 Closing date for postgraduate research and course award applications
- 31 Closing date for undergraduate applications via UAC (with late fee)
- 31 Closing date for undergraduate applications direct to UTS (without late fee)

### November

- 8 Last teaching day of Spring semester
- 9–29 Formal examination period
- 29 Spring semester ends

### December

- 9–13 Formal alternative examination period for Spring semester students
- 20 Release of Spring semester examination results
- 23 Public school holidays begin

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<sup>1</sup> Information is correct as at 15 November 1995. The University reserves the right to vary any information described in Principal Dates for 1996 without notice.

<sup>2</sup> HECS/Postgraduate course fees will apply after the HECS census date.

## PREFACE

This handbook is one of 10 faculty/institute handbooks: Business; Design, Architecture and Building; Education; Engineering; Humanities and Social Sciences; International Studies; Law; Mathematical and Computing Sciences; Nursing; and Science. Each handbook provides general information about the faculty/institute as well as detailed information on the courses and subjects offered.

The handbooks are part of a suite of 13 publications which also comprise the *University Calendar* and the undergraduate and postgraduate student handbooks. The *Calendar* contains the University By-law, which all students should read. It also includes a list of the University's courses, giving the name, abbreviation and title as indicated on the testamur. Copies of the *Calendar* are held in the University Library and faculty offices, and may be purchased at the Co-op Bookshop.

The student handbooks provide information on the rights and responsibilities of students and on the services and facilities available to them. They will assist you in your dealings with the University's administration and tell you whom to contact if you have a problem or need advice. You should make sure that you read the student rules published in these handbooks. Copies of the student handbooks are provided free to students at enrolment.

Other publications providing information of a general nature are the *UAC Guide* and the *UTS Undergraduate Studies Guide* which are available from the UTS Information Service.

For information not provided in any of the publications mentioned e.g. additional information on courses, methods of assessment and book lists, you should contact the UTS Information Service or your faculty office. If in doubt, don't hesitate to ask.

We hope you will enjoy your time as a student at UTS and wish you well in your studies.

## MESSAGE FROM THE DEAN

During 1995 the Faculty consolidated the move to its new building in Harris Street, and adjusted to the new Faculty structure. The new building has been extremely well received by students and academic staff because of its advanced equipment and facilities, and by industry and professional organisations because of the opportunities it presents for professional activities including seminars and conferences. There has been a notable increase in the number of organisations wishing to participate in Faculty activities, particularly courses in continuing professional education.

The new Faculty structure has assisted collegiality through a reduction in the tiers of management and increased collaboration of staff in all Faculty programs. Students have benefited through increased opportunities for interaction with students and staff of other disciplines. The new structure has enabled resource management to be conducted more effectively and efficiently. The appointment, under the new structure, of an Associate Dean – Research and Graduate Programs, has assisted the Faculty in developing its research profile, and the effects are noticeable already through the successful Australian Building Cost Database project, and cross-disciplinary research initiatives in areas including the changing composition and structure of urban development, inner-city gentrification and the impact of immigration on construction services. The Faculty has prepared, in cooperation with the Royal Melbourne Institute of Technology, the University of South Australia and the Construction Industry Institute (Australia), a strong application for an ARC Infrastructure grant titled *Design for Life: The Development of a Virtual Studio for Construction Life Cycle Design and Management*.

The recently updated 1995–1997 Strategic Plan for the Faculty reinforces the vision and direction for the Faculty in areas of quality and focus in teaching, research, national leadership in its disciplines, and internationalisation. The Strategic Plan stresses also the Faculty's commitment to

## FACULTY MISSION STATEMENT

maintaining its leadership in computing, with a continuing emphasis on multi-media through its Computer Imaging Laboratory. The Faculty's links with overseas institutions have been extended to China, where successful workshops under the AIDAB scheme have been organised by Faculty staff. The Faculty continues to strengthen its links with institutions and organisations in other Asian countries, Europe, the USA and the UK.

Faculty staff and students continue to be the recipients of prestigious awards. Professor Neville Quarry, following his award of the RAIA Gold Medal for his outstanding contribution to architectural education, was created member of the Order of Australia (AM) in the 1995 Queen's Birthday honours list. Dr Craig Langston was awarded the inaugural High Achievement Award of the Australian Institute of Quantity Surveyors (NSW Chapter).

For the third year in a row, a UTS student submission coordinated by the Faculty was one of eight international teams invited to contribute to the International Apple Interface Design Competition. The UTS entry 'Phoenix', an interactive computer system to help improve the operations of the NSW Fire Brigade and the personal safety of firefighters, attained a high commendation on the grounds of user engagement, industrial design and quality of presentation. Among other student award winners during the year was third-year Visual Communication student Simon Hong who won the CPI National Student Award.

Geoffrey Caban  
Dean

Faculty of Design, Architecture and  
Building

The Faculty's mission is to provide an environment which encourages a high sense of purpose, superior performance and a vision for national leadership in the areas of design, construction and property education. The Faculty aims to provide opportunities for education, training and research in accordance with international standards of best practice and management.

The Faculty aims to fulfil its purpose in the following manner:

1. To provide undergraduate and postgraduate courses that both reflect and progress relevant professional disciplines.
2. By way of cooperative education, to enhance the integration of educational programs with professional, industrial, commercial and societal activities.
3. To focus and promote a contextual awareness in government and society in those areas of Faculty interest.
4. To encourage staff and student research that will advance the Faculty's purpose.
5. To encourage Faculty and staff consulting at an appropriate level that will provide a sharing of Faculty expertise and that will strengthen and develop teaching programs.
6. To pursue strategies that will reinforce intra-Faculty cooperation in research and teaching and that will promote cooperative ventures externally.
7. To promote policies that will enhance the quality of teaching, technical and administrative activity and that will provide for staff development.
8. To maintain and promote programs in relevant areas of continuing education.

# FACULTY OF DESIGN, ARCHITECTURE AND BUILDING

## Courses offered by the Faculty

### DESIGN

- Bachelor of Design with a major in:
- DF01 Fashion and Textile Design
  - DD01 Industrial Design
  - DT01 Interior Design
  - DV01 Visual Communication
  - D059 Graduate Certificate in Design and Technology
  - D052 Graduate Diploma in Design
  - D051 Master of Design (by coursework)

### ARCHITECTURE

- AA02 Bachelor of Architecture
- AA03 Bachelor of Arts in Architecture
- AA53 Master of the Built Environment (by coursework)
- AA04 Bachelor of Arts (Honours) in Architecture

### BUILDING STUDIES

- AB03 Bachelor of Building in Construction Management
- AB04 Bachelor of Building in Construction Economics
- AB06 Bachelor of Applied Science in Land Economics
- AB52 Graduate Diploma in Urban Estate Management
- AB57 Graduate Diploma in Building Surveying and Assessment
- AB55 Graduate Diploma in Planning
- AB65 Graduate Diploma in Project Management
- AB64 Graduate Certificate in Urban Estate Management
- AB62 Graduate Certificate in Building Performance
- AB63 Graduate Certificate in Building Regulations

- AB66 Graduate Certificate in Project Management
- AB59 Master of Building in Construction Economics
- AB58 Master of Land Economics
- AB56 Master of Planning
- AB53 Master of Project Management

### RESEARCH

- D058 Master of Design (by thesis)
- AA51 Master of Architecture (by thesis)
- AB51 Master of Applied Science (by thesis)
- AA54 Doctor of Architecture (by thesis)
- D057 Doctor of Philosophy in Design
- AA52 Doctor of Philosophy in Architecture
- AB54 Doctor of Philosophy in Building/Quantity Surveying

## Student information

### ELIGIBILITY FOR AUSTUDY

Austudy provides financial help to full-time students who meet its income and assets requirements. Application forms and information about Austudy eligibility are available from offices of the Student Services Unit at the City and Kuring-gai campuses. **Students who receive Austudy and decide to drop subjects during the semester need to be aware that to remain eligible for Austudy they must be enrolled in a minimum of 18 credit points or have a HECS liability for the semester of .375.** The only exceptions made are for students with disabilities which interfere with their studies, students who are single supporting parents or those who have been directed by the University to reduce their study load. Student Welfare Officers in the Student Services Unit can assist students who wish to apply for exceptions on these grounds.

## INTERNATIONAL STUDIES ELECTIVES

The Institute for International Studies in UTS offers electives in language studies and in the study of contemporary societies in parts of the non-English-speaking world. All subjects are taught over one semester and have a value of eight credit points.

### Language Studies

All students wishing to take language studies as a credited part of their degree are required to enrol through the Institute for International Studies, whether the language studies are undertaken in UTS or elsewhere. The Institute teaches some language programs at UTS, has made arrangements with other universities for some languages to be taught to UTS students, and can make special arrangements for individual students to attend specific language programs where academic needs demand. The individual student's level of language proficiency before entry to the UTS program decides their level of language study. There is a range of entry levels to the various programs available. Most are available at beginner's and post-HSC levels, and some at more advanced levels.

In 1996 the Institute is offering the following programs at UTS to students in all faculties: Cantonese, Chinese, Indonesian, Japanese, Modern Standard Chinese and Spanish. In addition, arrangements are in place for the delivery of French, German, Hindi, Italian, Korean and Thai. (Modern Standard Chinese is a program for students who are either complete beginners or who started to learn Chinese at school in Australia). There are no prerequisites for entry to any language program.

## Contemporary Society

The Institute also offers a series of subjects that provide an introduction to the contemporary societies, politics, economics and cultures of the countries of East Asia and South-East Asia, Latin America and Western Europe that are the areas of specialisation of the Institute.

In 1996 introductory subjects on the contemporary societies of China, Japan, South-East Asia, Hong Kong and Taiwan, Latin America and Western Europe will be available. There are no prerequisites for any of the Contemporary Society subjects. All subjects are taught in English and are available, with the permission of their faculties, to all UTS students.

For more information students should consult the Academic Administrator at the Institute for International Studies, UTS, 9 Broadway (tel: 330 1574, fax: 330 1578), or the *Institute for International Studies Handbook*.



## PROGRAMS IN DESIGN

### UNDERGRADUATE COURSES

#### Bachelor of Design

In 1991 a new curriculum for the Bachelor of Design was introduced, based on a problem-solving approach and self-directed learning. All students undertake a common first semester (Design 1) and are thus introduced to each of the four major areas of design: Visual Communications, Fashion and Textiles, Interior Design and Industrial Design. The rationale behind this approach is based upon (1) the sharing of a common design process; (2) common knowledge and skills; (3) common social context within which designers operate; and (4) the desirability for designers in each area to establish personal and professional links with those in adjacent areas. The course is delivered by way of studios, lectures and workshops.

The second- and third-year curricula consist of more professionally focused coursework. The final year is based largely upon personal research and professionally orientated project work, and the final semester of the course consists of a major project of the student's own choosing.

The course also features a number of elective studies: Minor Studies in professional areas and General Studies in broad education areas. The latter may be taken within the Faculty, elsewhere in the University or at other approved tertiary institutions. The choice of electives is at the student's discretion, but is subject to availability/approval.

All students are required to gain practical experience in professional design practice to augment and complement their academic studies. Advice and approval should be sought from the appropriate members of staff.

#### FASHION AND TEXTILE DESIGN

Fashion and textile design is concerned with the design of fashion clothing, printed and knitted fabrics, and their related fields and technologies. The course deals with the changing needs and values of society and how this reflects on the direct and allied industries. The context of the course encompasses aspects from street to high-end fashion, and fashion to interior textiles.

Fashion and textile designers work with or alongside manufacturers and marketers; they have responsibility for design direction and marketability of produced concepts. They need to have an awareness of current and projected trends and values in lifestyle, and a detailed understanding of materials, technologies and process methodologies of the fashion and textile industry. The structure of the course is planned to produce graduates who aspire to the highest level of practice and as individuals are capable of adapting to the diversified and changing nature of the industry.

First-year studies commence with common problem-based projects and multidisciplinary study. Major studies for fashion and textile design commence in the second semester and focus on core design fundamentals of both fashion and textiles, with a strong base of technology across both disciplines. Second-year subjects comprise four complementary fields: Design, Technology, Communication and Business studies. Through the study of theory and practice in these fields, students develop their understanding of the design process, its adaptation and application to society. Third-year subjects, while continuing these strands, encourage specialist development of individual design practice, together with a professional experience program and academic research.

Subjects that combine fashion and knit design involve the study of the varied levels and market areas of this design field, while textile design encompasses the spectrum of surface design, with all its nuances.

Students develop a personal philosophy and style through the various design problems encountered and the accompanying theoretical research undertaken during the four years of study.

### Course structure

Credit points are shown in brackets.

#### Stage 1

##### *Autumn semester*

85000 Design 1 (24cp)

#### Stage 2

##### *Spring semester*

83220 Design Project F&T 2 (24cp)

#### Stage 3

##### *Autumn semester*

83330 Design Project F&T 3 (14cp)  
Minor study (6cp)  
General study (4cp)

#### Stage 4

##### *Spring semester*

83440 Design Project F&T 4 (14cp)  
Minor study (6cp)  
General study (4cp)

#### Stage 5

##### *Autumn semester*

83550 Design Project F&T 5 (14cp)  
Minor study (6cp)  
General study (4cp)

#### Stage 6

##### *Spring semester*

83660 Design Project F&T 6 (14cp)  
Minor study (6cp)  
General study (4cp)

#### Stage 7

##### *Autumn semester*

83770 Design Project F&T 7 (16cp)  
83780 Research Dissertation F&T (8cp)

#### Stage 8

##### *Spring semester*

83880 Major Project F&T (24cp)

## INDUSTRIAL DESIGN

Industrial design is concerned with the design of products for the manufacturing industry. The industrial designer works with manufacturers and has responsibility not only for the visual and tactile qualities of products but also to a large extent for their safety, efficiency and cost effectiveness. The industrial design course is planned to produce graduates who are capable of providing industry with leadership in design, and who will adapt successfully to industrial and social change.

First-year studies include common problem-based projects and activities. Subjects studied in later years fall into three complementary groups: manufacturing science and technologies; expressive and communication techniques; and design. The Manufacturing Science and Technologies strand includes the study of engineering principles and of manufacturing materials and methods. The Expressive and Communication Techniques strand covers analytical, presentation and engineering drawing; model-making; and written communication. The Design strand includes the design of products for mass production, and marketing and design for appropriate technologies. In the final year, students undertake a research study and develop in depth a design based on their research findings.

**Course structure**

Credit points are shown in brackets.

**Stage 1***Autumn semester*

85000 Design 1 (24cp)

**Stage 2***Spring semester*

84220 Design Project ID 2 (24cp)

**Stage 3***Autumn semester*

84330 Design Project ID 3 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 4***Spring semester*

84440 Design Project ID 4 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 5***Autumn semester*

84550 Design Project ID 5 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 6***Spring semester*

84660 Design Project ID 6 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 7***Autumn semester*

84770 Design Project ID 7 (16cp)  
84780 Research Dissertation ID (8cp)

**Stage 8***Spring semester*

84880 Major Project ID (24cp)

**INTERIOR DESIGN**

Interior design is concerned with the design of all facets of the interior environment in response to the particular human activities occurring within. The interior designer works with the building construction and product supply industries to create interior environments for specific purposes. Often work is undertaken in association with other design and technological consultants. A designer of interiors is required to have a thorough understanding of human environmental needs and to have the capacity to develop appropriate design solutions and organise their realisation.

First-year studies include common problem-based projects and activities. The later years of the course are problem-based in an academic direction. They combine and utilise information from the academic study fields to produce design problems for students that offer a holistic view to the designing of interior environments.

**Course structure**

Credit points are shown in brackets.

**Stage 1***Autumn semester*

85000 Design 1 (24cp)

**Stage 2***Spring semester*

86220 Design Project IT 2 (24cp)

**Stage 3***Autumn semester*

86330 Design Project IT 3 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 4***Spring semester*

86440 Design Project IT 4 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 5**

*Autumn semester*

86550 Design Project IT 5 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 6**

*Spring semester*

86660 Design Project IT 6 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 7**

*Autumn semester*

86770 Design Project IT 7 (16cp)  
86780 Research Dissertation IT (8cp)

**Stage 8**

*Spring semester*

86880 Major Project IT (24cp)

**VISUAL COMMUNICATION**

Design of visual communication involves the creation, processing and production of messages presented in a visual form. Designers in this area are employed to use their creativity and knowledge to determine the optimum effectiveness of the message, visually communicated to a selected group of people. The message may be designed to instruct, direct, inform, entertain or persuade, most often incorporating words and images produced freehand or with the assistance of photographic, video and digital technologies. In visual communication, designed messages are reproduced or transmitted to the end user/viewer through print or screen media.

The course aims to prepare students for this diversity and expects graduates to aspire to the highest level of practice while encouraging them to take a critical and imaginative stance to their eventual professional role in commerce and society. Integral to the course is an understanding of the way the design process is mediated by the contemporary sociopolitical framework within which it occurs.

Subjects actively encourage learning and design processing rather than the performance of skill-based tasks. Having emphasised creative visual thinking and introduced relevant media, the course encourages students to develop their individual talent and career orientation through project selection.

In lectures and tutorials the historical and contemporary context of design and practice are examined. By initiating a focus for research and project activity, close links are established between practice and theory. Design problems are supported by workshops which develop specific skills to assist the exploration, processing and realisation of design solutions. The integrated structure of activities at each stage offers a holistic model of design practice.

**Course structure**

Credit points are shown in brackets.

**Stage 1**

*Autumn semester*

85000 Design 1 (24cp)

**Stage 2**

*Spring semester*

87220 Design Project VC 2 (24cp)

**Stage 3**

*Autumn semester*

87330 Design Project VC 3 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 4**

*Spring semester*

87440 Design Project VC 4 (14cp)  
Minor study (6cp)  
General study (4cp)

**Stage 5**

*Autumn semester*

87550 Design Project VC 5 (14cp)  
Minor study (6cp)  
General study (4cp)

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**Stage 6**

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*Spring semester*

- 87660 Design Project VC 6 (14cp)  
 Minor study (6cp)  
 General study (4cp)

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**Stage 7**

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*Autumn semester*

- 87770 Design Project VC 7 (16cp)  
 87780 Research Dissertation VC (8cp)

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**Stage 8**

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*Spring semester*

- 87880 Major Project VC (24cp)

**MINOR AND GENERAL STUDIES**

In order to graduate, students who have completed the first and second stages are required to complete general studies to the specified number of credit points and a strand of minor studies taken over two or four semesters, for a total of four semesters. Each subject in a minor studies strand is a prerequisite for the next level within the strand.

Minor studies subjects are offered in a range of professional areas including illustration, photography, textile design, jewellery, transportation design, furniture design, environmental communications and design for theatre.

General studies subjects are offered in a range of areas including creative writing, social theory and Australian society, popular culture, Aboriginal and Torres Strait Islander studies, film and television documentaries, marketing and client presentation. Students may apply to take appropriate general studies subjects in other UTS schools, or at other institutions. There are no prerequisites.

Further details of minor and general studies subjects to be offered in 1996 will be provided at the time of enrolment. When enrolling, students should carefully check the 1996 offerings and subject numbers as detailed on the separate overlays provided at that time.



# UNDERGRADUATE SUBJECT DESCRIPTIONS

## Guide to subject descriptions

The subject descriptions shown below indicate the subject code and name, the number of credit points for the subject (e.g. 3cp). For some subjects, there may also be practical components off campus, and this is indicated in the text. Also shown are the prerequisites or corequisites, if any, and a brief outline of the content.

Prerequisites are subjects which must be completed before taking the subject to which they refer. Corequisites may be completed before or be taken concurrently with the subject to which they refer.

## COMMON FIRST SEMESTER

### 85000

#### DESIGN 1

24cp

As the Bachelor of Design is structured with problem solving as a central focus, students are introduced to the processes in the common first semester in Design 1. To solve the issues raised, the subject offers an interlocking set of studios, lectures and workshops as follows.

The studio is the central activity of problem-based learning. It gives all students an opportunity to work towards a resolution of the design problems in teams of 20 or so students in association with a studio supervisor. The studio sessions give time for a response to the problem briefs. They are used to coordinate both individual and group activities central to the resolution of Problems 1, 2 and 3 on the subjects of design and place, people and identity. As such they are an indispensable part of problem-based learning and are mandatory. All work is to be recorded in a Process Journal which is part of the assessment of the course.

The lectures represent a program of information developed to directly support the problems. Lectures are held in Design Process; Design Context 1 and 2; Human Factors; Design Communications; History of Design; and Design Computing.

Five workshops have been designed to provide essential backup to the problems.

#### 1. Design elements

The workshop is central to the development of a design vocabulary. Two major interlocking themes will be developed. The first focuses on the use of colour in numerous ways and develops an understanding of the interplay between the designer and the ways colour is used in the community. The second theme concerns the elements of design and seeks to develop an understanding of the applied nature of the elements of design. Students will work their way through a series of workshops and discussion sessions. The studio supervisors also coordinate these workshops but work with different groups from the studio sessions.

#### 2. Based on the preceding lecture series, the computing workshop gives a semester of hands-on experience with the computer. The workshop explores writing and drawing on the computer as well as basic information on computer operation.

#### 3. Design discipline-specific workshops

The need to develop an early understanding of the precise way in which ideas are communicated within a design team and beyond to the manufacturing and construction stage is addressed in this workshop. Because the specifics are of value to students enrolled in particular disciplines, these workshops are of limited availability. The program involves orthographic drawing for Interior and Industrial Design students, pattern drafting for Fashion and Textiles students and visual communication and computing for Visual Communications students. Each program is presented by staff from the disciplines and is regarded as an essential introduction to the second semester.

#### 4. A free drawing workshop is aimed at developing skills in the free use of drawing materials and their means of expression for designers. The

workshop explores a variety of media, all of which are of value in the presentation of design responses to problems developed within the Faculty and subsequently faced in the design profession.

5. The techniques for presenting ideas in three dimensions as built form are developed in the 3D presentation workshop. They involve elements of design and a knowledge of materials, processes and crafting skills. The workshop develops an awareness of the value of 3D representation in the design process, the principles involved in the selection of materials and appropriate techniques for construction, and allows students to become familiar with the materials and equipment most commonly used.

## **FASHION AND TEXTILE DESIGN**

### **83220**

#### **DESIGN PROJECT F&T 2**

24cp

*prerequisite: 85000 Design 1*

Design Project F&T 2 introduces students to the technology and design elements required by a fashion and/or textile designer. These are facilitated through workshops, lectures and tutorials in both disciplines. This core base is supported by lectures in fabrics communication, together with history and lifestyle lectures. Drawing and communication techniques, both freehand and computer generated, are included.

### **83330**

#### **DESIGN PROJECT F&T 3**

14cp

*prerequisite: 83220 Design Project F&T 2*

This semester continues with problem-based learning. Students further explore the fields of fashion and print textiles through design and technology. Skills and processes are advanced from the last semester. Students are introduced to fashion drawing as a communication skill, along with more advanced forms of CAD. Principles of Marketing introduces students to the importance of research in the

process of design. History of Design lectures support the projects.

### **83440**

#### **DESIGN PROJECT F&T 4**

14cp

*prerequisite: 83330 Design Project F&T 3*

Projects undertaken during this semester will include the more advanced aspects of fashion and print design, process and technology. Students study a more holistic approach to design and explore themes and adaptation. Principles of management will be introduced and lectures will be given by industry professionals. The semester is supported by a Design Context, and a History and Lifestyle lecture series.

### **83550**

#### **DESIGN PROJECT F&T 5**

14cp

*prerequisite: 83440 Design Project F&T 4*

A more innovative approach to the disciplines of fashion and textile design is encouraged within the problems set this semester. Projects are set in fashion and textile design in collaboration with industry, and/or are run with visits to and lectures from industry specialists. The area of applied marketing is included as a series of lectures, case studies and practical research, acquainting students with theory specific to the fashion and textile industries.

### **83660**

#### **DESIGN PROJECT F&T 6**

14cp

*prerequisite: 83550 Design Project F&T 5*

This semester begins with a series of industrial site visits combined with a period of professional experience within a specialised field of the industry. Emphasis is given to advanced aspects of the discipline, and projects are offered that encourage students to pursue their personal specialisation within the disciplines offered. The course is supported by the teaching of Applied Management which deals with the process and operation of manufacture such as TQM etc. A research paper is prepared by students as an introduction to their dissertation in level 700.

**83770****DESIGN PROJECT F&T 7**

16cp

*prerequisite: 83660 Design Project F&T 6*

This semester students are given the opportunity to demonstrate their professional knowledge and decision-making ability in selected areas of fashion and/or textile design. Through market research, design and development students develop two ranges in their agreed area of specialisation. This includes full research documentation of the processes of both design and production. The project is supported with lectures from industry specialists in professional practice.

**83780****RESEARCH DISSERTATION F&T**

8cp

*prerequisite: 83660 Design Project F&T 6*

Students are required to develop a research project orientated to support their personal direction or interest on a design-related topic. This subject is coordinated by a supervising lecturer. Research must be presented in written form, and can include visual components.

**83880****MAJOR PROJECT F&T**

24cp

*prerequisites: 83770 Design Project F&T 7; 83780 Research Dissertation F&T*

Students are required to demonstrate their professional ability and accumulated knowledge from previous years' study through the preparation and execution of a personally prepared brief and, in doing so, demonstrate their ability to work at a graduate, professional level. The project is supported by a series of seminars and tutorials on specialised aspects of the profession. Assessment is based on a presentation of completed work to a panel of staff and industry specialists at the end of semester.

**INDUSTRIAL DESIGN****84220****DESIGN PROJECT ID 2**

24cp

*prerequisite: 85000 Design 1*

The objective of this subject is to introduce the basic skills considered essential for industrial designers. Three projects provide the focus for studies within this subject. There is an emphasis on form investigation, the use of materials, and problem-solving techniques. Typical of the content are workshops in 3D representation and study modules in design methods; orthographic and freehand drawing; and the use of computers in design. It is at this second stage of the course that students move from the multi-design-discipline groups in Stage 1 to the Industrial Design Course stream. No other subjects are taken at this level.

**84330****DESIGN PROJECT ID 3**

14cp

*prerequisite: 84220 Design Project ID 2*

This subject encompasses all the core studies undertaken at Stage 3 of the Industrial Design course. The problem-based learning approach adopted in the previous stages is continued with three projects providing the focal point for study modules. Typical modules at this level are engineering, drawing, manufacturing and materials, basic engineering, rendering, human factors and design methodology.

**84440****DESIGN PROJECT ID 4**

14cp

*prerequisite: 84330 Design Project ID 3*

The same format as Design Project ID 3 is applied to this subject, and all core studies are included in this one subject. Problem-based learning is centred on the design projects which are supported by workshops and lectures. Typical lecture modules are design, computing, ergonomics, engineering drawing, manufacturing technology, engineering science, and design history.

**84550****DESIGN PROJECT ID 5***14cp**prerequisite: 84440 Design Project ID 4*

All core studies are included in this subject. Within the framework of problem-based learning, students develop expertise in the decision-making process involved in the design of manufactured goods. Lectures and seminars involving engineering science, manufacturing technology, applied marketing, and graphics for industrial design support the design projects which are selected to foster the growth of creative skills and the awareness of environmental factors related to the design of products.

**84660****DESIGN PROJECT ID 6***14cp**prerequisite: 84550 Design Project ID 5*

All core studies are included in this subject. Continuing with problem-based learning, students are assigned a number of product design projects emphasising the factors which influence the acceptability of products in the marketplace. Lectures and seminars in engineering science, design computing, and design management are typical of the study modules which support the projects. It is at this stage of the course that students will also normally undertake some form of work experience.

**84770****DESIGN PROJECT ID 7***16cp**prerequisite: 84660 Design Project ID 6*

This subject develops students' decision-making ability in the area of design to enable them to contribute effectively to the research, development and marketing strategies of new consumer products. Normally projects are undertaken with clients from manufacturing industries or other sectors involved in the development of new products.

**84780****RESEARCH DISSERTATION ID***8cp**prerequisite: 84660 Design Project ID 6*

This subject is aimed at giving students the ability to investigate in depth and report on an aspect of industrial design as preparation for a major project in the following semester.

**84880****MAJOR PROJECT ID***24cp**prerequisites: 84770 Design Project ID 7; 84780 Research Dissertation ID*

This subject is the culmination of study in the industrial design course. Students apply their knowledge in a design project of their own choosing, the aim of which is to demonstrate their ability to work at a professional level. Students are required to prepare their own programs under the guidance of a member of staff. On completion, the project is assessed by a panel which includes a professional, practising designer. This is the only subject undertaken at this final stage of the course.

**INTERIOR DESIGN****86220****DESIGN PROJECT ID 2***24cp**prerequisite: 85000 Design I*

This subject represents the academic core studies of interior design for students in Stage 2 of the course. Academic study fields instituted in Stage 1 will continue to direct and reinforce design projects undertaken in this subject. Through a series of experiential design projects students will gain a broader understanding of the breadth and diversity of interior design practice and the relevant issues and problems to be addressed in the design of interior spaces. As in all subsequent core studies, students will be presented with a holistic model of design problem solving. Knowledge and skills gained from issues raised in the academic study fields will be assessed within the design projects. At this level Interior Design projects are selected from community or institutional

sources and involve single functioning spaces. Academic study fields include Design Context, Interior Design History, Design Methods, Design Elements, and Design Communications. Communication workshops will specialise in three-dimensional representation, orthographic drawing, freehand drawing and illustration.

### 86330

#### DESIGN PROJECT IT 3

14cp

*prerequisite: 86220 Design Project IT 2*

This subject represents the academic core studies of Interior Design students in Stage 3 of the course. Through a series of experiential design projects, students will gain a broader understanding of the relevant issues and problems to be addressed in the design of residential interior spaces. Projects are selected from community and commercial sources, specifically interior spaces for casual or permanent domicile. Academic study fields instituted in the first year of the course will continue to direct and reinforce projects undertaken in this subject. Knowledge gained from issues raised in academic study fields will be assessed within the design project solutions. Academic study fields will include Design Context, Interior Design History, Design Methods, Design Technology, Environmental Systems and Design Communications. Communication workshops will specialise in design illustration, advanced orthographic drawing and design computing.

### 86440

#### DESIGN PROJECT IT 4

14cp

*prerequisite: 86330 Design Project IT 3*

This subject represents the academic core studies of Interior Design students in Stage 4 of the course. Through a series of experiential design projects, students will gain a broader understanding of the relevant issues and problems to be addressed in the design of commercial public spaces in the hospitality area. Projects are selected from commercial sources. Specifically, projects will centre on the hospitality

industry: restaurants, cafes, food premises, entertainment spaces and public bars.

Academic study fields will, as in preceding semesters, support the design projects and include Design Context, Interior Design History, Design Methods, Design Technology, Environmental Systems, and Design Communications. Communication workshops will specialise in design illustration and design computing.

### 86550

#### DESIGN PROJECT IT 5

14cp

*prerequisite: 86440 Design Project IT 4*

This subject represents the academic core studies of Interior Design students in Stage 5 of the course. Through a series of experiential design projects, students will gain a broader understanding of the relevant issues and problems to be addressed in the design of commercial interior spaces. Selected from commercial sources, projects will specifically centre on workplace design: commercial offices, banking chambers; and retail design: retail arcades, retail interiors. Academic study fields will, as in preceding semesters, support the design projects. Academic study fields include Design Context, Interior Design History, Design Methods, Design Technology, Environmental Systems, and Design Communications. Communication workshops will specialise in verbal communication and design computing.

### 86660

#### DESIGN PROJECT IT 6

14cp

*prerequisite: 86550 Design Project IT 5*

This subject represents the academic core activity of Interior Design students in Stage 6 of the course. At this stage, design projects are in the specialised area of adaptive reuse and interior conservation. Selected projects require students to analyse and respond to the existing spatial conditions and interior fabric of buildings of either social or historical significance and design spaces within contemporary functions and systems. Academic study fields include Design Context, Design Technology, Environmental Systems,



Research Methods, Design Methods, and Interior Conservation.

During this sixth stage of the course, students are required to gain professional experience in industry. Experience is to be documented for approval by the student's academic supervisor.

## **86770**

### **DESIGN PROJECT IT 7**

16cp

*prerequisite: 86660 Design Project IT 6*

Selected projects at Stage 7 of the course require students to design complex multifunctioning interior spaces. Problems are selected from industry and require demonstration of knowledge gained in previous academic study fields at an advanced level. Students are also required to utilise knowledge gained from their minor studies.

Students' learning is predominantly self-directed at this stage of the course. Academic study fields formally presented in this stage of the course include Interior Design Professional Practice, Market Research, and Design Technology.

## **86780**

### **RESEARCH DISSERTATION IT**

8cp

*prerequisite: 86660 Design Project IT 6*

Requires students to develop a research project, in consultation with a supervising lecturer, on a topic or area of study which supports the students' personal direction and career orientation within design practice.

## **86880**

### **MAJOR PROJECT IT**

24cp

*prerequisites: 86770 Design Project IT 7; 86780 Research Dissertation IT*

Requires students to design a major interior work to a brief they have developed, to demonstrate their knowledge and abilities and to establish their preparedness for professional practice. The project involves a complex of spaces providing a specialist environment and requires a significant modification of the interior of an existing or proposed building. Students prepare their own semester program and

are supervised by a staff member. The project assessment is based on the supervisor's assessment of the student's work methods and a panel assessment takes into account the degree to which the stated aims of the project have been achieved and the professionalism evident in the work.

## **ACADEMIC STUDY FIELDS**

The following academic study fields constitute the specific areas of study undertaken by students in the Interior Design course. Information is presented to students in a variety of ways, including lectures, tutorials, research packages and workshops.

### **Design Context**

Lectures from and discussions with a variety of user groups, consultants and experts on issues of contextual relevance to the design projects are presented in this study field. This allows for informed design decisions and appropriate solutions to design problems.

### **Interior Design History**

Through a series of lectures and research reports students will identify and draw upon appropriate historical precedents for their work and gain understanding of design philosophies and systems developed for and by designers in the past.

### **Design Technology**

Through a series of lectures, tutorials and research topics, students will gain competence in the selection of materials, technological systems, fabrication and construction methods.

### **Design Methods**

This academic study field develops students' ability to make design decisions using a clear process of decision making.

Techniques of research, problem analysis and evaluation, conceptual development and precedent analysis are developed in this study field.

## Design Elements

This field assists the students in developing knowledge and skills in design composition. Specifically the elements that affect the composition of interior environments are studied. Areas investigated include composition phenomena and human responses to the environment.

## Environmental Systems

The physical issues that influence the interiors of buildings are covered in this field. Subjects studied include the systems and methods of controlling the lighting, temperature and sound within an interior. Knowledge is gained incrementally by the student and tested in her/his design solutions.

## Furniture Fittings and Equipment

This study field covers issues of manufacture and selection and specification of furniture, fittings and equipment to be used in interiors.

## Design Communications

Lectures, workshops and exercises are undertaken to develop students' competence in communicating design exploration and design ideas to clients, consultants and contractors. The following workshops comprise the Communications strand in the Interior Design Course:

*Three-dimensional Representation* — this workshop aims to establish the value of three-dimensional representation in the design process. Via the process of model making, students will investigate the qualities of interior spaces. They will develop an understanding of model-making materials and appropriate techniques for model construction.

*Orthographic Drawing* — this workshop emphasises the value of accurate drawing systems in the design process by investigating proportioning systems, geometrically derived design and surface development drawings. Drawing conventions for plans, sections and evaluations of buildings and interiors are also introduced and developed as is the production of three-dimensional representations. Systems for communication with fabricators

and contractors will be developed and tested in design projects.

*Illustration* — this workshop combines studio and field activities and emphasises the importance of visual thinking in the design process. Emphasis is given to the communication of the emotive qualities of interior spaces. The workshop also explores the value of colour and various rendering techniques in the design and communication process.

*Freehand Drawing* — this workshop develops the students' abilities in drawing and sketching spaces, objects and life subjects using a variety of media and techniques.

*Design Computing* — through a series of lectures and tutorials students will gain competence in a variety of computer systems ranging in application from three-dimensional visualisation and composition to contract documentation.

## VISUAL COMMUNICATIONS

### 87220

#### DESIGN PROJECT VC 2

24cp

*prerequisite: 85000 Design I*

This subject introduces students to the academic core study of the Visual Communications major. The structure of integrated problem-based learning continues. Study fields initiated at Stage 1 continue to direct and reinforce problem setting and project activities.

#### Design context

Design practice is examined in the context of historical and contemporary cultural movements and technological developments over the last 150 years. The artistic movements and the intellectual and philosophical framework that have shaped design are examined in order to research and analyse the relationship of design to technology, material culture and consumption. Contemporary issues impacting on the role of the designer in society such as gender, ethnicity, multiculturalism, national identity and popular culture are introduced and developed through project activity.

### Design methods

Project activity offers a model of design practice requiring research, visual exploration, creative problem solving, design processing and the visual, verbal presentation of design solutions. Students are introduced to the demands and limitations of screen and print media technologies.

### Design elements

These are investigated through theory lectures, visual research and practical exploration integrated into project development and problem solving. Investigations focus on: word and image reinforcement; figure and ground relationships; scale, space and context; 2D and 3D translations; static and dynamic transition; sequence, framing and the illusion of movement.

### Design communication

A number of design technology workshops support project activity:

- Image-making workshop explores the generation of ideas translated through graphic forms of expression and consolidates abilities to visualise ideas with meaning.
- Photo media workshop consolidates black and white photography skills and initiates the design of constructed images.
- Typography workshop directly supports project activity and investigates the historical background of type development and the role of technological change on the generation and application of words as images.
- Computer workshop continues to develop digital skills introducing additional software programs which can be utilised in balance with manually-generated applications for computer-aided design and production.

## 87330

### DESIGN PROJECT VC 3

14cp

*prerequisite: 87220 Design Project VC 2*

This subject is the academic core study of the Visual Communications major. The structure of integrated problem-based learning continues. Study fields developed through earlier stages continue to direct and reinforce problem setting and project activities.

### Design context

Lectures and tutorials examine the social and technological context that has encouraged and enabled design to develop as a recognised activity and professional practice. Relevant aspects of contemporary theories such as semiotics, psychoanalysis, feminism and cultural theory are examined as they apply to the reading, interpretation and analysis of design, and the production and context of visual images.

### Design methods

Students, in response to a given brief, develop their ability to design and process ideas with consideration of media technologies and the needs and perceptions of the end user. Project activity focuses on the design of visual communication applicable to both graphic design and print reproduction and the design and production of moving images (animation and video) for transmission to the screen.

### Design elements

The selection and application of words, images, signs and symbols are examined as primary elements of visual communication design. The notion of 'visual metaphor' as integral to the development of visual language is investigated and applied through project development.

### Design communication

A number of design technology workshops support project activity.

- Image-making workshop explores the generation of ideas translated through graphic forms of expression and consolidates abilities to visualise ideas with meaning.

- Photomedia workshop consolidates black and white photography skills and initiates the design of constructed images.
- Typography workshop directly supports project activity and investigates the historical background of type development and the role of technological change on the generation and application of words as images.
- Computer workshop continues to develop digital skills introducing additional software programs which can be utilised in balance with manually-generated applications for computer-aided design and production.

## 87440

### DESIGN PROJECT VC 4

14cp

*prerequisite: 87330 Design Project VC 3*

This subject is the academic core study of the Visual Communications major. The structure of integrated problem-based learning continues. Study fields developed through earlier stages continue to direct and reinforce problem setting and project activities.

#### Design context

Lectures and tutorials examine the role and responsibility of designers in shaping the past, present and future. The impact of historical developments and precedent on the future of design and society provide the focus for project activity. Projects develop the theme of past and future. Topics such as modernity, post-modernity, green design and sustainable futures are examined.

#### Design methods

Experience gained in design for print reproduction and screen transmission is consolidated and integrated with photographic and manually generated word/image technologies. Within each project focus, students are encouraged to make personal choices, developing an orientation of personal interest through project work.

#### Design elements

As confidence and competence in structuring visual communications develop, this study field becomes fully integrated. Notions of element selection, bias, expression, stereotyping, ambiguity, subjectivity, objectivity, information and persuasion are investigated through project processing and evaluation.

#### Design communication

The workshops previously offered continue. Knowledge and skills are consolidated and gradually integrated into the design processing of projects through access and support in photography, video, animation, computing and digital pre-press.

## 87550

### DESIGN PROJECT VC 5

14cp

*prerequisite: 87440 Design Project VC 4*

This subject is the academic core study of the Visual Communications major. The structure of integrated problem-based learning continues. Study fields are now fully integrated into problem solving, design processing and production.

A major shift of focus occurs at this level of study requiring students to thoroughly examine professional design practice and to start to identify their personal career orientation. The role and responsibility of current practitioners, professionalism, ethical practice, prevailing philosophies and alternative visions are examined in detail. The wants of clients and the needs of users and their impact on design solutions are analysed and critically evaluated.

Study at 500 and 600 levels introduces a number of learning options.

#### International Exchange program

A number of places at equivalent institutions in England and Germany are available. Detailed information is circulated and an exchange can be negotiated at either 500 or 600 level.

### Professional Experience program

All students are required to gain practical experience in professional design practice to augment and complement academic study. A period of approximately five to six weeks is released from major study, usually at 600 level but may be negotiated to occur at 500 level or during the mid-semester break in July. Advice, approval and monitoring are undertaken by academic supervisors.

### Community Project program

At either 500 or 600 level students participate in a 'Community Project'. A number of identified community groups requiring design expertise are invited to become clients, briefing students on requirements. Students form design teams to offer their services, negotiate with clients and present solutions for discussion, approval, further development and production if finally approved. A model of design practice, having been initiated, is thoroughly discussed and evaluated. The role of designer in a team enterprise is investigated as students reflect on the experience of a 'live' project.

### Design project

If not involved at this stage in any of the above activities, students may choose project work from a number of projects offered by interdisciplinary teams of lecturers. These could include: photography and graphics; typography and video; animation and image-making. Each project either simulates or involves a live design project. External guests may be involved in problem setting and feedback. The reality of problem context and application is emphasised. This may include the role of marketing, client communication, external contacts, time management, research, resourcing materials and processes and other aspects of project management. Students experience the need to communicate effectively using visual, verbal and written language as well as developing the confidence to personally present ideas to clients and technical production specialists.

### Visual research

Having gained basic knowledge in design technologies, students are encouraged to undertake visual research which explores the potential of visual media to express and communicate concepts as extensions of given texts or as personally devised and researched.

### 87660

#### DESIGN PROJECT VC 6

14cp

*prerequisite: 87550 Design Project VC 5*

This subject is the academic core study of the Visual Communications major. The structure of integrated problem-based learning continues. As indicated previously a number of learning options are available for student choice.

The practice of contemporary design both nationally and internationally, the impact of technological change and the role of research in design practice are examined and critically evaluated.

Through project selection and orientation students are encouraged to identify a personal direction and develop individual knowledge, expertise and commitment. A number of seminars and workshops enable students to refine their capacity to undertake a high level of visual research and assist the development of research methodologies in preparation for undertaking personally directed inquiry and study in the final year of the course.

### 87770

#### DESIGN PROJECT VC 7

16cp

*prerequisite: 87660 Design Project VC 6*

*corequisite: 87780 Research Dissertation VC*

This subject is the academic core study of the Visual Communications major. Study is self-directed and negotiated with an academic supervisor through the use of a learning agreement developed as a personal brief. Students have an opportunity to reflect on their career objectives, undertake visual research, develop production expertise and introduce personally initiated design briefs in preparation for the final major project program.

The student group is set the task of initiating planning for the end of the year, including the design of personal promotion and publicity for the degree work exhibition. Visiting graduates assist students to clarify goals and further the process of professional networking.

### 87780

#### RESEARCH DISSERTATION VC

8cp

*prerequisite: 87660 Design Project VC 6*

*corequisite: 87770 Design Project VC 7*

Students are required to undertake a research project, orientated to support their personal direction, on a topic or area of study individually selected by each student. As negotiated with the supervising lecturer, research can be presented in written form or include a substantial component of visual research.

### 87880

#### MAJOR PROJECT VC

24cp

*prerequisites: 87770 Design Project VC 7; 87780 Research Dissertation VC*

Students will apply their knowledge and abilities gained through previous studies and experience to a major project program of their own choice and, in doing so, demonstrate their ability to work at a graduate, professional level. Students plan their own semester activity based upon an approved project or projects, and work under a supervisor and with nominated consultants. The project assessment is based upon the supervisor's assessment of the students' work methods and a panel assessment of the final presentation. The panel assessment takes into account the degree to which students have achieved the stated aims of the project(s) and the professionalism evident in their work. Invited designers advise the panel to ensure professional relevance and standards.

## GENERAL STUDIES SUBJECTS

### 51002

#### CREATIVE WRITING 1

4cp

Develops the basic skills in writing for publications, technical projects, film and television through a weekly series of seminars/tutorials. Topics covered include writing for various publications including books, magazines and newspapers; report writing; product support writing and copywriting; script writing for film and television. Traditional and contemporary examples from various fields will be discussed.

### 51003

#### SOCIAL THEORY AND AUSTRALIAN SOCIETY 1

4cp

Provides a framework in which to examine theories about the self and society and an understanding of the individual in relation to a social, cultural and political context. There is a series of lectures and tutorials on social psychology: general introduction; social psychology of the individual; group influences upon individual behaviour; social interaction; group structure and membership; leadership; sociology and general introduction to sociology in Australia; the Marxist tradition; social mobility and elites; the Weberian tradition; anthropology and its relation to sociology; case study; sociology and design.

### 51006

#### CREATIVE WRITING 2

4cp

See the *Faculty of Humanities and Social Sciences Handbook* for details.

### 51007

#### MEDIA STUDIES

4cp

Gives an understanding of the individual properties and potential of print, audio and visual media and their appropriate use. There is a series of lectures and discussions on basic communication theory, messages, communicators and audiences; and on properties and

potentials of print, radio, TV etc. Theories of McLuhan, Schwarz and others are discussed.

### 51008

#### SOCIAL THEORY AND AUSTRALIAN SOCIETY 2

4cp

Provides an in-depth sociological analysis of selected aspects of Australian society and culture. Has a flexible content and structure, so that staff and student concerns may determine several themes for any semester. Examples of possible themes are: immigration, ethnicity and multiculturalism; gender and social power; social class and the distribution of wealth and income; Australian popular culture.

### 80039

#### ABORIGINAL AND TORRES STRAIT ISLANDER ART AND CULTURE 1

4cp

The lectures introduce students to a critical understanding of aspects of Aboriginal culture and facets of Aboriginal involvement in Australia's history and contemporary politics. The program contains perspectives on Aboriginal art and culture, especially in relation to communication that will be relevant to design students in their studies and careers. A willingness to accept challenges to widely held beliefs and attitudes is essential.

### 80040

#### ABORIGINAL AND TORRES STRAIT ISLANDER ART AND CULTURE 2

4cp

Introduces students to the Aboriginal history of 'Australia' and to the Aboriginal analysis of the impact of white invasion and white society on Aboriginal nations. The course will develop these analyses around 'issues' relating to dispossession such as Land Rights claims, legal control and force, political control and political mobilisation, health issues, employment issues, education, art, literature, film etc.

### 80050

#### MARKETING

4cp

Acquaints the design student with modern marketing theory. There is a series of lectures and seminars covering such topics as marketing and design; marketing concepts; marketing environment; segmentation; industrial and consumable marketing; planning; products and services; life cycles; packaging; promotion; distribution.

### 80051

#### DESIGN HISTORY 1

4cp

Gives students an understanding of the relationship of design and designers to their cultural milieu by looking at design problems, techniques and solutions from a range of cultures. The course will acquaint students with vocabularies of Western design e.g. Classicism and Gothic, and examine the way in which these have been exploited and amended for different needs at different times. Historical shifts in the definition of the craftsman/artisan/designer and changing social roles will be examined.

### 80052

#### DESIGN SYSTEMS

4cp

Examines some categories of design problems and solutions that transcend professional boundaries and use systems concepts as an aid to their understanding. Includes a series of lectures and discussions on phenomena such as modularity, product evolution, designing for uncertainty and whether small really is beautiful.

### 80053

#### POPULAR CULTURE

4cp

Gives an overall perspective on the role of popular culture, especially the popular arts and design in contemporary society. A series of lectures, seminars and tutorials provide an introduction to the theory of popular culture as the dominant social context of our time and explores the popular arts, mass media and design as

cultural communication. Subjects include film, cartooning, pop music, jazz, video, craft, vernacular design, print media, TV and the built environment.

## 80056

### CINEMA AND TV STUDIES

4cp

The aim of this subject is to introduce students to approaches to the study of cinema and television. Through a series of lectures and screenings, various ways of gaining more informed understanding of cinema and television material will be developed.

The material covered will include fiction and documentaries, features, mini-series and short form production. The approaches will include silent cinema, national cinema, auteur theory, *cinéma-vérité*, avant-garde, genre study, melodrama and TV soap. Each of these approaches will be outlined in the context of their historical development. More specifically, the questions of form and function with reference to culture, aesthetics, technological development and economics will be addressed.

In the latter stages of the semester, students will be introduced to some of the contemporary concerns arising from recent developments to do with film and computer-based technology. In particular, the consequences for feature film development will be examined.

## 80070

### MARKET RESEARCH

4cp

Provides a working knowledge of the practical application and use of survey data from independent research in solving design problems. There is a series of seminar/tutorials dealing with research design and proposal; questionnaire design; sampling; interviewing; scoring; data interpretation; industrial research; research and segmentation of markets.

## 80071

### DESIGN HISTORY 2

4cp

The course examines aspects of design history in the context of social and technological change from the late 18th century to the present day. Western architecture, interior design, industrial design and fashion will be focal points.

## 80072

### ENVIRONMENTAL SYSTEMS

4cp

Examines various aspects of artificial and natural environment systems in order to understand basic characteristics of control, system failures and the scope for human intervention in such systems. Lectures and discussions are based upon large- and small-scale systems such as energy cycles, transportation and buildings.

## 80073

### CLIENT PRESENTATION

4cp

Provides students with practical skills in the planning and presentation of information and proposals to client groups using audiovisual equipment. There is a series of lectures and demonstrations dealing with coordination of equipment; group presentations; individual presentations; planning for major presentations; commercial applications.

## 80076

### VISUAL PERCEPTION

4cp

Provides students with an exploration of how all sorts of apparently practical aspects of life, from food to dress, from illness to sexuality, even birth and death, are represented in our minds, our language and our imagery as systems of symbols, often centring on our sense of identity and our relations with others. The course will begin with a short discussion of symbolism in the psychoanalytic sense (Freud, Jung) and metaphor in the literary sense, but will have wider scope. A series of lectures/discussions/presentations will develop themes and topics. Students will be free to negotiate topics that interest them and can be classified as part of the



'symbolic order'. Material discussed will include the work of Susan Sontag, Alison Lurie, Roland Barthes and the linguist Gordon Lakoff.

### 80079

#### FILM AND TELEVISION DOCUMENTARY

4cp

The aim of the course of study will be to give students an introduction to the documentary film in terms of tracing its origins from the Lumière Brothers at the turn of the century, through its development in the USSR from 1917, Great Britain and the USA in the 1930s and 1940s, its propaganda uses during World War II, its post-World War II educational applications in Canada and Australia under government sponsorship, its ethnographic applications, the 1960s and 1970s social and political cinéma-vérité developments in France, the USA and Australia, and finally its transformation to current affairs and general interest television formats with particular reference to Australia.

Students will be required to familiarise themselves with the documentary film by attending screenings and contributing to discussions, and by the presentation of seminars or the writing of essays on selected topics within the course outline.

### MINOR STUDIES SUBJECTS

### 88301

#### COMPUTERS AND DESIGN 1

6cp

This strand focuses on the professional use of computer programs in design, related practices and industries relevant to the major study in which the student is enrolled. Issues such as the effect of computers on the design process and the advantages and disadvantages inherent in their use are discussed and examined. It also gives an added opportunity to those students who wish to use computers in an innovative way.

### 88302

#### ENVIRONMENTAL COMMUNICATIONS 1

6cp

This subject introduces the issues and the principles of environmental communication by lectures, workshops and site visits. Students will apply and demonstrate their understanding of these issues in a design project based on a given exterior site. Students have the opportunity to devise a project relevant to their major area of study.

### 88304

#### ILLUSTRATION 1

6cp

Provides students with an understanding of the use of illustration as a communication tool, together with an introduction to a wide range of illustration media techniques and experience of their use in a number of applications relevant to their various design majors. A series of workshops, demonstrations and practical tasks concerned with a range of techniques and applications is undertaken.

### 88305

#### PHOTOGRAPHY 1

6cp

Provides students with a command of photographic techniques and experience of their application in a range of specialist areas relevant to the various design majors. A series of seminars/tutorials and tasks is undertaken. Emphasis is placed on the visualisation of concepts and the exploration of suitable means for realising those concepts. Specific aspects of photography (e.g. fashion, product) are addressed and students are given opportunities for appropriate specialisation.

### 88306

#### TEXTILE DESIGN 1

6cp

Gives students a level of technical and design ability within the areas of knitted, woven and printed textiles which will produce an understanding of the social and environmental responsibilities of a professional designer. A series of lectures,

seminars, workshops and tasks is undertaken, and is concerned with the following: preparation of constructed and printed textile designs; preparation of transparencies and silk-screens; fabric and fibre appreciation; and history of textiles.

### 88308

#### FILM AND VIDEO DESIGN 1

6cp

Provides students with an understanding of the techniques and processes involved in the design of film and video productions with particular emphasis on animation and special effects design. The first (300) level semester involves an introduction to the basic language and technology of animation and special effects design in film and video production and to the roles of the art director and other members of the design team. Subsequent semester units provide students with the experience of script analysis, design research, storyboard design and character design. A series of lectures, screenings and discussions will deal with the history, theory and practice of the screen media. Where possible, students will be presented with the opportunity for appropriate specialisation. It should be noted that this subject is not a film and video production subject but has emphasis on the design aspects of production. The subject is offered only as access is available.

### 88309

#### TRANSPORTATION DESIGN 1

6cp

Provides an introduction to vehicle design and a general understanding of these complex products. A theoretical component of the course will look at the dynamics of a moving wheeled product, including power transmission and steering geometry. A project team will design and construct a simple powered 'device' for moving one person. Operator comfort and aesthetic qualities will be considered. A field trip is included.

### 88310

#### DESIGN AND SUSTAINABLE HUMAN FUTURES 1

6cp

Ecological crisis is now a fact of life. How can and should designers respond? This course explores the options available to designers from a philosophical and pragmatic perspective. Ecodesign covers the connection between searching for a means to achieve ecological sustainment and the everyday practices of the design disciplines. The concepts of social ecology are developed by students, often working in groups. Contemporary initiatives towards providing sustainable benefits are examined. The outcome of the class will be positive action. The main aim is to explore collectively, to encourage the student to rethink and reconstruct his or her own design practice, and to work towards design solutions that facilitate ecological sustainment. The class will determine the outcomes.

### 88311

#### FURNITURE DESIGN 1

6cp

*prerequisite: a high level of competency in the communication areas of orthographic drawing and 3D representation*

Introduces students to the specialised area of furniture design. This subject examines, through the academic fields of history, design theory, ergonomics and appropriate technology, the methodologies and systems of furniture design. Students will progress through a series of projects and gain a specialised knowledge of the area of design and fabrication of furniture pieces. Students will be expected to realise models and prototypes of their designed works in the later stages of the course.

Lectures and workshop classes will be supported by factory and workshop visits.

### 88312

#### DESIGN FOR THEATRE 1

6cp

Introduces students to the specialised area of design for performances in theatre spaces. The subject examines through the academic fields of history, design methodology, script analysis, the professional

roles of the set and costume designer. This is a multidisciplinary course which will bring students together to solve specific design problems. The first level of this course deals with the various roles of members of the design team while exploring the basic language and procedures in theatre. In subsequent semesters, students will develop their specialised knowledge through designing productions of an increasingly complex nature.

Problems will be delivered and assessed by visiting professionals from a diverse range of performance areas: drama, opera, ballet.

### **88401**

#### **COMPUTERS AND DESIGN 2**

6cp

Continuation of 88301.

### **88402**

#### **ENVIRONMENTAL COMMUNICATIONS 2**

6cp

This subject continues the investigations and format of Semester 1, but with a focus on communication and exhibition design in the context of museums.

### **88404**

#### **ILLUSTRATION 2**

6cp

Continuation of 88304.

### **88405**

#### **PHOTOGRAPHY 2**

6cp

Continuation of 88305.

### **88406**

#### **TEXTILE DESIGN 2**

6cp

*prerequisite: 88306 Textile Design 1*

Provides students with a further understanding of the application of design for printed textiles in industry and society. The course will contain a series of lectures, tutorials, demonstrations and tasks concerning: preparation and production of a printed design into a sample length of fabric; printing of a multicoloured design;

carpet and rug design; and use of appropriate fabric/fibre/yarn into given design contexts. Site visits to textile industries and commercial enterprises support the study program.

### **88408**

#### **FILM AND VIDEO DESIGN 2**

6cp

Continuation of 88308. Offered only if available at Stage 1.

### **88409**

#### **TRANSPORTATION DESIGN 2**

6cp

*prerequisite: 88309 Transportation Design 1*

Further develops students' understanding of the complexity of designing moving wheeled products. The first of a two-semester project will be to design a passenger car for a specific market segment. Topics include theory of aerodynamics, anthropometrics, legal requirements etc. Interior design will be looked at, including seats, fascia, fabrics, colours, instrumentation, hardware etc. A field trip is included.

### **88410**

#### **DESIGN AND SUSTAINABLE HUMAN FUTURES 2**

6cp

The course will give hands-on experience to people wishing to practise ecodesign. The program develops the foundation of sustainable design practice laid down by 88310 Design and Sustainable Human Futures 1. In particular the role of systems thinking in relation to key ecological processes is explored, and the opportunities for ecodesign intervention in real community activities are developed. Projects will range from a feasibility study through to a final evaluation from an ecological perspective. The creation and operation of relational working groups will be an important part of the program. Real projects and clients and site visits are included. Participants are expected to be pro-active and interactive.

**88411****FURNITURE DESIGN 2***6cp*

Continuation of 88311.

**88412****DESIGN FOR THEATRE 2***6cp*

Continuation of 88312.

**88501****COMPUTERS AND DESIGN 3***6cp*

Continuation of 88401.

**88502****ENVIRONMENTAL  
COMMUNICATIONS 3***6cp*

This subject further develops an understanding of environmental communications with increasing emphasis on industry practice.

**88503****FILM AND VIDEO DESIGN 3***6cp*

Continuation of 88408.

**88504****ILLUSTRATION 3***6cp*

Continuation of 88404.

**88505****PHOTOGRAPHY 3***6cp*

Continuation of 88405.

**88506****TEXTILE DESIGN 3***6cp**prerequisite: 88406 Textile Design 2*

Further develops students' understanding of current industrial design methods, and provides the opportunity for exploring advanced techniques in the areas of knitted, woven or printed textiles. Students may specialise in the study and

design of textiles for upholstery, furnishings, household textiles, corporate identity and/or concept design, or the history of textiles.

**88509****TRANSPORTATION DESIGN 3***6cp*

Continuation of 88409.

**88510****DESIGN AND SUSTAINABLE HUMAN  
FUTURES 3***6cp*

Continuation of 88410.

**88511****FURNITURE DESIGN 3***6cp*

Continuation of 88411.

**88512****DESIGN FOR THEATRE 3***6cp*

Continuation of 88412.

**88601****COMPUTERS AND DESIGN 4***6cp*

Continuation of 88501.

**88602****ENVIRONMENTAL  
COMMUNICATIONS 4***6cp*

Students have the opportunity to initiate their own project in the environmental communications field.

**88604****ILLUSTRATION 4***6cp*

Continuation of 88504.

**88605****PHOTOGRAPHY 4***6cp*

Continuation of 88505.

**88606**

**TEXTILE DESIGN 4**

*6cp*

*prerequisite: 88506 Textile Design 3*

Consolidates students' knowledge of current industrial design methods and design ability within a specialised area of textiles. Students undertake a major design project which concentrates, through research and practical application on the role and responsibilities of the professional textile designer in society and the environment in general.

**88608**

**FILM AND VIDEO DESIGN 4**

*6cp*

Continuation of 88503.

**88609**

**TRANSPORTATION DESIGN 4**

*6cp*

Continuation of 88509.

**88610**

**DESIGN AND SUSTAINABLE HUMAN FUTURES 4**

*6cp*

Continuation of 88510.

**88611**

**FUTURE DESIGN 4**

*6cp*

Continuation of 88511.

**88605**

**DESIGN FOR THEATRE 4**

*6cp*

Continuation of 88512.

# UNDERGRADUATE COURSE REGULATIONS

These regulations are to be read in conjunction with the University's Rules and By-law.

## UNDERGRADUATE AWARD STUDENTS

Bachelor of Design with a major in:

Fashion and Textile Design  
Industrial Design  
Interior Design  
Visual Communication

### 1. Awards and graduation

A student is deemed to have completed the educational requirements for the Bachelor of Design course when he or she has achieved at least 192 credit points made up of:

- 1.1 152 credit points from required major studies subjects including:
  - 24 credit points for Design 1
  - 104 credit points at each of 200, 400, 500, 600 and 700 levels
  - 24 credit points from major project at 800 level;
- 1.2 24 credit points from an approved strand of Minor Studies subjects including six credit points at each of 300, 400, 500 and 600 levels;
- 1.3 16 credit points from General Studies subjects.

### 2. Assessment period

The assessment period for the Bachelor of Design is one semester.

### 3. Credit point system

Each subject offered for credit toward the degree has a credit-point value which reflects the effort normally required to complete the subject's study and other work and which provides the basis for the subject's weighting factor.

### 4. Minimum credit points

The minimum number of credit points for which a full-time student can be enrolled in a semester is 18.

### 5. Maximum credit points

The maximum number of credit points for which a student can be enrolled in a semester is 30. This maximum may be varied with the approval of the relevant Faculty committee.

### 6. Progression

A student must obtain 18 credit points and prerequisites by the completion of subjects at one level of study before being eligible to proceed to the next level of study. This requirement may be varied with the approval of the relevant Faculty committee.

### 7. Part-time study

Students may be permitted by the relevant Faculty committee to continue their studies on a part-time basis i.e. enrol for fewer than 18 credit points per semester. The circumstances under which part-time studies may be permitted are:

- 7.1 where a student who has completed successfully two years of study wishes to combine third and/or fourth year studies with appropriate industrial employment;
- 7.2 where a student through disability cannot carry a full-time study load;
- 7.3 where a student is denied access to subjects through failure in prerequisites and so is prevented from undertaking a full-time study load.

Application for permission to undertake studies on a part-time basis must be in the recommended form and be endorsed by the applicant's academic adviser before being lodged with the appropriate Associate Dean.

### 8. Special leave

- 8.1 Students who for good reasons such as illness, family or financial difficulties or misadventure cannot attend classes and undertake assignments for a period during a semester may apply for special leave.

- 8.2 Applications for special leave must be in the recommended form and be endorsed by the applicant's academic adviser before being lodged with the appropriate Associate Dean.
- 8.3 Special leave normally is limited to four weeks' duration and students temporarily absent with or without special leave must make arrangements with the coordinating examiners responsible for the subjects in which they are enrolled to meet the requirements for assessment in those subjects.

## 9. Assessment policy

Student work is assessed in accordance with the assessment policy adopted and issued by the relevant Faculty committee.

## 10. Ownership of student work

Under the University's Copyright Policy students generally own copyright in any work executed as part of the course in which they are enrolled except where they are working on a project governed by an agreement between UTS and a third party and agree to be bound by the terms and conditions of the relevant agreement. In such cases the terms and conditions of the agreement will prevail and the ownership of copyright will be determined accordingly. For more details refer to the section on UTS policies in the *Undergraduate Student Handbook*.

However, in accordance with Rule 2.9 of the Rules Relating to Students, the University reserves the right to retain the original or one copy of any drawings, models, designs, plans and specifications, essays, theses or other work executed by a student as part of their course, or submitted for any award or competition conducted by the University without affecting any copyright or other intellectual property right that may exist in such student work.

Notwithstanding Rule 2.9 of the Rules Relating to Students, the University may have a proprietary interest in any intellectual property developed by a student in the course of his or her studies at the University using substantial institutional resources (other than the facilities of the University Library) and pre-existing

intellectual property developed within the University.

The University has a Rule on intellectual property (G7), an inventions and designs policy, a policy on copyright and guidelines for the ownership of intellectual property in relation to students, all of which are printed in full in the *Undergraduate Student Handbook*. Any claim that the University may make in respect of intellectual property developed by a student will be consistent with the *Copyright Act 1968* and the relevant University policies.

In 1993 the University adopted revised 'Guidelines for the ownership of intellectual property in relation to students' under which the University acknowledges the entitlement of a student to be recognised as the first owner of any copyright which may subsist in work executed or submitted as part of the student's work within a course of study offered by the University or submitted for any award or competition conducted by the University. However, the University has the right to make copies of the work for assessment and other purposes and may also request the use of a student's work for its educational or administrative purposes in pursuance of which it may exhibit, reproduce, publish, perform, adapt or broadcast the work, subject matter or design in question. Where the University receives a financial profit from the use of a student's work, the student is entitled to equitable remuneration for its use.

## ASSESSMENT POLICY STATEMENT

This policy statement has been adopted in accordance with the University's policy on assessment. It outlines the ways in which the assessing (marking) of student work submitted during semesters and the compiling of subject assessments for students at the end of semester are undertaken.

Successful implementation of this policy requires understanding, commitment and active participation in assessment processes by both students and staff. It is important that staff and students are familiar with the policy and that they work to ensure that assessment processes are conducted as consistently and fairly as possible.

1. Enrolment in each subject is a form of agreement between the student and the University. The basis of that agreement is the printed subject description, made available to students before their enrolment, in which the subject's general aims and outline are spelt out. The University agrees to provide the subjects as described, and to award the credit points for the subject to those students who are properly enrolled in the subject and who are assessed and found to have been successful in achieving the subject's aims.
2. An application for a variation of approved program must be completed and lodged by a student wishing to withdraw from a subject in which he/she is enrolled or to undertake a subject in which he/she is not enrolled. The application must be lodged with the Academic Registrar before the end of the fourth week of a semester. Failure to vary enrolment will result in a student being awarded failures in subjects abandoned and not being credited with results obtained in subjects entered after enrolment day.
3. A semester program for each subject is provided to students in the first class of the semester. This program provides, in more detail than the subject description, an outline of the content, staffing, teaching/learning strategies, pattern of assignments, assignment weighting and basis of assessment planned for the semester.
4. The basis for assessment is spelt out in the semester program for the subject. Semester examinations are not used as part of the assessment process.
5. Attendance and participation in classes is prerequisite to a passing assessment in all subjects. Achievement of a subject's aims becomes difficult if many lectures, seminars, tutorials or studio/workshop sessions are missed. As a general rule attendance at 80 per cent of scheduled classes is required. Attendance, however, is not in itself sufficient. Active involvement in class activities and discussions is important to learning and therefore to assessment.
6. Assignments are the tasks prescribed for students in a subject. An assignment may take the form of a tutorial paper (i.e. group or individual investigation leading to a report presented in class and a documented submission), a semester paper (i.e. a group or individual investigation occupying most or all of the semester and leading to a documented submission) or a design project (i.e. the group or individual development and submission of design proposals in response to an issued brief).
7. The assignment conditions set by the subject lecturer define as necessary the submission format, the submission deadline and the assessment criteria.
8. The submission deadline is the date and time at which the assignment is due. Assignments are required to be delivered to the subject lecturer, or to the person nominated by the subject lecturer to accept submissions, before the deadline.
9. Late submissions will not be accepted. The only exceptions to this policy can occur where prior arrangements have been made with the subject lecturer. Students are strongly advised, in their own interest, to make an incomplete submission on time rather than to seek acceptance of a late submission.



10. Incomplete assignment submissions will be accepted before the deadline and will be assessed, and any students who believe themselves to have been prevented by disability or misadventure from completing an assignment may attach to their submitted work a written explanation of the circumstances preventing completion.
11. A criticism is provided to the author of each accepted assignment. This criticism usually is given by the subject lecturer in the form of a class discussion or critique, which may be supplemented by individual criticism or reports.
12. An assessment of each accepted assignment submission is made by the subject lecturer in terms of criteria made explicit in the assignment brief or subsequently agreed. A student is entitled to receive from the lecturer details of the mark awarded and an indication of where the mark sits in the class rank order.
13. A re-submission may be allowed or encouraged by a subject lecturer to help a student to bring an assignment to a more satisfactory conclusion. The re-submission will not lead to a revised assessment for the assignment but will be considered in an end-of-semester review and can influence the subject assessment.
14. Warnings may be issued at mid-semester by the subject lecturer to students who at that stage clearly are falling below a passing standard in work completed in the first half semester. It must be emphasised that the Faculty cannot and does not undertake to advise students in advance of impending failures.
15. Advice on progress is available to students from the subject lecturer. However, it must be understood that the lecturer cannot necessarily predict the end-of-semester subject assessment in giving such advice, particularly in borderline cases, because staff members other than the lecturer are involved in determining the grades awarded in subject assessment results.
16. A coordinating examiner is appointed for each subject by the responsible program director. If the lecturer who teaches the subject is a full-time staff member, he/she is the coordinating examiner. If the subject is taught by a team or by a part-time lecturer, one member of the full-time staff acts as the coordinating examiner. The coordinating examiner's task is to ensure all eligible assignment submissions have been assessed, assessment records are complete and available for reference and a subject assessment in the form of a grade is proposed for every enrolled student.
17. Subject assessments are compiled by coordinating examiners, in consultation with staff teaching in the subject and with the program director. In the compilation of subject assessments, assignment marks are weighted to reflect the duration, importance and effectiveness, as a measure of competencies, of the various assignments. Each grade proposed is based upon a percentage score.
18. Grades which can be proposed by coordinating examiners are as follows:
 

**High Distinction**  
Given to a student whose work in the subject has consistently been of exceptional standard.

**Distinction**  
Given to a student who, through work of outstanding merit, has demonstrated a capacity to achieve more than the subject's aims.

**Credit**  
Given to a student who has more than met the minimum requirements of the subject and whose work has been of a standard well above average.

**Pass**  
Given to a student who has met the requirements of the subject and demonstrated that he/she has satisfactorily achieved the subject's aims through work of average standard.

**N**  
This is a borderline case, to be resolved in discussions at the Examination Review Committee when the student's performance in all subjects

can be considered. The N can become a pass, conceded pass, or a failure on the recommendation of the coordinating examiner in the light of other subject grades.

#### W

Is a withheld result, granted in exceptional circumstances to a student who through illness or other form of incapacity has been prevented from completing a sufficient number of assignments to provide a basis for a subject assessment. This has the effect of granting the student a small extension of time, usually one week, to allow additional submissions to be made and for the examiners to complete their assessment.

#### T

Given to a student who has been granted a formal supplementary examination to be completed in the designated supplementary examination period, before a grade can be awarded.

#### Y

Indicates that the subject extends over two or more semesters and a grade is currently not available.

#### Z

Given to a student whose work shows an unsatisfactory achievement on one or more objectives of the subject, and does not qualify for the grade of conceded pass.

19. A conceded pass or R result can be awarded to a student by the Examination Review Committee, on the recommendation of a coordinating examiner. This is given to a student whose mark is just below the pass/fail boundary and for whom an N grade is proposed in the relevant subject result sheet. In any one semester a student may be awarded one conceded pass only, and in order to be granted that, must have achieved passing grades in all other subjects attempted.
20. The Assessment Standards Committee checks the collected subject assessment results. Analysis of subject results at each level is made to compare average marks and correct anomalous results. Different examiners use different marking scales and it

is important that these scales be brought into line so that the value of grades awarded is made as consistent as possible across all the subjects offered. The Assessment Standards Committee may, after consultation, move grade boundaries to adjust subject results.

21. The Examination Review Committee meets to consider consolidated results. Medical and other evidence about factors affecting a student's performance plus records of absences and approved leave are mentioned for each student, N and W results are resolved and R results awarded. The across-the-board comparison of student performance is valuable in deciding borderline cases. Students who, as a result of failures, are denied access to subjects are identified. When approved and adopted by the Examination Review Committee, results become official and are released to students by the Academic Office.
22. A review of subject assessment can be sought by students who believe that they can produce evidence which should cause the University to review and alter a subject assessment. In general, a subject assessment will be reviewed in the light of evidence that:
  - assignment submissions, the mark for which should have contributed to the subject result, were not assessed;
  - assignment submissions whose marks should have contributed to the subject result were not incorporated in the subject assessment;
  - the student's temporary disability or unavoidable absence from the University, attested to by a special leave or by evidence from a medical practitioner or a University counsellor, was not considered in the determination of the subject grade.

Procedures for appeal against assessment grades are published. Advice is available from the Faculty Office.

## POSTGRADUATE COURSES BY COURSEWORK

### Graduate Certificate in Design and Technology

The Graduate Certificate in Design and Technology is a part-time, full-fee-paying course of one year's duration.

#### AIM

This course is a response to the needs of school teachers who are undertaking the new curricula in the areas of Design and Technology for classes in Years 7 to 10. The course offers a broad awareness of design and technology in a social and environmental context, as well as design knowledge and skill essential for school teachers whose previous training has not equipped them for the introduction of design methodologies, processes and practical experiences, which are integral to the new curricula. The course is also of interest to those who may not be teachers but who are concerned with design processes and the professional practice of design.

#### QUALIFICATIONS FOR ADMISSION

To qualify for entry to the Graduate Certificate in Design and Technology an applicant shall hold a Bachelor's degree, diploma or equivalent qualification in an appropriate area and have relevant teaching experience, or submit other evidence of general and professional qualifications which indicates that the applicant possesses the educational preparation and capacity to pursue graduate studies.

#### STRUCTURE

To qualify for the Graduate Certificate in Design and Technology, a student must achieve 24 credit points in not less than one semester of study.

Each subject has a value of four credit points. Sixteen credit points must be achieved from the core subjects; the remaining eight credit points can be achieved from elective postgraduate subjects.

### COURSE STRUCTURE

#### Core studies

Students must complete core subjects to the value of 16 credit points.

##### *Autumn semester*

- 89919 Design and Technology<sup>2</sup> (4cp)
- 89912 Design Case Studies 1<sup>1</sup> (4cp)
- 89914 Design Practice 1<sup>2</sup> (4cp)

##### *Spring semester*

- 89104 Design and Society<sup>2</sup> (4cp)
- 89013 Design Case Studies 2<sup>1</sup> (4cp)
- 89012 Design Practice 2<sup>2</sup> (4cp)

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<sup>1</sup> Core subject

<sup>2</sup> Alternative core subject

#### Electives

Students must complete electives to the value of eight credit points, drawn from the following areas.

- Design Computing Studies
- Design Management Studies
- General Studies
- Methodology Studies
- Technology Studies
- User Studies

See postgraduate subject descriptions.

## Graduate Diploma in Design

The Graduate Diploma in Design is a one-year full-time or two-year part-time postgraduate course.

### AIM

The course examines the nature and processes of design, the roles and responsibilities of designers and their profession, and the impact of design on society.

It is particularly suited to graduates working in association with designers or managing design-based processes, as well as designers who wish to upgrade their skills and those concerned with teaching design. In consequence, the course aims to provide a useful understanding of design and the methods and values of designers.

### QUALIFICATIONS FOR ADMISSION

Applicants are normally expected to possess a Bachelor's degree or an equivalent qualification in an appropriate area, or be able to submit other evidence of general and professional experience which will indicate that the applicant possesses the educational preparation and capacity to pursue graduate studies.

### STRUCTURE

To qualify for the Graduate Diploma in Design a student must achieve 48 credit points in not fewer than two semesters of study. Twenty credit points must be achieved from the core subjects. The remaining 28 credit points must be achieved from elective subjects.

## COURSE STRUCTURE

### Core studies

Students must complete core subjects to the value of 20 credit points.

#### Autumn semester

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81920	Marketing and Design <sup>2</sup> (4cp)
89912	Design Case Studies 1 <sup>1</sup> (4cp)
89914	Design Practice 1 <sup>1</sup> (4cp)

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#### Spring semester

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81020	Management Techniques and Design <sup>2</sup> (4cp)
89013	Design Case Studies 2 <sup>1</sup> (4cp)
89012	Design Practice 2 <sup>1</sup> (4cp)

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<sup>1</sup> Core subject

<sup>2</sup> Alternative core subject

### Electives

Students must complete elective subjects to the value of 28 credit points, drawn from the following areas:

- Design Computing Studies
- Design Management Studies
- General Studies
- Methodology Studies
- Technology Studies
- User Studies

See postgraduate subject descriptions.

## Master of Design (by coursework)

The Master of Design is a one-and-a-half-year full-time or three-year part-time postgraduate course.

### AIM

The Master of Design course is aimed at equipping experienced graduate designers with the specialised knowledge and abilities necessary for their successful activity as professional designers in specially demanding areas of design practice.

Project work is undertaken in the third year of the course and provides an opportunity for the student to explore an area of particular interest or professional benefit.

### QUALIFICATIONS FOR ADMISSION

To be selected for admission to the Master of Design (by coursework) an applicant normally would be required to hold a recognised four-year degree (or equivalent) in an appropriate design area, and have completed not less than two years of appropriate professional experience as a practising designer or in a design-related field, after graduation.

In exceptional circumstances, applicants who do not meet these criteria may be considered for entry on the basis of their professional and academic experience.

### STRUCTURE

Students are assisted in developing a pattern of study suited to their own needs, made up of coursework and project work.

To qualify for the Master of Design a student must achieve 72 credit points in not fewer than three semesters of study. Twenty-four credit points must be achieved from project i.e. by two semesters' successful work on an approved project program. Twenty-eight credit points must be achieved from the core coursework subjects. The remaining 20 credit points must be achieved from an approved program of elective coursework subjects.

## COURSE STRUCTURE

### Core studies

Students must complete core subjects to the value of 28 credit points.

- 81920 Marketing and Design<sup>2</sup> (4cp)
- 82901 Psychology of Design<sup>1</sup> (4cp)
- 82903 Technological Change<sup>1</sup> (4cp)
- 82905 Research Methods<sup>1</sup> (4cp)
- 82912 Design Seminar<sup>1</sup> (4cp)
- 81020 Management Techniques and Design<sup>2</sup> (4cp)
- 82004 Design Decision Making<sup>1</sup> (4cp)
- 82013 Research Seminar<sup>1</sup> (4cp)

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<sup>1</sup> Core subject

<sup>2</sup> Alternative core subject

### Project

Students must complete the project to the value of 24 credit points over two semesters part time, or one semester full time.

- 89917 Design Project (P/T) (12cp)
- 89918 Design Project (F/T) (24cp)

### Electives

Students must complete electives to the value of 20 credit points, drawn from the following areas:

- Design Computing Studies
- Design Management Studies
- General Studies
- Methodology Studies
- Technology Studies
- User Studies

See postgraduate subject descriptions.

# POSTGRADUATE SUBJECT DESCRIPTIONS

## Guide to subject descriptions

The subject descriptions shown below indicate the subject code and name, the number of credit points for the subject (e.g. 3cp). For some subjects, there may also be practical components off campus, and this is indicated in the text. Also shown are the prerequisites or corequisites, if any, and a brief outline of the content.

Prerequisites are subjects which must be completed before taking the subject to which they refer. Corequisites may be completed before or be taken concurrently with the subject to which they refer.

Not all subjects are available at all times as they are subject to timetabling and the availability of resources.

## DESIGN STUDIES

### 82912<sup>1</sup>

#### DESIGN SEMINAR

4cp

Identifies and discusses contemporary issues in design theory and practice to help in selecting suitable topics for Master's projects.

### 89012<sup>1</sup>

#### DESIGN PRACTICE 2

4cp

Continues on from 89914 Design Practice 1 and provides an understanding of the designer/client interface in environmental and industrial design. Students undertake two individual research and design projects.

### 89013<sup>1</sup>

#### DESIGN CASE STUDIES 2

4cp

A continuation of 89912 Design Case Studies 1.

### 89104<sup>1</sup>

#### DESIGN AND SOCIETY

4cp

Develops issues raised in 89919 Design and Technology by examining the responsibility of design in society and the education process. It covers the implications of technological change in the context of the wants and needs of society. Focusing on project briefing, evaluation, feedback and assessment as affecting all three groups: teacher/client; student/design; market/user.

### 89912<sup>1</sup>

#### DESIGN CASE STUDIES 1

4cp

The subject covers: forms of design practice; the design processes used in the solution of a broad range of design problems; the values employed by designers in their work; and the means by which designs are evaluated. Areas addressed may include town planning, landscape design, architecture, interior design, fashion design, textile design, industrial design, film and television production, graphic design, exhibition design. Lectures involve practising designers, focusing on their professional roles, responsibilities and methods.

### 89914<sup>1</sup>

#### DESIGN PRACTICE 1

4cp

Covers design methods and techniques of research, decision making and evaluation involved in the practice of design and the designer/client interface. Students work together with a designer in the development of a design proposal in the area of exhibition or environmental design or the manufacturing or communication industry. Students undertake two individual research and design projects.

**89917<sup>1</sup>****DESIGN PROJECT (P/T)**

12cp

Program of individual supervised research or design activity undertaken by each student.

Assessment on submission of an original body of work. Usually four elements or phases: research, development, evaluation and report. Topics covered include: research, new product development, packaging, pricing, promotion, advertising, product image, test marketing, strategies and tactics for existing products, services and societal marketing, legislation, consumerism.

**89918<sup>1</sup>****DESIGN PROJECT (F/T)**

24cp

As for 89917 Design Project (P/T).

**89919<sup>1</sup>****DESIGN AND TECHNOLOGY**

4cp

Provides the knowledge and skills integral to the understanding of the processes and practice of design. The content will cover design elements, contextual studies, communication and design methodology. The application of design methodologies to the classroom will be considered.

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<sup>1</sup> Core subjects for some courses.

**DESIGN COMPUTING STUDIES**

Several strands of design computing are offered to give students the opportunities to develop skills relevant to the needs of particular professions.

**81022****DESKTOP PUBLISHING**

4cp

This subject provides a working knowledge of microcomputer applications of particular relevance to design. A series of lectures and seminars/tutorials is undertaken concerned with providing a working knowledge in the use of Macintosh microcomputers for a range of applications such as word processing, desktop publishing, scanning and graphics.

**81024****COMPUTER GRAPHICS 1**

4cp

Provides to selected postgraduate students the opportunity to apply computer techniques to specific design projects using advanced graphics/animation programs.

**81030****3D COMPUTER ANIMATION 2**

4cp

Develops and expands the basic knowledge of both the theory and operation of computer animation as learnt in 81925 3D Computer Animation 1, refining the different types of computer graphics in animation. The course includes the creation and manipulation of 3D images. Topics covered include advanced computer animation systems and theory, various animation software applications and video production techniques.

**81840****ADVANCED COMPUTER-AIDED DESIGN**

4cp

Provides a theoretical background and working experience in computer-aided design (CAD) and computer graphics systems. A series of lectures and seminars on developments in CAD programs and computer graphics, and projects giving direct experience of complex systems.

**81922****COMPUTER-AIDED DESIGN**

4cp

Provides a theoretical background and some working experience in computer-aided design (CAD) and computer graphics systems. A series of lectures and seminars on recent developments in CAD and computer graphics and projects giving direct experience of typical systems.

**81923****INTRODUCTION TO DESIGN COMPUTING**

4cp

Provides a working knowledge of the principles and applications of computer graphics to problem solving. The graphics techniques will include paintbrush systems, typography and spreadsheets. Projects provide an introduction to microcomputers, graphics and word-processing software packages.

**81924****COMPUTER GRAPHICS 2**

4cp

This subject aims to give selected students who have attained appropriate experience in computer graphics and design skills the ability to understand and operate high-end computer graphics and design programs. Students will be set a variety of projects and they will be required to undertake a wide range of computer programs. They will also be encouraged to develop their imagination, creativity and conceptual depth. The studio/design format of the class will be supported by visits to computer graphics agencies and in-class workshops with practising computer graphics designers.

**81925****3D COMPUTER ANIMATION 1**

4cp

Equips students with the basic knowledge of both the theory and operation of computer animation and the different types of computer graphics. Topics covered include computer animation systems, animation software, animation production and dropping animation to videotape.

**DESIGN MANAGEMENT STUDIES**

Subjects in the Design Management Studies area provide knowledge of managerial structures and methods by which organisations and activities, in particular design and production, are directed and controlled.

**81020<sup>1</sup>****MANAGEMENT TECHNIQUES AND DESIGN**

4cp

Provides a working knowledge of the range of management skills and techniques used in the planning and control of design projects. Consists of a series of seminars/tutorials, case studies and assignments concerned with such topics as task scheduling; planning systems and control models; program evaluation and review techniques; critical path monitoring; organisation development, personnel recruitment and staffing structures, organisational models, union and labour relations.

**81920<sup>1</sup>****MARKETING AND DESIGN**

4cp

Provides a working knowledge of the concept of marketing, and an understanding of the problems faced by management in achieving marketing success. Consists of a series of seminar/tutorials including case studies concerned with such topics as market segmentation, market research, new product development, packaging, pricing, promotion, advertising, product image, test marketing, strategies and tactics for existing products, services and societal marketing, legislation, consumerism.

**81921****INNOVATION, MANAGEMENT AND DESIGN**

4cp

Provides an understanding of innovation, its place in the planning and management of commercial and industrial firms, and the role of the designer in the processes of innovation and change. Consists of a series of seminars/tutorials and case studies concerned with such topics as development of new products and services, research/development/marketing/production interfaces, managing technological change, planning models and techniques, predictive models.

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<sup>1</sup> Core subject for some courses.



## GENERAL STUDIES

Subjects in the General Studies area provide knowledge of relevant aspects of history and contemporary culture. Students may be granted approval to undertake suitable postgraduate subjects offered by other faculties and universities as general studies.

### 81025

#### DESIGN HISTORY

4cp

Gives a historical perspective on design and designers. Lectures, seminars and tutorials are concerned with such topics as style, artifacts, communications, environment and culture, and group studies on different aspects of the technology/society interface.

### 82014

#### SPECIAL STUDIES 2

4cp

A continuation of 82913 Special Studies I for advanced investigation of a design topic.

### 82016

#### GRAPHIC VISUALISATION

4cp

Expands the awareness and ability of students with other disciplinary backgrounds to generate ideas and communicate visually through 'hands-on' experience.

### 82017

#### 2D AND 3D COMMUNICATION

4cp

This subject introduces methods and conventions to explain design intentions through three-dimensional model forms and two-dimensional drafting techniques and processes.

### 82913

#### SPECIAL STUDIES 1

4cp

Provides the opportunity for postgraduate students to pursue, as individuals, topics of interest or concern within any field of design.

### 82914

#### PHOTOGRAPHY AND VIDEO

4cp

This subject introduces students to photography and video for the documentation of 'authentic' information and the communication of ideas.

### 82915

#### PHOTOGRAPHY FOR DESIGNERS

4cp

This subject introduces students to photography and its applications to enhance the communication of design projects.

### 82916

#### VIDEO FOR DESIGNERS

4cp

This subject introduces students to the use of video and its applications for the communication of design ideas.

## METHODOLOGY STUDIES

Subjects in the Methodology Studies area provide knowledge of the means by which design decisions and design research activities are carried out.

### 82004<sup>1</sup>

#### DESIGN DECISION MAKING

4cp

Provides an understanding of the ways in which individuals and groups make and implement decisions regarding policies and actions, with particular reference to design decisions. Lectures, seminars and tutorials are concerned with such issues as thought and decision making; overt and intuitive decision making; defining problems and developing appropriate decision-making strategies; scientific methods, logic and the rational decision-making model.

### 82013<sup>1</sup>

#### RESEARCH SEMINAR

4cp

Gives students an understanding of the role and incentive for research in areas associated with design and enables students to assist each other in the early development of research projects. The

subject consists of a series of lectures and student presentations.

### 82905<sup>1</sup>

#### RESEARCH METHODS

4cp

Gives an understanding of the methods of research. Combines lectures with opportunities for first-hand experience. Lectures include choosing a topic, fact finding, assessment of information, problem definition and bounding, problem solving, project planning, forecasting and report writing. This is supplemented by practical sessions in the use of a major research library and especially its resources (abstracts, indices, computer databases), and problem solving (synetics, brainstorming).

<sup>1</sup> Core subject for some courses.

### TECHNOLOGY STUDIES

Subjects in the Technology Studies area provide knowledge of the established and emerging technologies with which designers must deal.

### 81021

#### COMMUNICATION TECHNOLOGY

4cp

Provides an understanding of the current state of communication theory and practice with particular reference to the designer's role in shaping components of communication systems.

### 82015

#### APPROPRIATE TECHNOLOGY

4cp

Develops an awareness of the social linkages of technology (environmental, social, psychological, legal, ethical, health and safety, economic, institutional), the current form of these linkages and opportunities for the future. Presented through lectures and student discussions which focus on different aspects of the technology/society interface, using contemporary issues where possible.

### 82903<sup>1</sup>

#### TECHNOLOGICAL CHANGE

4cp

Provides an appreciation of political, economic and social influences on technological change and the processes developed to foster technological change. Particular emphasis is given to the Australian situation.

### USER STUDIES

Subjects in the User Studies area provide knowledge of the means by which the needs, wants and preferences of the users of objects, environments and messages are identified and assessed.

### 82009

#### HUMAN FACTORS AND DESIGN

4cp

Provides an understanding of the physiological, psychological and social factors pertinent to the successful interaction of humans, environments and machines in a range of contemporary work situations.

### 82901<sup>1</sup>

#### PSYCHOLOGY OF DESIGN

4cp

Covers aspects of psychology especially relevant to design practice. Lectures and seminars are conducted on relevant examples and case studies to develop insights into: the fundamentals of human perception; non-verbal communication; human behaviour in small-scale environments such as workplaces and domestic situations; human behaviour in large-scale environments such as towns and cities.

### 82902

#### SOCIOLOGY OF DESIGN

4cp

Provides a sociological perspective and social definition of the designer, an understanding of the designer's role in contemporary society and the social uses of design.

<sup>1</sup> Core subject for some courses.

# POSTGRADUATE COURSE REGULATIONS

These regulations are to be read in conjunction with the University's Rules and By-law.

## 1. Award and graduation

A student is deemed to have completed the educational requirements for an award when he or she has achieved:

- 1.1 in the case of the Graduate Certificate in Design and Technology,  
16 credit points from required core subjects and  
8 credit points from elective subjects;
- 1.2 in the case of the Graduate Diploma in Design,  
20 credit points from required core subjects and  
28 credit points from elective subjects;
- 1.3 in the case of the Master of Design (by coursework),  
28 credit points from required core subjects,  
20 credit points from elective subjects and  
24 credit points from an approved project and has submitted in a format according to the requirements of Appendix A, two copies of a record of his or her project work.

## 2. Assessment period

The assessment period is one semester.

## 3. Credit point system

Each subject offered for credit toward an award has a credit-point value which reflects the effort normally required to complete the subject's study and other work and which provides the basis for the subject's weighting factor.

## 4. Minimum credit points

The minimum number of credit points for which a student can be enrolled in a semester is:

- 4.1 in the case of the Graduate Certificate in Design and Technology, 8 credit points;
- 4.2 in the case of the Graduate Diploma in Design, 16 credit points;
- 4.3 in the case of the Master of Design (by coursework), 16 credit points.

## 5. Maximum credit points

The maximum number of credit points for which a student can be enrolled in a semester is:

- 5.1 in the case of the Graduate Certificate in Design and Technology, 24 credit points;
- 5.2 in the case of the Graduate Diploma in Design, 32 credit points;
- 5.3 in the case of the Master of Design (by coursework), 32 credit points.

## 6. Special leave

- 6.1 Students who for good reasons such as illness, family or financial difficulties or misadventure cannot attend classes and undertake assignments for a period during a semester may apply for special leave.
- 6.2 Applications for special leave must be in the recommended form and be endorsed by the applicant's academic adviser and/or the program director before being lodged with the appropriate Associate Dean.
- 6.3 Special leave normally is limited to four weeks' duration. Students temporarily absent with or without special leave must make arrangements with the coordinating examiners responsible for the subject in which they are enrolled to meet the requirements for assessment in those subjects.

## 7. Assessment policy

Student work is assessed in accordance with the assessment policy adopted and issued by the Faculty Board.

## 8. Ownership of student work

Students as part of their course requirements produce items of work which are the subject of assessment.

- 8.1 All intellectual property rights in such items of work are vested in the student who authored the work, subject to the limitations on ownership and use set out in paragraphs 8.3 and 8.4 below. Accordingly, the student will own outright the work itself together with all intangible rights which might apply to the exploitation of that work.
- 8.2 Where students are engaged as part of their course requirements in the creation of works for third party commissions the party commissioning that work may negotiate rights to reproduce, copy or implement a student's design or make and sell that design. Students should seek advice in order to protect their rights and interests in such cases.
- 8.3 While the student is the owner of copyright in any original work or design, the University has the right to make copies for assessment and other purposes and may request the use of a student's work for its educational or administrative purposes.
- 8.4 During the calendar year in which an item or work is produced in satisfaction of course requirements, the student who is author of the work may exhibit, publish or reproduce the work provided all course requirements have been satisfied beforehand and provided no reference is made to the University or the student's association with the University without the prior written approval of the Academic Registrar.

# Appendix A

## RECORD OF PROJECT WORK – MASTER OF DESIGN (BY COURSEWORK)

### 1. Record of project work

Two copies of a full documentary record of a candidate's project shall be submitted in the approved format.

### 2. Volume

Where the format of the record is a bound volume the following requirements apply:

- 2.1 The volume shall be compiled in accordance with the guidelines issued.
- 2.2 The title page shall contain the volume title, author's name, degree, and year of submission.
- 2.3 All copies of the volume shall be in good quality typescript on one side of the paper only. In the main body of the volume one-and-a-half spacing is preferred, but double spacing may be used only for appendices and footnotes.
- 2.4 The paper used shall be good quality, medium weight, opaque white stock and the form of reproduction shall be original typescript, offset printing of high-grade, dry photocopy.
- 2.5 The size of paper shall be ISO paper size A4 (297 mm x 210 mm) except for illustrative material on which no restriction is placed.
- 2.6 The margin on each sheet shall be not less than 40 mm on the left-hand side, 20 mm on the right-hand side, 20 mm at the top and 30 mm at the bottom.
- 2.7 Each copy of the volume shall have an abstract of not more than 400 words bound in immediately after the title page.
- 2.8 Beginning with the first page of the Introduction (or Chapter One if

- there is no separate introduction), pages shall be numbered consecutively, using Arabic numerals.
- 2.9 Except with the approval of the supervisor, illustrations, charts, tables etc. shall be bound with the text, immediately after the first reference to them, as right-hand pages with the caption at the bottom or if necessary, on the page facing the figure.
- 2.10 Diagrams, maps, tables etc. which exceed A4 size shall be either: (1) folded so as to read as a right-hand page when opened; (2) clearly referenced in the text, numbered and folded for insertion in a pocket in the back cover of the volume binding.
- 2.11 All loose material shall be clearly marked with the author's name, the volume title and the degree for which it is submitted.
- 2.12 Each copy of the volume submitted shall be bound in boards covered with buckram or similar material and embossed on the spine as follows:
- 2.12.1 Reading from the bottom as follows: 90 mm, UTS, year of submission, M. Design, name of student.
- 2.12.2 Evenly spaced between the statement in (2.12.1) and the top of the spine, the initials and surname of the author. No other lettering or decoration shall appear on the spine; or
- 2.12.3 Where the spine of the thesis is too narrow to support lettering across, the wording shall be written along the spine reading from top to bottom in all cases.
- 2.13 The cover of the volume shall be dark blue and the letter shall be gold.
- 3. Access to record of project work**
- 3.1 The original or best copy, if there is a difference in quality of the copies, shall be deposited with the University Library.
- 3.2 (a) The copy deposited with the University Library will be available for consultation, loan, or copying at the discretion of the University Librarian, unless the University, on the application of the candidate, determines that it shall not be available until after the expiry of a period, which period shall not normally exceed two years.
- (b) The University Librarian shall require each user and recipient of a copy of a volume to undertake in writing to respect the author's rights under the law relating to copyright.
- (c) Candidates for a Master's degree may, when they lodge a record containing restricted or confidential information which the candidate does not desire to be disclosed freely, request that it be released to other persons only on the authorisation of the Academic Registrar in consultation with the Dean.
- (d) Where the record contains material which the candidate considers should have restricted distribution the Dean shall be informed which parts are classified. If further precautions are required such as more secure transmission than registered post, the costs will be borne by the candidate.
- (e) Where a candidate states that a record contains confidential information which the candidate does not desire to be disclosed freely, the candidate may, to the extent that it is possible, place that information in an appendix to the record.
- (f) The University Librarian shall not disclose to any person an appendix where the candidate states that the appendix contains restricted or confidential information, unless the Academic Registrar in consultation with the Dean has authorised such disclosure.

# PROGRAMS IN ARCHITECTURE

## UNDERGRADUATE COURSES

In 1996 a new architecture course is being introduced by the Faculty. The existing course, a six-year cooperative education program leading to the award of the degree of Bachelor of Architecture, will be progressively replaced by a new two-tier degree structure comprising a Bachelor of Arts in Architecture awarded after successful completion of the first four years of the course, followed by either a Bachelor of Architecture or a Master of Architecture degree after a further two years of study.

In 1996 the new Bachelor of Arts in Architecture degree program will be introduced into the first three years of the course. Accordingly, students entering (or repeating) Years 4, 5 or 6 in 1996 will enrol in the 'old' Bachelor of Architecture course as normal. Details of the existing course structure and subject descriptions are provided below in the section Bachelor of Architecture ('old' program).

Students entering Years 1, 2 or 3 of the course in 1996 will enrol in the 'new' Bachelor of Arts in Architecture program. Details of the new program structure and subject descriptions for the BA in Architecture degree, including those for the fourth year of the program, introduced for the first time in 1997, are provided below in the section Bachelor of Arts in Architecture ('new' program).

Under the new course structure students may be eligible to undertake a range of degree options, and may choose to undertake such degrees in a variety of year patterns. The chart below outlines seven likely patterns. Please note that Option 1 is only available to students enrolling in the 'old' Bachelor of Architecture program in Years 4, 5 or 6 in 1996.

options	AWARD		cp	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
1	BArch (Hons)	Final 1998	192	X	X	X	∞ (32)	∞ (32)	∞ (32)	X
2	BA in Arch	Intro. 1996	144	F/T (48)	∞ (32)	∞ (32)	∞ (32)	X	X	X
3	BA (Hons) in Arch	Intro. 1996	180	F/T (48)	∞ (32)	∞ (38)	F/T (62)	X	X	X
4	BA (Hons) in Arch	Intro. 1997	180	F/T (48)	∞ (32)	∞ (38)	∞ (32)	∞ (30)	X	X
5	BArch (Hons)	Intro. 1998	208	prerequisite - BA in Arch				∞ (32)	∞ (32)	X
6	MArch	Intro. 1998	276	prerequisite - BA (H) in Arch				F/T (48)	F/T (48)	X
7	MArch	Intro. 1998	276	prerequisite - BA (H) in Arch				∞ (32)	∞ (32)	∞ (32)

A fundamental aim of the architecture courses offered in the Faculty is to provide opportunities for students to combine study with practice, which is realised through the use of a combination of full-time and cooperative education programs.

The essence of cooperative education is the joint provision of architectural education by both the academy and the architectural profession. By such means a balance is maintained between intellectual study and practical training, between the study of architecture as a scholarly discipline in the University and the provision and development of professional skills in the workplace. Students thus engage contemporaneously in academic pursuits and practice through carefully monitored programs.

In general the cooperative education model means that students attend the university for one full day plus one additional evening per week during semester, while at the same time gaining practical experience by working, and thus being trained, in an architect's office for a further four days per week. The nature of the academic programs creates that essential synergy which enables students to apply academic learning in the

workplace and, correspondingly, to bring practical experience and understanding to their studies. This parallel development in intellect and practice makes for balanced and well-informed students who can contribute at all stages of their education to their vocational discipline. The structure of the program also allows for maximum flexibility of study choices and career specialisation. The cooperative education model thus perceives architectural education as being a joint venture between the essentially intellectual pursuits of the academy and the essentially practical pursuits of the profession.

### **PORTFOLIO REVIEWS AND VIVA VOCE EXAMINATIONS**

#### **Portfolio reviews**

At Year levels 1, 2 and 3 of the BA in Architecture and BA (Hons) in Architecture degree programs the subjects 11951/11061 Architectural Design and Technology 1 and 2 are monitored by a Portfolio Review Panel which inspects the year's work of each student, monitors the marks awarded by her or his tutors, and then arrives at a final grading by consensus. At Year 5 level of the Bachelor of Architecture/ Master of Architecture degree program the single subject 11951 Architectural Design and Technology 1 is similarly reviewed.

The Portfolio Review Panel will consist of some or all of the following:

Professor of Architecture

Subject-strand Director: Architectural Design

Subject-strand Director: Technology

Subject Coordinator: Construction

Subject Coordinator: Structure

Subject Coordinator: Environmental Science

All staff contributing to these specific subjects and/or components in the Year level being examined.

Three student representatives from the Year level being examined.

This approach ensures that consistent standards can be applied and provides stringent safeguards.

#### **Viva voce examinations**

At Year 4 level of the BA/BA (Hons) degree programs, and at Year 6 level of the Bachelor of Architecture/Master of Architecture programs, the subjects 11941 Architectural Design 4 and 11961 Architectural Design and Technology 2 respectively will be examined by way of a *viva* review.

### **COOPERATIVE EDUCATION/ ARCHITECTURAL EXPERIENCE/ REGISTRATION**

The concept of cooperative education — the joint provision of architectural education by both the academy and the architectural profession — is a central tenet of each of the Architecture programs offered by the Faculty of Design, Architecture and Building. Delivery of architectural education in the cooperative mode thus places serious pedagogical obligations on both providers and students. On the part of the University the obligation is to provide intellectual training by offering informed and challenging programs that treat in detail the study of architecture as a scholarly discipline; on the part of the profession, cooperative with the University in the provision of architectural education, the obligation is to provide the practical training and experience that leads to the development of the skills necessary for the pragmatic practice of architecture as a professional and vocational discipline; on the part of the student the obligation is to assimilate the two, to weld the intellectual with the practical, the academic with the vocational, the university with the profession.

An integral component of all programs is thus experience of architectural practice, which is acquired concurrently with academic study. Approved work experience is a precondition of the award of each of the degrees. Generally it takes approximately two years for a student to accumulate sufficient practice credit points to qualify for the award of the Bachelor of Arts in Architecture degree, and four years to qualify for the award of the Bachelor of Architecture or the Master of Architecture degrees.

At the completion of the academic program, and with the signed approval of the Director of Professional Practice, a student may submit a completed log book to the Board of Architects for confirmation of eligibility to submit for the Board of Architects Examination with a view to qualifying for vocational registration.

All information regarding registration with the Board of Architects and membership of the NSW Chapter of the Royal Institute of Australian Architects may be obtained from:

The Registrar  
Board of Architects of NSW  
'Tusculum'  
3 Manning Street  
Potts Point 2011  
(telephone 356 4900)

## Bachelor of Architecture (old program)

Students entering (or repeating subjects) in Years 4, 5 or 6 in 1996 will enrol in the 'old' Bachelor of Architecture program as normal.

### PROGRAM STRUCTURE

Credit point values are given in brackets

Year 4 (Last offered in 1996)	CP
11042 Design 4	10
11043 Structural Design	5
11045 Contextual Studies 4B	3
11046 Contextual Studies 4C	3
11047 Services 4	3
11048 Architectural Practice 1A	3
11049 Architectural Practice 1B	5
13998 Architectural Experience	

Year 5 (Last offered in 1997)	CP
11052 Design 5	11
11055 Contextual Studies 5B	5
11056 Contextual Studies 5C	5
11058 Architectural Practice 2A	3
11059 Architectural Practice 2B	3
11071 Elective Project	5
13998 Architectural Experience	

Year 6 (Last offered in 1998)	CP
11062 Design 6	11
11066 Elective Studies	8
11068 Architectural Practice 3A	5
11069 Architectural Practice 3B	3
11071 Elective Project	5
13998 Architectural Experience	



## Bachelor of Arts in Architecture (new program)

1996 will see the introduction of the 'new' Bachelor of Arts in Architecture program in the Faculty. The Bachelor of Arts in Architecture degree provides the first of a two-tier professional education course offered within the Faculty, the second tier comprising the 'new' Bachelor of Architecture/Master of Architecture programs which are outlined below.

The Bachelor of Arts in Architecture is a four-year program which may be undertaken as either a Pass degree or as an Honours degree.

In 1996, Years 1, 2 and 3 of the Bachelor of Arts in Architecture program will be offered for the first time. Students entering (or repeating subjects) in Years 1, 2 or 3 in 1996 will enrol in the new program.

### PASS DEGREE

The Pass degree of Bachelor of Arts in Architecture is of four years' duration and comprises 144 credit points.

Year 1 is undertaken via full-time study, comprises 48 credit points and involves 21 contact hours per week. Years 2, 3 and 4 are undertaken as part of a cooperative education program, with each year comprising 32 credit points and involving 13 contact hours per week.

While all subjects are compulsory in the Bachelor of Arts in Architecture program, a wide range of content choices, and thus opportunities for specialisation, are available to students via the subjects 'Elective Studies'.

### Program structure

Year 1	CP
11911 Architectural Design 1	17
11912 Technology 1	13
11913 Theory Studies 1	9
11914 Professional Practice 1	3
11915 Elective Studies 1	6
Year 2	CP
11921 Architectural Design 2	8
11922 Technology 2	9
11923 Theory Studies 2	9

11924 Professional Practice 2	—
11925 Elective Studies 2	6
Year 3	CP
11931 Architectural Design 3	8
11932 Technology 3	5
11933 Theory Studies 3	9
11934 Professional Practice 3	4
11935 Elective Studies 3	6
Year 4	CP
11941 Architectural Design 4	10
11942 Technology 4	12
11943 Theory Studies 4	6
11944 Professional Practice 4	4

### Students entering BA program at Year 4 level

Any students entering the architecture course at Year 4 level i.e. entering with advanced standing, will not be eligible for award of the Bachelor of Arts in Architecture degree, at either pass or Honours level, after the successful completion of Year 4 of the BA program. For such students Year 4 will be considered as a qualifying year for entry to Years 5 and 6 of the course. Students must have been enrolled for, and have successfully completed, a minimum of two full years of the program to be eligible for receipt of the degree.

Students wishing to undertake the Master of Architecture program in Years 5 and 6 will be required to successfully complete the Year 4 Honours program prior to such enrolment.

### Eligibility for the Honours program

Any student who has passed all subjects at Years 1 and 2 level and recorded no failures at Years 1 or 2 level, may elect to undertake the Honours Qualifying program in Year 3. The decision to undertake the Honours Qualifying program will be made at the beginning of Semester 2 of Year 3, with students undertaking additional work towards the Honours degree in that semester.

To qualify for entry into the full Honours program in Year 4, students undertaking the Honours Qualifying program in Year 3 must obtain a WAM at credit level in all Year 3 subjects plus a credit in the subject 11936 Honours Qualifying. Students who

do not meet this requirement will undertake the Pass degree program in Year 4.

Students who have already successfully completed the Pass degree of BA in Architecture and who wish to undertake the Honours program will be eligible to do so provided that they (1) have recorded no fails at Year 3 and 4 level; (2) have obtained a WAM at credit level in all Year 3 and Year 4 subjects; (3) have not previously attempted and recorded a fail in the Year 3 and/or 4 Honours program; and (4) enrol in the Honours program in the academic year immediately following that in which they have completed the BA Pass degree and thus prior to their receipt of that degree. Such students would be exempt from the Year 3 Honours Qualifying program but would be required to undertake the full Year 4 Honours program.

## HONOURS DEGREE

The Honours degree of the Bachelor of Arts in Architecture is an essential component of the educational profile established within the new course structure, particularly in light of the continuation of the professional course at both Bachelor of Architecture and Master of Architecture level. Entry to the professional Master's program will be via the BA(Honours) in Architecture program. The Honours degree is of nominally four years' duration and comprises 180 credit points. To be awarded the degree of Bachelor of Arts (Honours) in Architecture a candidate must fulfil all the requirements for the Pass degree **plus**

1. undertake one additional subject in Year 3;
2. undertake two additional subjects in Year 4;
3. pass the subject 11941 Architectural Design 4 (taken concurrently by Pass degree students) but at a higher level and in relation to more comprehensive criteria than Pass degree students.

## Program structure

Year 1		CP
11911	Architectural Design 1	17
11912	Technology 1	13
11913	Theory Studies 1	9
11914	Professional Practice 1	3
11915	Elective Studies 1	6
Year 2		CP
11921	Architectural Design 2	8
11922	Technology 2	9
11923	Theory Studies 2	9
11924	Professional Practice 2	
11925	Elective Studies 2	6
Year 3		CP
11931	Architectural Design 3	8
11932	Technology 3	5
11933	Theory Studies 3	9
11934	Professional Practice 3	4
11935	Elective Studies 3	6
<i>and</i>		
11936	Honours Qualifying	6
Year 4		CP
11941	Architectural Design 4	10
11942	Technology 4	12
11943	Theory Studies 4	6
11944	Professional Practice 4	4
<i>and</i>		
11945	Honours Elective Thesis	24
11946	Design Honours	6

## Honours program in Year 4

The Honours program in Year 4 may be undertaken either:

1. concurrently with all other Year 4 subjects as a full-time year (32+30=62 credit points). Students wishing to take this option would begin research for their major Honours thesis immediately after receiving notification of their successful completion of the full Year 3 program (i.e. mid December of the third academic year);
- or*
2. over two years in a cooperative education mode. Students wishing to take this option would be required to undertake the subjects 11941 Architectural Design 4, 11942 Technology 4, 11943 Theory Studies 4 and 11944 Professional Practice 4 in the first year (32 credit points) followed by the

subjects 11946 Design Honours, and 11945 Honours Electives Thesis in the second year (30 credit points).

### **Awarding of Bachelor of Arts (Honours) in Architecture**

The award of Bachelor of Arts(Honours) in Architecture degree will be determined as follows:

1. the candidate must record no fails in any of the compulsory subjects in Year 4;
2. the candidate must pass the subject 11941 Architectural Design 4 at a higher level than, and using different assessment criteria from, students undertaking that subject for a Pass degree;
3. the candidate must pass the additional subjects 11945 Honours Elective Thesis and 11946 Design Honours.

The class of Honours to be awarded will be determined as follows:

First Class Honours – aggregate mark of 75 or above in subjects 11945 Honours Elective Thesis and 11946 Design Honours (calculated proportionately according to credit point weight of each component) plus completion of the subject 11941 Architectural Design 4 at the requisite level for Honours candidate

Second Class Honours Division 1 – aggregate mark of 70–74 as above

Second Class Honours Division 2 – aggregate mark of 65–69 as above

Third Class Honours – aggregate mark of 50–64 as above

Students who undertake the Honours program in Year 4 but who record failures in any of the Honours components will (having satisfactorily completed all other subjects) be awarded the Pass degree of Bachelor of Arts in Architecture.

### **YEARLY PROGRESSION**

The BA in Architecture and the BA(Honours) in Architecture programs encourage maximum integration between architectural design subjects and those dealing with technology. Accordingly,

students who fail, at any given year level, **either** the subject Architectural Design **or** the subject Technology (or both), will not be allowed to enrol in **either** subject in the next year level until the subjects have been passed. Neither architectural design subjects nor technology subjects can be ‘carried’ into a subsequent year.

Example – a student who had passed 11912 Technology 1 but who had failed 11911 Architectural Design 1 would be prohibited from enrolling in **either** 11921 Architectural Design 2 or 11922 Technology 2 until the subject 11911 Architectural Design 1 had been successfully repeated.

Subjects other than the architectural design and technology subjects may, at the discretion of the Architecture Examination Review Committee, be ‘carried’ into a subsequent year. However, failed subjects can only be carried into the subsequent year provided that the **total** number of subjects failed does not exceed **two**. Any student who fails more than two subjects at any year level will not be allowed to proceed to the next level of study.

Example – a student who passed both Architectural Design 1 and Technology 1 but who failed two of the other Year 1 subjects would be allowed to carry the two failed subjects into Year 2, thus enrolling in a full Year 2 program **plus** the two failed Year 1 subjects.

Students carrying subjects may enrol only in subjects that are in consecutive years of the course.

Example – as described above, a student may undertake Year 2 subjects while carrying up to two Year 1 subjects. However, a student would not be allowed to enrol in **any** Year 3 subjects until **all** Year 1 subjects had been successfully completed.

### **ELECTIVE STUDIES**

In each of Years 1, 2 and 3 of the new program all students will be able to choose to study areas of specific interest by enrolling in the subjects Elective Studies 1, 2 and 3. At each year level the subject carries a weighting of six credit points, thus allowing students to undertake either two components at three credit points each or one component at six credit points.

Students will be free to choose from a range of available options as follows:

1. components offered within the Architecture program;
2. subjects offered in other programs in the Faculty of Design, Architecture and Building, subject to approval;
3. subjects offered in other faculties in the University, subject to approval.

In some instances students may choose to 'overload' by taking a subject outside the Architecture program which carries **more than** six credit points. In this case the subject will nevertheless count as **only** six credit points towards the BA in Architecture degree.

Components offered within the Architecture program may vary from year to year depending on staff availability. Components to be offered within the BA in Architecture program in 1996 are listed below. Students will be advised of any changes/additions at the beginning of the academic year.

In general and at each of the three Year levels at least two Elective Studies components will be offered within the BA in Architecture program. Effective running of such elective components will depend on student demand, meeting minimum requirements.

In special instances students may be directed to utilise the six credit points available in the Elective Studies strand to 'pick up' a compulsory subject that they might otherwise have missed. For example, given the Program's commitment to acknowledging previous educational experiences, students accepted directly into the course at Year 2 or 3 level may be required, as a condition of their enrolment with advanced standing, and in order to address a perceived 'lack' in their previous education, to undertake prescribed subjects or components from an earlier year.

In all such cases, all programs will be confirmed with individual students prior to enrolment.

In 1996, and in order to facilitate the introduction of the new course structure into Years 1, 2 and 3, certain 'one-off' measures will be required to ensure that,

in the transition from the old to the new course structures, students do not miss newly introduced programs. All students entering the new Year 2 program in 1996 will, for example, be obliged to utilise three of their Elective Studies credit points to undertake the new first-year subject 11914 Professional Practice 1.

In terms of future timetabling, appropriate teaching hours will be allocated in each of the first three years for Elective Studies. Since students may elect to choose subjects from outside the Architecture program, these timetable hours refer only to elective components offered **within the program**. Additionally, students should note that subjects taken outside the Architecture program must not conflict with the program's timetable for compulsory subjects.

### **Elective subjects offered within the Architecture program**

Subject to staff availability the following elective components will be offered within the Architecture program in 1996:

#### *Year 1*

11915 Elective Studies 1: Evolution of Shelter

11915 Elective Studies 1: History of Architecture 1E

#### *Year 2*

11925 Elective Studies 2: Sustainable Architecture 1

11925 Elective Studies 2: History of Architecture 2E

#### *Year 3*

11935 Elective Studies 3: Sustainable Architecture 2

11935 Elective Studies 3: Theory and Architecture 3

11935 Elective Studies 3: History of Architecture 3E

Further details may be found in the 'Subject descriptions' section.

### **Elective subjects available in the Faculty in 1996**

Certain subjects from programs in the discipline of Design may be available as suitable elective subjects for students enrolled in the BA in Architecture degree. As a general principle, students enrolled in Year 1 of the BA in Architecture might consider those subjects offered in the Design discipline under the heading of 'General Studies', while students enrolled in Years 2 and 3 might consider those offered under the general heading 'Minor Studies'. Further details may be found in the section 'Design programs – undergraduate subject descriptions'.

Additionally certain subjects from programs in the discipline of Building Studies may be available as suitable elective subjects for students enrolled in the BA in Architecture degree. Further details may be found in the section 'Building programs – undergraduate subject descriptions'.

### **Elective subjects offered by other faculties**

Students may undertake subjects in other faculties of the University, subject to approval by both the specific Faculty concerned and by the Coordinator of Electives in the Architecture program.

### **Special conditions for elective in Year 4**

While students wishing to undertake the Bachelor of Architecture degree must first successfully complete all subjects in the BA in Architecture degree, and those wishing to undertake the Master of Architecture degree must complete the BA(Honours) in Architecture degree at the required level, certain students may not wish to proceed to the professional degrees, choosing instead to leave after completion of either the Pass or the Honours degree of BA in Architecture. In such cases a student may, with the permission of the Program Director of Architecture, elect **not** to enrol in the subject 11941 Architectural Design 4, but rather to undertake a special Year 4 Elective Studies program, valued at 10 credit points. This would be in an area of the student's special interest, such as a course of action

allowing for greater flexibility and offering the potential for the development of alternative career specialisations at an early stage.

In the immediate future, and for reasons of the availability of resources, only a limited range of alternatives will be offered within the Architecture program and, depending on the student's intended specialty or future study plans, he or she will be encouraged to look to other areas of the Faculty/University.

As from 1999, however, existing students may apply to complete, as part of their fourth year of study, certain subject strands offered within the newly introduced Bachelor of Architecture course by undertaking components from Years 5 and 6 to **replace** the 10 credit points of 11941 Architectural Design 4. The following would be possibilities:

Environmental Science 5 and 6	(equiv. 10cp)
Theory and Architecture 4 and 5	(equiv. 10cp)
Urban Studies 3 and 4	(equiv. 10cp)
Architectural Practice 4 and 5	(equiv. 10cp)

Students undertaking the above option would still be eligible for enrolment in the BA(Honours) in Architecture program but would need to undertake an alternative component equivalent to the required Design Honours component in Year 4.

Any student choosing to undertake the special Year 4 elective would, thereby, not undertake the subject Architectural Design 4, and would therefore not be permitted to enrol in either the Bachelor of Architecture or in the Master of Architecture program until the subject Architectural Design 4 had been successfully completed at the requisite level.

## Bachelor of Architecture (new program)

### INTRODUCTION

Following the successful completion of four years of architectural education at UTS (or its judged equivalent at another institution as determined by the Program Admissions Panel) the Faculty will offer a further degree program – the Bachelor of Architecture.

The Bachelor of Architecture is a professional degree i.e. a qualification accepted for candidates seeking to take the professional examination of the Board of Architects and Royal Australian Institute of Architects as a prerequisite to: registration under the provision of the Architects Act administered by the Board of Architects of NSW; and professional membership of the Institute. The degree program is of two years' duration and may be **undertaken only after** the successful completion of the Bachelor of Arts in Architecture degree at pass or Honours level (or qualification judged equivalent). The Bachelor of Architecture degree is undertaken as part of a cooperative education program over two years – referred to here as Years 5 and 6 – each comprising 32 academic credit points, and involving 13 contact hours per week in each year.

Total minimum academic credit-point requirement before the professional Bachelor of Architecture degree may be awarded is thus 208: 144 obtained from the Pass degree of BA in Architecture plus 64. Students entering with a BA(Honours) degree in Architecture (180cp) must nevertheless complete all 64 credit points of the Bachelor of Architecture program.

All subjects in the Bachelor of Architecture degree are compulsory.

On the basis of the Weighted Average Mark achieved across all subjects the Bachelor of Architecture degree will be awarded **with Honours** as outlined below.

### PROGRAM STRUCTURE

Year 5	CP
11951 Architectural Design and Technology 1	17
11953 Theory Studies 5	10
11954 Professional Practice 5	5
Year 6	CP
11961 Architectural Design and Technology 2	17
11963 Theory Studies 6	10
11964 Professional Practice 6	5

### AVAILABILITY IN 1998/1999

The first year of the new Bachelor of Architecture program (the fifth year of the combined Architecture course) will be offered for the first time in 1998, with the second year (the sixth of the combined course) being offered in 1999.

### ELIGIBILITY FOR ENTRY TO THE BACHELOR OF ARCHITECTURE PROGRAM

The Bachelor of Architecture program may be undertaken **only after** the successful completion of either the Pass or Honours degree of Bachelor of Arts in Architecture, or the equivalent from another institution as judged by the Program Admissions Panel.

All students who have successfully completed the four-year BA in Architecture or BA(Honours) in Architecture degree at UTS will automatically be accepted into the Bachelor of Architecture program as continuing students provided that they enrol in the Bachelor of Architecture in the next academic year after award of the degree, or seek leave of absence for no longer than one academic year after the award.

Students applying with suitable qualifications from other institutions, or UTS BA in Architecture graduates who have not proceeded directly to the Bachelor of Architecture course, would be subject to an interview and portfolio examination conducted by a panel comprising the Program Director of Architecture and other senior academic staff. Such 'external' applicants would constitute new students and entry places would be limited, depending on quotas (available EFTSU).

### **AWARDING OF BACHELOR OF ARCHITECTURE DEGREE WITH HONOURS**

The Bachelor of Architecture will be awarded with Honours, with the class of Honours being based on the aggregate WAM received in all subjects in Years 5 and 6, as follows:

First Class Honours aggregate WAM of 75 or above

Second Class Honours aggregate WAM of 65 or above

There will be no award of Third Class Honours in the Bachelor of Architecture program. Students who do not meet the above criteria but who pass all subjects in Years 5 and 6 will be awarded the Pass degree of Bachelor of Architecture.

Pass degree aggregate WAM of 50 or above but less than 65

In addition, students who at any stage record a fail grade in any subject(s) in Years 5 and/or 6 will be awarded the Pass degree once all subjects have been successfully completed.

### **YEARLY PROGRESSION**

Students who fail the subject 11951 Architectural Design and Technology 1 (Year 5) may not enrol in 11961 Architectural Design and Technology 2 (Year 6) until the former subject is successfully repeated.

All other Year 5 subjects other than 11951/11961 Architectural Design and Technology 1 and 2 may, at the discretion of the Architecture Examination Review Committee, be 'carried' into the subsequent year. Any student who fails more than one subject during any year of study will not be allowed to enrol in any of the subjects at the next year level until the failures have been made good.

# UNDERGRADUATE SUBJECT DESCRIPTIONS

## Guide to subject descriptions

The subject descriptions shown below indicate the subject code and name, the number of credit points for the subject, and the number of formal contact hours per week. Also shown are the prerequisites, if any, and a brief outline of the content. Prerequisites are subjects which must be completed before taking the subject to which they refer.

Some subjects listed below comprise a number of individual components. Brief outlines of the content and weighting of each component are provided, as are the number of formal contact hours per week where appropriate. Assessment for the subject as a whole will be based on the weighted aggregate assessment for the individual components which make up that subject.

## I 1042

### DESIGN 4

*10cp; 4hpw*

*prerequisites: I 1032 Design 3; I 1031 Construction 3*

Application of design theory to areas of building design such as the resolution of planning relationships, structure, construction, services and environment and human needs. Development of complex buildings.

## I 1043

### STRUCTURAL DESIGN

*5cp; 2hpw*

*prerequisites: I 1033 Structural Analysis 2; I 1031 Construction 3*

Structural design of beams, columns, trusses, frames and slabs in timber, steel and reinforced concrete as appropriate. System selection, member calculation and constructional method related to design project. Model analysis and testing.

## I 1045

### CONTEXTUAL STUDIES 4B

*3cp; 2hpw*

The subject has two components. In the first component, Architecture in 19th Century Europe and America, the following topics will be examined: the late 18th and early 19th century notion of 'the picturesque' in architecture and landscape gardening; Classical and Gothic Revivalism in Germany and England; architectural theory in the writings of Pugin, Ruskin and Viollet-le-Duc; 'Old English' and 'Queen Anne Style' architecture in England; 'Shingle Style' architecture in America; Beaux-Arts architecture in France; the impact of new materials and constructional techniques on the architecture of England, France and America

The second component, Architecture in Europe and America, 1885–1914, will orientate itself around the work of the following architects: M H Baillie Scott, C F A Voysey, Edwin Lutyens, Charles Rennie Mackintosh, Victor Horta, Hector Guimard, Otto Wagner, Joseph Olbrich, and Frank Lloyd Wright. At the same time it will discuss the ideas and theories espoused by the Arts and Crafts movement in England, by the Art Nouveau in Belgium and France, and by the Secessionist in Austria.

## I 1046

### CONTEXTUAL STUDIES 4C

*3cp; 2hpw*

Regional and urban planning issues in the social context, and an examination of planning decisions, their bases and implications. Urban sociology.

## I 1047

### SERVICES 4

*3cp; 2hpw*

Examination of the envelope of the building in detail with respect to thermal performance, daylight performance and urban planning considerations of daylight and sunshine/shade.



## **I 1048**

### **ARCHITECTURAL PRACTICE 1A**

*3cp; 2hpw*

Law and management: a background to statute and common law and the operative legal systems, together with the laws of torts, contracts and agency, and their implications for architectural practice; and an introduction to management theory and the processes of forecasting, organising, planning, motivating, controlling, coordinating and communicating.

## **I 1049**

### **ARCHITECTURAL PRACTICE 1B**

*5cp; 2hpw*

Estimating and cost control: (1) methods available to architects in establishing estimates at the briefing, schematic, design development and documentation phases of a project. The detailed base of estimating small projects and cost variations; (2) parameters of cost planning and elemental analysis, their use in design and documentation stages and the development of final cost analysis.

## **I 1052**

### **DESIGN 5**

*11cp; 4hpw*

*prerequisites: I 1042 Design 4*

Design exercises relating to large span buildings. Urban design exercises.

## **I 1055**

### **CONTEXTUAL STUDIES 5B**

*5cp; 2hpw*

Introduction to concepts and the practice of urban design. History, planning processes, urban structure and form, residential, commercial and public building infrastructures.

## **I 1056**

### **CONTEXTUAL STUDIES 5C**

*5cp; 2hpw*

Theories and issues in contemporary culture: (re)thinking architecture. An investigation via an extensive reading program and seminar discussions of issues in contemporary cultural and

philosophical theory and their implications for thinking about architecture.

*or*

Long life, low energy, loose fit: an exploration of current theory and practice in respect to energy and environment and longevity issues in architecture. Introduction to appropriate research methodologies.

## **I 1058**

### **ARCHITECTURAL PRACTICE 2A**

*3cp; 2hpw*

Law and ethics: aspects of partnership, company law, taxation, insurances and the law of master and servant. Trade practice, the Architects Act and professional ethics.

## **I 1059**

### **ARCHITECTURAL PRACTICE 2B**

*3cp; 2hpw*

Financial management of architectural practices and of architectural projects, including relevant operations research.

## **I 1062**

### **DESIGN 6**

*11cp; 4hpw*

*prerequisites: I 1052 Design 5*

Development and presentation of designs embodying all aspects of the design process which, in their synthesis, take account of socioeconomic, cultural and physical determinants. Urban design exercises.

## **I 1066**

### **ELECTIVE STUDIES**

*5cp; 2hpw*

(Re)thinking architecture: a more thorough examination (involving an extensive reading program and seminar discussions) of the implications of contemporary theory on the perception of architecture through a detailed study of a particular theorist or theoretical position. Specific focus will vary and will be determined after discussion with participating students.

*or*

Research methods in evaluation of the functional efficiency of buildings and

post-occupancy evaluation (user satisfaction) with detailed case studies of buildings in use.

### **I1068**

#### **ARCHITECTURAL PRACTICE 3A**

*5cp; 3hpw*

Building contracts: seminars on the legal base of the provisions of building contracts. Comparisons between forms of contract in current usage and their administration, with case studies of practice situations.

### **I1069**

#### **ARCHITECTURAL PRACTICE 3B**

*3cp; 2hpw*

Marketing: theory and practice related to architectural practice.

### **I1071**

#### **ELECTIVE PROJECT 1**

*5cp; 2hpw or 4hpw (Semester 1)*

The preparation of a written dissertation under the supervision of an approved staff member and on a topic agreed to by the Director of Dissertations and the candidate.

### **I1911**

#### **ARCHITECTURAL DESIGN 1**

*17cp*

The subject Architectural Design is devoted both to the study of design, as an intellectual/academic discipline, and to the practice of designing, as a professional/practical discipline. In each year of the program key issues are addressed both through formal lectures and by means of practical project-based programs which seek to integrate with design practice the intellectual/academic work from other subject areas within the course. This integration of design and technology with theory studies is the primary objective of the subject Architectural Design and is accomplished through work on project-based design programs. Such programs vary in size and content, from individual, specifically focused, exercises to more 'complete' projects, and are calibrated for increased complexity and difficulty throughout the course. In all

stages of the design program there is a determination to demonstrate the relevance of linking theoretical studies and applied knowledge in critical assessments.

While the mode of delivery for the above is through studio-based design exercises and projects, the traditional model of the studio – as the central or 'core' activity of architectural education, as a simulation of architectural practice, and as a locus of individual tuition based on the master/pupil model – can no longer be maintained. Rather, studio-based exercises and projects will be structured around interactive small group sessions involving approximately 10 to 15 students, under the direction of a variety of tutors, and with the specific subject content of each project being introduced via a series of lectures and papers. All design projects will be timetabled to show how this method of delivery is to operate; will emphasise the integration of specific content from other subject areas within the program; and will offer specific requirements and criteria for successful fulfilment of the program. In addition the use of computer models as specific design aids will be stressed.

#### **COMPONENTS:**

##### **Projects 1**

*Weighting: 0.7; 6hpw*

Introduction to the concept of design as an activity which is fundamental to the making of habitable space. This involves developing an elementary understanding of the role of enclosed spaces, climate and materials in providing shelter, from the scale required by the individual to that of the group.

##### **Architectural Computing**

*Weighting: 0.2; 6hpw*

The use of the computer is studied as a tool to aid communication in all spheres of design. Basic CAD 2D, word processing and spreadsheet; application of ArchiCAD and 3D modelling; application of specific programs as design aids and tools of analysis; introduction to basic environmental modelling.

**Architectural Graphics***Weighting: 0.1; 4hpw*

Introduction to: free-hand drawing and graphic techniques; architectural drafting – projections and perspective; computer graphics.

**Architectural Model Making***Weighting: 0.1; 2hpw*

Elementary physical model making to show the construction and assemblage of buildings. Models of landscape and buildings in their setting.

Note: In order that students may be certified to use the Faculty Workshop facilities, all Year 1 students will be required to undertake a training course of approximately 10 hours' duration, under the direction of the Workshop manager.

**11912****TECHNOLOGY 1***13cp*

Central to an understanding of architecture and its technology is an appreciation of the relationship of construction to structure and to the technical servicing of buildings. This understanding is developed through the course by integrating the study of construction, structure and services with studio-based design projects, where these components are taught concurrently with design programs, allowing students at all stages of their development to test their designs against the reality of the constraints of technology.

**COMPONENTS:****Construction 1***Weighting: 0.5; 2hpw*

An introduction to the constructional determinants of design. This is studied from an analysis of precedent which includes analysis of constructional systems and the ordering of building typologies. Statutory regulations and building codes. Case studies of small scale, short span, single cell buildings.

**Structure 1***Weighting: 0.4; 3hpw*

The practice of architecture necessitates the production of stable buildings. The study of structure is intended to sharpen the predictive ability of building designers in this respect. Students are expected to demonstrate numeracy in their ability to compare systems quantitatively, undertake indicative computer analyses, and to manipulate physical units of force, length and time.

Forces acting on buildings – gravity, wind, seismic, temperature, ground movement; resolution of forces; classification of material properties – stress, strain, elasticity, ductility, strength; X-sectional properties; introduction to bending moment and shear force plots; simple 2D structures – columns, beams, arches and cables; structographics; consequences of variation in load pattern and jointing details; introduction to computer usage in all the above.

**Architectural Surveying***Weighting: 0.1; 3hpw*

Introduction to terminology used. Role of service performed and scope of work undertaken by either consultants or others. Instruments and equipment used. Field work applied to site surveys and measurement of existing buildings, including measured drawings. Plotting of services, contours and other site characteristics, and recording of site conditions. Locating boundaries and ownership limits via land records.

**11913****THEORY STUDIES 1**

9cp

**COMPONENTS:****Environmental Science 1***Weighting: 0.4; 3hpw*

This module will concentrate on the importance of placing buildings in context with the surrounding natural environment, and introduces climate studies, solar energy, and sunshine and shade analysis.

**Theory and Architecture 1***Weighting: 0.3; 2hpw*

An introduction to design and design thinking. Principles of thinking, reasoning and argument. Introduction to problems and problem solving. Introduction to criticism. Research and library skills.

**History of Architecture 1***Weighting: 0.3; 1hpw*

In each of Years 1–3 of the course students in the History of Architecture component will be required to take two from a range of topics offered. Topics may change from year to year. The following will be offered in 1996 subject to availability. Students wishing to undertake additional components of history may do so under the Elective Studies program outlined below.

All students must choose **two topics** from those listed below. Although topics will be offered in specific semesters, students are not restricted to selecting one topic per semester.

*The Architecture of Antique Greece and Rome**Weighting: 0.25; 1hpw*

This course will study the development of the Classical Orders and of the theory of beauty in Greek architecture; the buildings of Athens, Delphi and Olympia; the Greek and Roman theatre; Roman domestic architecture; the emergence of Roman concrete as a major building material and as a medium for shaping space and volume; Roman design theory and practice as reflected in the works of the Emperors Nero, Domitian, Trajan and Hadrian.

*Islamic Architecture, 690–1700**Weighting: 0.25; 1hpw*

What is Islamic architecture? This is the question which this course seeks to answer as it visits buildings designed for and by Muslim Jerusalem, Damascus, Baghdad, Samarra, Cairo, Cordoba, Granada, Istanbul and Isfahan.

*Contemporary Australian Architecture**Weighting: 0.25; 1hpw*

An introductory course dealing with the work of contemporary architects in Australia. Discussion of key themes and significant examples.

*The Architecture of Medieval Europe**Weighting: 0.25; 1hpw*

This course will concern itself at first with the Early Christian and Byzantine architecture of Rome, Ravenna and Constantinople. Thereafter it will turn to Romanesque and Gothic architecture of France, England, Germany, Spain and Italy.

**11914****PROFESSIONAL PRACTICE 1**

3cp

The importance given to studies related to professional practice is reflected in how they are structured within the course. Students are introduced, from the first year of the course, to the relationship of the professions to society, and to the importance of academic study and research in assuring that this role is properly fulfilled.

**COMPONENT:****Architectural Practice 1***Weighting: 1.0; 3hpw*

Principles of architectural practice and the law:

1. Law and ethics: aspects of trade practice and business structure, master and servant relationships, taxation;
2. Archi-technology: basic processes in architectural practice including use of current technology as a basis for cooperative education.

**11915****ELECTIVE STUDIES 1**

6cp; 2hpw

**COMPONENTS:****Evolution of Shelter**

3cp; 2hpw

Response to place, climate and available resources. The role of social structures and cultural mores. Case studies by climatic zones: Hot Arid, Hot Humid, Arctic, Temperate, Mediterranean.

**History of Architecture 1E**

3cp; 1hpw

Students may elect to undertake any two of the following topics (provided that they have not already enrolled in them as part of the component 11913 Theory Studies 1: History of Architecture 1). Details of content and semester patterns are as described under 11913 Theory Studies 1: History of Architecture 1.

*The Architecture of Antique Greece and Rome*

*Contemporary Australian Architecture*

*The Architecture of Medieval Europe*

*Islamic Architecture*

**11921****ARCHITECTURAL DESIGN 2**

8cp

*prerequisites: 11911 Architectural Design 1; 11912 Technology 1*

**COMPONENT:****Projects 2**

Weighting: 1.0; 4hpw

Development of design skills to meet the needs of more complex programs, including residential and related uses. This involves lectures and design exercises embracing social, environmental and technical issues in the grouping and assemblage of buildings.

**11922****TECHNOLOGY 2**

9cp

*prerequisites: 11911 Architectural Design 1; 11912 Technology 1*

**COMPONENTS:****Construction 2**

Weighting: 0.6; 2hpw

Study of domestic scale building, which is also related to studio-based design projects. Introduction to building economics. Case studies of building failures. Analysis of constructional systems. Analysis of architectural detailing and its relationship to architectural design. Integration of services and other technical and environmental constraints as they influence construction. Introduction to post-occupancy evaluation.

**Structure 2**

Weighting: 0.4; 3hpw

Introduction to code loadings and the effect of materials and codes on joint detailing; study of stability of low-rise 3D structures to gravity, lateral and torsional actions; bending and shear stress distribution over element X-sections; consequences of hyperstatic systems; composite materials and systems; use of computer techniques in all the above.

**11923****THEORY STUDIES 2**

9cp

**COMPONENTS:****Environmental Science 2**

Weighting: 0.4; 2hpw: Semester 1; 1hpw: Semester 2

This module further develops the work in 11913 Theory Studies 1: Environmental Science 1 by introducing the topic of biogeography, examining the various natural heat exchange mechanisms, and by discussing how these principles may apply to the climate modification of the built environment.

## Theory and Architecture 2

*Weighting: 0.3; 2hpw*

Design and design thinking continued. An introduction to the literature of creativity. Design thinking and the possibility of method. Criticism and architecture, types of criticism, the political and ethical responsibility of the critic.

## History of Architecture 2

*Weighting: 0.3; 1hpw*

In History of Architecture 2 students will be required to undertake **two topics** from those listed below (subject to availability). Students wishing to undertake additional components of history may do so under the Elective Studies program.

*The Architecture of the Early Renaissance*

*Weighting: 0.25; 1hpw*

The areas of study focused upon in this course are as follows: early 15th century Florence and the work of Filippo Brunelleschi; the writings and building projects of Leon Battista Alberti; the development of the urban *palazzo* in 15th-century Florence, Pienza and Urbino; Donato Bramante in Milan and Rome; Michelangelo in Florence and Rome; the early 16th-century projects of Raphael and Giulio Romano.

*Ideas in Early European Modernism 1907–1933*

*Weighting: 0.25; 1hpw*

A study of key ideas in the development of the Modern Movement in Europe with specific reference to Expressionism in Germany; the Futurist Movement; Mondrian, Rietveld and De Stijl; Gropius and the development of the Weimar Bauhaus; the *Neue Sachlichkeit*; Russian Constructivism; Le Corbusier.

*High Renaissance and Baroque Architecture*

*Weighting: 0.25; 1hpw*

Starting with the High Renaissance buildings of Ammanati, Vignola and Palladio, this course will proceed to an analysis of Baroque architecture through the works of Maderno, Bernini, Borromini, Longhena, Guarini, Neumann, Zimmermann, and von Erlach.

*Contemporary Architecture in the USA*

*Weighting: 0.25; 1hpw*

An examination of the work of contemporary architects in the USA. Discussion of key themes and significant examples.

## 11924

### PROFESSIONAL PRACTICE 2

#### Architectural Experience

An integral component of each of the programs offered is practical work experience which is acquired concurrently with academic study. Approved work experience is a precondition of the award of each of the degrees. All students must therefore undertake the component 'Architectural Experience' and must gain a specified amount of architectural experience prior to graduation.

Students must amass specified amounts of architectural experience by particular stages of the course in order to proceed through the course academically.

Such architectural experience is monitored through a non-academic credit-point system. Full details of the amount of experience to be gained and at what level will be issued to students by the Director of Professional Practice.

Students are required to record their practical experience in the log book of the Architects Accreditation Council of Australia [AACA] (which may be obtained from the RAlA) and all students must submit these log books and work experience sheets for inspection each year. Students who do not submit log books by the dates set down by the staff member responsible for Professional Practice will have a failure recorded in the subject.

Students who have gained the requisite number of non-academic architectural experience points and have had this verified by the Director of Professional Practice are no longer required to submit log books and are deemed to have satisfied the criteria for the component Architectural Practice.

Students who have been granted advanced academic standing may also be eligible for an allowance of points in respect of approved practical experience acquired prior to enrolment in the course.

**11925****ELECTIVE STUDIES 2**

6cp; 2hpw

**COMPONENTS:****Sustainable Architecture 1**

3cp; 2hpw

Energy usage and its implications for climate change and acidification of atmosphere. Contribution of the greenhouse effect and the built environment to this phenomena. Infrastructure planning, and climate responsive architecture. Resource allocation.

**History of Architecture 2E**

3cp; 1hpw

Students may elect to undertake any two of the following topics (provided they have not already enrolled in them as part of the component 11923 Theory Studies 2: History of Architecture 2). Details of content and semester pattern are described under 11923 Theory Studies 2: History of Architecture 2

*Ideas in Early European Modernism*

*The Architecture of the Early Renaissance*

*Contemporary Architecture in USA*

*High Renaissance and Baroque Architecture*

**11931****ARCHITECTURAL DESIGN 3**

8cp

*prerequisites:* 11921 Architectural Design 2; 11922 Technology 2

**COMPONENT:****Projects 3**

*Weighting:* 1.0; 4hpw

The relationship of buildings to their setting, in both rural and urban contexts, is studied in depth, together with the integration of social, environmental and technical services to support their use.

**11932****TECHNOLOGY 3**

5cp

*prerequisites:* 11921 Architectural Design 2; 11922 Technology 2

**COMPONENT:****Construction 3**

*Weighting:* 1.0; 2hpw

Investigation of more complex and larger scale building systems and their construction. Detailed cost planning and budgetary control. Evaluation of environmental impact studies and their impact on construction. Analysis of the integration of construction and services in high-rise and multi-use structures.

**11933****THEORY STUDIES 3**

9cp

**COMPONENTS:****Environmental Science 3**

*Weighting:* 0.4; 3hpw

This module will concentrate on the various energy exchange mechanisms within the built environment. The contribution made by sensible heat load from occupants and equipment will be discussed, as will the role of the building envelope as an environmental modifier and filter.

**Urban Studies 1**

*Weighting:* 0.3; 1hpw

These studies focus on issues which deal with the making of the built environment from the level of the individual building and its setting to the structure and restructuring of cities. In Urban Studies 1 the field of study and the interrelationship of subject areas are outlined. An introductory overview is given on the historical development of cities, which ranges from the planned and utopian city to the growth of the incremental city. Basic issues relating to landscape are examined – terrain evaluation, reading the landscape and discovering its underlying structure, vegetation, soil morphology, geology, hydrology. Understanding the implications of intervention in natural systems by built objects. Management and control of change.

### History of Architecture 3

*Weighting: 0.3; 1hpw*

In History of Architecture 3 students will be required to undertake **two topics** from those listed below (subject to availability). Students wishing to undertake additional components of history may do so under the Elective Studies program outlined below.

*Architecture in 19th Century Europe and America*

*Weighting: 0.25; 1hpw*

In this course the following topics will be examined: the late 18th and early 19th century notion of 'the picturesque' in architecture and landscape gardening; Classical and Gothic Revivalism in Germany and England; architectural theory in the writings of Pugin, Ruskin and Viollet-le-Duc; 'Old English' and 'Queen Anne Style' architecture in England; 'Shingle Style' architecture in America; Beaux-Arts architecture in France; the impact of new materials and constructional techniques on the architecture of England, France and America.

*Architecture in Sydney 1885–1930*

*Weighting: 0.25; 1hpw*

While defining the ideological framework within which architecture evolved in Sydney and its environs during the period in question, this course will analyse representative buildings designed by J Horbury Hunt, Harry C Kent, G M Pitt, E Jefferson Jackson, John Sulman, George Sydney Jones, B J Waterhouse, Hardy Wilson, Leslie Wilkinson and Neville Hampson. Research method as applied to the survey and documentation of historical buildings will also be discussed.

*Architecture in Europe and America, 1885–1914*

*Weighting: 0.25; 1hpw*

This course will orientate itself around the work of the following architects: M H Baillie Scott, C F A Voysey, Edwin Lutyens, Charles Rennie Mackintosh, Victor Horta, Hector Guimard, Otto Wagner, Joseph Olbrich, and Frank Lloyd Wright. At the same time it will discuss the ideas and theories espoused by the Arts and Crafts movement in England, by the Art Nouveau in Belgium and France, and by the Secessionist in Austria.

*Contemporary Japanese Architecture*

*Weighting: 0.25; 1hpw*

An analysis of recent developments in Japanese architecture. Theoretical debates. The implications of cultural differences. Critical regionalism. East–West influences.

## I 1934

### PROFESSIONAL PRACTICE 3

4cp

COMPONENTS:

#### Architectural Practice 2

*Weighting: 1.0; 3hpw*

The Architects Act, Regulations and Professional Bodies, and Law and Management:

1. a background to statute and common law and the operative legal systems, together with the laws of torts, contracts and agency, in their implications to architectural practice;
2. an introduction to management theory and the processes of forecasting, organising, planning, motivating, controlling, coordinating and communicating.

#### Architectural Experience

See 13998 Architectural Experience.



## 11935

### ELECTIVE STUDIES 3

6cp; 2hpw

COMPONENTS:

#### Sustainable Architecture 2

3cp; 2hpw

Further studies of sustainability. Energy efficiency. Embodied energy. Computer modelling of environments. Politics, policy and change.

#### Theory and Architecture 3

3cp; 2hpw

In pursuit of the postmodern. Key ideas. Antifoundationalism; Architecture and postmodernism; double-coded theories; postmodern space; postmodernity and the city; critical regionalism.

#### History of Architecture 3E

3cp; 1hpw

Students may elect to undertake any two of the following topics (provided that they have not already enrolled in them as part of the component 11933 Theory Studies 3: History of Architecture 3). Details of content and semester pattern are as described under 11933 Theory Studies 3: History of Architecture 3:

*Contemporary Japanese Architecture*

*Architecture in 19th Century Europe and America*

*Architecture in Sydney, 1885–1930*

*Architecture in Europe and America, 1885–1914*

## 11936

### HONOURS QUALIFYING

6cp

*prerequisite: successful completion of all subjects in Years 1 and 2*

COMPONENTS:

#### Research Methods

*Weighting: 0.2; 1hpw*

Introduction to research methods; methodologies in different disciplines; statistics; library facilities; international databases; introduction to thesis preparation.

#### Preliminary Thesis Submission

*Weighting: 0.8; 2hpw*

The preparation, under the supervision of an approved staff member and on a topic agreed to by the supervisor and the student, of a substantial essay outlining the proposed thesis topic; demonstration of research and scholarship skills applied to that particular topic; data gathering and analysis; development and demonstration of written skills suitable to the preparation of a thesis at Honours level.

## 11941

### ARCHITECTURAL DESIGN 4

10cp

*prerequisites: 11931 Architectural Design 3; 11932 Technology 3*

COMPONENT:

#### Projects 4

*Weighting: 1.0; 4hpw*

Problems related to the re-use and re-design of obsolete buildings are studied, with account taken of historical and cultural factors, architectural significance, as well as constraints on built form and land use imposed by statute and local regulation.

## 11942

### TECHNOLOGY 4

12cp

*prerequisites:* 11931 Architectural Design 3;  
11932 Technology 3

COMPONENTS:

#### Construction 4

*Weighting:* 0.4; 2hpw

Analysis of the integration of construction and services in high-rise and large-span buildings. Advanced constructional systems, including studies of precast and prestressed concrete design, timber technology, steel and cable structures. Study of building and planning codes and relevant statutory instruments. Detailed appraisal of the Burra Charter as it impacts on the rehabilitation of protected buildings. Technical adaptation of existing buildings to new use.

#### Structure 3

*Weighting:* 0.3; 3hpw

Case studies: building failures; typologies and shape finding; high-rise and long-span buildings; membranes, nets and space frames; wind and earthquake effects. Retrofit in the upgrading of old and damaged buildings; communication between CAD and computerised analysis.

#### Applied Services

*Weighting:* 0.3; 3hpw

Investigation and presentation of the management of the various information and control systems that contribute to the built environment's efficient utilisation of resources and energy. This module will cover all mechanical services, air distribution services, and hydraulic services, including professional liaison with appropriate consultants.

## 11943

### THEORY STUDIES 4

6cp

COMPONENTS:

#### Environmental Science 4

*Weighting:* 0.6; 3hpw

The introduction of architectural acoustics: the response of the human ear, the characteristics of sound and its propagation; design for acoustic environments.

#### Urban Studies 2

*Weighting:* 0.4; 1hpw

Seminal case studies on city development with a particular focus on the scale and growth of the 19th century city. Studies include sociopolitical, economic, physical and ideological critiques of the city.

## 11944

### PROFESSIONAL PRACTICE 4

4cp

COMPONENTS:

#### Architectural Practice 3

*Weighting:* 1.0; 3hpw

1. Application of cost planning and elemental analysis, their use in design and documentation stages and the development of the final cost analysis in office management.
2. Quality assurance and control, occupational health and safety aspects of architectural practice, including use of relevant technology.

#### Architectural Experience

See 13998 Architectural Experience

## 11945

### HONOURS THESIS

24cp; 8hpw

*prerequisite:* successful completion of all subjects in Years 1, 2 and 3, including Honours Qualifying, with WAM at credit level

The preparation of a thesis (c. 20,000 words) under the supervision of an approved staff member and on a topic agreed to by the supervisor and the student. Topic choice will be conditional on adequate supervision in that area being available within the Architecture program,

or elsewhere subject to the approval of the Architecture Program Director.

### 11946

#### DESIGN HONOURS

6cp; 2hpw

An additional coursework subject demonstrating design and technology skills at an advanced level.

### 11951

#### ARCHITECTURAL DESIGN AND TECHNOLOGY 1

17cp

*prerequisite: BA in Architecture or equivalent*

Within the fifth and sixth years of the course the importance given to architectural design and to the integration of design with technology remains paramount, with the two previous subject strands amalgamated into a single subject. Project-based programs are developed to a greater level of complexity than in the previous years. Again, in all stages of the design program there is a determination to demonstrate the relevance of linking theoretical studies and applied knowledge in critical assessments.

#### COMPONENTS:

##### Projects 5

*Weighting: 0.7; 6hpw*

Studies concentrate on two diverse areas of work. One focuses on the micro level of the individual building where a major public project, involving large-span technology and complex servicing, is selected to be designed in detail. The other involves a study of part of an urban area of a town or city, where the physical, economic and social infrastructure, as well as the built form of the place, has to be re-designed or modified to accommodate change.

##### Environmental Science 5

*Weighting: 0.3; 3hpw*

Specialist application of all prior learning in respect of environmental science, integrated with the design and technology component Projects 5.

### 11953

#### THEORY STUDIES 5

10cp

*prerequisite: BA in Architecture or equivalent*

#### COMPONENTS:

##### Theory and Architecture 4

*Weighting: 0.5; 2hpw*

In this component students must choose from a range of alternative seminar programs offered, as per the following examples:

1. Theories and issues in contemporary culture: (re)thinking architecture: an investigation via an extensive reading program and seminar discussions of issues in contemporary cultural and philosophical theory and their implications for thinking about architecture;
2. Long life, low energy, loose fit: an exploration of current theory and practice in respect to energy and environment and longevity issues in architecture. Introduction to appropriate research methodologies.

##### Urban Studies 3

*Weighting: 0.5; 2hpw*

The phenomenon of the suburb and the role of 19th century philanthropists and social reformers in its development. The dynamics of social change, especially with reference to changing patterns of urbanism.

### 11954

#### PROFESSIONAL PRACTICE 6

5cp

#### COMPONENTS:

##### Architectural Practice 4

*Weighting: 1.0; 3hpw*

Marketing: theory and practice related to architectural practice.

Financial management of architectural practices and architectural projects including building contract cost control, with relevant operations research.

##### Architectural Experience

See 13998 Architectural Experience.

## 11961

### ARCHITECTURAL DESIGN AND TECHNOLOGY 2

17cp

*prerequisite: 11951 Architectural Design and Technology 1*

COMPONENTS:

#### Projects 6

*Weighting: 0.7; 6hpw*

Development and presentation of designs embodying all aspects of the design process which, in their synthesis, take account of socioeconomic, cultural and physical determinants.

#### Environmental Science 6

*Weighting: 0.3; 3hpw*

Specialist application of all prior learning in respect of environmental science, integrated with the design and technology component Projects 6.

## 11963

### THEORY STUDIES 6

10cp

COMPONENTS:

#### Theory and Architecture 5

*Weighting: 0.5; 2hpw*

In this component students must choose from a range of alternative seminar programs offered, as per the following examples:

1. (Re)thinking Architecture: a more thorough examination, involving an extensive reading program and seminar discussions, of the implications of contemporary theory on the perception of architecture through a detailed study of a particular theorist or theoretical position. Specific focus will vary and will be determined after discussion with participating students.
2. Research methods in the evaluation of the functional efficiency of buildings and post-occupancy evaluation (user satisfaction) with detailed case studies of buildings in use.

## Urban Studies 4

*Weighting: 0.5; 2hpw*

Regional and urban planning issues in their social context and governmental framework. Planning procedures and current ideologies in planning. Infrastructural decision making in the context of city restructuring.

## 11964

### PROFESSIONAL PRACTICE 6

5cp

COMPONENTS:

#### Architectural Practice 5

*Weighting: 1.0; 3hpw*

Building contracts: seminars on the legal base of the provisions of building contracts. Comparisons between forms of contracts in current usage and their administration with case studies of practice situations. Role-playing dispute resolution and negotiation skills.

#### Architectural Experience

See 13998 Architectural Experience

## 13998

### ARCHITECTURAL EXPERIENCE

Students are required to accumulate at least the equivalent of 192 weeks of approved professional experience concurrently with their studies, and must satisfy the requirements of the Faculty Board in the relevant Experience subject, in order to graduate.

# POSTGRADUATE COURSES BY COURSEWORK

## Master of Architecture

Following the successful completion of four years of architectural education at UTS (or its judged equivalent at another institution as determined by the Program Admissions Panel) the Faculty will offer a further degree program – the Master of Architecture.

The Master of Architecture degree is a professional degree of two years' full-time duration (referred to here as Years 5 and 6) or three years' cooperative education comprising 96 credit points in total.

The Master's program comprises all the requirements for the Bachelor of Architecture degree (64cp) plus an additional subject. This subject, the Master's Research Elective, comprises an additional 32 credit points and may be taken either:

1. concurrently with all other Year 5 and 6 subjects as two full-time years (32+16=48cp per year x 2 years = 96cp), thus requiring 21 contact hours per week;
- or
2. following completion of the 'normal' Year 5 and 6 subjects (32cp per year x 2 years = 64cp), one additional year (Year 7) involving a further 32cp (64 + 32 = 96cp) and requiring 16 contact hours per week.

Total academic credit-point requirement before the professional Master of Architecture degree may be awarded is thus 276 (180 obtained from the Honours degree of BA in Architecture + 96).

All subjects in the Master of Architecture degree are compulsory, with considerable flexibility of subject content being offered in the Master's Research Elective components.

### AVAILABILITY IN 1998/1999

The first year of the Master of Architecture program (the fifth year of the combined Architecture course) will be offered for the first time in 1998, with the second year (the sixth of the combined course) being offered in 1999.

## PROGRAM STRUCTURE

Year 5	CP
11951 Architectural Design and Technology 1	17
11953 Theory Studies 5	10
11954 Professional Practice 5	5
11956 Master's Research Elective (Part 1)	16
Year 6	CP
11961 Architectural Design and Technology 2	17
11963 Theory Studies 6	10
11964 Professional Practice 6	5
11956 Master's Research Elective 2 (Part 2)	16

## ELIGIBILITY FOR ENTRY TO THE MASTER OF ARCHITECTURE PROGRAM

The Master of Architecture program may only be undertaken **after** the successful completion of: the UTS Honours degree of BA in Architecture at First or Second Class Honours level; its judged equivalent from another institution; or (and under special provisions outlined below) a professional Bachelor of Architecture degree with Honours.

Conditions of entry and course requirements for each are listed below.

### *Candidates entering with a UTS Honours degree of BA in Architecture:*

Candidates seeking to enter the Master of Architecture program from Year 4 of the first degree program would be required to hold a Bachelor of Arts in Architecture with First Class or Second Class, Division 1 Honours (including the subject Architectural Design 4). Students with a Pass degree of BA in Architecture must successfully complete the Honours component of the BA in Architecture degree before being eligible to enrol in the Master of Architecture degree.

Students meeting the above requirements will automatically be accepted into the Bachelor of Architecture program as continuing students provided that they enrol in the Bachelor of Architecture in the academic year immediately following the

award of the BA in Architecture degree, or seek leave of absence for no longer than one academic year after the award

*Candidates entering with an equivalent first degree in Architecture from another institution:*

All candidates seeking to enter the Master of Architecture program with a first degree in Architecture from another institution would be subject to a portfolio interview conducted by the Program Admissions Panel. Such candidates must:

1. be able to demonstrate that they hold the equivalent of a First Class or Second Class, Division 1, Honours degree of BA in Architecture from UTS;
2. satisfy the interviewing panel that their architectural design work is of a standard comparable to that of the credit level achieved by Year 4 students at UTS; and
3. have previously successfully undertaken a major piece of academic writing equivalent to the Honours Elective thesis as described above.

Students who do not satisfy the above requirements would normally be expected to undertake all or part of the Year 4 BA(Honours) in Architecture program before being eligible to enrol in the Master of Architecture degree.

In some cases it may be necessary, in order to address perceived deficiencies or structural differences in previous educational programs, for such candidates to undertake all or part of the Year 3 BA in Architecture program, as well as that of Year 4.

Candidates from other institutions who meet the above entry requirements would be eligible for enrolment and would undertake the program as outlined above. Note, however, such 'external' applicants would constitute new students and entry places would be limited, depending on quotas (available EFTSU).

*Candidates with existing professional Bachelor of Architecture degrees:*

Given that the Master of Architecture is a professional qualification and that the requirements for award of the degree of Master of Architecture include successful completion of all subjects required for the

award of Bachelor of Architecture, candidates with existing Bachelor of Architecture degrees awarded with First or Second Class Honours – from either UTS or other institutions – may be eligible to apply for entry to the Master's program. Candidates may fall into one of three categories, with entry provisions as outlined below.

In each of the cases described below all applicants who had already been awarded a Bachelor of Architecture degree with Honours would constitute new students to the UTS course and entry places would be limited, depending on quotas (available EFTSU). Final selection would be made by interview and portfolio examination by the Program Admissions Panel.

1. Applicants who had previously been awarded a 'new' UTS Bachelor of Architecture degree with First or Second Class Honours would be eligible for exemption from all subjects other than the Master's Research Elective. This subject (32cp) must be undertaken over one year.

Candidates holding a 'new' UTS Bachelor of Architecture degree at Pass level only, and who had not previously attempted the Honours thesis in the BA in Architecture program, would be required to complete it at the requisite level prior to commencing the Master's program. Candidates who had previously attempted the Honours thesis in the BA in Architecture program and failed it would be ineligible for entry to the Master's Program.

2. Applicants who had previously been awarded an 'old' UTS Bachelor of Architecture(Honours) degree with First or Second Class Honours may be eligible for exemption from the subjects 11951/11961 Architectural Design and Technology 1 and 2, and 11954/11964 Professional Practice 5 and 6. Candidates would be required to undertake the remaining subjects (52cp) over two years.

All 'old' degree students must have achieved an aggregate mark of not less than 65 (Credit grade) in the 'old' subjects Design V and Design VI and a mark of not less than 70 in the 'old' subject Elective Project.

All candidates will be subject to a portfolio interview.

3. Applicants who had previously been awarded a Bachelor of Architecture (Honours) degree with First or Second Class Honours from another institution would be subject to an interview and portfolio examination by the Program Admissions Panel. Such candidates must be able to satisfy the interviewing panel that:
  - they hold the equivalent to the UTS Bachelor of Architecture degree with First Class or Second Class, Division 1 Honours;
  - their design work is of a standard comparable to that described above;
  - they have previously successfully undertaken a major piece of academic writing equivalent to the Honours Elective Thesis as described above; and
  - they have undertaken programs equivalent to those required for the UTS Bachelor of Architecture degree in other subject areas.

On the basis of the above interview, eligibility for subject exemptions would be determined.

### **AWARDING OF MASTER OF ARCHITECTURE DEGREE**

To be awarded the Master of Architecture degree students must (a) pass all required subjects in Years 5 and 6, and (b) must have recorded no failures in any subjects in Years 5 and 6. Students enrolled in the Master's program in Year 5 who fail any subjects will revert in Year 6 to the Bachelor's program; students enrolled in the Master's program in Year 6 who fail any subjects will be awarded the Bachelor of Architecture degree once all requisite subjects are passed.

### **YEARLY PROGRESSION**

Students who fail the subject 11951 Architectural Design and Technology 1 (Year 5) may not enrol in 11961 Architectural Design and Technology 2 (Year 6) until the former subject is successfully repeated.

All other Year 5 subjects other than 11951/11961 Architectural Design and Technology 1 and 2 may, at the discretion of the Architecture Examination Review Committee, be 'carried' into the subsequent year. Please note, however, that any student who fails more than one subject during any year of study will not be allowed to enrol in any of the subjects at the next year level until the failures have been made good.

Students enrolled in the Master of Architecture program who fail any subject(s) in Year 5 will, in Year 6, be eligible for enrolment in the Bachelor of Architecture program only.

## Master of the Built Environment

This three-year part-time postgraduate course, taught by coursework, is uniquely comprehensive, dealing with the design and management issues involved in the regeneration of buildings and their settings at all levels of planning. This is heightened by the multidisciplinary nature of the specialist teaching provided and the involvement of students from differing professional backgrounds working in groups on complex case studies.

### AIM

The aim of the course is to enable students to lead and participate in the process of refurbishment and regeneration of existing buildings and groups of buildings. It is intended that graduates of the course will be competent in the following areas:

1. designing and facilitating within interdisciplinary groups engaged in the regeneration of urban projects at both micro and macro levels of planning;
2. understanding the roles and practices of all specialist consultants and contractors, and their integration in the design; the importance of design in the project process, especially in regard to obsolete or historic buildings and work settings;
3. presenting sound design arguments in which the economic, social, financial, legal, aesthetic, technical and environmental issues have been properly assessed.

### QUALIFICATIONS FOR ADMISSION

A degree in one of the disciplines related to the built environment e.g. Architecture, Building, Quantity Surveying, Engineering, Planning, Surveying, or equivalent is required. Students with postgraduate experience in their own field of study will be given preference. Admission of mature-age students or other special category students will be considered on their individual merits. However, they must be equivalent in competence to those admitted with degrees.

### STRUCTURE

The course is structured specifically to meet the needs of society. The subjects are integrated across disciplines.

The subjects are grouped into three categories: social context, design technology and legal management. Complementary fields of study such as law, management, sociology and urban economics are also examined.

The subjects are introduced in the first two semesters, via coursework and theoretical studies, laying the foundation for comprehensive examination of the issues involved in urban renewal and regeneration in the following three semesters.

In the final semester, groups of students present a 'design option' via a rigorously argued case for the future use of a building or group of buildings, representing a synthesis of their studies. This design option will include reports and drawings describing the proposal clearly, showing its viability and all aspects of financing and program implementation. It is intended that the results of these studies be published.

### COURSE STRUCTURE

Credit points are shown in brackets.

#### Year 1

##### *Semesters 1 and 2*

- 12584 Urban Architecture (6cp)
- 12585 Law (MBEnv) (5cp)
- 12586 Building Technology (MBEnv) (5cp)
- 12587 Economics (MBEnv) (6cp)
- 12564 Sociology (MBEnv) (2cp)

#### Year 2

##### *Semesters 3 and 4*

- 12570 Urban Regeneration Process 1 (6cp)
- 12588 Design Management 1 (6cp)
- 12575 Urban Regeneration Process 2 (7cp)
- 12589 Design Management 2 (5cp)

#### Year 3

##### *Semesters 5 and 6*

- 12579 Urban Regeneration Process 3 (7cp)
- 12590 Design Management 3 (3cp)
- 12582 Design Research (2cp)
- 12583 Design Project (12cp)



# POSTGRADUATE SUBJECT DESCRIPTIONS

## Guide to subject descriptions

The subject descriptions shown below indicate the subject code and name, the number of credit points for the subject (e.g. 3cp), the duration of the subject, indicated as semester weeks, if applicable, and the number of formal contact hours each week (e.g. 4hpw); for some subjects, there may also be practical components off campus, and this is indicated in the text. Also shown are the prerequisites and/or corequisites if any, and a brief outline of the content.

Prerequisites are subjects which must be completed before taking the subject to which they refer. Corequisites are subjects which must be completed before or be taken concurrently with the subject to which they refer.

## 11956

### MASTER'S RESEARCH ELECTIVE

*32cp; normally 8hpw over two years*  
*prerequisite: BA(Honours) in Architecture or equivalent*

The Master's Research Elective is offered in Years 5 and 6 of the course. Candidates for the degree of Master of Architecture must complete this program in addition to all the subjects required for the award of the Bachelor of Architecture degree.

The Master's Research Elective subject is valued at 16 credit points per year over two years. The subject is divided into two components:

1. a theory component (Master's Research Elective – Theory) involving the preparation of a written dissertation under the supervision of an approved staff member and on a topic agreed to by the Director of Dissertations and the candidate;
2. an applied component (Master's Research Elective – Application 1 and 2) involving the demonstration by projects of an advanced level of architectural and urban design and technology. This component involves two distinct programs of work, as

outlined below. Students undertaking the Master's Research Elective component only, must do so over a single year and thus must take both the above Applied programs simultaneously.

## COMPONENTS:

### Master's Research Elective – Application 1

*Weighting: 0.2; 3hpw; Year 5; Semesters 1 and 2*

Studies in restructuring the city and the remodelling of its infrastructure, both physical and non-physical. Case studies at the micro level of the individual building to demonstrate principles of this procedure in practice with studio-based projects to confirm its application.

### Master's Research Elective – Application 2

*Weighting: 0.2; 3hpw; Year 6; Semesters 1 and 2*

Design projects undertaken to demonstrate an ability to synthesise all aspects of the design process in creating or re-adapting major buildings, and locating them or reconnecting them into new or existing physical settings.

### Master's Research Elective – Theory

*Weighting: 0.6; 5hpw; Years 5 and 6; Semesters 1 and 2*

The preparation of a written dissertation under the supervision of an approved staff member and on a topic agreed to by the Director of Dissertations and the candidate.

## 12564

### SOCIOLOGY (MBENV)

*2cp; 1hpw*

Social theory; social values and population grouping in Australian society; housing; public participation in planning and community awareness; resident actions and effects of planning on communities and individuals.

## 12570

### URBAN REGENERATION PROCESS

16cp; 4hpw

This is the first of a three-part presentation of this subject, in which the process of urban renewal and regeneration is studied in depth, dealing initially with these issues at a strategic planning level; next with the concept of obsolescence; and finally with a series of morphological studies of particular typologies and executed building case studies.

## 12575

### URBAN REGENERATION PROCESS 2

7cp; 5hpw

This part of the renewal and regeneration process deals with the concept of obsolescence as it affects buildings in use, their technology, fiscal viability and cultural significance.

## 12579

### URBAN REGENERATION PROCESS 3

7cp; 5hpw

A series of morphological studies examining the changing pattern of use that generic building types undergo, and the impact which this changing pattern has on their operation and efficiency.

## 12582

### DESIGN RESEARCH

2cp; 1hpw

A series of lectures and seminars dealing with the methodology of research programs; the principles of thinking, reasoning and argument; and the critical analysis of contemporary issues.

## 12583

### DESIGN PROJECT

12cp; 8hpw

Project: either drawn or written/or combination of the two, covering an aspect of the built environment supervised and approved by a member of staff.

## 12584

### URBAN ARCHITECTURE

6cp; 2hpw

A general introduction to the subject is followed by a study of typologies and an analysis of historical precedents, their influence and interaction on built-form land-use policies, and philosophies employed in the making of cities, and in particular on the development of Sydney. A study of the theories of urbanism which have influenced the making and transformation of existing cities this century, and particularly their impact since 1945.

## 12585

### LAW (MBENV)

5cp; 2hpw

A short subject in property law, both real and personal, and, although it begins with contracts and ends with contracts for the sale of land, it provides an intensive coverage of many of the major principles relating to property law in NSW. Building control and a regulatory approach to conservation and regeneration projects; operation of the Land and Environment Court.

## 12586

### BUILDING TECHNOLOGY (MBENV)

5cp; 2hpw

A study of the impact of the various technologies on various building typologies and their effect on the fabric of buildings studied diagnostically. This appraisal of buildings is undertaken to assess the implications of the concept of 'long life; loose fit; low energy' when applied to buildings.

## 12587

### ECONOMICS (MBENV)

6cp; 2hpw

An introduction to aspects of macro- and microeconomics relevant to property development and property management. The nature and methods of financing development of the built environment; basic formulas and theory of finance including compound formulas. An analysis of the needs of property owners. Investigation and selection of appropriate

investment strategies in accordance with predetermined objectives. Investment, market analysis and appraisal, and a detailed investigation of capitalisation rates and rates of return in property investment decisions.

### **I 2588**

#### **DESIGN MANAGEMENT 1**

*6cp; 2hpw*

The management of the project process commencing with identification of opportunities for development resulting from the perceived or actual obsolescence of existing building stock to the final commissioning and handing over of a regenerated building that will ensure customer satisfaction. The subject will concentrate on the management of the marketing and the initial development phases of the project process. Outline of environmental planning legislation, regional proposal strategies, principles of environmental law, integration of future building control requirements, case studies.

### **I 2589**

#### **DESIGN MANAGEMENT 2**

*5cp; 2hpw*

Project planning, design management, value management, quality assurance, building audits and post-occupancy evaluation studies as design aids. Physical and economic feasibility studies, cost-benefit analysis of regeneration/refurbishment of projects.

### **I 2590**

#### **DESIGN MANAGEMENT 3**

*3cp; 1hpw*

Building control matters, 'engineered compliance', accreditation process, approval strategies, other authorities and approvals. Marketing system, marketing environment, market information, buyer and user behaviour, strategy, promotion and societal issues.

## PROGRAMS IN BUILDING STUDIES

Courses in Building Studies deal with the planning, procurement, construction and management of real property. All undergraduate and postgraduate programs may be undertaken by students on a part-time basis. The Faculty has thereby developed a close interaction with industry, professional associations, and employer organisations.

### UNDERGRADUATE COURSES

Three undergraduate courses of cooperative education are offered:

Bachelor of Building in Construction Management  
 Bachelor of Applied Science in Land Economics  
 Bachelor of Building in Construction Economics

### ATTENDANCE PATTERN

These programs are offered in two attendance patterns: four years full time and six years part time.

### PROFESSIONAL/INDUSTRIAL EXPERIENCE

In addition to attending classes, students are required to gain practical experience in professional or industrial organisations.

Full-time students undertake practical studies as part of the program included in core subjects. They are also required to gain approved professional experience in the final two full-time years of their programs. The experience required is to be equivalent to eight weeks' continuous employment in each year of the final two years. Students are required to enrol in the professional/industrial experience subject relevant to their course, and supply details of the experience gained by way of an appropriate diary and log.

Part-time students are required to enrol each year, except Year 1, in the professional/industrial experience subject relevant to their course, and to supply details of the experience gained. A total of three years' concurrent, relevant employment will satisfy this requirement of the course. Students satisfying this requirement may be exempted from the practical studies component of core subjects.

## Bachelor of Building in Construction Management

The Building graduate is concerned with management of the construction process. Extensive technological skills go hand in hand with the capacity to manage people, materials, equipment and plant in order to carry out this task as effectively as possible.

### COURSE STRUCTURE

Credit points are shown in brackets.

#### Four-year full-time program

##### Year 1

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16115	Construction 1 (8cp)
16201	Drawing and Surveying (4cp)
16541	Quantities 1 (4cp)
51388	Communications (2cp)
16211	Computations (6cp)
16701	Materials 1 (6cp)
16711	Building Science (4cp)
16301	Services 1 (6cp)
16901	Structures 1 (4cp)
16601	Contextual Studies 1 (4cp)

##### Year 2

---

16116	Construction 2 (8cp)
16542	Quantities 2 (4cp)
16611	Building Design (4cp)
16602	Contextual Studies 2 (4cp)
16531	Estimating 1 (4cp)
16402	Management 2 (6cp)
16702	Materials 2 (4cp)
16902	Structures 2 (6cp)
16801	Legal Studies 1 (4cp)
16403	Management 3 (4cp)

##### Year 3

---

16117	Construction 3 (8cp)
16802	Legal Studies 2 (6cp)
16404	Management 4 (6cp)
16405	Management 5 (4cp)
16903	Structures 3 (6cp)
16511	Economic Management 1 (6cp)
16197	Building Experience (F/T)

##### Year 4

---

16118	Construction 4 (8cp)
16406	Management 6 (4cp)
16532	Estimating 2 (6cp)
16512	Economic Management 2 (4cp)
16131	Professional Practice (4cp)
16221	Project (10cp)
16197	Building Experience (F/T)

#### Six-year part-time program

##### Year 1

---

16115	Construction 1 (8cp)
16201	Drawing and Surveying (4cp)
16541	Quantities 1 (4cp)
51388	Communications (2cp)
16701	Materials 1 (6cp)
16711	Building Science (4cp)

##### Year 2

---

16116	Construction 2 (8cp)
16901	Structures 1 (4cp)
16211	Computations (6cp)
16542	Quantities 2 (4cp)
16301	Services 1 (6cp)
16198	Building Experience (P/T)

##### Year 3

---

16117	Construction 3 (8cp)
16601	Contextual Studies 1 (4cp)
16402	Management 2 (6cp)
16902	Structures 2 (6cp)
16611	Building Design (4cp)
16198	Building Experience (P/T)

##### Year 4

---

16118	Construction 4 (8cp)
16531	Estimating 1 (4cp)
16702	Materials 2 (4cp)
16602	Contextual Studies 2 (4cp)
16801	Legal Studies 1 (4cp)
16403	Management 3 (4cp)
16198	Building Experience (P/T)

##### Year 5

---

16802	Legal Studies 2 (6cp)
16404	Management 4 (6cp)
16405	Management 5 (4cp)
16903	Structures 3 (6cp)
16511	Economic Management 1 (6cp)
16198	Building Experience (P/T)

##### Year 6

---

16406	Management 6 (4cp)
16532	Estimating 2 (6cp)
16512	Economic Management 2 (4cp)
16131	Professional Practice (4cp)
16221	Project (10cp)
16198	Building Experience (P/T)

## Bachelor of Applied Science in Land Economics

The objectives of the Land Economics course are:

- to produce a broadly educated graduate prepared for a career in the property industry;
- to equip students with an understanding of the legalities, principles, and processes required in order that they can fill a professional role as valuer, real estate agent, business agent, stock and station agent, auctioneer, property manager or a number of these;
- to develop an appreciation of a professional ethic which emphasises responsibility and responsiveness to community needs.

The course satisfies the educational requirements for licensing as a real estate agent, on-site residential property manager, business agent, stock and station agent, registration as a valuer and practice as a project manager.

### COURSE STRUCTURE

Credit point values are shown in brackets.

#### Four-year full-time program

##### Year 1

---

16163	Appraisal and Statistics (8cp)
16150	Land Studies 1 (6cp)
16351	Introduction to Valuation (6cp)
16361	Real Estate Fundamentals (6cp)
16551	Economics (8cp)
16552	Financial and Trust Accounting (8cp)
16851	Introduction to Law (6cp)

##### Year 2

---

16152	Surveying (2cp)
16153	Building Technology (6cp)
16352	Valuation Methodology (8cp)
16354	Rural Valuation (6cp)
16453	Development Management (4cp)
16553	Real Estate Finance (6cp)
16651	Urban Planning (4cp)
16853	Planning and Environmental Law (6cp)
16854	Real Estate Law and Conveyancing (6cp)

##### Year 3

---

16155	Facility Evaluation (6cp)
16355	Specialised Valuation Topics (8cp)
16454	Investment and Portfolio Management (6cp)
16652	Environmental Design (4cp)
16456	Property Management and Maintenance (6cp)
16554	Urban Economics (6cp)
16997	Land Economics Experience (F/T)

##### Year 4

---

16353	Advanced Valuation Methods (8cp)
16751	International Real Estate (6cp)
16356	Statutory Valuation and Litigation (4cp)
16452	Real Estate Organisation and Management Theory (4cp)
16455	Professional Practice Review (4cp)
16961	Project (10cp)
16997	Land Economics Experience (F/T)

#### Six-year part-time program

##### Year 1

---

16163	Appraisal and Statistics (8cp)
16351	Introduction to Valuation (6cp)
16361	Real Estate Fundamentals (6cp)
16551	Economics (8cp)

##### Year 2

---

16150	Land Studies 1 (6cp)
16352	Valuation Methodology (8cp)
16552	Financial and Trust Accounting (8cp)
16851	Introduction to Law (6cp)
16998	Land Economics Experience (P/T)

##### Year 3

---

16152	Surveying (2cp)
16153	Building Technology (6cp)
16355	Specialised Valuation Topics (8cp)
16553	Real Estate Finance (6cp)
16854	Real Estate Law and Conveyancing (6cp)
16998	Land Economics Experience (P/T)

##### Year 4

---

16353	Advanced Valuation Methods (8cp)
16453	Development Management (4cp)
16456	Property Management and Maintenance (6cp)
16651	Urban Planning (4cp)

- 16853 Planning and  
Environmental Law (6cp)  
16998 Land Economics Experience (P/T)

**Year 5**

- 16155 Facility Evaluation (6cp)  
16454 Investment and Portfolio  
Management (6cp)  
16554 Urban Economics (6cp)  
16652 Environmental Design (4cp)  
16354 Rural Valuation (6cp)  
16998 Land Economics Experience (P/T)

**Year 6**

- 16751 International Real Estate (6cp)  
16356 Statutory Valuation and  
Litigation (4cp)  
16452 Real Estate Organisation and  
Management Theory (4cp)  
16455 Professional Practice Review (4cp)  
16961 Project (10cp)  
16998 Land Economics Experience (P/T)

## Bachelor of Building in Construction Economics

The Construction Economics degree course provides quantity surveying education in applied economics for the construction industry, and leads to a professional qualification in quantity surveying. Quantity surveyors provide financial and economic advice relating to the cost management of projects from the time of their conception and extending throughout the design, construction and deployment phases. Quantity surveyors are key professionals in the construction industry and their clients include developers, government agencies, building proprietors, architects and contractors. The profession is suitable equally for men and women.

### COURSE STRUCTURE

Credit points are shown in brackets.

#### Four-year full-time program

**Year 1**

- 16115 Construction 1 (8cp)  
16501 Quantity Surveying 1 (8cp)  
16161 Mathematics and Statistics (4cp)  
16721 Material Science (8cp)  
16502 Quantity Surveying 2 (8cp)  
16162 Computing (6cp)  
16301 Services 1 (6cp)

**Year 2**

- 16116 Construction 2 (8cp)  
16531 Estimating 1 (4cp)  
16503 Quantity Surveying 3 (8cp)  
16621 Design Evaluation (8cp)  
16521 Building Economics 1 (8cp)  
16801 Legal Studies 1 (4cp)  
Elective(s) (8cp)

**Year 3**

- 16117 Construction 3 (8cp)  
16802 Legal Studies 2 (6cp)  
16411 Contract Administration (8cp)  
16597 Quantity Surveying  
Experience (F/T)  
16522 Building Economics 2 (8cp)  
Elective(s) (6cp)

**Year 4**

- 
- 16118 Construction 4 (8cp)
  - 16523 Building Economics 3 (8cp)
  - 16532 Estimating 2 (6cp)
  - 16513 Economic Analysis (4cp)
  - 16506 Quantity Surveying Practice (10cp)

*or*

- 16224 QS Project (10cp)
- 16597 Quantity Surveying Experience (F/T)

**Six-year part-time program**

**Year 1**

- 
- 16115 Construction 1 (8cp)
  - 16161 Mathematics and Statistics (4cp)
  - 16501 Quantity Surveying 1 (8cp)
  - 16721 Material Science (8cp)

**Year 2**

- 
- 16116 Construction 2 (8cp)
  - 16162 Computing (6cp)
  - 16301 Services 1 (6cp)
  - 16502 Quantity Surveying 2 (8cp)
  - 16598 Quantity Surveying Experience (P/T)

**Year 3**

- 
- 16117 Construction 3 (8cp)
  - 16503 Quantity Surveying 3 (8cp)
  - 16531 Estimating 1 (4cp)
  - 16621 Design Evaluation (8cp)
  - 16598 Quantity Surveying Experience (P/T)

**Year 4**

- 
- 16118 Construction 4 (8cp)
  - 16521 Building Economics 1 (8cp)
  - 16801 Legal Studies 1 (4cp)
  - Elective(s) (8cp)
  - 16598 Quantity Surveying Experience (P/T)

**Year 5**

- 
- 16411 Contract Administration (8cp)
  - 16522 Building Economics 2 (8cp)
  - 16802 Legal Studies 2 (6cp)
  - Elective(s) (6cp)
  - 16598 Quantity Surveying Experience (P/T)

**Year 6**

- 
- 16506 Quantity Surveying Practice (10cp)
  - or*
  - 16224 QS Project (10cp)
  - 16513 Economic Analysis (4cp)

- 16523 Building Economics 3 (8cp)
- 16532 Estimating 2 (6cp)
- 16598 Quantity Surveying Experience (P/T)

**ELECTIVES**

Electives in the Construction Economics course may be chosen from other courses offered within the Faculty, elsewhere in the University or other approved tertiary institutions. The choice of electives is at the student's discretion, but subject to availability and approval by the Program Director. Further details are supplied at the time of enrolment.

**INTERNATIONAL STUDENTS**

International students holding a diploma or advanced diploma from recognised institutions and in relevant fields may obtain advanced standing in the Construction Economics degree course. For example, students holding a Diploma in Quantity Surveying or an advanced diploma in a building-related discipline will enter the course by way of the **International Bridge**, which will operate each year over the summer term (December to February), and will thereafter complete a further 48 credit points of subjects. In this case students will be able to complete the requirements of the course effectively in one calendar year. There is a range of articulation pathways in the course, and students holding previous qualifications should contact the Faculty Office for further information.

The International Bridge comprises two subjects, which operate over the summer term:

- 16225 QS Project (Summer) (10cp)
- 16300 Industry Studies (14cp)



## UNDERGRADUATE SUBJECT DESCRIPTIONS

### Guide to subject descriptions

The subject descriptions shown below indicate the subject code and name, the number of credit points for the subject (e.g. 3cp), the duration of the subject, indicated as semester weeks, if applicable, and the approximate number of formal contact hours each week (e.g. 4hpw); for some subjects, there may also be practical components off campus, and this is indicated in the text. Also shown are the prerequisites and/or corequisites if any, and a brief outline of the content.

Prerequisites are subjects which must be completed before taking the subject to which they refer. Corequisites are subjects which must be completed before or be taken concurrently with the subject to which they refer.

Subjects which include practical studies and field work as part of the requirements do not show hours per week. Where shown, the hours per week are indicative only.

### 16150

#### LAND STUDIES 1

6cp; 2hpw

The objective of the subject Land Studies is twofold. Firstly, to develop an awareness of the relationship between real estate and society and also to introduce thinking and presentation skills appropriate to academic development. Secondly, to introduce financial modelling for real estate using Discounted Cash Analysis within advanced computer spreadsheet aids.

### 16115

#### CONSTRUCTION 1

8cp; 8hpw

Residential construction. Terminology and detail design of typical residential buildings. Footings, floor, wall and roof framing, cladding, windows and doors, finishes and joinery. Interpreting architectural drawings and sketching construction details. Model building. Concurrent practical studies and field work.

### 16116

#### CONSTRUCTION 2

8cp; 8hpw

*prerequisite: 16115 Construction 1*

Industrial and commercial construction. Footings, sub-surface drainage systems, basement construction, load-bearing wall systems, steel-framed buildings and concrete-framed buildings for multistorey construction. Materials handling systems and their application. Transportation and placement of concrete. Concurrent practical studies and field work.

### 16117

#### CONSTRUCTION 3

8cp; 8hpw

*prerequisite: 16115 Construction 1*

Commercial construction. Curtain walling, built-up roofing systems, doors and frames, stairs and ramps, partitions, suspended ceilings and finishes. Site establishment and hoardings. Scaffolding. Formwork. Pre-stressed and post-tensioned concrete. Planning and coordination of services. Concurrent practical studies and field work.

### 16118

#### CONSTRUCTION 4

8cp; 8hpw

*prerequisite: 16115 Construction 1*

Construction techniques and equipment. Temporary works, site preparation and demolition. Earthmoving and soil compaction equipment, compressed air services, piling systems and associated plant, dewatering and blasting equipment. Fire safety regulations and requirements. Occupational health and safety. Concurrent practical studies and field work.

### 16131

#### PROFESSIONAL PRACTICE

4cp; 1hpw

The history and definition of professionalism, the organisation of professions in the building field, responsibilities of consultant to client, third party and community, conditions of engagement, indemnity insurance.

**16152****SURVEYING***2cp; 2hpw**prerequisite: 16163 Appraisal and Statistics*

The interpretation of survey plans; types of surveys; use of instruments; aerial photography. Land measurement and definition. Types of surveys, land geometry, current practice in land surveying relating to land economy.

**16153****BUILDING TECHNOLOGY***6cp; 3hpw*

Technology of components and elements of domestic, commercial and industrial buildings, both low and high rise: structures; facades; partitions; services. Relevance of ordinances. Aspects of refurbishing.

**16155****FACILITY EVALUATION***6cp; 2hpw**prerequisite: 16453 Development Management**corequisite: 16456 Property Management and Maintenance*

The objective is to assess the effects of aspects of the design of buildings on user comfort, energy usage, aesthetics and safety: orientation, use of materials, layout, services. Ageing of buildings. Relationships of buildings to structures.

**16161****MATHEMATICS AND STATISTICS***4cp; 3hpw*

The study and use of mathematical and statistical tools appropriate to construction economics, with an emphasis on statistics. Data collection and presentation, descriptive statistics, graphical techniques, probability and distribution, index numbers, statistical inference, time series, correlation and regression analysis. Computer applications.

**16162****COMPUTING***6cp; 3hpw**corequisite: 16501 Quantity Surveying I*

The application of information technology and information exchange to the quantity surveyor. Future trends and the impact of computers on traditional roles. The investigation and use of specialist software packages and equipment for the measurement and presentation of quantities. Measurement exercises involving superficial areas of building elements as an introduction to the processes of cost planning. Scheduling exercises as an introduction to construction planning. Computer-aided design and the automatic production of quantities.

**16163****APPRAISAL AND STATISTICS***8cp; 3hpw*

The study of mathematical and statistical tools required for land economics: equations solution; indices and surds; logarithms; graphs, coordinate geometry; trigonometry; simple differentiation and integration. Descriptive statistics; probability; regression and multiple regression; time series analysis; statistical inference. Practical studies and field work.

**16197****BUILDING EXPERIENCE (F/T)****16198****BUILDING EXPERIENCE (P/T)****16201****DRAWING AND SURVEYING***4cp; 2hpw*

Drafting and graphic skills including lettering, plane and solid geometry and projections. Use of drawing to solve detailing problems. Selection of scales and mode of presentation to communicate. Use of drawings in the building process. Architectural floor plans, reconciliation of dimensions, the meaning of lines, building terms, use of references. The process of setting out works; extractions of information from surveying drawings, levels, contours; the choice of setting out

techniques; the use of tape, level, theodolite and optical plummets. The NSW land title systems. Powers of public authorities.

### **16211**

#### **COMPUTATIONS**

6cp; 4hpw

The exploration and application of functions and graphs, differentiation and integration. An introduction to matrix algebra. Chance and probability, permutations and combinations. Presentation of data. Average and means, central tendency. Scatter, standard deviation, variance. Distribution: binomial, Poisson, normal, confidence. The computing course is aimed at developing the students' basic knowledge of computing skills and is structured to allow them to further develop these skills through the solving of suitable problems.

### **16221**

#### **PROJECT**

10cp; 4hpw

The detailed investigation of a topic by literature search, laboratory experiment or survey and the production of a large report to a professional standard.

### **16224**

#### **QS PROJECT**

10cp; 4hpw

*alternative to 16506 Quantity Surveying Practice*

Preparation and submission of a major project, involving the detailed study of an individual topic related to the field of construction economics.

### **16225**

#### **QS PROJECT (SUMMER)**

10cp; 8hpw

Preparation and submission of a major project involving the detailed study of an individual topic related to the field of construction economics.

### **16300**

#### **INDUSTRY STUDIES**

14cp; 8hpw

A critical and quantitative examination of parts of the Australian construction industry and their comparison with international practice and performance, plus documented field work necessary for the collection and interpretation of the research data.

### **16301**

#### **SERVICES 1**

6cp; 3hpw

An introduction to hydraulic, electrical, airconditioning, vertical transportation, fire protection services and systems. Terminology, design and construction requirements. Intelligent buildings.

### **16351**

#### **INTRODUCTION TO VALUATION**

6cp; 3hpw

An introduction to the valuation profession, its role and function within the real property industry. Basic methodology and technical tools of the valuer will also be studied.

### **16352**

#### **VALUATION METHODOLOGY**

8cp; 2hpw

*prerequisites: 16351 Introduction to Valuation; 16163 Appraisal and Statistics*

An in-depth study of the role, functions and obligations of the valuation profession. Areas studied include: methods of valuation; time value of money; measures of rates of return; resumption and acquisition values; the use of statistical analyses in valuation practice. Practical studies and field work are included as part of the requirements for this subject. Part-time students may be exempted from this practical studies component.

**16353****ADVANCED VALUATION METHODS***8cp; 2hpw**prerequisites: 16352 Valuation Methodology; 16355 Specialised Valuation Topics*

The subject is designed to provide an extensive and in-depth knowledge of real estate feasibility studies for development and investment projects. Practical studies and field work are included as part of the requirement for this subject.

**16354****RURAL VALUATION***6cp; 2hpw**prerequisites: 16551 Economics; 16352 Valuation Methodology*

An in-depth study of the purpose and methodology of valuing non-urban and rural properties. Introduction to the importance of agriculture to the Australian economy. Practical studies and field work included as part of the requirements for this subject.

**16355****SPECIALISED VALUATION TOPICS***8cp; 2hpw**prerequisite: 16352 Valuation Methodology*  
*corequisite: 16553 Real Estate Finance*

An in-depth study of the more specialised areas in the valuation profession. Capitalisation, summation and replacement cost approaches are developed. Practical studies and field work are included as part of the requirements for this subject.

**16356****STATUTORY VALUATION AND LITIGATION***4cp; 2hpw**corequisite: 16353 Advanced Valuation Methods*

Valuation case law is discussed. Expert witness testimony and specialist report writing are covered with particular reference to professional negligence.

**16361****REAL ESTATE FUNDAMENTALS***6cp; 2hpw*

An introduction to the real estate industry examining the statutory controls and professional ethics and applying them to agency practice. The property market will also be examined.

**16402****MANAGEMENT 2***6cp; 2hpw**prerequisites: 51388 Communications; 16115 Construction I*

Organisation theory, the individual in the workplace, leadership, needs hierarchy, motivation, team building, group dynamics, communication, problem solving, decision making, organisational variables, buildability and planning related to the management of the construction process.

**16403****MANAGEMENT 3***4cp; 2hpw*

The application of statistical methods of quality management; statistics, operations research techniques, process capability.

**16404****MANAGEMENT 4***6cp; 2hpw*

The principles and practice of the writing and interpretation of specifications for building work; the impact of standard codes and building regulations; developments in the standardisation and computerisation of specifications. The administration of contracts. An examination of the administrative requirements for efficient contracts using case studies.

**16405****MANAGEMENT 5***4cp; 2hpw*

Strategic planning and marketing. The interface between the building and building products industries; quality management.

**16406**

**MANAGEMENT 6**

*4cp; 2hpw*

Industrial relations and site safety; roles of licensing boards and prescribed payments system.

**16411**

**CONTRACT ADMINISTRATION**

*8cp; 3hpw*

*prerequisite: 16801 Legal Studies 1*

The principles and practice involved in the administration of building contracts, including preparation of variations, progress claims, activity reports, cash flows and package-deal documentation. Rise and fall provisions. General conditions of contract. Specification writing. Construction planning for residential and commercial projects.

**16452**

**REAL ESTATE ORGANISATION AND MANAGEMENT THEORY**

*4cp; 2hpw*

*prerequisite: 16361 Real Estate Fundamentals*

Examination of the relevance of organisation theory to real estate, valuation and property departments: contributions of various theorists; technology, motivation, group behaviour, structure, goals, analysis of various organisational forms.

**16453**

**DEVELOPMENT MANAGEMENT**

*4cp; 1.5hpw*

*prerequisites: 16351 Introduction to Valuation; 16163 Appraisal and Statistics*

Aspects of the management of projects under development: client needs determination; procurement methods; design management including cost planning and buildability; approvals management.

**16454**

**INVESTMENT AND PORTFOLIO MANAGEMENT**

*6cp; 1.5hpw*

*prerequisites: 16553 Real Estate Finance; 16453 Development Management*

In-depth study of the methods and techniques of investment and portfolio

management. A study of the asset allocation process and risk and return with an introduction to the techniques of investment and portfolio analysis.

**16455**

**PROFESSIONAL PRACTICE REVIEW**

*4cp; 2hpw*

*prerequisites: 16854 Real Estate Law and Conveyancing; 16456 Property Management and Maintenance*

Definition of responsibilities of consultant to client, third party and community; conditions of engagement; indemnity insurance.

**16456**

**PROPERTY MANAGEMENT AND MAINTENANCE**

*6cp; 3hpw*

*prerequisites: 16361 Real Estate Fundamentals; 16552 Financial and Trust Accounting; 16153 Building Technology*

The management of large complex properties. Development and administration of systems for market research, rent collection, tenancy management, investment taxation and negotiation. Development of maintenance standards for and estimate of live components of buildings. Maintenance budgets; assessing the effects of design on maintenance and recording operating cycles of plant and equipment.

**16501**

**QUANTITY SURVEYING 1**

*8cp; 3hpw*

An introduction to quantity surveying services and methods. The measurement and calculation of simple quantities in accordance with the current Australian Standard Method of Measurement. Principles of measurement, set-out and notation. Quantity surveying activities, opportunities and responsibilities, including the benefits of membership of a professional institution. Course requirements regarding assignment preparation and presentation.

**16502****QUANTITY SURVEYING 2***8cp; 2hpw*

The development of professional communication and management skills. Basic research methodology including library skills, information gathering, dissemination and analysis. Written communication skills incorporating formal correspondence, essay/report writing and English expression. Verbal communication and client presentation skills. Conflict management. Fundamental principles of management and organisational theory and their practical application. Marketing principles, strategies and techniques.

**16503****QUANTITY SURVEYING 3***8cp; 3hpw**prerequisites: 16501 Quantity Surveying 1*

The preparation and uses of a bill of quantities and types of documentation formats in common use. The acquiring of competence in preparing trade packages within a bill of quantities in accordance with the current Australian Standard of Method of Measurement. Measurement rules and procedures. The measurement of engineering services, such as hydraulics, electrical, mechanical and fire protection systems and the measurement of civil engineering quantities. Alternative methods of measurement.

**16506****QUANTITY SURVEYING PRACTICE***10cp; 4hpw**alternative to 16224 QS Project*

A critical examination of the quantity surveying profession and its future. Professional practice, ethics and codes of conduct. Professional liability and indemnity. Setting up and running a professional practice. Conflict management and dispute resolution. Topical issues affecting the profession and the industry.

**16511****ECONOMIC MANAGEMENT 1***6cp; 3hpw*

Principles of accounting and business finance. Profit and loss statements; balance sheets; cash budgets, services of funds and financial decision making are examined in detail.

**16512****ECONOMIC MANAGEMENT 2***4cp; 2hpw**prerequisite: 16511 Economic Management 1*

The financial control of construction projects which involves variances, budgets and development of various systems of control. The second part of the subject concentrates on the preparation of feasibility studies for development and investment projects.

**16513****ECONOMIC ANALYSIS***4cp; 2hpw*

The application of economic analysis and forecasting to the building, construction and property industries. The measurement of economic performance in terms of benchmarking and productivity indicators. The need for industry restructuring and microeconomic reform and the role of innovation in the construction process. Valuation methods and the preparation of feasibility studies for development projects. Forecasting techniques and the impact of economic assumptions.

**16521****BUILDING ECONOMICS 1***8cp; 3hpw**prerequisites: 16501 Quantity Surveying 1; 16162 Computing*

An examination of the principles and practices relating to building economics including budgeting, feasibility studies, preliminary estimating, cost planning and elemental cost analysis. Building price indices. Cost modelling techniques are explored in detail. Computer methods are used to solve cost problems.

## **16522**

### **BUILDING ECONOMICS 2**

8cp; 2hpw

An introduction to the structure and performance of the Australian economy, covering aspects of basic macro- and microeconomics relevant to the construction industry, property development and property management.

## **16523**

### **BUILDING ECONOMICS 3**

8cp; 3hpw

*prerequisite: 16521 Building Economics 1*

Advanced techniques used by building economists in evaluating design alternatives are examined in detail, specifically life-cost planning and analysis, cost-benefit analysis, multi-objective decision analysis, value management and post-occupancy evaluation.

## **16531**

### **ESTIMATING 1**

4cp; 3hpw

*prerequisite: 16542 Quantities 2 or 16502 Quantity Surveying 2*

The development of techniques and skills for the pricing of construction work. Conceptual and bid estimating. Calculation of labour, material, plant, subcontract and indirect costs. Pricing of bill of quantities items. Obtaining and checking subcontract quotations. Tendering procedures.

## **16532**

### **ESTIMATING 2**

6cp; 2hpw

*prerequisites: 16531 Estimating 1*

A review of the techniques used in the preparation of competitive tenders for construction projects is undertaken. Tendering objectives and procedures are examined in detail. Bidding strategy theory and practice including statistical applications. Risk analysis and risk evaluation theory. Probabilistic estimating techniques.

## **16541**

### **QUANTITIES 1**

4cp; 2hpw

An introduction to quantity surveying services and methods. The measurement and calculation of quantities. Principles of measurement, set-out and notation.

## **16542**

### **QUANTITIES 2**

4cp; 2hpw

*prerequisite: 16541 Quantities 1*

The preparation and uses of a bill of quantities and types of documentation formats in common use. The acquiring of competence in preparing trade packages within a bill of quantities in accordance with the current Australian Standard Method of Measurement. Measurement rules and procedures. Computer measurement systems.

## **16551**

### **ECONOMICS**

8cp; 3hpw

Microeconomics – largely traditional microeconomic theory but with a property market slant. Each topic covered e.g. consumer equilibrium theory, production theory, competition theory, and resource pricing theory, is directly and indirectly related to the property market to ensure student understanding of the relevance, and application of, each concept. Macroeconomics – analytical tools are developed to provide insight into the nature of major common issues currently of importance to Australia. The inter-relationship of macroeconomic variables as well as the influence of microeconomic reform on the economy's overall efficiency is emphasised, with application to the property market stressed in each topic covered.

## **16552**

### **FINANCIAL AND TRUST ACCOUNTING**

8cp; 3hpw

An introduction to basic accounting: the preparation and use of accounting information; the tools used. Accounting concepts related to partnerships,

corporations, manufacturing enterprise; accounting related to business funds and cash flows. Trust accounting. Use of data processing.

### **16553**

#### **REAL ESTATE FINANCE**

*6cp; 2hpw*

*prerequisites: 16552 Financial and Trust Accounting; 16163 Appraisal and Statistics; 16150 Land Studies I*

An overview of the corporate financial system in Australia; concepts and techniques of financial evaluation; time value of money; risk management; financing of investments. Real estate investment analysis and methods of financing. The institutional structure of financing and financing techniques.

### **16554**

#### **URBAN ECONOMICS**

*6cp; 2hpw*

*prerequisites: 16551 Economics; 16651 Urban Planning*

Economic theories of land use including location theory, urbanisation, demographics of cities, role of levels of government, urban services, privatisation, urban problems, urban renewal and decentralisation.

### **16597**

#### **QUANTITY SURVEYING EXPERIENCE (F/T)**

### **16598**

#### **QUANTITY SURVEYING EXPERIENCE (P/T)**

### **16601**

#### **CONTEXTUAL STUDIES 1**

*4cp; 2hpw*

The history of the built environment and the role of the builder from ancient times to the present. The built heritage and the cultural significance of buildings. Building styles in Australian building.

### **16602**

#### **CONTEXTUAL STUDIES 2**

*4cp; 2hpw*

The analysis of Sydney's land use structure; introduction to planning methods; understanding the application of planning; addressing conservation and development goals in cities.

### **16611**

#### **BUILDING DESIGN**

*4cp; 2hpw*

*prerequisite: 16601 Contextual Studies I*

An examination of the parameters that affect building design; the problems that architects face in designing buildings; case studies of design, both professional and other. Design exercises.

### **16621**

#### **DESIGN EVALUATION**

*8cp; 2hpw*

An examination of the factors that affect building design; the problems that architects face in designing buildings; building orientation and thermal performance; design history and philosophy. Structural evaluation of building systems. Design exercises.

### **16622**

#### **ENVIRONMENTAL PLANNING**

*8cp; 3hpw*

Contextual issues relating to human's impact on the environment. Urban planning and sociology. Environmental impact assessment. Economic theories of land use including urbanisation, effects of controls, provision of services, rehabilitation and renewal, welfare provision, transportation and decentralisation. Legal aspects of town planning and the approval process.

### **16651**

#### **URBAN PLANNING**

*4cp; 1.5hpw*

Social and political systems particularly in the Western urban situation; stability and change.



## **16652**

### **ENVIRONMENTAL DESIGN**

*4cp; 2hpw*

Introduction to the history of architecture and building design as an art form. The relationship of people to the physical environment. The function of human and natural systems; their responses. The environmental impact of cities.

## **16701**

### **MATERIALS 1**

*6cp; 2hpw*

The properties and behaviour of building materials, in particular the characteristics of metal, timber and concrete. Material testing.

## **16702**

### **MATERIALS 2**

*4cp; 2hpw*

*prerequisite: 16701 Materials 1*

A detailed course in concrete technology emphasising those aspects of concrete properties which are relevant to the building site. The properties and uses of those metals commonly used in building. The properties and uses of mastics and sealants. Properties of surface coatings.

## **16711**

### **BUILDING SCIENCE**

*4cp; 1hpw*

The physics of heat, light and sound are covered with reference to applications in buildings.

## **16721**

### **MATERIAL SCIENCE**

*8cp; 2hpw*

The properties and behaviour of building materials, in particular the characteristics of metal, timber and concrete. Material testing. The theory of architectural science. Heat, light and sound principles and their application to building design and material selection.

## **16751**

### **INTERNATIONAL REAL ESTATE**

*6cp; 2hpw*

*prerequisite: 16551 Economics*

Analysing the factors that determine foreign investment; an examination of foreign investment in the real estate markets with particular focus on Australia and the Pacific regions.

## **16801**

### **LEGAL STUDIES 1**

*4cp; 2hpw*

An introduction to the legal system in Australia including sources of law, the court system and legal personnel. A detailed study of contract law and an outline of criminal law, civil law, industrial law, insurance law, dispute resolution, property law and the law of business associations.

## **16802**

### **LEGAL STUDIES 2**

*6cp; 2hpw*

*prerequisite: 16801 Legal Studies 1*

The tortious liability imposed by the law upon professionals, some major contractual problems related to the building industry and an outline of employment law and statutory industrial regulation.

## **16851**

### **INTRODUCTION TO LAW**

*6cp; 2hpw*

An introduction to the legal system in Australia including sources of law, the court system and legal personnel. A detailed study of contract law and an outline of criminal law, civil laws, industrial law, insurance law, dispute resolution, property law and the law of business associations.

**16853****PLANNING AND ENVIRONMENTAL LAW***6cp; 2hpw**prerequisite: 16851 Introduction to Law*

Social theory: analysis of planning theories; and environmental law; individual theories examined: contributions of theories to understanding society. Social values in Australia: effects of values and socialisation on behaviour norms. Housing in Australia: desired attributes; government policies. Public participation in community development. Resident actions. Effects of planning on individuals. Introduction to the design of subdivisions: drainage; road and services design. Transportation and its effects.

**16854****REAL ESTATE LAW AND CONVEYANCING***6cp; 2hpw**prerequisite: 16851 Introduction to Law*

The principles and details of real estate law including: the law relating to agents; consumer protection; sale of goods and trade practices legislation. Principles associated with the transfer and acquisition of property. Titles of property.

**16901****STRUCTURES 1***4cp; 2hpw*

Basic structural skills necessary for later use in analysis and design structures.

**16902****STRUCTURES 2***6cp; 3hpw**prerequisite: 16901 Structures 1*

The assessment of loads on structures according to SAA codes. The designing and checking of structural elements in timber, reinforced concrete and steel. Connections between these elements. Soils as materials for supporting buildings.

**16903****STRUCTURES 3***6cp; 2hpw**prerequisite: 16902 Structures 2*

The approximate analysis and description of indeterminate building frame behaviour. Prestressed concrete, reinforced concrete two-way slabs, structural brickwork, design of temporary works—formwork, scaffolding, strutted excavations, underpinning, shoring.

**16961****PROJECT***10cp; 4hpw*

A major project, undertaken by each student, involving the detailed study of an individual topic with the preparation of a comprehensive report.

**16997****LAND ECONOMICS EXPERIENCE (F/T)****16998****LAND ECONOMICS EXPERIENCE (P/T)****51388****COMMUNICATIONS***2cp; 1hpw*

Develops human communication skills and promotes understanding of the communication process. Emphasis is on business writing and effective speech communication. Intensive writing practice will be related to communication principles. Teaching will be by lecture for communication principles and in small group workshops for writing and oral communication.

## PROFESSIONAL MEMBERSHIP

Upon graduation, students may be eligible to apply for membership of the relevant professional bodies. Whilst enrolled at the University, students may take out student membership.

Students should note that the Faculty's regulations regarding approved practical experience as set out apply to the award of its degrees, and are different from, and may not meet, the practical experience requirements demanded by the professional bodies as a condition of membership.

Students should bear in mind their future professional intentions when satisfying the practical experience requirements for their degree.

Although reference should be made to specific organisations, a guide to the requirements of the various bodies for admission to full membership is as follows.

### AUSTRALIAN INSTITUTE OF VALUERS AND LAND ECONOMISTS (INC)

Student membership is actively sought by the Institute, and students are encouraged to join the various study groups, details of which are available from the Registrar.

The requirements for Associate Membership include:

- (a) a degree in a recognised course of study i.e. Bachelor of Applied Science (Land Economics) at the University of Technology, Sydney;
- (b) a minimum of two years' approved valuation experience prior to application.

Under the provisions of the *Valuers Registration Act*, valuers are required to be registered. Full details can be obtained from the Real Estate Services Council.

### REAL ESTATE INSTITUTE OF NSW (REI)

The REI is the main professional body for real estate agency practice. Student membership is available and encouraged.

Amongst other things, membership entitles the student to receive the REI journal and participate in any of their Chapters, such as: Property Management, Commercial and Industrial, and Valuation.

### AUSTRALIAN INSTITUTE OF QUANTITY SURVEYORS

Successful completion of the Construction Economics degree course satisfies the educational requirements for admission to full corporate membership of the AIQS, though particular experience requirements also need to be met. Part-time students can obtain this experience during the last two years of their course so that they will be eligible for interview (Assessment of Professional Competence) immediately upon completion. Reciprocal membership with the RICS and NZIQS is also available.

### AUSTRALIAN INSTITUTE OF BUILDING

The Bachelor of Building in Construction Management course satisfies the academic requirements for corporate membership of the Australian Institute of Building. There are additional professional experience requirements necessary for chartered membership concerning which students should refer to AIB for details.

# UNDERGRADUATE COURSE REGULATIONS

These regulations shall be read in conjunction with the University's Rules and By-law.

1. On the recommendation of the Examination Review Committee, the Faculty Board may in exceptional circumstances exempt a student from the regulations relating to progression.
2. The year in these regulations is defined as the program for a year shown in the current edition of the Faculty handbook.
3. A student may not enrol in subjects spanning more than two consecutive years of the course.
4. A student may undertake subjects totalling not more than eight credit points from the previous year while doing a full program from the next year.
5. A full-time student who is required to repeat subjects totalling more than eight credit points may enrol in subjects from the next year which would bring the student's total program to not more than 42 credit points.
6. A part-time student who is required to repeat subjects totalling more than eight credit points may enrol in subjects of the next year which would bring the student's total program to not more than 28 credit points.
7. In exceptional circumstances, course programs at variance with the above rules may be approved by the Associate Dean.

## GUIDELINES FOR THE AWARDING OF HONOURS

The award of Honours in undergraduate degree courses may be recommended by the Faculty Board for meritorious performance. Any such award is entirely within the discretion of the Faculty Board and numeric calculation of level of performance is only one of the matters taken into consideration.

## EXAMINATIONS AND ASSESSMENT

Final grading for progression is determined by combining the total marks for class work and for final examinations, if any. Class assignments and quizzes are therefore of great importance.

Final examinations may be held at the end of the year, but some examinations may also be held at the end of the Autumn semester.

Arrangements for informal examinations, conducted in class, will be announced by the lecturer in each case. It is each student's responsibility to be present.

## CONDUCT OF THE EXAMINATION REVIEW COMMITTEE

The Faculty Board has determined that the following procedures govern the operation of Examination Review Committees for each course.

1. The Examination Review Committee is a subcommittee of the Faculty Board with delegated power to make decisions on behalf of the Board.
2. The membership of the Examination Review Committee for each course shall be the academic staff offering the course; the Dean shall be a member ex officio.
3. The Examination Review Committee may modify the assessment of any examiner, subject to clauses 4 to 7 below.
4. A conceded pass in a subject may be awarded if the following are satisfied:
  - (a) The subject mark is in the range 45 per cent to 49 per cent.
  - (b) The student's average mark for the assessment period is 55 per cent or greater.
  - (c) Only one failure is recorded for that assessment period.
5. Clause 4 may be varied in exceptional circumstances.
6. Extenuating personal circumstances should not be taken into account in the examiners' assessments, but any

such circumstances and recommendations may be brought to the attention of the Examination Review Committee.

7. Results should not be withheld unless the issue is expected to be determined within a week (e.g. by the submission of further or revised work) of the commencement of the following semester. Otherwise a failure should be recorded.
8. The Dean or Associate Dean may amend the decisions of the Examination Review Committee in the case of obvious clerical or arithmetic errors.
9. Except as to (8), no alterations may be made to the subject assessments of the Examination Review Committee other than by the use of an official review procedure.
10. The Associate Dean may amend the progression of a student as determined by the Examination Review Committee in the light of subject reassessments.
11. All alterations made under (8) are to be reported to the Faculty Board.

### UNIVERSITY MEDAL

A student who displays exceptional merit in any of the undergraduate degree courses may be recommended for the award of the University Medal in addition to graduating with First Class Honours. Any such recommendation will be submitted to the appropriate University committee for approval.

### CHECKING OF ENROLMENT DETAILS

It is the student's responsibility to check that her or his enrolment is correctly shown on the listings which will be exhibited on the noticeboards during the first few weeks of each semester, and to notify the Faculty Office of any errors.

### ATTENDANCE

It is the student's responsibility to attend lectures and carry out all assignment and examination work in every subject in which he or she is enrolled.

On rare occasions, students repeating a subject may make special arrangements with the Coordinating Examiner regarding exemption from attendance at lectures for part of a course and/or credit for work previously completed. Any such arrangement must be documented, and it is the student's responsibility to obtain, in writing, clear evidence of the details of the arrangement from the Coordinating Examiner.

### ASSIGNMENTS

Assignments are to be handed in on or before the date and time specified in the program. Late assignments will not be accepted unless accompanied by a medical certificate or the like. It is each student's responsibility to make sure that the receipt of his or her assignment is noted by the lecturer.

Lecturers may, at their discretion, accept late assignments (and exact appropriate penalties), if students make arrangements in advance.

### WITHDRAWAL FROM SUBJECTS

Students are referred to University Rule 2.13 regarding withdrawal from subject(s) and their program of study.

The Associate Dean may grant approval for students to withdraw without academic penalty beyond this date.

Students having problems with the course caused by personal or work-related pressures are advised that the matter should, in the first instance, be discussed with the Program Director.

### QUERIES AND COUNSELLING

The Program Director and Subject Coordinators are course counsellors; queries of a general nature should be addressed to them. However, matters concerning a single subject should be raised in the first instance with the lecturer in that subject.

### PRIZES AND AWARDS

A number of prizes and awards are available to students in the Faculty (see the *UTS Calendar*).

## POSTGRADUATE COURSES BY COURSEWORK

All coursework postgraduate programs feature flexible and innovative attendance patterns, designed to suit busy practising professionals.

This attendance pattern involves full-time attendance of separate week-long or equivalent sessions (i.e. attendance over five consecutive days or two-and-a-half days on a given week, two-and-a-half days on another). This permits students to attend courses with minimal disruption to their professional and personal lives and allows those living in the country, interstate or overseas to participate. Specific attendance dates are available from the Faculty Office.

### Graduate Diploma in Urban Estate Management

### Graduate Certificate in Urban Estate Management

#### AIMS

Property is an exciting and challenging field that has become increasingly complex and professional over the last 20 years. The Urban Estate Management program is designed to provide

- valuers, real estate practitioners, property managers and other property practitioners with opportunities to enhance and extend their qualifications and expertise in the field;
- graduates in other fields such as architects, builders, planners, engineers, quantity surveyors, lawyers, project managers, economists and financiers with the opportunity to extend their professional qualifications and their understanding of property development and investment issues and techniques.

Expected outcomes of the program for students include:

- understanding of the social, environmental, political, economic, managerial, legal and physical systems which contribute collectively to the effective management and development of property assets;
- ability to initiate and/or create proposals for the development of property and, as part of this process, satisfy economic, social, financial, legal, planning and building constraints;
- ability to determine the needs of the client organisation;
- ability to establish an appropriate management structure to allow the development to be completed as efficiently as possible;
- ability to monitor the development process ensuring that all consultants, the project manager and contractors satisfy the client needs;
- ability to estimate the social costs and benefits of development and, with community acceptance of this ability, to manage a property investment portfolio in order to provide an adequate return to the owner;
- ability to satisfy the needs of tenants;
- ability to protect, maintain, develop and enhance the urban environment;
- development of a keen appreciation of the professional ethic which emphasises responsibility and responsiveness to the community to initiate and/or create proposals for the development of property.

#### QUALIFICATIONS FOR ADMISSION

To qualify for entry to the Graduate Diploma in Urban Estate Management an applicant shall hold a Bachelor's degree or a Diploma in Technology; or possess an equivalent qualification; or submit other evidence of general and professional qualification such that it demonstrates the applicant's educational preparation and capacity to pursue graduate studies.

The Graduate Certificate in Urban Estate Management is for applicants who have good practical experience but may lack the professional qualifications or academic entry requirements for the Diploma. Applicants will be assessed on their individual merits. On completion of the Certificate, articulation with the Graduate Diploma in Urban Estate Management or the Master of Land Economics is possible.

For both the Certificate and Diploma programs, all non-degree qualified applicants seeking admission are required to satisfy a Faculty interview panel that their experience is equal to the rigorous requirements of the course at whichever level they seek to enter.

## STRUCTURE

The Graduate Diploma in Urban Estate Management is a two-year part-time or one-year full-time course. Students must achieve 48 credit points from the subjects listed below. There are opportunities for additional study leading to the awards of Master of Land Economics or a Master of Project Management.

The Graduate Certificate in Urban Estate Management is a one-year part-time, full-fee-paying course. Students must achieve 24 credit points from the subjects listed below which are shared with the diploma program.

All subjects are provided by the Faculty. Not all subjects will be offered in each year and availability will depend upon viable subject enrolments.

## COURSE STRUCTURE

12511	Building Technology and Regulation (6cp)
12518	Property Transactions (6cp)
17701	Environment and Control <sup>1</sup> (6cp)
12525	Property Analysis 1 (6cp)
12535	Property Analysis 2 (6cp)
12515	Property Life Cycle (6cp)
12524	Property Development (4cp)
12543	Property Development Project (4cp)
17703	Property Taxation <sup>1</sup> (4cp)
17517	Research Methodology <sup>1</sup> (4cp)
12550	UEM Project (6cp)
17507	Industry Project Studies 1 <sup>2</sup> (12cp)
17508	Industry Project Studies 2 <sup>2</sup> (12cp)
	Elective(s) (maximum 12cp)

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<sup>1</sup> Subjects shared with Master of Land Economics

<sup>2</sup> Subjects shared with Master of Project Management. These subjects will only be credited towards a Graduate Certificate in Urban Estate Management if the projects selected are property related.

## Graduate Diploma in Building Surveying and Assessment

### AIMS

The aims of this two-year part-time course are to enable students to lead, coordinate and/or participate in the Local Government Approvals Process as multiskilled professional building surveyors/certifiers, and to assess buildings on behalf of owners as an extension of building surveying to private enterprise beyond that of certification. To this end, graduates of the course will be competent in the following roles:

- (a) multiskilled surveyors and facilitators within multidisciplinary groups engaged in the assessment and approval of urban projects on behalf of the community, via local government;
- (b) professional building surveyors in private enterprise engaged in the certification of complexes for compliance with the relevant legislation;
- (c) professional building surveyors in private enterprise, who are technically competent to assess buildings on behalf of owners for reasons such as risk, safety, fitness of purpose and overall investment potential;
- (d) showing an understanding of the roles and practices of all specialist disciplines (environmental health surveyors, planners, certifiers/checkers, design consultants, contractors, asset managers, and the like); their integration in the regulation, control, assessment, maintenance, and certification for compliance of complexes, and their criticality both in the project process and the life cycle of the complex (or asset) especially with respect to hazardous and complex buildings/facilities;
- (e) in the preparation of codes and standards, and understanding the intent of the provisions of the relevant legislation;
- (f) in the assessment of designs prepared in accordance with performance objectives;
- (g) in presenting sound arguments which are cognisant of the social, legal, technical, safety, health and environmental issues, and are properly assessed and evaluated in any approval, study, assessment or certification;
- (h) in satisfying the requirements of item (g) within a cost-effective framework;
- (i) in presenting comprehensive evidence before a Board of Referees or a Court as a professional expert witness.

The graduates of this course are intended to make a major contribution to the industry as well as the community as more informed professionals returning to their own disciplines, as building surveyors at senior levels in local government, or as consultant building surveyors involved in certification or assessing building performance for owners, users and investors.

### QUALIFICATIONS FOR ADMISSION

To qualify for entry an applicant should hold a Bachelor's degree or a Diploma in Technology; or an equivalent qualification; substantial relevant experience; or submit such other evidence that demonstrates the applicant's capacity to pursue graduate studies.

Eligible applicants who were unable to complete undergraduate degrees in either Environmental Health or Building Surveying may be required to undertake additional study prior to commencement, in the areas of Building Technology and Engineering Fundamentals. Further information and advice on this can be obtained from the Program Director.



## STRUCTURE

The Graduate Diploma in Building Surveying and Assessment requires the completion of eight six-credit-point subjects totalling 48 credit points. The course is undertaken by attendance at eight week-long (or equivalent) sessions over two years.

The course is divided into two blocks each containing four six-credit-point subjects. Only one block of four subjects will run each year.

## COURSE STRUCTURE

### Block 1

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12518	Property Transactions (6cp)
17701	Environment and Control (6cp)
xxxxx	Performance-based Certification (6cp)
xxxxx	Natural Disasters and Risk Management (6cp)

### Block 2

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12170	Building Assessment (6cp)
xxxxx	Fire Engineering (6cp)
12115	Building Science and Environmental Factors (6cp)
xxxxx	Special Issues (6cp)

## Graduate Certificate in Building Performance

### AIMS

The aims of this one-year part-time, full-fee-paying course are:

- to provide an alternative entrance path for students wishing to enter the Graduate Diploma in Building Surveying and Assessment course who do not meet the entrance requirement (students who successfully complete this course may enter the Graduate Diploma Building Survey and Assessment course with advanced standing) and
- to provide an avenue for students to gain expertise in the area of building performance assessment.

Graduates of this course will have:

- a detailed knowledge of the effect of fire on buildings, a knowledge of building regulations related to fire and how to prevent or minimise fire-related damage;
- a detailed knowledge of how to assess the condition of the structure and a detailed knowledge of the environmental performance of buildings;
- an understanding of the building surveying certification process with particular reference to performance-based certification.

### QUALIFICATIONS FOR ADMISSION

To qualify for entry an applicant should hold a Bachelor's degree or a Diploma in Technology; or a tertiary qualification in a related field with at least three years' relevant experience and a demonstrated capacity to pursue graduate studies.

## STRUCTURE

The Graduate Certificate in Building Performance requires the completion of four six-credit-point subjects totalling 24 credit points. The course is undertaken by attendance at four week-long (or equivalent) sessions over one year.

## COURSE STRUCTURE

xxxxx	Fire Engineering (6cp)
12170	Building Assessment (6cp)
12115	Building Science and Environmental Factors (6cp)
xxxxx	Performance-based Certification (6cp)

## Graduate Certificate in Building Regulations

### AIMS

The aims of this one-year part-time, full-fee-paying course are:

- to provide an alternative entrance path for students wishing to enter the Graduate Diploma in Building Surveying and Assessment course who do not meet the entrance requirements (students who successfully complete this course may enter the Graduate Diploma in Building Surveying Assessment course with advanced standing) and
- to provide an avenue for students to gain expertise in the area of building regulations.

Graduates of this course will have:

- an understanding of the legal framework of regulations;
- an understanding of the planning process as it relates to building surveying;
- an understanding of the building surveying certification process with particular reference to performance-based certification;
- an understanding of the possible causes of damage to buildings, how to calculate the risks involved and how to manage them.

## QUALIFICATIONS FOR ADMISSION

To qualify for entry an applicant should hold a Bachelor's degree or a Diploma in Technology, or a tertiary qualification in a related field with at least three years' relevant experience and a demonstrated capacity to pursue graduate studies.

## STRUCTURE

The Graduate Certificate in Building Regulations requires the completion of four six-credit-point subjects totalling 24 credit points. The course is undertaken by attendance at four week-long (or equivalent) sessions over one year.

## COURSE STRUCTURE

- 12518 Property Transactions (6cp)
- 17701 Environment and Control (6cp)
- xxxxx Performance-based Certification (6cp)
- xxxxx Natural Disasters and Risk Management (6cp)

## Master of Planning

### Graduate Diploma in Planning

The course is designed to meet the needs of professionals in the many different aspects of urban development, including planners, architects, engineers, social planners, lawyers, managers, and those involved in finance, investment and development.

The Graduate Diploma in Planning is offered as a two-year, part-time terminating course. Students enrolled in the Master of Planning complete an additional year of part-time study.

The Master of Planning degree has been accredited by the Royal Australian Planning Institute, and meets the educational requirements for corporate membership of the Institute.

## AIMS

The course focuses on the processes by which development takes place, and seeks to improve the quality of the physical planning and development control which form an integral part of those processes. The course addresses the major social and environmental issues of the cities and regions; emphasises the economics and the practicalities of how development takes place; treats the processes of statutory planning and development control as subjects of academic inquiry, and capable of much higher levels of performance; develops skills for understanding how planning decisions influence costs, function, feasibility, building form and aesthetics; adopts an integrated, skills-based educational approach; and provides practical experience of innovative planning techniques.

The aims of the course can best be met if a significant component emulates planning practice. This is feasible in a part-time course if the students have had relevant work experience since gaining an appropriate first degree, if they are concurrently working in a related area, and if the attendance pattern provides for periods of full-time participation in lectures, seminars and group project work.

The course has been structured around the core subjects, Planning 1, 2 and 3. These subjects consist primarily of a continuing planning project; content and organisation are described in detail below. The other subjects have been structured to provide knowledge, context, concepts and techniques which can be applied in the project work.

## **QUALIFICATIONS FOR ADMISSION**

To be eligible for entry an applicant should possess an appropriate first degree and at least three years' relevant experience. Appropriate first degrees would include a Bachelor's degree in planning, architecture, geography, economics, land economics, commerce, law, engineering and building. Other qualifications may be accepted if supported by extensive relevant work experience. Work experience is relevant if it includes the holding of a responsible position related to the planning or administration of land, or the design, financing, regulation, construction or management of buildings or infrastructure.

## **STRUCTURE**

The Graduate Diploma in Planning requires the completion of subjects totalling 48 credit points, by attending eight week-long sessions over two years.

The Master of Planning requires the completion of 72 credit points over three years; 10 week-long sessions in the first two-and-a-half years of the course and attendance for the equivalent of two weeks in the last half year.

## **COURSE STRUCTURE**

Credit points are shown in brackets.

### **Year 1: Graduate Diploma and Master's degree**

17510	Planning 1 (8cp)
17511	Urban Economics and Finance 1 (4cp)
17516	Environment and Infrastructure 1 (4cp)
17513	Urban Design and Management 1 (4cp)
59337	Sociology and Planning <sup>1</sup> (2cp)
17515	Environmental Law <sup>2</sup> (2cp)

### **Year 2: Graduate Diploma and Master's degree**

17520	Planning 2 (8cp)
17521	Urban Economics and Finance 2 (4cp)
17522	Environment and Infrastructure 2 (4cp)
17523	Urban Design and Management 2 (4cp)
59336	Politics and Planning <sup>1</sup> (2cp)
17525	Property and Development Law <sup>2</sup> (2cp)

### **Year 3: Master's degree**

17530	Planning 3 (4cp)
17751	Specific Issues in Planning (4cp)
17755	Graduate Project (Planning) (16cp)

<sup>1,2</sup> These subjects alternate with each other in successive years.

## Master of Project Management

## Graduate Diploma in Project Management

## Graduate Certificate in Project Management

The Project Management program provides a comprehensive grounding in both the underlying principles and practical aspects of project management as a powerful approach to administering complex tasks.

Delivered through coursework, distance and action learning, the courses in the program focus on the project life cycle, and are grounded in a generic core. Students also have opportunities for focusing on the project process as applied to specific project types and industries such as building and construction, information technology, organisational development or manufacturing.

### AIMS

The aims of the Project Management program are to develop practitioners who are able to:

- understand and apply project management principles and techniques;
- lead a group of specialist professionals engaged in the overall management, planning and control of projects across a wide range of industries and technologies;
- appreciate the roles and utilise the services of specialist consultants and contractors used in the project delivery process;
- communicate effectively, and at all levels;

- lead and motivate individuals and project teams;
- make decisions and/or policies and/or solutions on the basis of either complete or incomplete information;
- identify options and utilise the benefits of circumstance or unexpected opportunity;
- establish clear guidelines for complex tasks/situations and facilitate completion no matter what problems arise;
- satisfy economic, social, financial, legal, environmental and similar requirements;
- work within all corporate, production, organisational and/or technological constraints;
- evaluate the social impact, cost and benefits of the project and accurately assess community acceptance or otherwise;
- evaluate completed projects and ensure information about lessons learnt is available for improvement of future projects and processes.

### QUALIFICATIONS FOR ADMISSION

To qualify for entry to either the Master in Project Management or the Graduate Diploma in Project Management an applicant shall hold a Bachelor's degree or an equivalent qualification, or submit other evidence of general and professional qualifications such that it demonstrates the applicant's educational preparation and capacity to pursue graduate studies at the desired level. A minimum of five years' work experience is expected.

To qualify for entry to the Graduate Certificate in Project Management an applicant shall hold a Bachelor's degree or a Diploma in Technology or an equivalent qualification; or submit other evidence of general and professional qualifications such that it demonstrates the applicant's educational preparation and capacity to pursue graduate studies at the desired level.

It is usual for graduates from whatever discipline to be accepted for enrolment. It should also be noted that the function of project management itself is such that substantial work experience can also provide a sound basis for formal study. The Project Management program is thus also designed for professional project managers who wish to further their knowledge base but who may lack degree or Diploma of Technology qualifications. Thus, all non-degree-qualified applicants must satisfy a Faculty interview panel that their practical experience is equal to the requirements of the course at whichever level they seek to enter.

Articulation from the Graduate Certificate to the Graduate Diploma and Master in Project Management will be allowed for Certificate students with the approval of the Director of Program.

Graduates of the Graduate Diploma in Urban Estate Management enrolling in the Master of Project Management, would be entitled to exemptions of up to 36 credit points plus credit up to an additional 12 credit points for credit points gained in the Graduate Diploma in Urban Estate Management in subjects from the Master of Project Management as electives, or in subjects shared by the Urban Estate Management and Project Management programs.

All students are expected to be proficient in English comprehension and expression. Applicants previously educated in a language other than English may be required to undertake an assessment as approved by the Academic Board.

## STRUCTURE

The program structure allows students a choice of entry requirements and study-paths leading to award of Graduate Certificate (24 credit points), Graduate Diploma (48 credit points), and Master of Project Management (72 credit points). Each stage is self-contained and can be undertaken through part-time or full-time study.

## COURSE STRUCTURES

### Master of Project Management

#### *Recommended part-time program*

Year 1		CP
17101	Project Process 1	6cp
17201	Project Process 2	6cp
17301	Project Process 3	6cp
17401	Project Process 4	6cp
Year 2		CP
17105	Industry-specific Project Process 1	6cp
17205	Industry-specific Project Process 2	6cp
17305	Project Technologies 1	6cp
17405	Project Technologies 2	6cp
Year 3		CP
17600	Graduate Project (MPM) P/T	14cp
17506	Industry-specific Project Process 3	6cp
17517	Research Methodology	4cp
	<i>or</i>	
82905	Research Methods	4cp

#### *Recommended full-time program*

Year 1		CP
17101	Project Process 1	6cp
17201	Project Process 2	6cp
17301	Project Process 3	6cp
17401	Project Process 4	6cp
17517	Research Methodology	4cp
	<i>or</i>	
82905	Research Methods	4cp
17601	Graduate Project (MPM) F/T	8cp

Year 2	CP
17105 Industry-specific Project Process 1	6cp
17205 Industry-specific Project Process 2	6cp
17305 Project Technologies 1	6cp
17405 Project Technologies 2	6cp
17601 Graduate Project (MPM) F/T	6cp
Elective(s)	6cp

**Notes**

1. Graduates of the Graduate Diploma in Urban Estate Management enrolling in the Master of Project Management, would be entitled to exemptions of up to 36 credit points plus credit up to an additional 12 credit points for credit points gained in the Graduate Diploma in Urban Estate Management in subjects from the Master of Project Management, as electives, or in subjects shared by the Urban Estate Management and Project Management programs.

2. Suitably qualified applicants may, with the approval of the Director of Program, substitute

17507 Industry Project Studies 1 (12cp)  
17508 Industry Project Studies 2 (12cp)  
17509 Industry Project Studies 3 (12cp)

or

Electives 1 (12cp maximum)

for up to 36 credit points of subjects listed in the recommended full- and part-time programs except the subjects 17101 Project Studies 1 to 17401 Project Process 4 and 17600 or 17601 Graduate Project which are core subjects for the Master's program. The Industry Project Studies subjects are intended as individual or group action learning or research projects.

3. 82905 Research Methods from the Master of Design (by coursework), 17517 from the Master of Land Economics or an equivalent Research Methods subject approved by the Director of Program is a corequisite for enrolment in 17600 and 17601 Graduate Project.

4. 17600 or 17601 Graduate Project (MPM) is required for graduation at Master's level unless an exemption from the subject is granted by the Director of Program with the approval of the Graduate Studies Committee.

5. Other program variations will be permitted with approval of the Director of Program.

**Graduate Diploma in Project Management***Recommended part-time program*

Year 1	CP
17101 Project Process 1	6cp
17201 Project Process 2	6cp
17301 Project Process 3	6cp
17401 Project Process 4	6cp

Year 2	CP
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17105 Industry-specific Project Process 1	6cp
17205 Industry-specific Project Process 2	6cp
17305 Project Technologies 1	6cp
17405 Project Technologies 2	6cp
or	
Elective	6cp

*Recommended full-time program*

Year 1	CP
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17101 Project Process 1	6cp
17201 Project Process 2	6cp
17301 Project Process 3	6cp
17401 Project Process 4	6cp
17105 Industry-specific Project Process 1	6cp
17205 Industry-specific Project Process 2	6cp
17305 Project Technologies 1	6cp
17405 Project Technologies 2	6cp
or	
Elective	6cp

**Notes**

1. Suitably qualified applicants may, with the approval of the Director of Program, substitute

17507 Industry Project Studies 1 (12cp)  
17508 Industry Project Studies 2 (12cp)  
17509 Industry Project Studies 3 (12cp)

or

Electives (6cp maximum)

for up to 24 credit points of subjects listed in the recommended full- and part-time programs except the subjects 17101 Project Studies 1 to 17401 Project Process 4 which are core subjects for the Master's program. The Industry Project Studies subjects are intended as individual or group action learning or research projects.

2. Other program variations will be permitted with approval of the Director of Program.

## Graduate Certificate in Project Management

### Recommended program

- 17101 Project Process 1 (6cp)  
 17201 Project Process 2 (6cp)  
 17301 Project Process 3 (6cp)  
 17401 Project Process 4 (6cp)

or

- 17105 Industry-specific Project Process 1 (6cp)  
 17205 Industry-specific Project Process 2 (6cp)  
 17305 Project Technologies 1 (6cp)  
 17405 Project Technologies 2 (6cp)

or

Elective (6cp)

### Notes

- Suitably qualified applicants may, with the approval of the Director of Program, substitute
 

17507 Industry Project Studies 1 (12cp)  
 17508 Industry Project Studies 2 (12cp)  
 17509 Industry Project Studies 3 (12cp)

 for up to 24 credit points of subjects listed in the recommended program if these subjects are taken as part of an industry-sponsored program.
- Other program variations will be permitted with approval of the Director of Program.

## Master of Land Economics

### AIMS

The Master of Land Economics will enable students to study matters relating to the land economics field, with the purpose of adding value to their professional activity and minimising the cost to society in general and to clients in particular.

The course has three broad aims:

- to provide a thorough and advanced grounding in the land economics process, markets and institutions;
- to develop a range of skills and analytical techniques which will be of use to those seeking to work as researchers, analysts, managers or consultants within the land economics sector; and
- to provide a learning environment which will encourage the further development of critical thinking and value judgment skills at a strategic level in the field of land economics.

It is proposed to commence the program in 1996. Applicants should however confirm this with the Faculty Office.

### STRUCTURE

The Master of Land Economics requires the completion of 48 credit points on a two-year part-time basis in 1996. Students will undertake four week-long sessions in the first year and one week-long session and the Research Project subject in the second year.

### COURSE STRUCTURE

- 17701 Environment and Control<sup>1</sup> (6cp)  
 xxxxx Advanced Property Finance (6cp)  
 17703 Property Taxation<sup>1</sup> (4cp)  
 17517 Research Methodology<sup>1</sup> (4cp)  
 xxxxx Elective (4cp)  
 xxxxx Contemporary Issues in Land Economics (6cp)  
 xxxxx Research Project – M Land Ec (18cp)

<sup>1</sup> Subjects shared with the UEM program.



## Master of Building in Construction Economics

### AIMS

The course aims to provide a learning environment that encourages the further development of critical thinking and value judgment skills at a strategic level in the field of Construction Economics. It addresses issues of sustainability that are expected to be at the forefront of the discipline early in the next century, and thereby aims to prepare professionals who soon will be faced with this new and challenging responsibility. The course theme is 'economic approaches to ecologically sustainable development (ESD)'.

### QUALIFICATIONS FOR ADMISSION

Admission to this course will be assessed on merit given that a four-year full-time equivalent Bachelor's degree in a building-related discipline is a prerequisite qualification. Furthermore, entrants will need to demonstrate that they have at least three years' relevant experience in the construction industry. This requirement will be waived, however, where applicants have obtained an Honours level degree. The course will provide a means for applicants in a different yet allied profession to acquire a specialisation in construction economics.

### STRUCTURE

The course is offered to both local and international students as two years of part-time or one year of full-time study (48 credit points) and is a full-fee-paying course. The course is run during normal teaching weeks and comprises coursework studies and the preparation of a written thesis. The coursework component comprises lectures and workshops on topics that are at the leading edge of research in environmental economics.

### COURSE STRUCTURE

Credit points are shown in brackets.

#### One-year full-time program

##### Year 1

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17550	Environmental Economics (24cp)
17560	Research Thesis (24cp)

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#### Two-year part-time program

##### Year 1

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17550	Environmental Economics (24cp)
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##### Year 2

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17560	Research Thesis (24cp)
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# POSTGRADUATE SUBJECT DESCRIPTIONS

## Guide to subject descriptions

The subject descriptions shown below indicate the subject code and name, the number of credit points for the subject (e.g. 3cp). For some subjects, there may also be practical components off campus, and this is indicated in the text. Also shown are the prerequisites and/or corequisites if any, and a brief outline of the content.

Prerequisites are subjects which must be completed before taking the subject to which they refer. Corequisites are subjects which must be completed before or be taken concurrently with the subject to which they refer.

## 12115

### BUILDING SCIENCE AND ENVIRONMENTAL FACTORS

4cp

Examines the theory of building environmental performance and applies the theory to issues of building occupancy and public health and safety.

## 12157

### RISK MANAGEMENT AND LOCAL GOVERNMENT

3cp

Risk assessment techniques and regimes, quantitative methods, risk reduction and management, approvals and risk, decision making in approvals process.

## XXXXXX

### NATURAL DISASTERS AND RISK MANAGEMENT

6cp

Natural hazards and their management, risk assessment techniques and regimes, quantitative methods, risk reduction and management, approvals and risk, decision making in approvals process.

## 12158

### CODES AND STANDARDS 1

2cp

Performance concepts, performance versus prescriptive provisions, appraisal methods, intent of codes and regulations, regulation-making process, Building Code of Australia, engineered approach for existing buildings, discretion and liability.

## 12164

### FIRE ENGINEERING 1

3cp

Chemistry and physics of fire, fire initiation and development, design fires, passive fire protection, smoke management, radiant heat assessment.

## 12165

### STRUCTURAL PERFORMANCE

3cp

Structural behaviour under extreme loading and fire behaviour of materials at elevated temperatures, degradation of materials' properties and antique building materials, refurbishment issues and quality assurance.

## 12167

### LEGAL PROCEDURES 3

2cp

Professional statutory responsibility, negligence, liability in contract and tort, statutory time limitations, integration of development, building and health matters, case studies.

## 12168

### DEVELOPMENT CONTROL INTERFACE

4cp

Development control as a system for managing the urban environment, featuring the origins of development control, development control and conflict, the nature of rules, review of decisions, the urban designer's view of a place, the planner's view of a site, case studies, the heritage assessment process, planning as

an ongoing process, the values of planning and public participation.

### 12169

#### FIRE ENGINEERING 2

3cp

Occupant behaviour and egress in fires, detection and early warning systems, emergency lighting, active fire protection, maintenance of essential services, regulations, basic risk assessment.

### 12115

#### BUILDING SCIENCE AND ENVIRONMENTAL FACTORS

6cp

Concepts of building performance (heat, light, sound and vibration), human environmental factors, air and water pollution, waste management, construction safety issues, internal environmental issues, design for persons with disabilities, crowd behaviour and control.

### XXXXX

#### FIRE ENGINEERING

6cp

Concepts and physics of fire initiation and development, radiant heat assessments, prediction of egress times, principles of smoke management, fire protection systems, performance of building materials, fire safety engineering, performance-based assessment, maintenance programs for fire protection and safety systems.

### 17701

#### ENVIRONMENT AND CONTROL

6cp

Property development and statutory control processes, including both statutory and strategic planning issues and practice. Alternative solutions and approaches to environmental issues and sustainable development. Community consultation and dispute resolution. Communication of strategic advice to stakeholders on environmental issues.

### XXXXX

#### PERFORMANCE-BASED CERTIFICATION

6cp

Intent of codes and regulations, regulation-making process, the Building Code of Australia, performance versus prescriptive provisions, drafting of building regulations, case studies, certification process, certification of a major building.

### 12170

#### BUILDING ASSESSMENT

6cp

The assessment of the technical condition of existing buildings and the impact of that condition on possible future use of the building. Detailed knowledge of the construction methods used in the past and the likely deterioration with time that would be expected of the building elements.

### 12170

#### BUILDING ASSESSMENT

6cp

Building services, maintenance, technological change, diagnostic, security systems and assessment practice.

### 12171

#### CERTIFICATION PROCESS AND PRACTICE

4cp

Principles of and criteria for certification, qualifications, appropriate processes, management and coordination of professional groups, negotiation, accreditation, legal issues in practice, professional practice (code of ethics).

### 12172

#### CODES AND STANDARDS 2

2cp

Drafting of building regulations, policies and codes, preparation of explanatory documents and commentaries, appropriate styles, case studies.

**12174****SPECIAL ISSUES IN BUILDING SURVEYING AND ASSESSMENT**

6cp

Completion of the subject will enable students to conduct research into specific issues confronting the professional building surveyor in practice, and to present their findings to their peers in a comprehensive report and paper, to a standard suitable for publication in a referred journal. Possible topics include healthy buildings, environmental safety, building performance and life costs, planning for emergencies in local precincts, minimisation of the greenhouse effect through effective planning controls.

**XXXXX****SPECIAL ISSUES**

6cp

Preparation and submission of a 10,000 word report, involving the detailed study of an individual topic related to the field of building surveying and assessment. The thesis shall comprise identification of the problem, a thorough literature review of the topic and presentation of a state-of-the-art report. Presentation of report to peers.

**12511****BUILDING TECHNOLOGY AND REGULATION**

6cp

A critical examination of building structure, cladding and service systems for a range of building types; maintenance, life cycle costing and energy efficiency; purpose and application of building regulations; interpretation of building documentation; in the context of property development and management processes.

**12515****PROPERTY LIFE CYCLE**

6cp

A strategic and responsible approach to management of property assets requires the ability to understand and respond to economic and social influences which affect the performance of property through a life cycle which begins with raw

land and includes development, management and redevelopment. Marketing and effective property management techniques are examined as responses to changing economic and social forces in the strategic management of property assets.

**12516****URBAN SOCIOLOGY**

2cp

Social theory: analysis of theories; individual theories examined; contributions of theories to understanding society. Social values in Australia: effects of values and socialisation on behaviour; norms. Poverty and social justice: history; interpretation of concept. Housing in Australia: desired attributes; government policies. Public participation in community development.

**12517****PROPERTY MANAGEMENT**

3cp

Appraisal of rent collection procedures and policies. Administration of tenancies and leases. Compensation. Taxation. Risk management. Investment portfolio analysis and management. Social responsibilities. Maintenance and building management. Acquisition and disposal. Budgeting and accounting requirements.

**12518****PROPERTY TRANSACTIONS**

6cp

The nature of the ownership of personal property including intellectual property; the nature of ownership of real property including the related concepts of title, leases, mortgages and conveyancing transactions, options to purchase; an overview of the law of contract with emphasis on construction industry contracts and joint venture agreements; the law of negligence including liability for negligently given advice or certification, the operation of the statute of limitations; the manner in which local government building, planning and subdivision approvals are given including the mechanisms for appeal to the Land and Environment Court.

**12524****PROPERTY DEVELOPMENT****4cp**

This subject provides a framework, tools, techniques and practical approaches for individuals and organisations involved in property development. Material covered will include strategic planning, introduction to project management of property developments; team formation, development and management; project initiation, planning, procurement and completion, the property development process, organisational structure and culture, human resource management; industrial relations, characteristics and needs of different property development types.

**12525****PROPERTY ANALYSIS 1****6cp**

General accounting principles; capital budgeting techniques; discounted cash-flow analysis; risk analysis techniques; interest rate theory and discount rates; traditional and contemporary principles and methods of valuation, advanced capitalisation and other valuation methods; valuation of different classes of property, sources of finance.

**12527****PROPERTY FINANCE****3cp**

Computer application of property taxation and general accounting principles, discounted cash flow and risk management techniques. Sources of property finance.

**12528****LEGAL PROCEDURES 2****3cp**

The primary focus of this course will be legislative building control, subdivision, changes in use and other matters relating to local government. Operation of the Land and Environment Court will be covered and some time will be devoted to landlord and tenant matters and aspects of common law relating to ownership of real property.

**12535****PROPERTY ANALYSIS 2****6cp**

Site identification and analysis; financial feasibility analysis for both residential and non-residential properties; estimation of development feasibility components; sensitivity and risk analysis; preparation of development business plans and finance proposals; investment market and portfolio analysis; property investment portfolio management including impact of economic size, market constraints, physical constraints, maintenance of market position, reappraisal and culling; risk exposure, profiles, gearing and management; current issues in property and non-property asset investment; use of basic computer applications.

**12542****MARKETING****2cp**

The student will be able to understand the role played by marketing generally and be able to apply it to all aspects of urban estate management.

**12543****PROPERTY DEVELOPMENT PROJECT****4cp**

Integration of the property development process from initiation of development proposal to completion of project. Student teams prepare and present a business case for a property development project which they have identified in response to a given client brief.

**12545****PROPERTY ECONOMICS 4****4cp**

Corporate strategy, investment market and portfolio analysis, property investment as a component, investment portfolio management, financing and risk management.

**I2549****ORGANISATIONAL POLICY AND MANAGEMENT**

2cp

Provides informed perspective of the corporate function; the formulation of objectives, policy and strategy; how corporate plans and strategic plans are prepared as an outgrowth of objectives and policy; the various styles of management with emphasis on the suitability of each; team building; the recruitment of executive and senior management personnel; the purpose, formation, and management of joint ventures.

**I2550****UEM PROJECT**

6cp

An independent study in an area related to Urban Estate Management, selected by the student, subject to approval of the Director of Program.

**I2551****URBAN LAND USE AND PLANNING**

3cp

The main forces shaping urban land use, the main issues this produces, the land use planning response, the main methods of urban planning, focus on localities and regions, the environmental, economic and social forces which lie behind the policies and restrictions produced by planning agencies.

**I7101****PROJECT PROCESS 1**

6cp

An introduction to and overview of generic project management. Characteristics of projects and project management; generic project phases and life cycles; an introduction to project management processes; the context of project management; teams and teamwork in project management.

**I7105****INDUSTRY-SPECIFIC PROJECT PROCESS 1**

6cp

**I7205****INDUSTRY-SPECIFIC PROJECT PROCESS 2**

6cp

**I7506****INDUSTRY-SPECIFIC PROJECT PROCESS 3**

6cp

Each subject in this strand will present a project management case study for a specific industry or project type. Industry-specific project processes and practices will be examined and critically evaluated and compared with generic process models. Building and construction industry projects will form the basis of one subject in this strand. Other specific industries and project types which may be examined in a subject in this strand, are: Information Technology, 'soft' projects such as Research and Development; Change Management or Organisation Change; and Product Development.

**I7201****PROJECT PROCESS 2**

6cp

Examines the first, or Initiation and Concept phase, of a four-phase generic project process or life cycle: stakeholder identification; identification of needs and opportunities; internal and external factors affecting projects; project appraisal; project objectives and performance measures; generation and analysis of options; feasibility studies and sensitivity analysis; initial project time, cost, risk and quality plans; testing and approvals; assessment of process capability.

**I7205****PROJECT MANAGEMENT STUDIES**

5cp

Examination of three further generic project management functions which are particularly relevant to 17201 Project Process 2: management of project scope,

decision making and project organisation. Examination of three further environmental constraints identified in 17101 Project Process 1, namely financial, political and legal constraints. Economic and financial aspects as they apply specifically to projects.

### **17301**

#### **PROJECT PROCESS 3**

6cp

Examines the second or Planning and Development phase of a four-phase generic project process or life cycle: project scope management; project scheduling; development of project budgets; project quality management; project organisation and resourcing; project communication planning; project risk management; project documentation; change management; asset management; value management.

### **17305**

#### **PROJECT TECHNOLOGIES 1**

6cp

### **17405**

#### **PROJECT TECHNOLOGIES 2**

6cp

Each subject in this strand will cover, in more depth than is possible in other parts of the course, one or more project management topics which may be drawn from the following: the latest research and development in project management; Managing Project Interfaces; Project Human Resource Management; Project Organisation; Project Leadership; Risk Management; Project Information Management; Advanced Project Cost and Scheduling; Value Engineering and Management; Risk Management; Quality Management and Quality Assurance; Financial Management; Marketing; Projects and the Environment.

### **17401**

#### **PROJECT PROCESS 4**

6cp

Examines the third (Implementation) and fourth (Completion) phases of a four-phase generic project process or life cycle: management of internal and external project environments; management of

stakeholder relationships, project scope and change control; project time and cost control; quality control and quality assurance; management of project human resources; project information management; contract management; conflict management; project commissioning and handover; post-project evaluation; continuous improvement.

### **17516**

#### **ENVIRONMENT AND INFRASTRUCTURE 1**

4cp

The physical environment and development: ecology, geomechanics, climate and noise measurement, with an examination of erosion, water pollution, solar access, air quality, wind effects and noise pollution; the source of environmental design criteria for urban development. Managing movement: current and projected practice in transportation engineering, traffic management, public transport provision and the design, construction and maintenance of roads; paratransit; pedestrian requirements and opportunities.

### **17506**

#### **BUILDING AND CONSTRUCTION PROJECT MANAGEMENT STUDIES 2**

6cp

An examination of the remaining basic project management functions as they apply specifically to building and construction projects: management of project resources; management of project human resources; management of project communications, including building project negotiation; and management of construction project contracts and procurement. Detailed examination of three further topics of particular importance for building and construction projects: planning methods and techniques; post-project analysis; and occupational health and safety. Examination of industrial relations and related matters in the context of building and construction: industrial arbitration, organisations and policies, dispute resolution and cost of disputes.

**17507****INDUSTRY PROJECT STUDIES 1**

12cp

**17508****INDUSTRY PROJECT STUDIES 2**

12cp

**17509****INDUSTRY PROJECT STUDIES 3**

12cp

This strand of subjects is designed to encourage students, either as individuals or teams, to develop their competence and underpinning knowledge and understanding of project management by reflective application to specific selected projects. Students may develop a detailed case study of a specific project which is completed or in progress; or, they may follow an action learning approach, applying project management principles and processes as they carry out a real workplace or 'live' project. Study requirements, attendance pattern and assessment will be designed in consultation with the Subject Coordinator to suit the needs of each case or project. The action learning approach is particularly suitable for employer-sponsored workplace teams.

**17510****PLANNING 1**

8cp

In the first semester, the investigation of a major and complex site, through the documentation of its physical characteristics and its social and environmental context; the development of ideas for the site; the preparation of briefs and contracts; the development of skills in relevant aspects of planning practice. In the second semester, the analysis of the planning issues relating to the chosen site, through a study of the opportunities and constraints, an analysis of the political context, the development of strategies and the generation of options; the development of skills in relevant aspects of planning practice.

**17511****URBAN ECONOMICS AND FINANCE 1**

4cp

The concepts of microeconomics and macroeconomics, and the analysis of externalities in an urban and regional context; the institutionalist and property rights approaches to land use regulation; market analysis and appraisal. The nature of the Australian economy; understanding the property market; techniques of cost-benefit analysis; the nature of a local economy.

**17513****URBAN DESIGN AND MANAGEMENT 1**

4cp

Historiography; urban history, the history of State and local government in NSW, and local history. Aspects of the history of State regulation of urban development, of the history of town planning and the planning profession, and of the ideologies of planning. An introduction to the history of ideas of the city and of city form; aspects of the history of building and urban development; past and present attitudes and approaches to the management of the urban design process; principles, criteria and values used in urban design.

**17515****ENVIRONMENTAL LAW**

2cp

Environmental law and its operation in the Australian federal system; Commonwealth-State relationships; air, water, waste, and heritage law; the law and practice of environmental impact assessment; relevant principles of administrative law; implications for government.

The role of the relevant courts and the nature of environmental litigation; changes in the treatment of standing; practice and procedure of the Land and Environment Court of NSW.

Current issues and controversies in environmental law and policy.



**I7520****PLANNING 2***8cp*

In the first semester, the assessment of planning options for the chosen site, through an evaluation of alternatives, an analysis of feasibilities, an assessment of impacts, and an analysis of benefits and costs; the development of skills in relevant aspects of planning practice. In the second semester, the preparation of final plans for the chosen site: goals and objectives, policies, implementation mechanisms, visualisation; the presentation and promotion of the plan; the development of skills in relevant aspects of planning practice.

**I7521****URBAN ECONOMICS AND FINANCE 2***4cp*

The analysis of location as a factor in urban development; methods and purposes of carrying out feasibility studies; market analysis and valuation; costings and estimating rates of return. Urban and regional economic issues: as a demonstration of economic method and so as to examine a topic in depth, one of the following topics will be studied: housing, recreation, tourism, transportation, public sector finances, the incidence of infrastructure costs.

**I7522****ENVIRONMENT AND INFRASTRUCTURE 2***4cp*

Management of land and services: the principles of soil and nature conservation and catchment management; the cultural significance of natural and historic environments, and heritage conservation; the design, construction and operation of water supply, sewerage, drainage, gas, electricity and telecommunications systems. Current practice in the design and management of infrastructure: the values, concepts and methods used in engineering and related professions; the use of warrants and specifications, and approaches used in the design, construction, operation and maintenance of infrastructure and other elements in the

built environment; the strengths and limitations of these practices.

**I7523****URBAN DESIGN AND MANAGEMENT 2***4cp*

The development process: the principles of the management of development and construction processes; the roles of the various players in urban development. Planning administration: the management of public sector planning agencies and the roles of planning staff; professional practice management. The institutional context: case studies of the structure and operations of the Department of Planning, a major municipality, a major financial institution, and a major developer.

**I7525****PROPERTY AND DEVELOPMENT LAW***2cp*

Aspects of property law including occupier's liability, tenancy, resumption and compensation; nuisance law as it relates to planning and the environment.

Planning and development law including legislative framework, comparative models and intergovernmental relations; health and building control issues and related issues in planning; developer contributions.

Current issues and controversies in planning and development law.

**I7530****PLANNING 3***4cp*

The integration of the work of the previous four semesters in relation to the chosen site; an examination of the costs and impacts of the planning and regulatory mechanisms; a review of the decision-making processes; the development of skills in relevant aspects of planning practice.

**17550****ENVIRONMENTAL ECONOMICS***24cp; 18hpw*

Exploration of issues affecting the interaction between economic development and environmental protection. Sustainable development. The role of construction economists in providing strategic advice to clients and government on the most effective use of resources over a project's life cycle. Advanced project evaluation techniques. Risk identification, analysis and management. Political, legal, ecological and societal considerations affecting environmentally sensitive projects.

**17560****RESEARCH THESIS***24cp; 18hpw*

Preparation and submission of a 25,000 word thesis, involving the detailed study of an individual topic related to the field of sustainable development. The thesis shall comprise identification of a problem, a thorough literature review of the topic and development of a solution based on a selected research methodology. The work should make a contribution to existing knowledge in the field. Workshops on research methodology and quantitative methods.

**17600 P/T****and****17601 F/T****GRADUATE PROJECT (MPM)***14cp*

A major study of a project or topic relevant to project management, undertaken by each student individually resulting in the preparation of a comprehensive report.

**17701****ENVIRONMENT AND CONTROL***6cp*

Property development and statutory control processes, including both statutory and strategic planning issues and practice. Alternative solutions and approaches to environmental issues and sustainable development. Community consultation

and dispute resolution. Communication of strategic advice to stakeholders on environmental issues.

**17703****PROPERTY TAXATION***4cp*

Analysis of various forms of taxation relating to property holdings and property investment. Income tax, capital gains taxation, depreciation allowances, land tax and stamp duties. Taxation of trusts. Negative gearing. Alternative forms of taxation and their likely impacts on the property industry.

**17517****RESEARCH METHODOLOGY***4cp*

Research methods; students will study the research process, research design, sampling, estimation of sample size etc. Computer applications – an introduction to computer analysis using the SPSS-X package. Statistical methodology – elementary statistical analysis, with emphasis on non-parametric statistics. Theory generation.

**17751****SPECIFIC ISSUES IN PLANNING***4cp*

Planning in the contemporary world of electoral politics, bureaucracies, business, resident action and environmental campaigns: the detailed analysis of a small number of specific current issues.

**17755****GRADUATE PROJECT (PLANNING)***16cp*

The graduate project consists of a major planning project based on a real site. The project will be carried out by a project team. Each team member is responsible for a component which is assessed both on the quality of the work and on its integration with the work of the other members of the team. The coordinating examiner may permit a student to work with only one other student or individually, where the above approach is not feasible in any particular case.

### 59336

#### POLITICS AND PLANNING

2cp

This unit provides students in planning disciplines with an introduction to the perspectives of political theory, and the techniques of political analysis. Topics include theories of the state, the emergence of structures of decision making, urban managerialism, the politics of public participation, community politics and local government. Concepts of modernity and post-modernism are used to situate analysis of urban political action into socio-cultural contexts.

### 59337

#### SOCIOLOGY AND PLANNING

2cp

This unit provides students in planning disciplines with an introduction to the perspectives of the social sciences and the techniques of sociological investigation. Topics include the emergence of the modern city, the development of the spatial pattern, environmental perception, issues in housing, labour markets, tourism and migration, and current social and demographic trends.

## POSTGRADUATE COURSE REGULATIONS

Students are advised to refer to the UTS *Calendar* for the Rules Relating to Students Enrolled in Particular Award Courses. The Faculty Board has also determined the following.

### GRADED AWARDS IN GRADUATE DIPLOMA COURSES

Graded awards in Graduate Diploma courses (except for the Graduate Diploma in Planning) may be recommended by the Faculty Board for meritorious performance. Any such award is entirely within the discretion of the Faculty Board and the numeric calculation of level of performance is only one of the matters taken into consideration. The Faculty Board would not normally consider for graded awards any student who has not obtained the following numeric levels on the basis of a weighted average mark over the whole of the course.

75 and above – with distinction

65 to less than 75 – with credit

### DISCONTINUATION OF REGISTRATION

The registration of a Graduate Diploma or Master's candidate may be discontinued if the Faculty Board is dissatisfied with his/her progress.

Faculty Board may deem unsatisfactory progress to include:

1. failure in any two subjects;
2. failure in a subject twice.

## FACULTY RESEARCH DEGREES

The Faculty offers both PhD and Master's programs by research and thesis in areas that relate to the three disciplines of the Faculty.

### Doctor of Philosophy

The PhD is a University-wide degree which involves an intense period of supervised study and research, culminating in the submission of a thesis. The degree is awarded to candidates who, through original investigation, make a distinct and significant contribution to knowledge in their field of specialisation.

To qualify for admission to a Doctoral degree program, applicants should possess a Bachelor's degree with First Class Honours, Division 1, and experience in research or a Master's degree from UTS, or equivalent.

The PhD applicant's proposed area of research should be within one of the disciplinary areas of the Faculty. Applicants are advised to discuss in detail their proposals with the Associate Dean, Research and Graduate Programs or nominee.

In submitting an application, applicants should include an outline of their research proposal, detailing the aims, objectives, methodology and required resources/facilities.

During the period of enrolment, candidates are supervised by appropriate academic staff members appointed by the Faculty. Candidates are required to present papers on their thesis topic at Faculty postgraduate seminars. Candidates are also invited to participate in other research activities occurring in the Faculty.

The minimum duration for a PhD program is two to three years full time, and three to four years part time (depending on whether the candidate is the holder of a Bachelor's or Master's degree).

### Doctor of Architecture

The Doctor of Architecture program is intended to enable architects whose work is made public by construction, rather than in print, to receive academic recognition for their work when substantiated by a theoretical discourse at a doctoral level.

To qualify for admission, applicants should have a degree in architecture, with Honours or equivalent, and extensive experience and achievement in architectural practice. Applicants are required to submit a documented portfolio of their built and projected works, over a period of at least the previous six years. Applicants without a minimum of six years' professional experience will not be considered.

The architectural work produced prior to and during the period of enrolment forms the substance of the student's program. Candidates submit their work progressively during their enrolment period. For final assessment, candidates submit a portfolio of documented work, plus a theoretical dissertation of approximately 30,000 words.

The attendance pattern for this Doctorate is six years part time or three years full time.

## Master of Architecture

## Master of Applied Science

## Master of Design

A limited number of places are offered each year to suitably qualified students to follow a program of study leading to one of the above awards. These degrees are for graduates seeking to extend and deepen their knowledge by undertaking an appropriate research investigation under professional supervision by academic staff of the Faculty.

To qualify for admission to a Master's degree (by thesis), applicants should possess a Bachelor's degree or equivalent, and be proficient in English. Non-graduates with outstanding professional qualifications and experience may also apply, provided they can demonstrate their capacity to pursue graduate studies. Prior to admission, applicants are required to submit a thesis topic which should be discussed with and agreed to by the Associate Dean, Research and Graduate Programs or nominee.

The requirement of the degree is the preparation of a thesis which is judged by its examiners to be a distinct contribution to the knowledge of the subject. The thesis

may take the form of an original theoretical or investigative dissertation, or may be built around a piece of developmental or creative work. The format of the body of work and the length of the written dissertation will be determined after discussion within Faculty staff and must be approved by the Graduate Studies Committee.

Candidates may be required in the first instance to undertake coursework subjects in research methodology, to gain exposure to and experience with research methods and skills. They may also be required to present papers, which form part of the preparation of their thesis, at the Faculty Postgraduate Seminars.

The minimum duration for a Master's degree (by thesis) is two years full time or three years part time.

### GENERAL

Applicants for all of the above courses are advised to consult the *UTS Calendar* for details relating to eligibility for admission, submission of thesis etc. Information may also be obtained from the University Graduate School.

Prospective applicants should discuss possible topics of research with the Associate Dean, Research and Graduate Programs (or nominee).

## SUBJECT NAMES IN ALPHABETICAL ORDER

2D and 3D Communication	82017	Building Technology (MBEnv)	12586
3D Computer Animation 1	81925	Building Technology	16153
3D Computer Animation 2	81030	Building Technology and	
Aboriginal and Torres Strait Islander Art and Culture 1	80039	Regulation	12511
Aboriginal and Torres Strait Islander Art and Culture 2	80040	Certification Process and Practice	12171
Advanced Computer-aided Design	81840	Cinema and TV Studies	80056
Advanced Property Finance	xxxxx	Client Presentation	80073
Advanced Valuation Methods	16353	Codes and Standards 1	12158
Appraisal and Statistics	16163	Codes and Standards 2	12172
Appropriate Technology	82015	Communication Technology	81021
Architectural Design 1	11911	Communications	51388
Architectural Design 2	11921	Computations	16211
Architectural Design 3	11931	Computer-aided Design	81922
Architectural Design 4	11941	Computer Graphics 1	81024
Architectural Design and Technology 1	11951	Computer Graphics 2	81924
Architectural Design and Technology 2	11961	Computers and Design 1	88301
Architectural Experience	13998	Computers and Design 2	88401
Architectural Practice 1A	11048	Computers and Design 3	88501
Architectural Practice 1B	11049	Computers and Design 4	88601
Architectural Practice 2A	11058	Computing	16162
Architectural Practice 2B	11059	Construction 1	16115
Architectural Practice 3A	11068	Construction 2	16116
Architectural Practice 3B	11069	Construction 3	16117
Building and Construction Project Management Studies 2	17506	Construction 4	16118
Building Assessment	12170	Contemporary Issues in Land Economics	xxxxx
Building Design	16611	Contextual Studies 1	16601
Building Economics 1	16521	Contextual Studies 2	16602
Building Economics 2	16522	Contextual Studies 4B	11045
Building Economics 3	16523	Contextual Studies 4C	11046
Building Experience (F/T)	16197	Contextual Studies 5B	11055
Building Experience (P/T)	16198	Contextual Studies 5C	11056
Building Science	16711	Contract Administration	16411
Building Science and Environmental Factors	12115	Creative Writing 1	51002
Building Technology	12511	Creative Writing 2	51006
		Design 1	85000
		Design 4	11042
		Design 5	11052
		Design 6	11062

Design and Society	89104	Design Project IT 2	86220
Design and Sustainable Human Futures 1	88310	Design Project IT 3	86330
Design and Sustainable Human Futures 2	88410	Design Project IT 4	86440
Design and Sustainable Human Futures 3	88510	Design Project IT 5	86550
Design and Sustainable Human Futures 4	88610	Design Project IT 6	86660
Design and Technology	89919	Design Project IT 7	86770
Design Case Studies 1	89912	Design Project VC 2	87220
Design Case Studies 2	89013	Design Project VC 3	87330
Design Decision Making	82004	Design Project VC 4	87440
Design Evaluation	16621	Design Project VC 5	87550
Design For Theatre 1	88312	Design Project VC 6	87660
Design For Theatre 2	88412	Design Project VC 7	87770
Design For Theatre 3	88512	Design Research	12582
Design For Theatre 4	88612	Design Seminar	82912
Design History	81025	Design Systems	80052
Design History 1	80051	Desktop Publishing	81022
Design History 2	80071	Development Control Interface	12168
Design Honours	11946	Development Management	16453
Design Management 1	12588	Drawing and Surveying	16201
Design Management 2	12589	Economic Analysis	16513
Design Management 3	12590	Economic Management 1	16511
Design Practice 1	89914	Economic Management 2	16512
Design Practice 2	89012	Economics (MBEnv)	12587
Design Project (F/T)	89918	Economics	16551
Design Project (P/T)	89917	Elective Project	11071
Design Project	12583	Elective Studies	11066
Design Project F&T 2	83220	Elective Studies 1	11915
Design Project F&T 3	83330	Elective Studies 2	11925
Design Project F&T 4	83440	Elective Studies 3	11935
Design Project F&T 5	83550	Environment and Control	17701
Design Project F&T 6	83660	Environment and Infrastructure 1	17516
Design Project F&T 7	83770	Environment and Infrastructure 2	17522
Design Project ID 2	84220	Environmental Communications 1	88302
Design Project ID 3	84330	Environmental Communications 2	88402
Design Project ID 4	84440	Environmental Communications 3	88502
Design Project ID 5	84550	Environmental Communications 4	88602
Design Project ID 6	84660	Environmental Design	16652
Design Project ID 7	84770	Environmental Economics	17550
		Environmental Law	17515
		Environmental Planning	16622
		Environmental Systems	80072

Estimating 1	16531	Investment and Portfolio Management	16454
Estimating 2	16532	Land Economics Experience (F/T)	16997
Facility Evaluation	16155	Land Economics Experience (P/T)	16998
Film and Television Documentary	80079	Land Studies 1	16150
Film and Video Design 1	88308	Law (MBEnv)	12585
Film and Video Design 2	88408	Legal Procedures 2	12528
Film and Video Design 3	88503	Legal Procedures 3	12167
Film and Video Design 4	88603	Legal Studies 1	16801
Financial and Trust Accounting	16552	Legal Studies 2	16802
Fire Engineering	xxxxx	Major Project F&T	83880
Fire Engineering 1	12164	Major Project ID	84880
Fire Engineering 2	12169	Major Project IT	86880
Furniture Design 1	88311	Major Project VC	87880
Furniture Design 2	88411	Management 2	16402
Furniture Design 3	88511	Management 3	16403
Furniture Design 4	88611	Management 4	16404
Graduate Project (MPM) F/T	17601	Management 5	16405
Graduate Project (MPM) P/T	17600	Management 6	16406
Graduate Project (Planning)	17755	Management Techniques and Design	81020
Graphic Visualisation	82016	Market Research	80070
Honours Elective Thesis	11945	Marketing	12542
Honours Qualifying	11936	Marketing	80050
Human Factors and Design	82009	Marketing and Design	81920
Illustration 1	88304	Masters Research Elective 2	11956
Illustration 2	88404	Material Science	16721
Illustration 3	88504	Materials 1	16701
Illustration 4	88604	Materials 2	16702
Industry Project Studies 1	17507	Mathematics and Statistics	16161
Industry Project Studies 2	17508	Media Studies	51007
Industry Project Studies 3	17509	Natural Disasters and Risk Management	xxxxx
Industry-specific Project Process 1	17105	Organisational Policy and Management	12549
Industry-specific Project Process 2	17205	Performance-based Certification	xxxxx
Industry-specific Project Process 3	17506	Performance-based Control	xxxxx
Industry Studies	16300	Photography 1	88305
Innovation Management and Design	81921	Photography 2	88405
International Real Estate	16751	Photography 3	88505
Introduction to Design Computing	81923	Photography 4	88605
Introduction to Law	16851		
Introduction to Valuation	16351		



Photography and Video	82914	Property Transactions	12518
Photography for Designers	82915	Psychology of Design	82901
Planning 1	17510	Quantities 1	16541
Planning 2	17520	Quantities 2	16542
Planning 3	17530	Quantity Surveying 1	16501
Planning and Environmental Law	16853	Quantity Surveying 2	16502
Politics and Planning	59336	Quantity Surveying 3	16503
Popular Culture	80053	Quantity Surveying Experience (F/T)	16597
Professional Practice	16131	Quantity Surveying Experience (P/T)	16598
Professional Practice 1	11914	Quantity Surveying Practice	16506
Professional Practice 2	11924	QS Project	16224
Professional Practice 3	11934	QS Project (Summer)	16225
Professional Practice 4	11944	Real Estate Finance	16553
Professional Practice 5	11954	Real Estate Fundamentals	16361
Professional Practice 6	11964	Real Estate Law and Conveyancing	16854
Professional Practice Review	16455	Real Estate Organisation and Management Theory	16452
Project	16221	Research Dissertation F&T	83780
Project	16961	Research Dissertation VC	87780
Project (UEM)	12550	Research Methodology	17517
Project Management Studies 1	17105	Research Methods	82905
Project Management Studies 2	17205	Research Project (M Land Ec)	xxxxx
Project Process 1	17101	Research Seminar	82013
Project Process 2	17201	Research Thesis	17560
Project Process 3	17301	Risk Management and Local Government	12157
Project Process 4	17401	Rural Valuation	16354
Project Technologies 1	17305	Services 1	16301
Project Technologies 2	17405	Services 4	11047
Property Analysis 1	12525	Social Theory and Australian Society 1	51003
Property Analysis 2	12535	Social Theory and Australian Society 2	51008
Property and Development Law	17525	Sociology (MBEnv)	12564
Property Development Management 1	12524	Sociology and Planning	59337
Property Development Management 2	12543	Sociology of Design	82902
Property Development Project	12543	Special Issues	xxxxx
Property Economics 4	12545	Special Studies 1	82913
Property Finance	12527	Specialised Valuation Topics	16355
Property Life Cycle	12515	Specific Issues in Planning	17751
Property Management	12517		
Property Management and Maintenance	16456		
Property Taxation	17703		

Statutory Valuation and Litigation	16356	Urban Architecture	12584
Structural Design	11043	Urban Design and Management 1	17513
Structural Performance	12165	Urban Design and Management 2	17523
Structures 1	16901	Urban Economics	16554
Structures 2	16902	Urban Economics and Finance 1	17511
Structures 3	16903	Urban Economics and Finance 2	17521
Surveying	16152	Urban Land Use and Planning	12551
Technological Change	82903	Urban Planning	16651
Technology 1	11912	Urban Regeneration Process 1	12570
Technology 2	11922	Urban Regeneration Process 2	12575
Technology 3	11932	Urban Regeneration Process 3	12579
Technology 4	11942	Urban Sociology	12516
Textile Design 1	88306	Valuation Methodology	16352
Textile Design 2	88406	Video for Designers	82916
Textile Design 3	88506	Visual Perception	80076
Textile Design 4	88606		
Theory Studies 1	11913		
Theory Studies 2	11923		
Theory Studies 3	11933		
Theory Studies 4	11943		
Theory Studies 5	11953		
Theory Studies 6	11963		
Transportation Design 1	88309		
Transportation Design 2	88409		
Transportation Design 3	88509		
Transportation Design 4	88609		

# FACULTY BOARD IN DESIGN, ARCHITECTURE AND BUILDING

## Ex officio members

*Dean of the Faculty*

Associate Professor G Caban (Chair)

*Associate Dean, Undergraduate Programs*

Professor D Freeman

*Associate Dean, Professional and Industry Programs*

Associate Professor W Barnett

*Associate Dean, Research and Graduate Programs*

Professor D Lenard

*Professors*

Professor N Quarry

## Nominated members

*University Librarian's representative*

Ms J Slater

*Centre for Learning and Teaching*

Ms J McKenzie

*Faculty Board in Business*

Vacant

*Faculty Board in Education*

Ms Z Wagner

*Faculty Board in Engineering*

Associate Professor S Johnston

*Faculty Board in Humanities and Social Sciences*

Ms A Chandler

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Ms A Bastock

Mr E Best

Dr J Broadbent

Mr T Caro

Mr P Clarke

Ms S Cowell

Ms L Crawford

Mr M Davis

Mr J Dawkins

Mr G de Valence

Ms R Dever

Mr W Granwal

Mr R Hayes

Mr P Healy

Mr K Heathcote

Ms V Horridge

Mr A Karantonis

Dr C Langston

Mr T Laurence

Mr B Longfoot

Ms S Looi

Mr T Loveday

Ms S Martin

Mr J Muir

Associate Professor C Nielsen

Dr J Oluwoye

Mr K Pearson-Smith

Dr J Phillips

Mr N Shooter

Mr R Small

Mr K Smith

Mr P Smith

Mr D Springett

Ms H St. John

Associate Professor D Tomkin

Mr R Trembath

Associate Professor P van Sommers

Mr G Verghese

Ms J Wilson

## Elected student members

Mr C Allan

Mr T Christian

Ms S Costigan

Ms L MacLarty

Mr D Owen

Mr M Trevor

## STAFF LIST

*Associate Professor and Dean of Design, Architecture and Building*  
G Caban, BA, MEd (Syd), DipEd (Syd Teach Coll), GradDipCommunication (NSWIT), MDIA (ED), AADM

*Associate Professor and Associate Dean, Professional & Industry Programs*  
W Barnett, DipArch (Dunelm), MPhil (Soton), FRSA, FRIBA, FRAIA

*Associate Dean, Undergraduate Programs*  
Vacant

*Professor of Building Studies and Associate Dean, Research & Graduate Programs*  
D Lenard, BAppSc (Hons), MAppSc (NSWIT), FAIQS, MAIB

*Secretaries, Dean's Unit*  
M Makris, BA (UTS), AWG  
P O'Loughlin

### Faculty Office

*Faculty Administrator*  
S A Martin, BA (UNSW), MBA (UTS), GMA

*Executive Assistant*  
S G Cowell

*Services Clerk*  
C Allison, BComm (W'gong)

*Financial Services Officer*  
S Looi

*Financial Projects Officer*  
R Squirchuk, BA (Macq), MA (Syd)

*Financial Assistant*  
P H W Chan

*Purchasing Clerk*  
C T K Hong

*Student Administration Officer*  
R Dever, BA (Syd)

*Student Liaison Assistant*  
N Singh

*Postgraduate Assistant*  
S A Hewson

*Courses Information Assistant*  
M A Bastock, BA (Macq)

### Faculty Technical Resources

*Laboratory Manager, Building*  
G J Moor, StructEngCert (STC)

*Technical Officer, Textiles*  
P P Inwood, CertTypDipTextDes (Wgtn Poly), GradDipDesign (UTS)

*Technical Officer, Fashion*  
M V Spear

*Workshop Manager*  
W Feinberg, MOHS (UTS)

*Technical Officer, Workshop*  
A Pearson

*Research Officer, Interior Design*  
J A F Powell, DipArts (IntDes) (SCA)

*Production Coordinator, Graphic Pre-press and Presentation*  
A Royce, BA (WSyd)

*Production Coordinator, Photomedia*  
Vacant

*Production Coordinator, Film and Video*  
C Eade, DipArt (NCAE), GradDip Communication (UTS)

### Computing Unit

*Assistant Lab Manager*  
H Trisnodjojo, MEEng (SWCU)

*Computing Services Coordinator*  
E Bourke

*Software Development and Co-ordination Trainee*  
R Sabir

### Directors of Program

*Built Environment*  
Associate Professor W Barnett, DipArch (Dunelm), MPhil (Soton), FRSA, FRIBA, FRAIA

*Master of Project Management and Urban Estate Management*  
L Crawford, BArch (Hons), MTCP (Syd), GradDipHRM (MCAE), FRAIA, FAIB, AVLE (Econ), MAIPM

*Planning*  
J Dawkins, BSc (WAust), MTCP (Syd), MRAP

*Design Postgraduate*

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GradDipLD (UNSW),  
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ISSN 1036-0654

Price \$6