

RHATICK DESK

# FACULTY OF DESIGN, ARCHITECTURE AND BUILDING

YEAR 1993

83

Z

J.

00

UTS LIBRARY

00418081 3





# Faculty of Design, Architecture and Building Handbook 1993

## HANDBOOK

1993



## **MESSAGE FROM THE DEAN**

After two years' operation of the newly amalgamated Faculty of Design, Architecture and Building, there are a number of encouraging signs that the amalgamation has already been effective and will be more so in coming years. Staff from each of the Schools have cooperated on a number of projects, and there is a recognition that the potential exists for increased interaction of staff and students from the range of faculty disciplines.

A Faculty Postgraduate Committee has been established to review postgraduate offerings across the faculty and to assist in maintaining a high quality of courses and effective organisation. The Faculty Research Degrees Committee enables staff and research students of all Schools to share approaches to research methods, supervision and assessment. The formation of the Faculty Computer Unit has brought together the expertise of staff from the Balmain and Broadway campuses to ensure the continued high standard of computer facilities and offerings.

The faculty underwent a Developmental Review in Spring semester, 1992. A committee consisting mainly of external members and chaired by Mr Max Bourke reviewed all aspects of the faculty's activities and made a number of observations and recommendations with a view to assisting the faculty in its planning and development.

Excavation of the Harris Street site for the new faculty building, designed by the Architects Philip Cox, Richardson and Taylor, began in August 1992, and the building should be available for occupation by the faculty from Spring semester, 1994.

Professorships in Design and Building Studies were advertised by the Faculty in 1992, and it is hoped that appointments will have been made by the beginning of the 1993 academic year. It is intended that the Professor of Design will also be appointed as Head of School for an initial term of three years.

Geoffrey Caban Dean

# UNIVERSITY MISSION STATEMENT

UTS provides higher education aimed at enhancing professional practice, advancing the technologies and generally contributing to the creation, application and extension of knowledge for the benefit of society. The University is concerned to improve educational provision for students from a diversity of backgrounds by valuing exemplary teaching and developing flexible study patterns. It is committed to close interaction with the professions, business, government, science and the human services in promoting scholarship, research, continuing education, consultancy and technology transfer.

#### Objectives

- 1. To ensure high standards in teaching and professional experience in all academic programs.
- 2. To achieve an increased level of research funding and postgraduate research students, and increased research experience of staff.
- 3. To develop library resources of the highest standard and appropriate to faculty and student needs.
- 4. To improve links with industry, the professions, and the community through the provision of consultancy and continuing education programs.
- 5. To develop international linkages in the application of knowledge and learning.
- 6. To gain and retain an equitable level of funding.
- 7. To increase the level of entrepreneurial activity.
- 8. To improve the physical, social and educational environment of students and staff.
- 9. To provide an efficient, effective and responsible internal management.

## PREFACE

This faculty handbook is intended as a reference for students currently enrolled at the University of Technology, Sydney. In addition to basic general information about the university, it contains detailed information about courses offered by the faculty. The information is correct as at October 1992. Please note that the titles of courses offered by the university have recently been revised. A full list of the university's courses, showing the name, the abbreviation and the title as indicated on the testamur, is provided in the 1993 Calendar.

More detailed information of a general nature is contained in the UAC Information Guide and in the Undergraduate and Postgraduate Studies Guides, available from the UTS Student Information Service. The faculty provides additional information about its courses, methods of assessment, book lists and other information which was not available at time of publication. Students should also make sure to read the student rules and the By-law relating to students, which contain essential information about matters such as minimum rate of progress, variation to approved programs of study, leave of absence, examinations and so on. The rules and By-law are included in the University Calendar, a companion volume to this handbook. Copies are held in the library and in the faculty offices, and are available for sale in the Co-op Bookshop.

It is university policy to provide equal opportunity for all, regardless of sex, race, marital status, physical ability, sexual preference, age, political conviction or religious belief. The university has also adopted an ethnic affairs policy to ensure that all aspects of university life are sensitive to the multicultural nature of Australian society and to cultural diversity within the university.

Freedom of information (FOI) legislation gives people the legal right to obtain access to information held by State Government agencies (universities are regarded as government agencies for this purpose), to request amendments to personal records which are inaccurate, and to appeal against any decision not to grant access or amend personal records. The university will make every attempt to meet all reasonable FOI requests.

The names and telephone numbers of people to contact for further information are given throughout this handbook. If in doubt – ask!

We wish you well in your program of study this year.

# CONTENTS

	page
Message from the Dean	2
University Mission Statement	3
Preface	4
General Information	Providentifi (1997) and a start of the start
Academic Office	7
Student Information Service	7
Application	7
Admission	7
Enrolment	8
Academic Attendance and Progression	9
Awards and Graduation	10
Academic Misconduct	10
Special Assistance Admission Schemes	11
Insearch Language Centre	11
Exchange Programs	11
International Students Program	12
Assistance Schemes	13
Student Ombudsman	14
Learning Centres	14
Services	
University Library	14
Instructional Technology Services	15
Computing Services	15
UTS Union	16
Child Care	18
Student Services	19
Students' Association	20
Radio Station 2SER-FM	21
The Co-on Bookshop	21
State Bank	21
Faculty Information	22
	22
School of Design	23
Undergraduate Courses	
Bachelor of Design	27
Fashion and Textile Design	28
Industrial Design	28
Interior Design	29
Visual Communication	30
Minor and General Studies	31
Subject Descriptions	31
Postgraduate Courses	
Graduate Certificate in Design and Technology	44
Graduate Diploma in Design Studies	45
Master of Design (by coursework)	47
Master of Design (by thesis)	50
Doctor of Philosophy	50
Subject Descriptions	51
School of Architecture	54
Undergraduate Courses	55
Bachelor of Architecture	55
Subject Descriptions	57

Postgraduate Courses	
Doctor of Architecture	60
Doctor of Philosophy (Architecture)	60
Master of Architecture (by thesis)	60
Master of the Built Environment	60
Subject Descriptions	62
School of Building Studies	64
Undergraduate Courses	67
Bachelor of Building in Construction Management	67
Bachelor of Applied Science in Land Economics	68
Bachelor of Building in Construction Economics	69
Subject Descriptions	70
Postgraduate Courses	
Doctor of Philosophy (Building)	76
Master of Applied Science (by thesis)	76
Master of Project Management	76
Master of Planning	77
Graduate Diploma in Planning	77
Graduate Diploma in Urban Estate Management	78
Graduate Diploma in Building Surveying Assessment	79
Subject Descriptions	86
Faculty Board	86
Faculty Advisory Committees	86
Staff List	87
Principal Dates for 1993	91
Campus Maps	93

## **GENERAL INFORMATION**

#### ACADEMIC OFFICE

The Academic Office is responsible for administering the rules which relate specifically to the student body at UTS. The branches within the Academic Office are:

- UTS Student Information Service
- Course promotions
- Undergraduate admissions (includes external award and extension study)
- Postgraduate studies and scholarships
- Enrolments and Undergraduate studies (includes examinations, graduation, HECS and student records)
- Student systems
- Facilities Hire
- Kuring-gai Student Administration Centre

The rules may be found in the University Calendar and cover all areas of undergraduate, postgraduate and non-award (external and extension) study. Details include admission, registration and enrolment, fees and charges, identification, conduct, attendance and study requirements, postgraduate supervision, examinations, progression, appeals, exclusion, leave of absence, internal course transfer, readmission, graduation and awards.

#### INFORMATION

The UTS Student Information Service provides information and assistance regarding all administrative matters. It is the principal point of contact between students, the public and the central administration. The UTS Student Information Service is located in the foyer area of the Tower Building at 15-73 Broadway and in the foyer area at the Kuring-gai campus in Eton Road, Lindfield. The postal address for enquiries is: UTS Student Information Service, University of Technology, Sydney, PO Box 123, Broadway 2007. Telephone enquiries should be directed to (02) 330 1222 or (02) 330 5555.

Further details regarding academic and administrative matters may be obtained from the branches listed above or from the following:

UTS Undergraduate Studies Guide UAC Information Guide UTS Postgraduate Studies booklet UTS Postgraduate Scholarships Guide UTS Calendar and Faculty handbooks.

#### APPLICATION

Applications for most undergraduate and postgraduate courses may be obtained from the UTS Student Information Service during the main application period, August, September, and October, for admission in the following year. Closing dates and application requirements vary for UTS courses, and applicants are encouraged to make early enquiries.

In general, most undergraduate applications through the Universities Admissions Centre (UAC) close on the last working day of September. Applications for some UAC courses are accepted during October, but require payment of a late fee. Certain undergraduate courses accept applications direct to the university. Applications for these courses and most postgraduate courses close on the last working day of October.

A smaller mid-year application period occurs for some courses during April and May, with applications closing on the last working day of May.

International fee paying applicants must apply through the International Programs Office. Specific information can be found in the following pages.

Formerly enrolled UTS students seeking readmission should lodge a new application during the application period. Currently enrolled UTS students who wish to transfer to another UTS course must complete an internal transfer application, available from the UTS Student Information Service.

Full details on application requirements and closing dates for all undergraduate and postgraduate courses are available from the UTS Student Information Service.

#### ADMISSION

To be eligible for admission to a course at UTS, all applicants must:

satisfy the rules relating to undergraduate and postgraduate admission (see the Calendar), and be selected in competition with other eligible applicants for that course.

Applicants must have an adequate background in English. A minimum level such as 2-unit General English in the HSC is recommended. If the majority of an applicant's education was undertaken in a language other than English, completion of an English Test may be required.

UTS accepts the results of two tests: the Combined Universities Language Test (CULT), conducted by the Institute of Languages at the University of New South Wales, in which a minimum pass of 65% is required; and the International English Language Testing System (IELTS), conducted through the UTS International Programs Office. A minimum score of 6.5 overall, with at least 6.0 in writing, is required.

No application for admission will be considered until proficiency in English, where requested, has been demonstrated.

Admission is based on the quota of places available in each course, and the number and quality of eligible applicants applying for each course. Selection is determined through the order of merit of each applicant in competition with other eligible applicants.

Special admission schemes are available for Aboriginal and Torres Strait Islander applicants (SCATS) and those applicants with high academic potential whose education has been disadvantaged by circumstances beyond their control (inpUTS). Information concerning these schemes is given below.

Further details regarding all aspects of admission may be obtained from the UTS Student Information Service.

#### ENROLMENT

New students receive offers of enrolment by mail. Each successful applicant must enrol as indicated in the information enclosed with the offer or that offer will lapse. Other information enclosed covers dates for enrolment, student service fees and course fees, the Higher Education Contribution Scheme (HECS), admission with advanced standing or with subject exemption, and information on deferment.

Continuing students are required to re-enrol annually. Information regarding re-enrolment is sent with each continuing student's Spring semester results, usually by late December. Information is also forwarded to students regarding their student service fees and course fees or HECS charges.

The main enrolment period each year is from mid January to late February. A smaller enrolment period in July follows any mid-year offers.

Those who cannot enrol on the specified enrolment dates may be permitted to enrol at a later date subject to payment of a late enrolment fee. These students must contact the UTS Enrolments Office to explain their situation and gain permission for a late enrolment.

The location of enrolment may vary, but the main sites are at the City (Broadway) campus and the Kuring-gai campus.

#### **Student Service Fees**

Compulsory annual fees and charges are payable to the University Union and Students' Association. The 1992 fees were \$252 for new students and \$232 for re-enrolling students. In 1992 this amount included a Student Accommodation Levy of \$35, which has increased to \$42 for 1993 and is expected to increase to \$50 for 1994. All fees and charges may vary from year to year.

# Higher Education Contribution Scheme (HECS) Charges

HECS was introduced in 1989 by the Commonwealth Government to collect a contribution from certain categories of higher education students towards the cost of their education.

As a part of enrolment, all students who are liable to pay the HECS charge are required to nominate their status as either an "upfront" or "deferred" payer. If nominating "upfront" payment, students are then notified by the university of the amount owing and the date by which payment is required. If a "deferred" payer, students are advised of the amount owing to the Australian Taxation Office. All amounts are determined according to the subject load which HECS eligible students are undertaking for the coming semester. Students who nominate the "upfront" option but do not make payment by the due date will have their enrolment terminated.

#### **Course Fees**

Certain categories of students are not required to pay the above HECS charges. These students, unless enrolled under an approved scholarship or HECS exempt program, will be required to pay course fees. Course fee information is available during each application period.

# Admission with Advanced Standing or with Subject Exemption

Applicants who receive an offer of enrolment to UTS and have previously completed appropriate subjects of courses at recognised tertiary education institutions or Australian technical colleges may apply for subject exemptions in their offered UTS course.

An exemption application form with instructions is forwarded to all new students with their offer letter. Admission with advanced standing or with subject exemption may be approved by a faculty subject to rules 2.29.1 to 2.29.5.

#### Deferment

All new undergraduate students will receive a deferment application form with their offer letter.

With the exception of three courses (Bachelor of Accounting, Bachelor of Information Technology and Bachelor of Manufacturing Management) offers of admission to all other undergraduate courses can be deferred on request. Deferred enrolment will be approved for up to one year; however, a deferred place will lapse if the student enrols in an undergraduate or postgraduate degree, diploma or associate diploma course during the period of approved deferment.

All students must re-apply as directed upon completion of their approved deferment period.

Deferment of enrolment in postgraduate courses at UTS is not permitted.

Full details regarding student fees, HECS charges, course fees, admission with advanced standing or with subject exemption, and deferment may be obtained from the UTS Student Information Service.

#### ACADEMIC ATTENDANCE AND PROGRESSION

#### **Course and Subject Variation**

Students wishing to add or delete subjects must apply on the appropriate form as obtained from Faculty or School offices or the UTS Student Information Service. Specific dates apply (see *Principal Dates* below) and students are reminded that HECS or postgraduate course fees still apply after the HECS Census dates of 31 March and 31 August.

Academic transcripts will indicate a fail against subjects where students have not withdrawn by the due date.

#### **Examinations and Results**

Formal examinations are held at the end of each semester. Preliminary timetables for examinations will be displayed on noticeboards near Faculty and School offices and in the foyer areas of the Tower Building at Broadway and Kuring-gai campus. Such timetables are on display for two weeks from calendar week 19 for the Autumn semester and calendar week 40 for the Spring semester.

Students who identify concerns with these preliminary timetables must write to the Academic Registrar immediately. Final timetables showing dates, times and location will be displayed in the areas indicated above for two weeks prior to the commencement of the examination period.

Students will be notified by mail of their semester results in mid July and late December each year. Results will also be displayed on noticeboards in the areas indicated above. Formal enquiries or concerns regarding results must be expressed in writing to the Academic Registrar. Initial enquiries may be made in person at the UTS Student Information Service on the City (Broadway) or Kuring-gai campuses. No information will be given by telephone.

All students are advised to read carefully rules 2.15 to 2.24 to understand the regulations concerning examinations.

#### Assessment Review and Appeals

Where students are not satisfied with their assessment, they may lodge an appeal of assessment at the UTS Student Information Service. In cases of appeal, a Student Assessment Appeals Committee of the relevant Faculty Board considers the appeal following the criteria and procedures approved by Academic Board.

Full details of appeals against assessment may be found under rule 2.26.

#### **Progression, Probation and Exclusion**

Full details regarding student progression, probation and exclusion are provided in rules 3.1.13 to 3.1.19.

#### **Readmission after Exclusion – Undergraduate**

A student can re-apply to the course from which he or she was excluded following the specified period of exclusion. Readmission is not automatic and the student must compete with other eligible applicants for that course during the given admission period. Where readmission to the previous course is achieved, the student will be reinstated in the progression category which applied prior to exclusion.

Where a former student's first application for readmission to the course from which he/she was excluded is refused, an appeal may be lodged with the Academic Registrar. Full details are forwarded to such students following lodgement of their application for readmission. Each submitted appeal against refused readmission is forwarded to the relevant Dean for reconsideration. Where such a reconsideration is recommended for dismissal by the Dean, the appeal is forwarded to the Appeals Committee of Academic Board for final decision.

Where the Dean or the Appeals Committee upholds the appeal, the student will be reinstated in the progression category which applied prior to exclusion.

Further details may be obtained from the Undergraduate Admissions Branch.

#### **Discontinuation of Registration - Postgraduate**

Students at the Graduate Diploma, Masters or Doctoral level may have their registration discontinued if they fail to complete all prescribed work within a given period of time or if the specific Faculty Board is dissatisfied with the student's progress.

Full details regarding this and the subsequent appeal regulations may be found under rules 3.2, 3.3, 3.4 and 3.5.

# Readmission after Discontinuation of Registration – Postgraduate

A student can re-apply to the course from which her or his registration was discontinued following the specified period of exclusion. Readmission is not automatic and the student must compete with other eligible applicants for that course during the given admission period. Where readmission is successful a maximum number of semesters for completion shall be nominated by the university.

Rules for postgraduate students regarding appeal against refused readmission after a period of discontinued registration vary. Full details may be found rules 3.2, 3.3, 3.4 and 3.5.

Further details may be obtained from the Postgraduate Studies Branch.

#### AWARDS AND GRADUATION

All students who believe they will qualify for an award of the university at the end of their current semester must complete an *Application for Award* form, available from the UTS Student Information Service. A specific lodgement date applies and students are encouraged to make early enquiries at the UTS Student Information Service.

Graduation ceremonies are conducted during a specific period in April – May and September – October each year. Information regarding graduation will be forwarded to eligible students following receipt of the above application form.

Academic dress can be hired from the university. The faculty colour for the Faculty of Design, Architecture and Building is Chartreuse, PMS 457.

#### ACADEMIC MISCONDUCT

The University has strict rules relating to the conduct of students. Examples of academic misconduct are cheating in examinations, and the use of plagiarism, which is an attempt to present another person's work as your own by not acknowledging the source. "Work" includes written materials such as books, journals and magazine articles or other papers, and also includes films and computer programs. The two most common types of plagiarism are from published materials and other students' work.

#### Published materials

In general, whenever you use anything from someone else's work, whether it is an idea, an opinion or the results of a study or review, you should use a standard system of referencing. Examples of plagiarism may include a sentence or two, or a table or a diagram that have been taken from a book or article without acknowledgment. There have been cases when an entire paper consisted of material copied from a book, with only a few sentences added by the student. Both these examples are plagiarism. The first, however, may be treated as a simple failure to cite the references, while the second is more likely to be seen in the same way as cheating in an examination.

Most assignments are likely to require the use of the works of other people. To avoid plagiarism, you should keep a detailed record of where various ideas and findings came from, and to make sure that these sources are always clearly indicated in your work. At the tertiary level of education, assignments should not consist simply of bits and pieces copied from books and articles.

#### Other students' work

It is not unusual for students to pass round relevant articles and to discuss their ideas before writing an assignment. However, unless the assignment is clearly to be done on a group basis, students should write their own paper. Examples of this type of plagiarism include the inclusion of identical or very similar sentences, paragraphs or sections. When two students submit the same or similar papers, both are likely to be penalised.

#### Penalties

Alleged cheating or plagiarism during formal examinations is investigated by an examinations conduct committee, which may recommend to the Vice-Chancellor an appropriate penalty from the range of penalties which apply to breaches of discipline under the university By-law. Any instance of plagiarism associated with informal examinations or any other form of assessment is also treated as a breach of discipline, and is subject to the same range of penalties. The relevant provision is in Chapter 8, Division 2 of the By-law; and the relevant rules are 2.17, 2.23 and 2.24 of the student rules. The By-law and rules are set out in full in the University Calendar.

#### SPECIAL ASSISTANCE ADMISSION SCHEMES

#### inpUTS

The inpUTS Special Admission Scheme is designed to assist certain applicants to gain entry to UTS undergraduate courses. A reserve quota is established for most undergraduate courses for applicants with high academic potential whose education has been disadvantaged over a long time by circumstances beyond their control.

Applications must be received by 30 September each year in order for a working party of the Equity and Access Committee of Academic Board to assess eligibility for admission. Applications are forwarded to ACT and NSW high schools and TAFE colleges during July and are available from the UTS Student Information Service from August each year.

The scheme is aimed at those persons who have not had the opportunity to attempt tertiary studies. It is open to all applicants who satisfy the university rules as described under 3.1.1 to 3.1.12.

#### SCATS

Under the direction of Jumbunna Aboriginal Education Centre at UTS a special admission scheme (SCATS), incorporating a supplementary course leading to degree studies, is available for Aboriginal and Torres Strait Islander applicants. All Aborigines and Torres Strait Islanders who are considering tertiary education are encouraged to apply. Jumbunna assesses all applications to determine if supplementary studies are required.

#### SKATE (Street Kids Access Tertiary Education)

The target group for the SKATE program is disadvantaged young people with a high potential for a life of abuse, violence, crime and self-destruction, who wish to change their lifestyle and regain access to education. Entry criteria: those who are aged between 16 and 25 years; have little or no family support; have not completed secondary school; and have had experience of or been involved in homelessness, unemployment, drug/alcohol abuse, property offences or violence.

The program follows Board of Secondary Education NSW content and is backed by an extensive biosocial support system.

Tertiary entry status is not automatic and students apply as category B students. No formal arrangements for acceptance of graduates exists with other institutions; however, personal initiatives with support of the SKATE program director have achieved successful entries. For further information contact the Director on 330 5337.

#### **INSEARCH LANGUAGE CENTRE**

Insearch Language Centre, University of Technology, Sydney is an ELICOS (English Language Intensive Course for Overseas Students) and Asian Languages Centre operating in its premises on levels 2 and 3, Prince Centre, 8 Ouav Street, Ultimo, ILC also has a second campus at 187-189 Thomas Street (opposite the Prince Centre), ILC was established in October 1987 and since that time there has been a phenomenal growth in student numbers and courses on offer in both the ELICOS and Asian Languages Departments. In the ELICOS department ILC offers courses in General English, English for Academic Purposes (EAP), English for International Business (EIB), English for Matriculation and Foundation Studies (EFS), English for Test Preparation - IELTS, Tertiary Orientation Program (TOP), Evening English and Holiday English.

The ELICOS Department also offers teacher training courses leading to the Cambridge University/Royal Society of Arts Certificate or Diploma in Teaching English as a Foreign Language to Adults.

The Asian Languages department offers individual and group tuition as well as corporate development programs in Japanese, Korean, Thai, Indonesian, Mandarin, Cantonese and Vietnamese.

Courses are offered in the above languages for beginners through to advanced level students.

In the Japanese language area the ILC also offers HSC coaching, Japanese for teachers, advanced conversation and reading – which helps to prepare students for the *Japanese Proficiency Test* and teacher training.

The European Languages Department offers individual and group tuition in French, Italian and Spanish.

For more information contact: Insearch Language Centre, level 3, Prince Centre, 8 Quay Street, Sydney NSW 2000 Australia, telephone (02) 281 4544, fax (02) 281 4675.

#### **EXCHANGE PROGRAMS**

The university, through individual faculties, has an extensive exchange program arrangement which include the following institutions:

Wirtschaftsuniversitat, Vienna, Austria University of Waterloo, Canada Aarhus School of Business, Denmark Insa de Lyon, France Fachhochschule, Wiesbaden, Germany Technical University of Budapest, Hungary Tilburg University, The Netherlands Dr Soetomo Press Institute, Indonesia Yonsei University, Seoul, Korea South China Institute of Technology, Guangzhou, People's Republic of China Tilburg University, The Netherlands Oregon State University, USA

In the United Kingdom: University of Brighton, De Montfort University, University of Humberside, University of Portsmouth and Saint Martin's School of Art

In Thailand: Pranakorn Teachers' College, Chiang Mai University, Mahidol University, and King Mongkut's Institute of Technology, Thonburi

Interested persons should make initial enquiries through the International Programs Office or faculty offices.

#### INTERNATIONAL STUDENTS PROGRAM

Fee-paying international students are encouraged to apply for admission to selected undergraduate and postgraduate courses on a fee-paying basis.

#### **Application for Admission**

Application will be assessed on the basis of academic results in high school, post-secondary studies or university.

International students who are studying for an Australian Year 12 examination (either in Australia or overseas) should apply to UTS through the Universities Admissions Centre.

International students who are studying for a Bachelor degree at an Australian university and wish to transfer to UTS should also apply through the Universities Admissions Centre.

All other international students (undergraduate and postgraduate) should apply direct to the International Programs Office.

Note: Australian citizens or those who have permanent residency status should contact the University's Student Information Service.

#### Documentation

The following comments must be included with an application:

- an original (or properly certified\* copy) of the applicant's official transcript or results sheet
- an original (or properly certified\* copy) of the applicant's official school leaving diploma or certificate
- a certified\* official translation of any document not in English
- a certified\* copy of any scholarship.

\*Note: a properly certified copy means a copy certified by either the issuing institution or a statutory body (e.g. Public Notary). Copies certified by a Justice of the Peace or a lawyer are not acceptable.

The applicant should include any relevant letters of support from his or her employers.

#### English Language

All international students are required to provide evidence of English language proficiency. UTS prefers students to have a satisfactory score on the IELTS test (6.5 overall with a minimum of 6.0 in writing). Details and application forms for the IELTS test are available from the International Programs Office.

#### **Course Fees 1993**

Fees for selected courses offered to fee-paying students range from \$A10,000 to \$A16,500 per annum, depending on the course. Fees are normally paid on a six-monthly basis.

#### **Financial Assistance**

UTS is unable at this time to offer any scholarships or financial assistance to international students.

The Australian Government offers some scholarships under the John Crawford Scholarship Scheme (JCSS) and the Overseas Postgraduate Scholarship Program (OPRS). Details and application forms for JCSS are available only at Australian Embassies and Australian Education Centres overseas. Details and application forms for OPRS are available from the International Programs Office.

#### Student Visas

Following offer of a place at UTS and payment of first semester fees, International Programs will provide an acceptance advice form which is required when applying for a student visa. Visitors to Australia on a visitors' visa are unable to change their visa status whilst in Australia but must leave the country and apply for a student visa from outside Australia.

#### **Additional Information**

For further information and application forms for undergraduate or postgraduate courses please contact the International Program office, level 5, Tower Building, Broadway.

Postal address: University of Technology, Sydney, International Programs, PO Box 123, Broadway NSW 2007, Australia, telephone (61 2) 330 1531, fax (61 2) 330 1530.

#### ASSISTANCE SCHEMES

#### AUSTUDY

AUSTUDY provides income support to financially disadvantaged students over 16 years of age undertaking approved courses of study in higher education institutions. Maximum benefit rates are age-related and aligned with those for relevant Social Security payments (Job Search and Newstart Allowances). Benefits are paid to 16-17 year old students with higher rates for those 18 years old and over, and those aged over 21 years in special categories. This assistance is provided subject to parental and personal income and assets tests for dependent students or personal and spouse income tests for independent students. AUSTUDY is also subject to academic progress rules.

Following consideration of the review of AUSTUDY commissioned by DEET, fundamental changes are to be made to the program.

A supplementary scheme will be introduced from 1 January 1993, to provide flexibility for tertiary students to tailor assistance to their individual needs.

Under the proposed arrangements, tertiary students eligible for AUSTUDY and ABSTUDY will have the option of "trading-in" part of their grant assistance for a repayable income supplement of twice the amount, up to a maximum of \$4000 per annum. A similar repayable income supplement of up \$2000 will also be available to tertiary students whose parental income, while excluding them from receiving grants through the parental income test, is less than \$50,000 a year, provided other eligibility criteria are met.

How to apply: the Student Welfare Officer located in the Student Services Unit at Broadway and Kuring-gai campuses will be able to supply all forms and will help with other problems or queries that may arise when filling in forms. To make an appointment telephone 330 1177 or 330 5342 for any assistance.

#### ABSTUDY

ABSTUDY assists Aboriginal and Torres Strait Islander students by providing income support and other assistance tailored to their needs. The basic rates of assistance are similar to AUSTUDY, with additional assistance available to part-time students, pensioners and those over 21 years of age. Aboriginal tertiary students will also be eligible for the voluntary "loan" scheme. ABSTUDY payments are not subject to assets tests. The staff in the Aboriginal Education office, Jumbunna, will be happy to help with any queries. Telephone 330 1905 and ask for the Student Services Officer.

#### Postgraduate Assistance

The Commonwealth Government offers each year a limited number of awards for full-time postgraduate study at Australian higher education institutions.

Australian Postgraduate Course Awards at the University of Technology, Sydney are available to students undertaking a Masters Degree by coursework. A good academic record is essential and preference is given to those with relevant employment experience. Applications close at the end of October 1992.

Australian Postgraduate Research Awards are tenable for full-time postgraduate research leading to the degree of Master or Doctor of Philosophy at UTS. Applications close at the end of October of the year prior to the year of study.

The awards are available to Australian citizens and those who have been granted permanent resident status and lived in Australia continuously for the last 12 months. Applicants should have completed a four-year undergraduate degree with at least Second Class Honours, Division One, or equivalent.

Application forms may be obtained from the UTS Student Information Service or the Postgraduate Studies and Scholarships Office, level 5, Tower Building.

#### University Research Scholarships

These Scholarships, including the R L Werner Postgraduate Scholarship and University of Technology, Sydney Doctoral Scholarship, are normally available to an applicant of the highest academic calibre for full-time research at UTS.

Applications must be made on the prescribed form and close with the Academic Registrar at the end of October of the year prior to which applicants intend to commence candidature.

Further information and conditions of award may be obtained from the Postgraduate Studies and Scholarships Office, level 5, Tower Building.

# Commonwealth Scholarship and Fellowship Plan Awards

The awards are intended for postgraduate study or research and are tenable in the United Kingdom, Canada, Hong Kong, India, Jamaica, Malaysia, Malta, Nigeria, Sri Lanka, Trinidad and Tobago.

Applications from UTS graduates must be made on the prescribed form, and close with the Academic Registrar in early October of the year to which applicants intend to study overseas.

Further information may be obtained from the Postgraduate Studies and Scholarships Office, level 5, Tower Building.

#### STUDENT OMBUDSMAN

Enrolled or registered students with a complaint against decisions of university staff may seek assistance from the Student Ombudsman. The position of the Student Ombudsman was created by the University Council of the old UTS in 1989 for a trial period of one year, and the scheme has now been extended to all campuses.

The university policy on the role of the Student Ombudsman is published in the Calendar.

The Student Ombudsman's office is located in Room 402, Building 2 on the City campus at Broadway, telephone 330 2575/76.

All matters are treated with the strictest confidence.

#### LEARNING CENTRES

#### Jumbunna Aboriginal Education Centre

Located on the City campus at Broadway, Jumbunna Aboriginal Education Centre was established in 1987 with only two indigenous students. Today it has more than 250 Aboriginal and Torres Strait Islander students and a staff of 10.

The Centre was conceived to afford indigenous Australians the opportunity to gain access to tertiary studies through the provision of academic and cultural support programs. The name *Jumbunna* comes from the Aboriginal word meaning a *meeting place*.

Jumbunna Centre is predominantly staffed by black Australians and offers a range of award courses, many unique to UTS. Owing to its programs, its support system and its caring environment, Jumbunna Centre has fast gained a reputation among the indigenous community as being a most desirable place to study. Jumbunna's courses include: adult education, tourism and leisure, business studies, social sciences, design, life sciences and nursing, law, media studies, architecture and building.

For further information contact the Jumbunna Centre on 330 1902.

#### **ELSSA Centre**

ELSSA, the English Language and Study Skills Assistance Centre, provides free English language and study skills courses for students enrolled at UTS and university staff. These include communication electives for award to degrees, intensive vacation courses and weekly workshop courses. The Centre runs courses on essay writing, report writing, advanced grammar, critical thinking, discussion skills, seminar presentation, effective reading, pronunciation and writing at postgraduate level. Students may make an appointment for an individual consultation with a lecturer at the Centre to discuss difficulties with academic work. The Centre also has books and tapes for self-study. Brochures with further details of ELSSA programs are available at school offices and at the Centre.

For further information and appointments, telephone 330 2327, fax 330 2321, level 18, Tower Building, Broadway.

#### **Student Learning Centre**

The major role of the Student Learning Centre is to assist students to realise their academic potential for tertiary studies. The Centre fosters the development of student learning and encourages student autonomy through access to the Centre's resources. It provides individual and group tuition to students from various faculties of the university in areas of language and study skills such as time management, writing essays, ESL, presenting seminars, taking part in tutorials, examination preparation, and in mathematics, statistics, and problem-solving strategies. Bridging and preparatory programs are held during the year. Qualified and experienced staff members are committed to an ethic of service in helping students succeed at the highest level.

Students may visit the Centre on their own initiative or on a voluntary basis when referred by academic staff. The Centre is located in rooms 2.520-2.522 above the main Library on the Kuring-gai campus. Telephone 330 5160 (Language and Study Skills), and 330 5186 (Mathematics).

#### SERVICES

#### THE UNIVERSITY LIBRARY

The University Library houses more than half a million books, journals and audiovisual items and provides services to staff and students through five campus libraries.

#### Balmain Campus - Design Library

The Design Library is managed as a joint library service with the Sydney College of the Arts, and houses materials relating to visual arts and design. It is located on the corner of Mansfield and Batty Streets, Rozelle.

City Campus - Markets Library at Haymarket

The Markets Library collects materials in a wide range of subject areas including architecture, building, business, computing science, education, engineering, humanities, law, mathematics, physical sciences, social sciences. It is located in the Haymarket area on the corner of Quay Street and Ultimo Road.

#### Kuring-gai Campus - George Muir Library

The George Muir Library is located at the Kuringgai campus in Eton Road, Lindfield. The library's collection is broad: major subject areas include business, education, leisure, information and communication studies and nursing. The library also has a curriculum collection associated with education studies.

#### St Leonards Campus - College of Law Library

This library provides services for staff and students undertaking courses in practical legal training and is located at 2 Chandos Street, St Leonards.

#### St Leonards Campus - Gore Hill Library

This library collects materials in the areas of life sciences and nursing. It is located on the corner of the Pacific Highway and Westbourne Street, Gore Hill.

The library's collection is recorded in the UNILINC catalogue which is available as an up-to-date on-line catalogue, and as a compact disc catalogue with enhanced search features. The catalogue can be accessed in each of the libraries as well as in offices and laboratories throughout the university. Access to library information and other bibliographic and numeric databases is extended nationally and internationally through high speed communications networks such as AARNet (the Australian Academic and Research Network). Access within Australia is extended through participation in ABN (the Australian Bibliographic Network) and the Linked Library System which links the university libraries in New South Wales and the ACT.

The library has a firm commitment to provide the best possible information service and has established a team of Faculty and School Liaison Librarians who, in partnership with academic staff, assist users in achieving their objectives in education and information. The Liaison Librarians for the Faculty of Design, Architecture and Building are

School of Design – Joy Slater (Balmain) School of Architecture, School of Building Studies – Julie Sweeten (City)

Services provided include loans, reservations, intercampus document delivery, interlibrary loans from Australian and international sources, reciprocal borrowing with other institutions, user education, and on-line, compact disc and print-based information retrieval services.

Service guides can be obtained from the libraries. Opening hours are posted in the libraries.

## INSTRUCTIONAL TECHNOLOGY SERVICES

In 1992 a new unit, Instructional Technology Services (ITS), was created. Initially this unit will concentrate on establishing a high standard of classroom audiovisual services across the university's campuses. It is also intended that it will deliver a high quality technical and maintenance service, as well as a production capacity.

Services currently available include provision of a one-stop booking service, enhanced presentation lecture theatres, reticulated video services, a trolley service for audiovisual equipment, videotape duplication services and a mediawatch service for current affairs programs.

At present ITS has offices at the Kuring-gai campus and in the Bon Marche Building, City campus. Administratively, the Service is controlled by the University Librarian.

#### **COMPUTING SERVICES**

The Computing and Communications Services Division provides a comprehensive range of facilities and services to meet the major computing requirements of academic and administrative areas of the university.

#### Equipment

The academic facilities consist of four large Sun SPARCserver computers and an Amdahl 5860 mainframe computer. These systems provides the academic community with a wide range of programming languages and application packages. They run the UNIX operating system, and can be accessed by users from public PC and Macintosh laboratories operated by the Division.

A Prime 9955-II computer, running the PRIMOS operating system, which has provided academic facilities on the Kuring-gai campus, has been replaced by a Sun SPARCserver 630 system on the Broadway campus.

Other central academic computing facilities consist of 12 PC laboratories, four Macintosh laboratories and three terminal rooms. It is also planned to install two Sun workstation laboratories for use in 1993.

A Data General MV20000, a Sun 4/470 and a Sequent S2000/200 systems support administrative data processing, while a Data General MV15000 services office automation and systems development work.

All computer systems are connected to the university's Local Area Network (UTSnet), which covers the City, Kuring-gai, Balmain and St Leonards campuses. Connected to the network are personal computers and terminals located in the public laboratories and terminal rooms, as well as various School minicomputers.

#### Location of Facilities

Located on level 9 of Building 1 at Broadway are the Sun, Amdahl, Sequent and Data General systems, as well as Computing and Communications Services Division staff offices.

Public laboratories and terminal rooms are located on the following campuses:

#### **City Campus**

Building 1 Room 1017 – 15 x Macintosh SE Room 1313A – 20 x PC XT Building 2 Room 421 – 25 x PC XT Building 4 Room 104 – 20 x PC 486SX Room 438 – 20 x Terminal Room 440 – 20 x Terminal Room 444 – 20 x PC XT Building 5 Room A209- 15 x PC XT Room A210 – 20 x PC XT Bon Marche Room 439 – 20 x Macintosh LCII

## **Balmain Campus**

Balmain North Basement – 20 x Macintosh LC Block A

St Leonards Campus

Dunbar Building Room 507 – 20 x Macintosh LC Room 511 – 16 x PC XT

#### Kuring-gai Campus

Stage 2 Room 461 – 20 x Terminal Room 524 – 20 x PC 3865X

Stage 3 Room 338 – 20 x PC 386SX Room 339 – 20 x PC XT

Room  $340 - 18 \times PC XT$ 

Room 341 – 20 x PC 386SX

General enquiries should be directed to the Response Centre, Room 913, level 9, Building 1, City campus (telephone 330 2111).

#### Services

Services provided by the Computing and Communications Services Division include:

- academic and administrative computer processing
- consulting on programming languages, application packages and system usage
- consulting on use of microcomputer hardware and software

- installation, maintenance and support of data communications equipment, terminals and microcomputers
- connection to the University's Local Area Network
- connection to the University's Voice Communications (Telephone) Network
- design, development and support of administrative data processing systems
- operation of a help desk for user enquiries and problems
- production of newsletters and technical documentation
- operation of a retail Microcomputer Shop

#### **Microcomputer Shop**

The Computing and Communications Services Division operates a Microcomputer Shop. This shop is a self-supporting, non-profit retail outlet that aims to provide the university and its staff and students with microcomputers and microcomputer software at the lowest possible prices. Purchases from the shop are restricted to university schools/units and to registered students and staff.

The shop stocks hardware and software from the following vendors:

Microsoft
Mitsui
Netcomm
Novell
SourceWare
Star
Tech Pacific
Techflow
WordPerfect

Other services include Macintosh rentals.

The shop is located on level 27, room 2713 of Building 1 at Broadway, telephone 330 2474. Trading hours for the shop are 9am to 5pm Monday to Friday.

#### UTS UNION

UTS Union is the community centre for the university. It provides food and drink services, lounges and recreational areas, comprehensive social and cultural programs, sports facilities and programs, stationery shops, newsagency and car park. The union also provides student accommodation, runs the University Careers and Appointments Service, provides a legal service with a full-time solicitor, and operates a large ski lodge at Jindabyne.

#### MANAGEMENT

The union is controlled by a Board of 15 persons consisting of eight students, three staff representatives, three Council appointees and one Alumni nominee. Annual elections are usually held in September and all students and staff are eligible to stand for a position on the Board. The union employs a staff of about 150, headed by the Secretary/Manager.

#### MEMBERSHIP

All registered students and university staff are members of the union.

#### FEES

All students pay an annual fee to the union and new students pay a joining fee as well. Staff fees are paid by the university.

#### **Fee Exemptions**

Students who have paid seven annual fees to the union are entitled to exemption from further fees. For further information, please contact the Union Office (not the university).

#### **ENQUIRIES**

For general information, contact the Union Receptionist in the Broadway Union Centre or Union Centre at Kuring-gai campus. For information about membership, fees or management, contact the Union Office on level 6 of the Tower building. For all sporting enquiries, contact the Sports Office in the Union Sports Centre at Broadway.

#### **Telephone Numbers**

The telephone number for the Union Receptionist, Union Office and all other branches of the union at Broadway is 330 1444. The union's telephone number at Haymarket is 330 1444. The union's telephone number at Haymarket is 330 3369, Gore Hill is 330 4048, at the Faculty of Nursing 330 4375 and at Kuring-gai 330 5011.

#### CATERING SERVICES

The union operates food services on all campuses except Balmain, where the service is provided by the Sydney College of the Arts Students' Association.

Licensed bars are provided at Broadway, Haymarket and Kuring-gai.

#### **Functions Catering Service**

The Functions Catering Service can cater for lunches, buffets, dances dinners, weddings, etc. Most of these are held in the Gallery Function Centre on level 6 of the Tower Building or at Kuring-gai. Ask about the special discount rates which apply for student and other union groups.

#### UNION SHOPS

There are union shops at Broadway, Haymarket, Balmain and Gore Hill with a wide range of items to meet course requirements, including calculators, stationery and technical drawing equipment. The Union Shop at Broadway also carries a range of university sweaters, pennants and memorabilia.

#### ACTIVITIES

The Union Activities Department arranges the social and cultural programs at UTS. These include dances, concerts, films, barbecues, creative leisure courses, art exhibitions, plays and lunchtime speakers. Faculty clubs and societies and hobby and social clubs (the Activities Clubs) receive financial and other support from the Activities Department. The Activities Officers are located in the Bornholt Room in the Broadway Union Centre. The Activities Officer at Kuring-gai is located in the Union Centre, telephone 330 5013.

#### PUBLICATIONS

The union produces a monthly magazine *Plexus*, the weekly *Union News* and a diary which is given to all students and staff at the beginning of the year and many other publications.

#### SPORT

#### Facilities

The Union Sports Centre at Broadway contains five squash courts (with special discount rates for union members) gymnasium, weights room, men's and women's saunas, change rooms with lockers and showers, sports office, sports clinic and sports shop. There is also an open air basketball/volleyball court on the roof of the squash courts. The Sports Centre is located on the lower ground floor of Building 4, extending into the quadrangle.

The union runs squash courts at Kuring-gai and can also arrange the hire of tennis courts. The Sports Department at Kuring-gai can be contacted on 330 5012.

#### **Fitness Classes and Programs**

The union runs daily fitness classes at Broadway and Kuring-gai. Contact the Sports Office for further information.

#### **Intervarsities and Interfaculty**

The union sponsors teams to state and national intervarsity meetings. As well, numerous interfaculty competitions are organised within the university throughout the year.

#### Clubs

There are many sporting clubs affiliated with the union. They receive financial support from the union and new members are most welcome.

#### Kookaburra Lodge

Kookaburra Lodge, which is owned and operated by the union, is located in Jindabyne at the foot of the Snowy Mountains. The Lodge, which overlooks the lake, is fully renovated and offers 30 rooms (some with en suites), heated pool, comfortable dining room and large recreation room. The union offers numerous weekend and mid-week trips during the ski season, with prices for members well below commercial rates.

In the off season, bed and breakfast is available from as little as \$20 per night, so Kookaburra Lodge is also an excellent base for those interested in bushwalking and non-winter activities in the Snowy Mountains.

All bookings are made through the Broadway Sports Office, phone 330 2444.

#### **UTS Haberfield Rowing Club**

Formed after a merger between Haberfield Rowing Club and the union, the UTS Haberfield Rowing Club caters for beginners through to elite rowers.

The club is located in Dobroyd Parade, Haberfield, less than 15 minutes by car from the City campus.

For further information, phone the club on 797 9523.

#### STUDENT ACCOMMODATION

The union has its own student residence, the Imperial, at 54-58 City Road, Chippendale. Just 10 minutes walk from the City Campus, Broadway, the Imperial offers high quality, low cost accommodation in single and double rooms. Preference is given to first and second year students from outside the metropolitan area. For further information, contact the Union Housing Office at Broadway, on 330 1509.

#### CAREERS AND APPOINTMENTS SERVICE

The UTS Careers and Appointments Service is a division of the union and provides the following services:

- A directory of employers seeking full-time, part-time and casual staff.
- Advice on employment skills such as interview techniques, personal presentation and resume writing.
- A register of students seeking employment, linked to a mailing and telephone contact service.
- A career counselling service aimed at assisting students and graduates in clarifying and focusing their career objectives.

• Ongoing campus interview programs which introduce final year students to a range of leading employers.

The Careers and Appointments Service is located on level 5 of the Tower Building at Broadway, telephone 330 1500, and at Kuring-gai in the Union Centre, telephone 330 5016. To take full advantage of the services offered, all students are urged to register with the Careers and Appointments Service at the earliest opportunity.

#### LEGAL SERVICE

The union employs a full-time solicitor who provides a range of legal services, in most cases free of charge, to members.

Free advice and assistance in any matter is available, especially those involving criminal charges, motor vehicle claims, family law, tenancy disputes, consumer and debt claims and welfare matters.

Representation in Local Courts is normally available free of charge to full-time students and students on low incomes.

Members can discuss any problems at the Solicitor's Office on level 5 of the Tower Building, telephone 330 1511, where all enquiries are dealt with in the strictest confidence. The solicitor is available at Kuring-gai campus one day a week, telephone 330 5017.

#### WORK EXPERIENCE INSURANCE

At UTS students who participate in approved work experience programs are insured by the university for "workcare" benefits (other than weekly payments) arising out of work related injuries sustained anywhere in Australia. The scheme is administered by UTS Union on behalf of the university. To obtain a letter of confirmation, or for further information, or to make a claim, contact the Union Office on level 6 of the Tower Building, telephone 330 1642.

#### CHILD CARE

UTS Child Care Inc. is an incorporated Association which coordinates the operation of all child care services at UTS. The Board of UTSCC Inc. comprises representatives of the University, the union, the Students' Association and parent users of the centres. The Board plans new child care facilities for UTS, and aims at providing a variety of services at each campus. It also sets operational policies to ensure that child care services are of high quality and meet the needs of members of the university community.

Each child care centre is managed by a Director who reports to a Management Committee, the majority of whose members are elected parent representatives. All parents are invited to become involved in the management of the centres. Operating costs for the various children's services are provided by State and Federal Funding: 8%, UTS sources (Union/SA/University): 10% and parent fees: 73%.

Under the Federal Government Fee Relief Scheme, families earning under \$440 per week pay minimum fees. Parents earning between \$440-\$1150 (approx) per week receive some fee relief benefit according to a sliding scale. Those with incomes greater than \$1150 per week pay full fees.

Access to child care facilities is open to all staff and students under "Priority of Access" guidelines. Priority is given to working and studying parents. There are waiting lists at each centre which take into account various factors including family circumstance, length of time on the waiting list and the family's need for care, in establishing priority of access to the centres. Waiting time varies depending on the family circumstances, the child's age, and the type of care required. There is little or no wait for night care or for vacation care.

Kuring-gai Kuring-gai Campus Child Care Centre is situated next to the oval on campus, and provides 45 day care places for babies to five year olds, from 8am until 6pm for 50 weeks each year. There are also 10 evening care places for babies to 10 year olds, until 10pm Monday – Friday during semester periods only. Enrolment is available on a full-time, regular part-time, evening only, semester only, or emergency basis. Some occasional care may be available during the December-February period. Occasional weekend care can be provided (by prior arrangement) when the university hosts conferences and seminars. Vacation care for school aged children is available during school holiday period. Telephone 330 5105 for information.

**Balmain** UTS supports Allen Street Glebe Child Care Centre which is attached to Sydney College of the Arts (Sydney University). Enrolment is available on a full-time or part-time basis daily.

City Campus Magic Pudding Child Care Centre is behind Building 1 on the Broadway campus, and provides 40 day care places for babies to five year olds, from 8am until 6.30pm for 51 weeks each year. There are also 15 evening care places for babies to 10 year olds, until 10pm Monday-Friday during semester periods only. Enrolment is available on a full-time, regular part-time, evening only, semester only, or emergency basis. Some occasional care may be available during the December-February period. Occasional weekend care can be provided (by prior arrangement) when the university hosts conferences and seminars. Vacation care for school aged children is available during the Christmas and July school holiday periods. St Leonards St Leonards Campus Child Care Centre is situated just off the Pacific Highway opposite the Dunbar Building at Gore Hill. It provides 25 day care places for babies to five year olds, from 8am until 6pm for 48 weeks each year. Enrolment is available on a full-time, regular parttime, semester only, or emergency basis. Some occasional care may be available during nonsemester periods. Telephone 330 4023 for information.

### STUDENT SERVICES

Student Services staff are employed by the university to cater for students' health, counselling, and welfare needs. Staff also assist in the development of study skills and provision for students with disabilities. All interviews are strictly confidential.

#### Welfare

Welfare Officers offer assistance with personal financial matters. Central to their work is administration of the Student Loan Fund, financial counselling and advising on AUSTUDY claims and appeals.

#### Health

The Health Service has two locations: level 3A of the Tower Building at Broadway and level 5 of Kuring-gai campus. The practice offers a free service to students with an emphasis on health education and promotion.

#### Counselling

Counsellors are available on all campuses. The service is full-time at City and Kuring-gai and parttime at Balmain and St Leonards campuses. The counsellors are experienced in dealing with all kinds of personal difficulties and can advise on administrative matters in relation to the university, such as appeals against exclusion.

#### International Student Counsellor

The International Student Counsellor can help students from overseas and from non-English speaking backgrounds with personal, practical and administrative problems while studying at UTS.

#### Learning Skills

The Learning Skills Counsellor helps students to understand how best they can learn. Advice is given on time management, writing assignments, reading effectively and preparing for exams. As well as individual consultations, workshops are held during both semesters.

Telephone 330 1456 for information.

#### Special Needs Coordinator

The Special Needs Coordinator works with other university staff to ensure appropriate support is available for students with disabilities and students admitted through the inpUTS Special Admission Scheme. Students with physical, sensory and learning disabilities are encouraged to contact the Coordinator. The Coordinator can also provide information and advice to prospective students who have disabilities.

To contact Student Services:

**Broadway.** level 3A Tower Building, telephone 330 1177, fax 330 1172, TTY 330 1166 Health Service Appointments: 330 1166

Balmain. Student Centre, appointments 330 1177.

**Kuring-gai.** level 5, telephone 330 5342, fax 330 5537.

St Leonards. appointments 330 5342.

#### STUDENTS' ASSOCIATION

The Students' Association (SA) is the elected representative body of students at the UTS: it is an organisation run by students for students. All students become members of the Students' Association upon enrolment. It is the only body in the university which can legitimately claim to truly represent the concerns, issues and problems students face on a day-to-day basis whilst at this university. All students have the right to stand for election of the Students' Association and to vote in the annual elections. There are 23 general representatives on the Council that makes policy for the Students' Association. It also has specialised portfolios and office bearers to deal with a range of issues: the environment, women, students with special needs. gay and lesbian rights, overseas students and postgraduates.

The Students' Association maintains close links with student organisations from other universities. Its political role is to defend and extend educational standards and conditions for students both within the university and the tertiary sector as a whole. Campus committees deal with campus-specific issues. This has proved to be the most effective and equitable means of ensuring that all students from all campuses are adequately represented in the make-up of the Students' Association. At this level, campus conveners carry out the directions of campus committees, which are also elected annually.

In general the Students' Association plays a representative and advocacy role on behalf of students. It acts as the voice of the student body. As part of this function it produces a fortnightly newspaper, *Vertigo*, and a weekly radio show on 2SER Student Voice. It liaises closely with the University Union, which provides services to students (e.g. the cafeteria, reading and leisure areas) and the Student Services Unit, which is funded by the university to provide welfare advice and counselling, loan assistance and medical services. The Students' Association also employs specialised education staff to assist in enquiries about AUSTUDY, HECS, appeals against exclusion and assessment grades and any other problems that students encounter at UTS. The Students' Association has lots to offer all students and welcomes student involvement.

#### Locations and Services

City campus 330 1155 The main office of the Students' Association is located on the City campus, Broadway on Level 3A of the Tower Building (near the bar and cafeteria) and offers the following services:

- General student representatives
  - Elected office bearers Women's officers Overseas students' officers Special needs officers Gay and lesbian officers Environment officer Postgraduate officer
- Specialist education, research and welfare staff
- General student enquiries
- Academic coaching service
- Photocopying
- Funding of PERC Clubs

#### Haymarket Resource Centre

This is located in room B110 and its services include:

- Computer, fax
- Photocopying
- Secondhand books

#### Design School Student Centre 330 2958

This is located on the Balmain campus, Mansfield Street, Balmain and is open Tuesday to Friday and offers:

- Photocopying
- Computer facilities

#### Gore Hill Resource Centre 330 4040

This is located in room 1/18 in the Dunbar Building and its services include:

- Photocopying
- Secondhand books
- Computer facilities

#### Kuring-gai Campus 330 5237

Located next to State Bank, the services offered include:

- General and campus representatives
- Specialist education, research and welfare staff
- General student enquiries

#### **RADIO STATION 2SER-FM**

In conjunction with Macquarie University, UTS operates Sydney Educational Broadcasting Ltd (2SER-FM), Sydney's first mass coverage educational radio station thus expanding the institution's role in education to a wide community audience. The station, on air 24 hours a day, broadcasts a variety of spoken word educational programs covering arts and sciences. In addition to a small core of paid staff, some 400 volunteers, including UTS staff and students, are involved in programming the station.

#### THE CO-OP BOOKSHOP

The Bookshop is located next to the Tower Building on Broadway. While committed to supplying textbooks for all timetabled courses it also attempts to cater to the needs of the university community for general books, stationery, calculators and computer books and software.

Through its extensive computer system linking over 40 branches in Australia, the bookshop can often get hold of hard-to-get titles. Students and staff are welcome to place special orders, and charge accounts are available for approved customers.

At the start of each semester the bookshop runs temporary branches at the City campus, Haymarket (room C117) and Gore Hill. The Kuring-gai campus is also serviced by a permanent Co-op Bookshop specialising in texts used on that campus.

The Broadway bookshop is open from 9am till 6pm Monday to Thursday, 9am till 5pm on Friday and 9am till 1pm on Saturday. There are normally extended hours at the beginning of each semester. The Bookshop can be contacted on 212 3078 or 330 2163.

#### STATE BANK

Full branches of the State Bank are situated on level 4 of the Tower Building, Broadway, and at Kuringgai campus. A complete range of banking services is provided. Normal banking hours apply all year at Broadway and the hours at Kuring-gai are 10am to 3pm. The State Bank also offers complete banking services at Gore Hill, St Leonards and Haymarket, operating through the UTS union facilities.

## FACULTY OF DESIGN, ARCHITECTURE AND BUILDING

The Faculty consists of three Schools: Design, Architecture and Building Studies. The School of Design is located at the Balmain campus in the White Bay and Mansfield Street buildings, Mansfield Street, Balmain. The School consists of four departments: Fashion and Textile Design, Industrial Design, Interior Design, and Visual Communication, and three units: Design Computing, Integrated Design Studies, and Postgraduate Studies.

The Schools of Architecture and Building Studies are located at the Broadway campus. The School of Building Studies consists of three departments: Building, Quantity Surveying and Land Economics.

## COURSES

#### SCHOOL OF DESIGN

Bachelor of Design with a major in: Fashion and Textile Design Industrial Design Interior Design Visual Communication Graduate Certificate in Design and Technology Graduate Diploma in Design Master of Design (by coursework) Master of Design (by thesis) PhD (by research)

#### SCHOOL OF ARCHITECTURE

Bachelor of Architecture Master of the Built Environment (by coursework) Master of Architecture (by thesis) Doctor of Architecture (by thesis)

### SCHOOL OF BUILDING STUDIES

Bachelor of Building in Construction Management Bachelor of Building in Construction Economics Bachelor of Applied Science in Land Economics Graduate Diploma in Urban Estate Management Graduate Diploma in Building, Surveying and Assessment Graduate Diploma in Planning Master of Planning (by coursework) Master of Project Management (by coursework)

Master of Applied Science (by thesis)

Full particulars of these courses and their requirements are given in the sections relating to the respective schools.

PhD programs are offered in Design, Architecture and Building and associated fields.

## SCHOOL OF DESIGN

## SCHOOL AIMS

The School of Design aims to maintain the stimulating and supportive environment and the educational standards which will ensure that its students are facilitated in the development of their intellectual, creative and critical abilities and its graduates can undertake successfully the professional practice of design.

The School aims to provide to its graduates the ability to solve design problems creatively and responsibly, based upon:

understanding of the social, cultural, environmental and economic context within which designers operate

understanding of the role and responsibilities of the professional designer

knowledge of the nature and potential of technology

knowledge of the means for identifying and assessing the wants and needs of those who will use their designs

knowledge of the processes of management relevant to design practice

command of the research, decision making and evaluation techniques upon which successful designing depends

skills in communicating with others

the motivation to continue to increase their knowledge and develop their abilities as designers.

## **COURSE RULES**

These rules 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 B Design course when he/she has achieved at least 192 credit points made up of –

1.1 146 credit points from required major studies subjects including:

- 24 credit points for Design I
- 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 four credit points at each of 300, 400, 500 and 600 levels;
- 1.3 16 credit points from General Studies subjects.

Note: Students completing their final year in 1993 require a total of 190 credit points, including 4 minor studies subjects and 5 general studies subjects.

#### 2. Assessment Period

The assessment period for the School 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 School Board.

#### 6. Progression

A student must obtain 18 credit points and required prerequisites by 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 School Board.

#### 7. Part-Time Study

Students may be permitted by the School Board 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 appropriate form and be endorsed by the applicant's academic adviser before being lodged with the Head of School.

#### 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 appropriate form and be endorsed by the applicant's academic adviser before being lodged with the Head of School.
- 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 School Board.

#### 10. Ownership of Student Work

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 will 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.

Any claim that the University may make in respect of intellectual property developed by a student will be made in accordance with the Copyright Act 1968, the University's Inventions Policy and other relevant policies. The University has reasonable access to student university work including for the purposes of assessment, exhibition, reproduction or publication except that, upon written request the University will refrain from using any work of the author in any way which would jeopardise his/her ability to protect any intellectual property rights that may attach to that work.

## ASSESSMENT POLICY

This policy statement has been adopted by the School Board in Design, in accordance with the university's policy on assessment. It outlines the ways in which the School goes about assessing (marking) student work submitted during semesters and compiling subject assessments for students at end-of-semester.

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

- 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 spelled 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 s/he is enrolled or to undertake a subject in which s/he is not enrolled. The application must be lodged with the 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.

- The basis for assessment is spelled out in the semester program for the subject. The School does not use semester examinations as part of its 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% 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, say, 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).
- The assignment conditions set by the subject lecturer define as necessary the submission format, the submission deadline and the assessment criteria.
- 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 criticisms 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 resubmission may be allowed or encouraged by a subject lecturer to help a student to bring an assignment to a more satisfactory conclusion. The resubmission 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 School 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 department head. If the lecturer who teaches the subject is a full-time staff member s/he 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 that all eligible assignment submissions have been assessed, that assessment records are complete and available for reference and that 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 head of the responsible department. 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.
- 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, has demonstrated that s/he has satisfactorily achieved the subject's aims through work of average standard.

#### Ν

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.

- 19. A conceded pass or R result can be awarded by the examination review committee to a student, 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. The committee consists of the Head of the School and Heads of Departments. 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 by the School. The assessment standards committee may, in consultation with a

head of department and coordinating examiner, move grade boundaries to adjust subject results.

21. The examination review committee, i.e. the full time academic staff of the School, 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.

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 where 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 in UTS document which is available from the School Office.

## COURSES

The School of Design provides four-year courses of study leading to the degree of Bachelor of Design majoring in Fashion and Textile Design, Industrial Design, Interior Design, and Visual Communication.

The School also provides the following postgraduate courses: Graduate Certificate in Design and Technology, Graduate Diploma in Design, Master of Design (by coursework), Master of Design (by thesis), and PhD (by research).

## DEPARTMENTS AND UNITS

Fashion and Textile Design – responsible for undergraduate subjects concerned with the technology of fibres, textiles and garment construction and the design of textiles and fashion.

**Industrial Design** – responsible for undergraduate subjects concerned with the technology of manufacturing and the design of manufactured products.

**Interior Design** – responsible for undergraduate subjects concerned with the technology of building construction, finishes, furniture and furnishings, and the design of building interiors.

Visual Communication – responsible for undergraduate subjects concerned with the technology of the visual media and the design of messages for transmission via those media.

**Design Computing Unit** – responsible for undergraduate and postgraduate subjects and activities in computer-assisted drawing, sketching, drafting, concept modelling, desk top publishing. type generation, and image generation and manipulation.

Unit for Integrated Design Studies – responsible for undergraduate and postgraduate subjects, research and consultancy in the fields of design management, human factors, marketing, environmental studies and social/psychological studies.

Unit for Postgraduate Studies – responsible for the management and coordination of postgraduate coursework, project and thesis supervision and research initiatives. Studies are aimed at the improvement of professional practice and performance in industry.

## **UNDERGRADUATE COURSES**

## **BACHELOR OF DESIGN**

In 1991, the School of Design introduced a new curriculum for the Bachelor of Design based on a problem-solving approach to learning and on increased interdisciplinary activity between the major areas of design study.

In 1993 this new course will operate for all students enrolled in Stages 1 to 6. The old subject-based course continues for students enrolled in Stages 7 and 8 (the old year 4).

The first-year curriculum of the new course allows students to gain a broad understanding of the role, process and responsibilities of professional design. Common design projects with students from the other design disciplines in the School are undertaken.

Design problems introduced by lectures and tutorials are supported by workshop activities and research. Four fields of study support the problem-based learning activities, forming the structure and initiating problem solving and project orientation. These are

**Design Context,** concerned with the historical and contemporary context within which design was/is practised, providing the theoretical knowledge for dealing with the wide range of issues that affect design decisions;

**Design Methods**, concerned with techniques for research, analysis, creative thinking and evaluation, and concerned also with the technologies and methods of construction, manufacturing and decisions;

Design Elements, concerned with the physical phenomena and their variables (e.g. form, shape, texture, place, space) which are studied and used by designers; providing an awareness of the characteristics of human response to physical variables;

Design Communication, concerned with the simulation and explanation of design intentions at progressive stages of idea exploration, development and presentation; including personal verbal, written, graphic, three dimensional communication; developing experience in handling tools, materials, media and processes of design communication.

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

Approximately one quarter of a student's study load is made up of elective studies, which are of two kinds: **Minor Studies** subjects in professional areas including transportation design, design for sustainable futures, photography, theatre and set design, and furniture design; and **General Studies** in broad education areas including cultural studies, environmental studies, and film studies, can be taken within the School of Design or in other UTS Schools or other comparable institutions.

## FASHION AND TEXTILE DESIGN

Fashion and textile design is concerned with the design of printed and knitted fabrics as well as fashion clothing and its related fields. The course deals with how the subject reflects the changing values, needs and customs of our society. Fashion and textile designers work alongside manufacturers and marketers, and combine an awareness of current lifestyles and values with detailed understanding of the materials, skills and processes of the fashion and textile industry.

First year studies include common problem-based projects and activities. Major studies for fashion and textile design in the later years of the course cover the technologies of the fashion and textile industries, construction of garments and accessories and the design of printed and knitted fabrics.

Fashion design subjects cover many facets of design, including clothing for women, men and children, day through to evening and club wear. In addition, garment construction is taught to assist students to understand the translation of design ideas, and illustration to communicate expression of ideas. Also included is the production process of manufacture through to costing. Marketing and management are important team subjects in the discipline and are included in the later six stages of the course, culminating in professional practice.

Textile design subjects cover designing for both fashion and household items, fibre characteristics, dyeing, and the various printing and embellishing techniques used with fabric. Students gain experience of the design and production of knitted fabrics and knitted garments. Printing techniques studied include batik, silk screen, heat transfer, fibre reactive, tie dyeing and the students print cloth to their own designs for incorporation into garments and other products designed to given briefs.

#### **Practical Experience**

Students are required to gain practical experience to augment and complement their academic studies prior to completion of the program.

#### **COURSE STRUCTURE**

Credit point values are shown in brackets.

P	
Stage 1 -	- Autumn semester
85000	Design I (24cp)
Stage 2 -	- Spring semester
83220	Design Project Fashion and Textile II (24cp)
Stage 3 -	- Autumn semester
83330	Design Project Fashion and Textile III (14cp) Minor study (6cp) General study (4cp)
Stage 4 -	- Spring semester
83440	Design Project Fashion and Textile IV (14cp) Minor study (6cp) General study (4cp)
Stage 5 -	- Autumn semester
83550	Design Project Fashion and Textile V (14cp) Minor study (6cp) General study (4cp)
Stage 6 -	- Spring semester
83660	Design Project Fashion and Textile VI (14cp) Minor study (6cp) General study (4cp)
*Stage 7	- Autumn semester
83770	Design Project Fashion and Textile VII (16cp)
83780	Research Dissertation Fashion and Textile (8cp)
*Stage 8	– Spring semester
83880	Major Project Fashion and Textile (24cp)
+0. 1	C 111 1 1 1 10021

\*Students finishing their courses in 1993 have a different program in Stages 7 and 8. Details are given in the 1992 Handbook.

## INDUSTRIAL DESIGN

Industrial design is concerned with the design of products for 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, modelmaking, 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.

#### Practical Experience

Students are required to gain practical experience to augment and complement their academic studies prior to completion of the program.

#### COURSE STRUCTURE

Credit points are shown in brackets.

Stage 1 –	Autumn semester
85000	Design I (24cp)
Stage 2 –	Spring semester
84250	Design Project ID II (24cp)
Stage 3 -	Autumn semester
84330	Design Project ID III (14cp)
	Minor study (6cp)
	General study (4cp)
Stage 4 –	Spring semester
84440	Design Project ID IV (14cp)
	Minor study (6cp)
	General study (4cp)
Stage 5 –	Autumn semester
84550	Design Project ID V (14cp)
	Minor study (6cp)
	General study (4cp)
Stage 6 –	Spring semester
84660	Design Project ID VI (14cp)
	Minor study (6cp)
	General study (4cp)
*Stage 7 -	- Autumn semester
84770	Design Project ID VII (16cp)
84780	Research Dissertation ID (8cp)
*Stage 8	– Spring semester
84804	Major Project ID (24cp)

\*Students finishing their courses in 1993 have a different program in Stages 7 and 8. Details are given in the 1992 Handbook.

#### 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 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.

#### **Practical experience**

With the new course there is a requirement for students to gain practical experience to augment and complement their academic studies. Students may seek experience in associated industries or the profession. Advice and approval should be sought from the Head of Department.

#### COURSE STRUCTURE

Credit points are shown in brackets.

Stage 1 -	- Autumn semester
85000	Design I (24cp)
Stage 2 -	- Spring semester
86220	Design Project IT II (24cp)
Stage 3 -	- Autumn semester
86330	Design Project IT III (14cp) Minor study (6cp) General study (4cp)
Stage 4 -	- Spring semester
86440	Design Project IT IV (14cp) Minor study (6cp) General study (4cp)
Stage 5 -	-Autumn semester
86550	Design Project IT V (14cp) Minor study (6cp) General study (4cp)
Stage 6 -	- Spring semester
86660	Design Project IT VI (14cp) Minor study (6cp) General study (4cp)

*Stage 7	<ul> <li>Autumn semester</li> </ul>	
86770	Design Project IT VII (16cp)	
86780	Research Dissertation II (8cp)	
*Stage 8	<ul> <li>Spring semester</li> </ul>	
86880	Major Project IT (24cp)	

\*Students finishing their course in 1993 have a different program in Stages 7 and 8. Details are given in the 1992 Handbook.

## 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. The visual development and processing most often uses a combination of words and images, produced freehand or with the assistance of computer, photographic, and/or video 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. An understanding of the social context of design and communication and the way the design process is mediated by the contemporary socio-political framework within which it occurs is integral to the course.

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

First year studies include common problem-based projects and activities. In the later years of the course lectures and tutorials examine the historical and contemporary context of design and practice. By initiating a topic theme and a focus for research and project activity, close links are established between practice and theory. Design problems initiated by project lecturers 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 model of the holistic nature of design practice.

#### **Minor and General Studies**

On completion of Stages 1 and 2 students must elect a number of minor and general studies to complement their major study.

#### **Professional Experience**

All students are required to gain practical experience in professional design practice to augment and complement their academic studies. In the Visual Communication course, a period of five weeks is released at the end of Stage 6 to ensure that this can be achieved for a minimal period of time. Advice and approval must be negotiated with designated lecturers. Additional experience should be sought during vacation breaks. This is recommended from Stage 4 onward.

#### **International Exchange Program**

A number of student exchange places are available at equivalent institutions in England and Germany. These are usually undertaken at either Stage 5 or Stage 6.

#### **Research Project**

At Stage 6, students initiate supervised research. This is developed at Stage 7 and involves research on a relevant 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. This research project enables students to focus on the orientation of self directed project activity undertaken over the final stages of the course.

#### **Major Project**

In Stage 8, the final semester of the course, students are expected to research and resolve with professional competence, a complex visual communication design problem. The resolution must be presented for assessment by a panel of academic supervisors with advice from external professional designers.

#### **COURSE STRUCTURE**

Credit points are shown in brackets.

Stage 1 -	– Autumn semester	
85000	Design I (24cp)	
Stage 2 -	– Spring semester	
87220	Design Project VC II (24cp)	
Stage 3 -	– Autumn semester	
87330	Design Project VC III (14cp) Minor Study (6cp) General Study (4cp)	

Stage 4 -	- Spring semester	
87440	Design Project VC IV (14cp) Minor Study (6cp) General Study (4cp)	
Stage 5 -	- Autumn semester	
87550	Design Project VC V (14cp) Minor Study (6cp) General Study (4cp)	
Stage 6 -	- Spring semester	
87660	Design Project VC VI (14cp) Minor Study (6cp) General Study (4cp)	
*Stage 7	- Autumn semester	
87770 87780	Design Project VC VII (16cp) Research Dissertation VC (8cp)	
*Stage 8	– Spring semester	
87880	Major Project VC (24cp)	

\*Students finishing their courses in 1993 have a different program in Stages 7 and 8. Details are given in the 1992 Handbook.

### MINOR AND GENERAL STUDIES

In order to graduate, students who have completed first and second years are required to complete four general studies subjects, and a strand of minor studies taken over 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 computing and design, illustration, photography, textile design, jewellery, film and video design, transportation design, design and sustainable human futures, furniture design 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 Islanders studies, music video, and environmental studies. Students may apply to take appropriate General Studies subjects in other UTS Schools, or at other comparable institutions. There are no prerequisites.

Further details of minor and general studies subjects to be offered by the School of Design in 1993 will be provided at the time of enrolment. When enrolling, students should check carefully the 1993 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 (i.e. 3cp), the duration of the subject, indicated as semester weeks, if applicable, and the number of formal contact hours each week (i.e. *four hpw*); 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, the method of assessment and name of the subject coordinator, if known, and a brief outline of the content.

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

### 85000 DESIGN I (24cp)

Gives students an appreciation of the disciplines and process of design and the social, historical, environmental and economic context in which designers work. Design problems introduced by lectures and tutorials are supported by workshop activities and research. Four fields of study support the problem-based learning activities, forming the structure and initiating problem solving and project orientation. These are:

**Design Context.** The historical and contemporary context of design is introduced through a series of lectures and tutorials. The content is broad based, focusing on the social, environmental, technological, political and economic structures relevant to design activity in the past, present and future.

**Design Methods.** Students are introduced to the design process and creative problem solving methodologies through problem identification, research, processing and the communication and presentation of design solutions in response to project briefs. By introducing creative thinking techniques, students are encouraged to develop their individual process through personal research, exploration and experimentation.

**Design Elements.** A broad range of physical phenomena are introduced at this stage of the course. Physical, perceptual and experiental aspects of place, context and identity are thoroughly examined through project activity. Awareness of other variables evolves through investigation and practical experience gained in supporting workshops.

**Design Communication**. To attain the skills necessary to explore and communicate design ideas and to offer support in the processing and presentation of design solutions a number of workshops classes are programmed:

Drawing Workshop introduces students to free hand representational drawing. This develops skills in seeing and documenting visually as well as offering a means of visually communicating ideas and processes.

Orthographics Workshop introduces students to methods of producing accurate measured drawings using drafting techniques and tools. This develops knowledge and skills in the conventional methods of representing three dimensional form or abstract processes and the accurate translation to a two dimensional plane.

3D Representation Workshop introduces students to the techniques, materials, tools and processes relevant to the production of three dimensional forms. This develops craft skills and an understanding of the use and application of simulated models as a means of research, idea generation, processing and communication. *Computing Workshop* introduces students to computing skills and to the concepts of computer and software use and applications. This develops basic competency and offers an insight into the scope and range of alternatives, developed at later stages of each course.

All workshops develop knowledge and skills of essential value to design practice as well as directly assisting students to develop the necessary confidence and competence to communicate ideas relevant to project activity and problem solution.

## **FASHION AND TEXTILE DESIGN**

#### 83220 DESIGN PROJECT FASHION AND TEXTILE II (24cp); prerequisite 85000 Design I

In the Spring semester students enter the department of the discipline preferred. The course is projectdriven with all classes and workshops revolving around the problem set in the given brief. Classes and workshops are conducted in fashion design and technology, textile design and technology, garment construction, history of lifestyle and fashion, objective drawing costume and life drawing, fabric communication, fashion communication, textile drawing and computing.

#### 83330 DESIGN PROJECT FASHION AND TEXTILE III (14cp); prerequisite 83220 Design Project Fashion and Textile II

The problem-based approach to learning and teaching is continued in Design Project Fashion and Textile III. Projects are supported by lectures, tutorials and workshops, in the technologies of the fashion and textile industries, design of garments and accessories, the design of printed cloth and knitted fabrics and garments. Principles of marketing, with theory specific to the industry, are studied as an integral part of the overall subject, along with contextual studies focusing on social, environmental, technological, historical and economic aspects of the design activity.

#### 83440 DESIGN PROJECT FASHION AND TEXTILE IV (14cp); prerequisite 83330 Design Project Fashion and Textile III

The problem-based approach to teaching and learning is maintained in this semester, with projects that are supported by lectures, tutorials and workshops. These cover, at more advanced levels, the activities and processes of the discipline, and their application to the market. This semester incorporates principles of management, history of lifestyle and costume, computing with paintbox, fashion design theory and practice, textile print and knit theory and practice, and fashion and textile communication.

#### 83550 DESIGN PROJECT FASHION AND TEXTILE V (14cp); prerequisite 83440 Design Project Fashion and Textile IV

As in the previous levels, problem-based learning is the basic structure of this semester. The course is structured to develop further students' abilities to prepare, execute and present innovative and thoroughly resolved design proposals in response to given briefs. Applied marketing is included as a series of lectures, to acquaint students with theory specific to the fashion and textile industry, covering market niche, consumables marketing and promotion. Market research is part of all projects, including sample interviewing of established companies and segmentation of the market.

#### 83660 DESIGN PROJECT FASHION AND TEXTILE VI (14cp); prerequisite 83550 Design Project Fashion and Textile V

This is the final semester of project-based teaching and learning. The course is structured to develop further the students' abilities to research, design and execute innovative and thoroughly resolved design proposals, in response to given briefs. Emphasis is placed upon students developing a responsible professional approach and method, and identifying their preferred career directions.

#### 83770 DESIGN PROJECT FASHION AND TEXTILE VII (16cp); prerequisite 83660 Design Project Fashion and Textile VI

Aims to provide students with an opportunity to reflect on their career objectives and to further develop their professional contacts in design. Students are allowed the opportunity to demonstrate ability in specialised areas: e.g. menswear, active sportswear, printed homewares, printed and knitted ranges. The student is required to research, design and technically develop two ranges of marketable merchandise appropriate to their agreed areas of specialisation. Aspects to be covered with complete documentation are storyboards, working and production drawings, market research, production projection, costings, range drawings and presentation. Included in the semester is the business study of establishing a professional practice. Through a series of lectures and tutorials, the aim is to give the student a working knowledge of the professional and legal aspects of design practice; a series of lectures deals with the legal systems; professional liability; finance; agency; management principles; contracts; job interviews; taxation; insurance and real estate.

#### 83780 RESEARCH DISSERTATION FASHION AND TEXTILE (8cp); prerequisite 83660 Design Project Fashion and Textile VI

Students are required to develop a research project oriented 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, including a component of visual research.

#### 83880 MAJOR PROJECT FASHION AND TEXTILE (24cp); prerequisites 83770 Design Project Fashion and Textile VII, 83780 Research Dissertation Fashion and Textile

Students are required to demonstrate their professional ability gained through previous study, to prepare professional quality designs in their chosen area of fashion and/or textile, etc., and in doing so to demonstrate their ability to work at a graduate, professional level. The student is required to design, plan, develop and produce a complete range or agreed project, supported by documentation of target market research, marketing strategy, manufacturing, costing and production projection. Students work with numerous academics as supervisors and, dependent on the nature and range of their project, they may also be required to liaise with an accepted external adviser or nominated consultant.

## INDUSTRIAL DESIGN

#### 84250 DESIGN PROJECT ID II (24cp); prerequisite 85000 Design I

Design projects introduce students to some of the basic skills required by Industrial Designers. There

is an emphasis on form studies and use of materials in the projects which form the core of problem-based learning. Project work is supported by lectures and workshops in design methods, design elements, design context and design communication.

#### 84330 DESIGN PROJECT ID III (14cp); prerequisite 84250 Design Project ID II

The problem-based learning approach is maintained with design projects supported by lectures and workshops in manufacturing science and technologies, expressive and communication techniques, and computing.

#### 84440 DESIGN PROJECT ID IV (14cp); prerequisite 84330 Design Project 1D III

The problem-based approach to learning and teaching is continued. Projects are supported by classes and workshops as in Design Project III but at advanced levels.

#### 84550 DESIGN PROJECT ID V (14cp); prerequisite 84440 Design Project ID IV

Within the framework of problem-based learning students develop expertise in the decision-making process characteristic of the design of manufactured goods. Lectures and seminars involving Engineering Science, Manufacturing Technology, Applied Marketing, and Industrial Design Graphics support the design projects which are also selected to foster the growth of creative skills.

#### 84660 DESIGN PROJECT ID VI (14cp); prerequisite 84550 Design Project ID V

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 market place. Lectures and seminars in manufacturing technology, engineering science, computer-aided design, and design management support these projects.

#### 84770 DESIGN PROJECT ID VII (16cp); prerequisite 84660 Design Project ID VI

Develops students' design decision-making ability so that they are able to contribute effectively to the research, development and marketing processes leading to the successful production of consumer goods. Design projects are often undertaken with clients from manufacturing industries.

### 84780 RESEARCH DISSERTATION ID (8cp)

Gives 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.

#### 84804 MAJOR PROJECT ID (24cp); prerequisites 84770 Design Project ID VII, 84780 Research Dissertation ID

Enables students to apply knowledge gained through research on a major project of their own choosing and in so doing evidence their ability to work at graduate, professional level. The students prepare their own programs for the semester. Each student is supervised by a member of staff. The project assessment is based on a panel assessment at a final presentation. The panel assessment takes into account the degree to which the student achieves the stated aims of the the project and the degree of professionalism evident in the work.

#### INTERIOR DESIGN

#### 86220 DESIGN PROJECT IT II (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 the first stage 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 study students will be presented with an 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. Interior Design problem projects are selected mainly from community sources. Academic study fields will be:

Design Context. Through a series of lectures from a variety of user groups, consultants and experts on issues of contextual relevance to the design projects, students will be expected to justify the relevance and appropriateness of their solutions. Issues will include ergonomic, social, cultural, political, environmental, economic and technological issues and will be addressed as they relate to the current Design Projects.

**Design Context (Historical).** Through a series of lectures and research reports students will identify and draw upon appropriate historical precedents for their work.

Design Methods. To introduce students to the techniques of research, analysis and evaluation appropriate to design problem-solving activities and to encourage students' individual processing through creative thinking techniques, personal exploration and experimentation. Students will be encouraged to develop and justify their own design method. **Design Elements.** Through a series of lectures, demonstrations, site visits and research reports students will become conversant with the elements that effect interior environments both phenomenological and technological. Topics will have direct relevance to current design projects.

**Design Communications** To further develop students' abilities to explore and communicate design ideas and solution, communication workshops will concentrate on the following areas: *3-Dimensional Representation*. This workshop aims to establish the value of 3-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 structural dynamics and structural principles.

The principles involved in the selection of modelmaking materials and appropriate techniques for construction will also be highlighted. 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 elevations of buildings and interiors are also introduced as are the production of 3-dimensional representations. Within this workshop students will explore and test issues raised in other academic study fields. Illustration. This workshop combines studio and field activities and emphasis the importance of visual thinking in the design process. Significant interior spaces are selected for analysis via sketching and drawing. 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.

#### 86330 DESIGN PROJECT IT III (14cp); prerequisite 86220 Design Project IT II

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 interior spaces. 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 assessed within the design project solutions. Projects are selected from community and commercial sources, specifically interior spaces for casual or permanent domicile. Academic study fields will be: **Design Context.** Through a series of lectures from a variety of user groups, consultants and experts on issues of contextual relevance to the particular design projects, students will be expected to justify the relevance and appropriateness of their solutions.

**Design Context (historical):** Through a series of lectures and research reports students will draw links to the historical precedents of their work and gain a broader understanding of the role of design and designers in society.

**Design Methods.** Through a series of lectures and tutorials students will be encouraged to strengthen and develop their own design processes. Lecture on design problem solving, analysis and synthesis, research methods and design philosophies will further enrich the students' approaches.

**Design Elements**. Through a series of lectures, demonstrations, site visits and research reports students will become conversant with the elements that affect interior environments both phenomenological and technological. Topics will have direct relevance to current design projects.

**Design Communications**. Workshops will continue in areas of communication skills to assist students in design visualisation and communication, particularly in illustration techniques, documentation systems, and computer applications.

#### 86440 DESIGN PROJECT IT IV (14cp); prerequisite 86330 Design Project IT III

This subject represents the academic core studies of Interior Students in Stage 4 of the course. Academic study fields will direct and reinforce projects undertaken in this subject. 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 interior spaces. Knowledge gained from issues raised in academic study fields will be assessed within the design project solutions. Projects are selected from community and commercial sources, specifically spaces for commercial activity: retail and hospitality. Academic study fields will be:

**Design Context**. Through a series of lectures from a variety of user groups, consultants and experts on issues of contextual relevance to the design projects, students will be expected to justify the relevance and appropriateness of their solutions.

**Design Context (historical).** Through a series of lectures and research reports students will draw links to the historical precedents of their work and gain a broader understanding of the role of design and designers and the historical influences on their work.

**Design Methods**. Through a series of lectures and tutorials students will be encouraged to strengthen and develop their own design and research processes. Lectures on design methodologies through case studies and research reports will strengthen students' solutions to design projects.

**Design Elements.** Through a series of lectures, demonstrations, site visits and research reports students will become conversant with the elements that affect interior environments both phenomenological and technological. Topics will have direct relevance to current design projects.

**Design Communications**. Workshops will continue in areas of communication skills to assist students in design visualisation and communication, particularly in illustration techniques and documentation systems.

#### 86550 DESIGN PROJECT IT V (14cp); prerequisite 86440 Design Project IT IV

This subject represents the academic core activity of Interior Design students in Stage 5 of the course. Academic study fields will continue to direct and reinforce projects undertaken in this subject. 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 interior spaces, specifically spaces for casual or permanent habitation. Knowledge gained from issues raised in the academic study fields will be assessed within the design project solutions. Projects are selected from community and commercial sources. Academic study fields will be:

**Design Context.** Through a series of lectures from a variety of user groups, consultants and experts on issues of contextual relevance to the design projects, students will be expected to justify the relevance and appropriateness of their solutions.

**Design Context (historical).** Through a series of lectures and research reports students will become aware of the issues relating to the conservation and restoration of interior spaces.

**Design Methods**. Through a series of lectures and tutorials students will analyse the works of contemporary designers. Specifically, lectures will highlight philosophies and approaches to design in historically sensitive interior spaces.

**Design Elements.** Through a series of lectures, demonstrations, site visits and research reports students will become conversant with the elements that affect interior environments both phenomenological and technological. Topics will have direct relevance to current design projects.

**Design Communications.** Workshops will continue in areas of communication skills to assist students in design visualisation and communication, computer applications and contract documentation systems.
## 86660 DESIGN PROJECT IT VI (14cp); prerequisite 86550 Design Project IT V

This subject represents the academic core activity of Interior Students in Stage 6 of the course. Academic study fields instituted in the preceding stages will continue to direct and reinforce projects undertaken in this subject. 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 interior spaces, specifically spaces for the hospitality industry and public exhibition. Knowledge gained from issues raised in the academic study fields will be assessed within the design project solutions. Projects are selected from community and commercial sources. Academic study fields will be:

**Design Context.** Through a series of lectures from a variety of user groups, consultants and experts on issues of contextual relevance to the design projects, students will be expected to justify the relevance and appropriateness of their solutions to design projects.

**Design Context (historical)**:. Through a series of lectures and research reports students will draw links to the historical precedents of their work and draw parallels in their current work.

**Design Methods.** Through a series of lectures and tutorials students will be encouraged to further reinforce their own design processes. Methodologies for design research will be revised in preparation for students research dissertation at the following stage.

**Design Elements.** Through a series of lectures, demonstrations, site visits and research reports students will become conversant with the elements that effect interior environments both phenomenomlogical and technological. Topics will have direct relevance to current design projects. Lectures on design phenomenology and philosophies will concentrate on case studies of Australian and overseas designers and their impact on contemporary practice.

**Design Communications.** Students will be tested on the clarity, appropriateness and quality of their communications through their design project work.

## 86770 DESIGN PROJECT IT VII (16cp); prerequisite 86660 Design Project IT VI

Requires students to undertake projects that allow them to apply knowledge and abilities gained in major, minor and general studies subjects. Students complete approved design projects of the type and complexity that will prepare them for 86810 Interior Design – Major Project.

# 86780 RESEARCH DISSERTATION IT (8cp)

Requires students to develop a research project, in consultation with a supervising lecturer, on a topic or

area of study which supports the student's personal direction and career orientation within professional design practice.

# 86880 MAJOR PROJECT IT (24cp); prerequisites 86770 Design Project IT VII, 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 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.

# VISUAL COMMUNICATIONS

# 87220 DESIGN PROJECT VC II (24cp); prerequisite 85000 Design I

Stage 2 introduces students to the academic core study of the major Visual Communication. The structure of integrated problem-based learning continues but content focuses on study relevant to the design of visual communication. Through a series of experiential design projects students identify issues and problems to be addressed, gaining a broader understanding of design practice in their major core study. Study fields initiated at Stage 1, continue to direct and reinforce problem setting and project activities:

Design Context. Developing from the introductory stage, design practice is examined in the context of historical and contemporary cultural movements and technological developments over the last 150 years. While offering a broad view, attention is centred on aspects of particular relevance to the design and practice of visual communication. A series of lectures introduces these issues and topics which establish a theme for further research investigation and development through project activity. Small group tutorials offer the opportunity for further discussion and debate. At this stage contemporary cultural issues are introduced and discussed such as gender, ethnicity, nuclear family, obsessions, addictions, power, consumer culture and popular culture.

**Design Methods.** The established theme initiates project activity. Project activity offers a model of design practice requiring research, visual exploration, creative thinking, design processing and verbal/visual presentation. Students are introduced to the demands and expectations of specific media technologies which are further developed at later stages in the course.

Design Elements. These are investigated through visual research and practical exploration initiated by each project lecturer as integral to project development and problem solving. At this stage investigation focuses on word/image reinforcement; use of scale, size and context; 2D/3D translations; static/dynamic transition; word as visible language/ image.

**Design Communication**. As major study involves the design of visual communication this field becomes a primary component of project activity. A number of workshops are offered to support project activity.

Visual Research Workshop directly relates to and supports each project activity assisting students to explore ideas, develop visual awareness and a level of visualising competence relevant to the needs of project work.

Image/Photo Workshop introduces students to photography as a "technologically produced" image. At this stage students work in black and white format developing their "way of seeing" as well as technical competence in image generation and reproduction. Word Workshop introduces students to basic type forms and terminology and develops skill in visualising words for various applications. Occasional workshops in computer applications assist students to generate typographic forms as well as the manipulation of type to symbol format.

### 87330 DESIGN PROJECT VC III (14cp); prerequisite 87220 Design Project VC II

This subject is the academic core study of the major, Visual Communication for students at Stage 3 of the course. The structure of integrated problem-based learning continues. Through a series of experiential design projects students gain a broader understanding of the relevant issues and problems to be addressed at this stage of development in the design of visual communication. 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 contemporary theories are introduced and their influence on the design of visual communication is examined. Students are encouraged to research and investigate contemporary issues and their impact on design activity. Lectures and tutorials introduce the theme. Topics investigate broad global issues of current significance, involving current affairs and

issues of media attention and debate. Research concentrates on magazine, newspaper and electronic media references.

Design Methods. Investigation of issues introduced by the theme are further explored in project activity. Students are encouraged to select from within the theme, topics of personal interest for further research through project development. Students develop their ability to design and process ideas with consideration of production media and technologies in response to given brief and needs/perception of user/audience. Project activity at this stage focuses on the design of visual communication applicable to both print reproduction and dissemination and to the design and production of the moving image for transmission on the screen.

**Design Elements.** The selection, orientation 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 a visual language is introduced and applied as appropriate to project activity. Exploration of sequence, framing and dynamic formats as well as 2D/3D static applications is emphasised.

**Design Communication.** A number of workshops are offered to support project activity : *Visual Research Workshop* introduces the notion of "visual metaphor" and initiates creative visual exploration.

Image/Photo Workshop develops student's photographic awareness and skills and initiates the notion of a "constructed image". Students are encouraged to use the photographic studio and are introduced to the use of associated equipment necessary to devise, stage and direct the making of a "constructed image".

Word Workshop continues to develop students' knowledge and skills in generating, manipulating and applying words in typographic or symbolic form. Application to graphic and screen formats is emphasised. Occasional computer workshops introduce further software programs which assist students to develop further skill.

# 87440 DESIGN PROJECT VC IV (14cp);

prerequisite 87330 Design Project VC III This subject is the academic core study of the major, Visual Communication for students at Stage 4 of the course. The structure of integrated problembased learning continues. Through a series of experiential design projects students gain a broader understanding of the relevant issues and problems to be addressed at this stage of development in the design of visual communication. Study fields developed through earlier stages, continue to direct and reinforce problem setting and project activities undertaken in this subject. **Design Context.** Lectures and tutorials continue to offer students a broad view of the historical and contemporary context in which design operates, examining the role and responsibility of design and designers in shaping the past, present and future. The theme at this stage examines issues that focus on Australia. Topics of immediate interest are examined as well as those of longer term significance such as political power structures and sustainable futures.

**Design Methods.** Project activity develops and consolidates experience gained in design and production relevant to print and screen media. Experience gained in previous workshops is now able to be integrated into project activity. Students continue to be encouraged to make personal choices from within the established theme, developing topics of personal interest through design project activity.

**Design Elements.** As confidence and competency develop, study of design elements becomes integral to project practice requiring less specific emphasis. Aspects of semiotics introduced at the previous stage are further examined. Notions of selection, bias, objectivity, information and persuasion are investigated as part of project work.

**Design Communication**. At this stage, previously separate workshop activity is totally integrated into problem identification and project activity. Students continue to develop skills in communication media, maintaining access to photography, video, animation computing and graphic prepress facilities.

Occasional workshops are offered as seen necessary by lecturers or requested by student group. These workshops of varying length are initiated in direct response to the needs of project activity.

## 87550 DESIGN PROJECT VC V (14cp); prerequisite 87440 Design Project VC IV

This subject is the academic core study of the major, Visual Communication for students at Stage 5 of the course. The structure of integrated problem-based learning continues. Through a series of experiential design projects students identify issues and problems to be addressed, gaining a broader understanding of design practice in their major core study. Study fields developed through previous stages, continue to direct and reinforce problem setting and project activities:

Design Context. Lectures and tutorials continue to examine the historical and contemporary context in which design operates but examine topics at greater depth. Students are encouraged to research and investigate the role and responsibility of current professional practice in design. The theme at this stage focuses on design practice, professionalism, ethics, philosophies and alternatives to mainstream activity. Topics of direct significance are investigated such as notions of style, high, low, vernacular. The wants of clients and the needs of users and their impact on design solutions are analysed and examined critically.

**Design Methods.** Project activity becomes selective enabling students to choose from a number offered. Through problem choice and project orientation students may select to develop highly specialised expertise or remain broad based and flexible. Towards the end of this stage all students participate in a "Community Project". A number of identified community groups requiring design expertise are invited to become clients, briefing students on requirements. Student design teams offer their services, negotiate with clients and present their solutions for discussion, approval, further development and selected production. A model of design practice having been initiated is then discussed and critically examined.

**Design Elements.** A sophisticated level of visual awareness is developed through project choice processing and development. Study of design elements at this stage is developed through topics examined in lectures and integrated into project activity.

Design Communication. Project activity requires students to develop their visualising skills to communicate effectively at all stages of idea development, processing and presentation to client. The need to communicate using visual, verbal, and written language as well as developing the confidence to personally present ideas is emphasised at this stage. Access to communication and production technologies such as computers, video, animation, photography and graphic prepress facilities enables students to process and present intentions and ideas. The role of visual presentation through conventions of rough concept sketches through comprehensives to highly presented visual formats and/or production work is identified and practiced as relevant to project briefs. Occasional workshops are offered in support of specifically identified needs and requests.

## 87660 DESIGN PROJECT VC VI (14cp); prerequisite 87550 Design Project VC V

This subject is the academic core study of the major, Visual Communication, for students at Stage 6 of the course. The structure of integrated problem-based learning continues. Through a series of experiential design projects students identify issues and problems to be addressed, gaining a broader understanding of design practice in their major core study. Study fields developed through previous stages, continue to direct and reinforce problem setting and project activities: **Design Context.** Lectures and tutorials continue to establish a theme for further investigation through project choice. Existing and changing practises in professional design practice both nationally and internationally are examined. The impact of technological change and the role of research in design practice become a primary focus.

Design Methods. Through project selection and orientation, students are encouraged to identify a personal direction and develop individual strength and expertise. All students are required to initiate a research project oriented to support their personal direction, ensuring that relevant skills and competencies are acquired to assist each to prepare for self directed study and enquiry in the final year of the course.

**Design Elements/ Design Communication.** These study fields can no longer be separately identified as they are integral to project activity.

## 87770 DESIGN PROJECT VC VII (16cp); prerequisite 87660 Design Project VC VI

Provides students with an opportunity to reflect on their career objectives and develop contacts in professional practice. A number of graduates working in professional practice are invited to discuss issues of relevance to them and offer advice on career development and opportunities. The student group initiates planning for final stage project work and the preparation, display and publicity for the degree exhibition and personal promotional material.

## 87780 RESEARCH DISSERTATION VC (8cp); prerequisite 87660 Design Project VC VI

Students will develop a research project oriented to support their personal direction, on a topic or area of study, individually selected by each student. As negotiated with 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 VII, 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 to 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 student's work methods and a panel assessment of the final presentation. The panel assessment takes into account the degree to which the student has achieved the stated aims of the project(s) and the professionalism evident in the work.

# **GENERAL STUDIES SUBJECTS**

# 51002 CREATIVE WRITING I (4cp)

Provides 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 I (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 (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 II** (4*cp*) Continuation of 51002.

# 51007 MEDIA STUDIES (4cp)

Gives an understanding of the individual properties and potentials of print, audio and visual media and their appropriate use. There is a series of lectures and discussions on (1) basic communication theory, messages, communicators and audiences; and (2) properties and potentials of print, radio, TV etc., theories of McLuhan, Schwarz etc.

## 51008 SOCIAL THEORY AND AUSTRALIAN SOCIETY II (4cp)

See the Faculty of Social Sciences Handbook for details.

# 80039 ABORIGINAL AND TORRES STRAIT ISLANDERS ART AND CULTURE I (4cp)

The lectures introduce students to a critical understanding of aspects of Aboriginal culture and to 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 ISLANDERS ART AND CULTURE II (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 I (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. Two topics, each of eight weeks' duration are presented. Topic 1 – the development of architecture and other design elements in various cultures e.g. Indian, Tibetan, Japanese, Indonesian and Western, and Topic 2 – the materials, symbols and design elements of traditional artifacts from Japan, China and Papua New Guinea.

# 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. 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 which provide an introduction to the theory of popular culture as the dominant social context of our time and explore 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.

# 80054 MUSIC VIDEO I (4cp)

Develops awareness of the history of the genre, examines some of the influences on its development, and its influences on other forms of film and video production, and evaluates its effectiveness as a medium of both artistic expression and commercial promotion. Topics covered include the study of the Hollywood musical, experimental film, television technology and the effect of music video on film, fashion, advertising and dance.

# 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 II (4cp)

Provides a further understanding of the relationship of design and designer to their cultural milieu. Two topics, each of eight weeks' duration, will be presented in lectures and seminars.

# 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 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 audio-visual equipment. There is a series of lectures and demonstrations dealing with coordination of equipment; group presentations; individual presentations; planning for major presentations; commercial applications.

# **80074 MUSIC VIDEO II** (4*cp*)

Promotes advanced studies of the genre including examination of various forms, such as the concept type, the narrative type, the performance type, the experimental type and the self-reflexive type, as well as study of legal, budgetary and promotional aspects of music video production and distribution. Topics covered include the study of authorship, ownership, budgets, contracts, experimental film and video art, image marketing and promotion, and genre studies.

## 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 centering around 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 then that can be classified as part of the "symbolic order". Material discussed will include the work of Susan Sontag, Alison Lurie, Roland Barteus and the linguist Gordon Lakoff.

# MINOR STUDIES SUBJECTS

# 88301 COMPUTERS AND DESIGN I (6cp)

Provides a working understanding of the potential of computers for design practice and to provide skills in relevant applications. This strand is concerned with microcomputer-based systems for word and image processing, drafting and animation and consists of a series of lectures, seminars and tasks concerned with computer graphics relevant to the various design majors. Visits are made to computer graphics systems in industry.

## 88304 ILLUSTRATION I (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 seminar/tutorials, demonstrations and tasks are undertaken concerned with a range of techniques and applications, e.g. line and half tone work, rendering and airbrushing and reprographic technologies.

# 88305 PHOTOGRAPHY I (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 are undertaken. Emphasis is placed on 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 I** (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 are undertaken, and are 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 I (6cp)

Provides students with an understanding of the techniques and processes involved in the planning and detailed design of film and video productions, and experience of relevant aspects of design. The first (300) level semester provides an introduction to the basic language, technology and procedures of film and video production and to the roles of the various members of production and design teams, Subsequent semester units give students experience of script analysis, design research, preproduction planning, storyboard, set design and construction, modelmaking, costumes, special effects, titles, makeup design, lighting and camera work. Students have opportunities for appropriate specialisation. A series of lectures, screenings and discussions will deal with the history, theory and practice of the screen media. Guest designers present and discuss their work, and production exercises give students direct experience of design for film and video.

# **88309** TRANSPORTATION DESIGN I (6cp)

An introduction to vehicle design and a general understanding of these complex products and why they are the way they are. A theoretical component 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 I (6cp)

Introduces students to the concept of sustainable human futures. This subject examines the role of essential ecological processes in maintaining human life and the extent to which these processes are already stressed from, for example, economic growth, population and pollution. The role of attitudes, values and societal priorities as barriers to sustainable futures is next considered. Finally, contemporary initiatives towards providing sustainable benefits to humanity are examined. Project work explores possible relationships between design and sustainable human futures.

## 88311 FURNITURE DESIGN I (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** (6cp)

Introduces students to the specialised areas 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 multi-disciplinary 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 II (6cp) Continuation of 88301.

**88404** ILLUSTRATION II (6cp) Continuation of 88304.

**88405 PHOTOGRAPHY II** (6cp) Continuation of 88305.

88406 TEXTILE DESIGN II (6cp); prerequisite 88306 Textile Design I

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

# **88408** FILM AND VIDEO II (6cp)

Continuation of 88308.

## 88409 TRANSPORTATION DESIGN II (6cp); prerequisite 88309 Transportation Design I

Further develops students' understanding of the complexity of designing moving wheeled products. The first of a two semester project to design a passenger car for a specific market segment, including 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 II (6cp); prerequisite 88310 Design and Sustainable Human Futures I

Examines the role of systems thinking in designing sustainable human futures. A basic understanding of systems concepts is followed by an examination of key ecological processes and their relevance to human systems. The changing relationship through time between human and natural systems is next considered, demonstrating both the evolving nature of human systems and their growing impact on natural systems. Contemporary thought on the application of ecosystem principles, particularly to human settlements, is evaluated. Finally, future directions for the development of sustainable technological systems for both urban and rural societies are predicted. The relevance of the systems approach to designers is emphasised throughout the unit. Project work explores more fully relationships between design and systems thinking.

**88411 FURNITURE DESIGN II** (6cp)

Continuation of 88311.

**88412 DESIGN FOR THEATRE II** (6cp) Continuation of 88312.

**88501 COMPUTERS AND DESIGN III** (*6cp*) Continuation of 88401.

**88503** FILM AND VIDEO III (6cp) Continuation of 88408.

**88504** ILLUSTRATION III (6cp) Continuation of 88404.

**88505 PHOTOGRAPHY III** (6cp) Continuation of 88405.

# 88506 TEXTILE DESIGN III (6cp); prerequisite 88406 Textile Design II

Further develops students' understanding of current industrial design methods, and to provide 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 history of textiles.

# 88508 PHOTOGRAPHY (HOLOGRAPHY) III (6cp)

Introduces students to the skills and techniques used in holography. Lectures concentrate on a particular method and are complemented by practical sessions. Processes to be outlined will include: laser transmission and mass production methods, such as embossing and photopolymer.

# 88509 TRANSPORTATION DESIGN III (6cp)

Continuation of 88409.

# 88511 FURNITURE DESIGN III (6cp)

Continuation of 88411.

**88512 DESIGN FOR THEATRE III** (6*cp*) Continuation of 88412.

**88601 COMPUTERS AND DESIGN IV** (*6cp*) Continuation of 88501.

## 88603 FILM AND VIDEO IV (6cp)

Continuation of 88503.

# 88604 ILLUSTRATION IV (6cp)

Continuation of 88504.

# 88605 PHOTOGRAPHY IV (6cp)

Continuation of 88505.

# 88606 TEXTILE DESIGN IV (6cp); prerequisite 88506 Textile Design III

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.

88609 TRANSPORTATION DESIGN IV (6cp) Continuation of 88509.

# **88611 FURNITURE DESIGN IV** (6cp) Continuation of 88511.

**88612 DESIGN FOR THEATRE IV** (6*cp*) Continuation of 88512.

# **POSTGRADUATE COURSES**

# GRADUATE CERTIFICATE IN DESIGN AND TECHNOLOGY

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

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 skills 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 curicula.

The course is also of interest to those who are concerned with design processes and the professional practice of design.

# **Qualifications for Entry**

To qualify for entry to the Graduate Certificate in Design and Technology an applicant shall: hold a Bachelor Degree, Diploma or equivalent qualification in an appropriate area; have relevant teaching experience, or submit other evidence of general and professional qualifications which will satisfy the Postgraduate Committee that the applicant possesses the educational preparation and capacity to pursue graduate studies.

The course can be completed in one year of part-time study.

# **Course Rules**

The Graduate Certificate in Design and Technology is a full-fee paying course.

These rules are to be read in conjunction with the rules for Graduate Certificate and Graduate Diploma of the University of Technology, Sydney.

## 1. Award and Graduation

A student is deemed to have completed the educational requirements for the Graduate Diploma in Design Studies when he/she has achieved 24 credit points made up of-

1.1 16 credit points from required core subjects;

1.2 Eight credit points elective subjects.

## 2. Assessment Period

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

# 3. Credit Point System

Each subject offered for credit toward the certificate 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 twenty four. This maximum may be varied with the approval of Faculty Board.

## 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 appropriate form and be endorsed by the applicant's academic adviser and the head of the department responsible for the applicant's major studies before being lodged with the Head of School.
- 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 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 products to that design. Students should seek advice in order to protect their rights and interests in such cases.

- 8.3 During the calendar year in which an item or work is produced in satisfaction of course requirements, the University may have reasonable access to that work including for the purposes of assessment, exhibition, reproduction or publication, except that the University upon written request from the student who is author of the work will refrain from using that work in any way which could jeopardise the student's ability to protect any intangible rights which may attach to the work.
- 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 Registrar.

# **COURSE 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 part time study. Each subject has a value of four credit points.

16 credit points must be achieved from the core subjects; the remaining eight credit points can be achieved from elective postgraduate subjects drawn from the following areas:

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.

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

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

General Studies Subjects in the General Studies area provide knowledge of relevant aspects of history and contemporary culture.

In consultation with the Head of the Unit for Postgraduate Studies students plans a program of study suited to their needs, bearing in mind their prior study and work experience. All subjects have a credit point value of four.

## Core Studies

Cole olua	103
Autumn se	emester
89919*	Design and Technology
89912*	Design Case Studies
89914**	Design Practice
Spring ser	nester
89104*	Design and Society
89013*	Design Case Studies
89012**	Design Practice
User Stud	ies
82009	Human Factors and Design
82901	Psychology of Design
Technolog	gy Studies
82015	Appropriate Technology
82903	Technological Change
Managem	ent Studies
81020	Management Techniques and Design
81920	Marketing and Design
General S	tudies
81022	Desk Top Publishing
81025	Design History
81922	Computer-Aided Design
81923	Introduction to Design Computing
82016	Graphic Visualisation
82017	2D and 3D Communication
82914	Photography and Video

\* Core Subject

\*\* Alternate core subjects

Details of the fees can be obtained by contacting the Unit for Postgraduate Studies of the School of Design, the Faculty Office or the UTS Student Information Service.

### **GRADUATE DIPLOMA IN DESIGN STUDIES**

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

The Graduate Diploma in Design Studies is aimed at equipping graduates in related fields with the knowledge and understanding necessary to work with practising designers in effective association. In consequence, the course is planned to provide a useful understanding of design, and of the methods and values of designers.

#### **Qualifications for Entry**

To qualify for entry to the Graduate Diploma in Design Studies an applicant shall hold a Bachelor degree, diploma or equivalent qualification in an appropriate area, or submit other evidence of general and professional qualifications which will satisfy the Postgraduate Committee that the applicant possesses the educational preparation and capacity to pursue graduate studies.

The course can be completed in two years of parttime study, involving four to eight hours of classes weekly, or one year of full-time study.

# **Course Rules**

These rules are to be read in conjunction with the rules, including the rules for Graduate Diploma of the University of Technology, Sydney.

# 1. Award and Graduation

A student is deemed to have completed the educational requirements for the Graduate Diploma in Design Studies when he/she has achieved 48 credit points made up of –

1.1 20 credit points from required core subjects;

1.2 28 credit points from elective subjects.

# 2. Assessment Period

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

# 3. Credit Point System

Each subject offered for credit toward the diploma 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 24. This maximum may be varied with the approval of Faculty Board.

# 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 appropriate form and be endorsed by the applicant's academic adviser and the head of the department responsible for the applicant's major studies before being lodged with the Head of School.
- 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 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 to that design. Students should seek advice in order to protect their rights and interests in such cases.
- 8.3 During the calendar year in which an item or work is produced in satisfaction of course requirements, the University may have reasonable access to that work including for the purposes of assessment, exhibition, reproduction or publication, except that the University upon written request from the student who is author of the work will refrain from using that work in any way which could jeopardise the student's ability to protect any intangible rights which may attach to the work.
- 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 Registrar.

# **COURSE STRUCTURE**

To qualify for the Graduate Diploma in Design Studies a student must achieve 48 credit points in not fewer than four semesters of study. 20 credit points must be achieved from the core subjects. The remaining 28 credit points must be achieved from elective subjects drawn from the areas of:

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

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

Methodology Studies Subjects in the methodology area provide knowledge of the means by which design decisions are made by individuals and groups.

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.

Students may be granted exemption from, and credit for, subjects which have been studied previously at postgraduate level. The maximum extent of such exemptions and credits is 24 credit points.

In consultation with the Head of the Postgraduate Unit, each student plans a program of study suited to their needs, bearing in mind their prior study and work experience. All subjects have a credit point value of four.

#### Core Studies Autumn semester 81920\*\* Marketing and Design (and/or 81020) 89912\* Design Case Studies 89914\* **Design** Practice Spring semester 81020\*\* Management Techniques and Design (and/or 81920) 89012\* **Design** Practice 89013\* Design Case Studies User Studies 82009 Human Factors and Design 82901 Psychology of Design 82902 Sociology of Design **Technology Studies** 81021 Communication Technology 82015 Appropriate Technology 82903 Technological Change Management Studies 81020\*\* Management Techniques and Design 81920\*\* Marketing and Design 81921 Innovation, Management and Design Methodology Studies 82905\* Research Methods 82912\* Design Seminar

	Studies
81022	Desk Top Publishing
81024	Computer Graphics I
81025	Design History
81030	3D Computer Animation II
81840	Advanced Computer-Aided Design
81922	Computer-Aided Design
81923	Introduction to Design Computing
81924	Computer Graphics II
81925	3D Computer Animation I
82014	Special Studies II
82913	Special Studies I
82016	Graphic Visualisation
82017	2D and 3D Communication
82914	Photography and Video

\* Core Subject

\*\* Alternate core subjects

## MASTER OF DESIGN (BY COURSEWORK)

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

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.

# **Qualifications for Entry**

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 area of design, and have completed not less than two years of appropriate professional experience after graduation.

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

## **Course Rules**

These rules are to be read in conjunction with the rules for Masters Degrees by coursework of the University of Technology, Sydney.

# 1. Admission Requirements

To qualify for admission to the Master of Design (by coursework) course applicants shall have completed two years experience as a practising designer in addition to meeting the university's general eligibility requirements.

## 2. Award and Graduation

A student is deemed to have completed the educational requirements for the Master of Design (by coursework) when he/she has achieved 72 credit points made up of:

- 2.1 28 credit points from required core subjects;
- 2.2 20 credit points from elective subjects;
- 2.3 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 their project work.

# 3. Assessment Period

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

## 4. 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.

## 5. Minimum Credit Points

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

## 6. 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 Faculty Board.

## 7. Special Leave

- 7.1 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.
- 7.2 Applications for special leave must be in the appropriate form and be endorsed by the applicant's academic adviser before being lodged with the Head of School.
- 7.3 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.

# 8. Assessment Policy

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

# 9. Ownership of Student Work

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

9.1 All property rights in such items of work are vested in the student who authored the work, subject to the limitation on ownership and use set out in paras 9.3 and 9.4 below. Accordingly, the student will own outright the work itself together with all intangible rights which might apply to the exploitation of that work.

- 9.2 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 products to that design. Students should seek advice in order to protect their rights and interests in such cases.
- 9.3 During the calendar year in which an item of work is produced in satisfaction of course requirements the University may have reasonable access to that work, including for the purposes of assessment, exhibition, reproduction or publication, except that the University upon written request from the student who is author of the work will refrain from using that work in any way which could jeopardise the student's ability to protect any intangible rights which may attach to the work.
- 9.4 During the calendar year in which an item of 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 prior written approval of the Registrar.

# Record of Project Work Appendix A

# 1. Record of Project Work

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

# 2. Volume

Where the format of the record is a bound volume

- 2.1 The volume shall be compiled in accordance with the guide-lines of the Postgraduate Unit as written by the Head of the Unit, David Denne.
- 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 oneand-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 I.S.O. 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 on 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, tablets 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-
  - (i) Folded so as to read as a right-hand page when opened.
  - (ii) 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 buchram or similar and embossed on the spine as follows
- 2.12.1 90 mm from the bottom and across, the degree and year of submission;
- 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 Oxford green and the lettering 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 Copyrights
- (c) Candidates for a Masters 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 Registrar in consultation with the Dean and Head of School, otherwise by lodging a record a candidate consents to its release.
- (d) Where the record contains material which the candidate considers should have restricted distribution the Dean and Head of School 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 Registrar in consultation with the Dean and Head of School has authorised such disclosure.

## COURSE 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 four semesters of study. 24 credit points must be achieved from project, i.e. by two semesters successful work on an approved project program. 28 credit points must be achieved from the core coursework subjects. The remaining points must be achieved from an approved program of elective coursework subjects from the areas:

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

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

Methodology Studies Subjects in the methodology area provide knowledge of the means by which design decisions are made by individuals and groups.

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. A twounit strand in aspects of computing is offered in this area.

Students may be granted exemption from, and credit for, subjects which have been studied previously at Masters Degree level. The maximum extent of such exemptions and credits is 14 credit points. All subjects, with the exception of the Project, have a credit point value of four. The Project has a value of 12cp (part-time) and 24cp (full-time).

# Core Studies

Autumn se	emester
81920**	Marketing and Design (or 81020)
82901*	Psychology of Design
82903*	Technological Change
82905*	Research Methods
82912*	Design Seminar
Spring ser	nester
81020**	Management Techniques and Design (or 81920)
82004*	Design Decision Making
82013*	Research Seminar
89917*	Project (part-time)
89918*	Project (full-time)

#### User Studies

82009	Human Factors and Design
82901*	Psychology of Design
82902	Sociology of Design

## Technology Studies

81021	Communication Technology
82015*	Appropriate Technology
02002*	Tashnalasiaal Change

# 82903\* Technological Change

# Management Studies

81020\*\* Management Techniques and Design

- 81920\*\* Marketing and Design
- 81921 Innovation, Management and Design

M	ethodo	logy	S	tudies	
-					

- 82004\* Design Decision Making
- 82013\* Research Seminar
- 82905\* Research Methods
- 82912\* Design Seminar

# General Studies

81022	Desk Top Publishing
81024	Computer Graphics I
81025	Design History
81030	3D Computer Animation II
81840	Advanced Computer-Aided Design
81922	Computer-Aided Design
81923	Introduction to Design Computing
81924	Computer Graphics II
81925	3D Computer Animation I
82014	Special Studies II
82913	Special Studies I
* Core Sul	bject

\*\* Alternate core subjects

Elective subjects may be offered in either Spring or Autumn semesters according to timetabling and demand.

# **MASTER OF DESIGN (BY THESIS)**

The Master of Design (by thesis) aims to provide opportunities for graduate research work and awards to honours graduates and other graduates who have established their capacity to perform at a high level in such advanced work.

To qualify for the Master of Design (by thesis) degree a students will be required to complete successfully two coursework subjects, and to complete a thesis which is judged by its examiners to be a distinct and substantial contribution to knowledge in a design related area.

81830* Thesis (Design) (part-time) 82013* Research Seminar	81820*	Thesis (Design) (full-time)	
82013* Research Seminar	81830*	Thesis (Design) (part-time)	
	82013*	Research Seminar	
82905* Research Methods	82905*	Research Methods	

# DOCTOR OF PHILOSOPHY

The university offers a Doctor of Philosophy program to graduates of design who have established their capacity to study at a high level of advanced study. Candidates are encouraged to undertake the coursework subjects 82013 Research Methods and 82905 Research Seminar. The program is normally of a minimum of three years' duration part-time, and two years on a full-time basis. Supervision of candidates is undertaken by appropriate academic staff appointed by the faculty.

# POSTGRADUATE SUBJECT DESCRIPTIONS

# 81020 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. The subject consists of a series of seminar/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; organisational development; personnel recruitment and staffing structures; organisational models; union and labour relations.

# 81022 DESK TOP PUBLISHING (4cp)

Provides a working knowledge of microcomputer applications of particular relevance to design. A series of lectures and seminars/tutorials are undertaken concerned with providing a working knowledge in the use of Macintosh microcomputers for a range of applications such as word processing, filing databases, spreadsheets, desk top publishing and graphics.

# 81024 COMPUTER GRAPHICS I (4cp)

Provides selected postgraduate students who have previously attained a minimum of a credit pass in their first year computing courses with the opportunity to experience a wide range of 2D and some introductory 3D graphics programs.

# 81025 DESIGN HISTORY (4cp)

Furnishes a historical perspective on design and designers. A series of lectures, seminars and tutorials are undertaken concerned with such topics as artefacts, communications, environment and culture and group studies on different aspects of the technology society interface.

# 81030 3D COMPUTER ANIMATION II (4cp)

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

## 81709 ADVANCED 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 the advanced development in CAD programs and computer graphics and projects giving direct experience of complex systems and their varied applications.

# 81820/ THESIS (DESIGN) 81830

These subjects provide an opportunity to achieve a Masters Degree by research. To qualify for the Master of Design (by thesis) degree, a student will be required to undertake an approved, supervised program of investigation, review, criticism or design, leading to the completion of a thesis. The thesis should make a distinct and original contribution to a design related area. The applicant will also be required to complete two coursework subjects, Research Methods and Research Seminar.

# 81920 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. The subject 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 innovation and processes of change. The subject 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.

# 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 the recent development 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 subject consists of a series of lectures and tutorials concerned with the history and current developments of computer graphics and the implications for the design professions. The graphics techniques will include paintbrush systems, live diagrams and typography. Projects provide an introduction to microcomputers and standard graphics software packages.

# 81924 COMPUTER GRAPHICS II (4cp)

Gives 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.

# **81925 3D** COMPUTER ANIMATION I (4*cp*)

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

# 82004 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 decisions in the area of design. A series of lectures, seminars and tutorials are undertaken concerned with such issues as thought and decision making; overt and intuitive decision making; defining problems and developing appropriate decision making strategies; logic, scientific methods and the rational decision making model.

# 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. A series of lectures, seminars and case studies.

# 82013 RESEARCH SEMINAR (4cp)

Provides students with an understanding of the role and incentives for research in areas associated with design and to enable students to assist each other in early development of research projects. A series of lectures and student presentations.

# 82014 SPECIAL STUDIES II (4cp)

Provides an opportunity for postgraduate students to continue to pursue, as individuals, topics of particular interest or concern within any field of design. The subject provides the opportunity for group discussion on a range of current design issues as well as programs tailored to the needs of individual students or groups of students. Assessment is by participation, a semester paper and a presentation based on the semester paper to the class.

# 82015 APPROPRIATE TECHNOLOGY (4cp)

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

# 82016 GRAPHIC VISUALISATION (4cp)

This is an introductory level subject to enable participants with other disciplinary backgrounds and knowledge to expand their awareness and practical ability to generate ideas and communicate through "hands on" experience. The subject will include methods of graphic investigation, application and reproduction.

# 82017 2D AND 3D COMMUNICATION (4cp)

This is an introductory level subject to enable participants with other disciplinary knowledge to expand their awareness and practical ability to generate ideas and communicate through "hands on" experience. The subject introduces methods and conventions to explain design intentions through three-dimensional model forms and two-dimensional drafting techniques and processes.

# 82901 PSYCHOLOGY OF DESIGN (4cp)

Provides an understanding of 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; and human behaviour in large scale environments such as towns and cities.

# 82902 SOCIOLOGY OF DESIGN (4cp)

Provides a sociological perspective upon, and a social definition of the designer, together with an understanding of the designer's role in contemporary society and the social uses of design. The subject consists of a series of lectures, seminars and investigations concerned with such issues as identifying the range of decisions classifiable as design; identifying the design decision makers; values, trends, fashion and fads; status symbols; the designer/client relationship; the future technologies; the social context of work; the designer in the consumer society; professionalism.

# 82903 TECHNOLOGICAL CHANGE (4cp)

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

# 82905 RESEARCH METHODS (4cp)

Provides an understanding of the methods of research. The course combines lectures with opportunities for first hand experience. Lecture topics 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).

# 82912 DESIGN SEMINAR (4cp)

Identifies and discusses contemporary issues in design theory and practice in order to help in selecting suitable topics for Masters projects.

## 82913 SPECIAL STUDIES I (4cp)

Provides an opportunity for postgraduate students to pursue, as individuals, topics of particular interest or concern within any field of design. The subject provides the opportunity for group discussion on a range of current design issues as well as programs tailored to the needs of individual students or groups of students. Assessment is by participation, a semester paper and a presentation based on the semester paper to the class.

# 82914 PHOTOGRAPHY AND VIDEO (4cp)

This elective subject introduces the students to the use of photography and video for the documentation of "authentic" information and communication of ideas. Students will gain basic knowledge in the functions and handling of equipment and the use of specialised facilities as well as initial experience in relevant techniques, approaches and applications.

# 89012 DESIGN PRACTICE (SPRING) (4cp)

Provides an understanding of the techniques of research, decision making and evaluation involved in the practice of design and of the designer/client interface in product and communication design. Projects are undertaken in which students work together with a designer in the development of a design proposal in the area of either the manufacturing or the communication industry, or in the design of landscapes or interior spaces. As an alternative to participation in group activity, a student may be permitted to undertake an individual research and design project.

## **89013 DESIGN CASE STUDIES** (4cp)

Provides further understanding of the 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; the means by which designs are evaluated. A series of lectures and seminars involving practising designers and focussing on their professional roles, responsibilities and methods. The areas addressed in this semester may include fashion, textile, industrial, film and television production, graphic, exhibition design.

# 89014 DESIGN AND SOCIETY (4cp)

Examines the role of design in society as well as in the educative process. Develops issues raised in Design and Technology and examine design practice and user studies as well as the social and environmental factors that are affected by design decisions.

# **89914 DESIGN PRACTICE (AUTUMN)** (4cp)

Provides an understanding of the techniques of research, decision making and evaluation involved in the practice of design and of the designer/client interface in environmental design. Students undertake two individual research and design projects.

# **89917/89918 DESIGN PROJECT** (12/24 cp)

Design Project is a program of individual supervised research or design activity undertaken by each student, leading to the submission for assessment of an original body of work. A design project normally consists of four elements or phases – research, development, evaluation and report.

# 89919 DESIGN AND TECHNOLOGY (4cp)

Provides the knowledge and skills that are integral to the understanding of the processes and practice of design. The subject content will cover design elements, contextual studies, design methodology and communication.

# SCHOOL OF ARCHITECTURE

# **COURSE RULES**

These rules should be read in conjunction with the University's rules and By-Law:

- 1. The appropriate Examination Review Committee, in making its decisions, shall take into consideration the student's performance in all subjects and may concede a pass in an individual subject.
- 2. On the recommendation of the appropriate Examination Review Committee, Faculty Board may in exceptional circumstances exempt a student from provision of the rules relating to progression.
- 3. The year/stage in these rules is defined as the program for a year shown in the current edition of the Calendar.
- A student who fails one or more subjects in any year/stage will normally be required to repeat and pass those subjects failed before progressing to the next year/stage.
- 5. Notwithstanding Rule 4 a student in any year/ stage may be permitted at the discretion of the Examination Review Committee:
  - (i) to undertake one or more subjects from the following year/stage; or
  - (ii) in exceptional cases where the Examination Review Committee is satisfied as to the resultant workload in relation to the student's capacity and commitments to carry the subject or subjects in the next year/stage.

## **Architecture Design Review**

The subject Design is assessed by a Design Review Panel which inspects the year's work of each student and the marks awarded by his/her tutors and then arrives at a final grading by consensus. The panel consists of faculty members, eminent outside academics or practitioners, and student representation from the year being examined.

It is the faculty's view that this is the fairest method that can be devised for assessing a subject in which absolute standards are difficult to define. It ensures that consistent standards can be applied. With these safeguards in place and mindful of the difficulties of reconvening the panel, assessments are not subject to review or appeal. However, the panel may award a mark which indicates to the Examination Committee of the Faculty Board that a conceded pass may be granted in the light of a student's results in other subjects.

# Rules for Award of Honours in the Bachelor of Architecture Degree Courses

The award of Honours in the degree course is recommended by the Faculty Board on the basis of the criteria listed below. The application of these rules is not totally automatic and Faculty Board modifies them in cases where it is felt that they do not give a true representation of an individual student's calibre, particularly in those cases which are very close to the dividing line between categories (on either side).

On the basis of WAM averaged over the last four semesters of the course:

75% and over	Degree with 1st Class Honours
65% to 74%	Degree with 2nd Class Honours
50% to 64%	Degree

# PROFESSIONAL MEMBERSHIP

## **Royal Australian Institute of Architects**

Students enrolled in the Architecture Course are eligible to become student members of the Royal Australian Institute of Architects, and are encouraged to do so. Student membership may be retained by graduates for a period of 12 months.

Application details may be obtained from the Secretary, NSW Chapter, RAIA, 'Tusculum', 3 Manning Street, Potts Point 2011 (Telephone 356 2955).

The annual student membership subscription is approximately \$35. Student members receive the Institute's journal *Architecture Australia*.

Student participation is actively sought by the Institute, particularly as members of the various committees and working groups. The RAIA notice board at the City campus on level 7 displays programs of RAIA activities and the monthly bulletins. Further information may be obtained from M D Chapman (tel 330 2752).

The requirements for Associate membership include:

- (i) A degree in a recognised course of study, i.e. BArch (UTS).
- (ii) A minimum of two years approved practical experience, at least one of which must be obtained after completing the course leading to the degree.

In the later years of their course students should check the categories of practical experience required for registration as an Architect. If registration is to be sought 12 months after graduation, students should seek practical experience involving a reasonably high level of responsibility.

## **Registration Requirements**

Architects are required to be registered under the provisions of the Architects Act, administered by the Board of Architects of New South Wales. The essential requirements for registration include:

- 1. A degree in a recognised course of study, i.e. BArch (UTS).
- 2. A minimum of two years approved practical experience, at least one of which must be obtained after completing the course leading to the degree.
- Approved practical experience in a number of categories, and some experience at a professional level.
- Details of practical experience are to be recorded in an approved log book (i.e. AACA log book) with entries at maximum intervals of three months.
- 5. A pass in an examination in Architectural Practice, such as the AACA Examination conducted by the Board of Architects of NSW on behalf of the Architects Accreditation Council of Australia. A prerequisite to the examination is the completion of the periods of practical experience.

Further information is available from the Registrar, Board of Architects of NSW, 'Tusculum', 3 Manning Street, Potts Point 2011, telephone 356 4900.

# **UNDERGRADUATE COURSES**

# **BACHELOR OF ARCHITECTURE**

The School of Architecture offers a six year course of cooperative education leading to the award of Bachelor of Architecture which can be conferred with first or second class honours.

Students usually attend 12 hours of formal class work each week during one full day and two evenings. Students also carry out substantial assignment work, while simultaneously gaining practical experience in the industry through appropriate employment.

## POINT SCHEME

### **Architectural Experience**

An integral component of the Architecture course is practical work experience which is acquired concurrently with academic study. Approved work experience is a pre-condition of the award of the degree. Generally it takes approximately four years for a student to accumulate sufficient points as detailed below.

All students are required to enrol in the subject 13999 Architectural Experience and gain points for their experience. A student must gain a total of 60 points in order to satisfy the practical experience requirements for graduation. A student must also gain the following minimum number of points at various stages in the course in order to be eligible for progression:

Entry to Year 3	– 15 points
Entry to Year 5	- 35 points

Entry to Year 6 - 50 points

Students are required to record their practical experience in the log book of the Architects Accreditation Council of Australia, and these log books and work experience sheets must be submitted each year by all students. Students who do not submit log books by the dates set down on the School noticeboard will have a failure recorded in the subject.

Students who have gained 60 points or more and have had this verified by the Head of School are not required to submit log books.

Log books may be obtained from the Faculty Office.

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.

Table 1 ALLOCATION OF CREDIT POINTS

Employment Category	Duration (D) whole
weeks	Weighting Factor (W)
Sub-Total (DxW)	Maximum Points
Allowed	

1. Not architectural	0.1	9
2. Architectural employee	e (refer to log book for	

details of level) Level A 02

Level A	0.2	24
Level B	0.3	24
Level C	0.4	Unlimited
Level D	0.5	Unlimited
Level E	0.6	Unlimited
3. Self employed with arcl	hitect adviser	
Level B or C	0.2	30
Level D	0.3	. 30
Level E or F	0.5	30
4. Self employed in archit	ectural capacit	ty without

0.3

24

# **COURSE STRUCTURE**

architect adviser

Credit point values are given in brackets.

Year 1		
11011	Construction I (5cp)	
11012	Design I (10cp)	
11013	Materials and Systems (5cp)	
11014	Contextual Studies I A (3cp)	
11015	Contextual Studies I B (3cp)	
11016	Contextual Studies I C (3cp)	
11017	Services I (3cp)	
13998	Architectural Experience	
Year 2		
11021	Construction II (7cp)	
11022	Design II (10cp)	
11023	Structural Analysis I (3cp)	
11024	Contextual Studies II A (3cp)	
11025	Contextual Studies II B (3cp)	
11026	Contextual Studies II C (3cp)	
11027	Services II (3cp)	
13998	Architectural Experience	
Year 3	1997 · · · · · · · · · · · · · · · · · ·	
11031	Construction III (5cp)	
11032	Design III (10cp)	

11033	Structural	Analysis	; II (3cp)
11005	<u> </u>		

Contextual Studies III B (3cp) Contextual Studies III C (3cp) 11035

11036

Services III (8cp) 11037 13998 Architectural Experience

Year 4	
11042	Design IV (10cp)
11043	Structural Design (5cp)
11045	Contextual Studies IV B (3cp)
11046	Contextual Studies IV C (3cp)
11047	Services IV (3cp)
11048	Architectural Practice I A (3cp)
11049	Architectural Practice I B (5cp)
13998	Architectural Experience
Year 5	
11052	Design V (11cp)
11055	Contextual Studies V B (5cp)
11056	Contextual Studies V C (5cp)
11058	Architectural Practice II A (3cp)
11059	Architectural Practice II B (3cp)
11071	Elective Project (5cp)
13998	Architectural Experience
Year 6	
11062	Design VI (11cp)
11066	Elective Studies (8cp)
11068	Architectural Practice III A (5cp)
11069	Architectural Practice III B (3cp)
11071	Elective Project (5cp)
13998	Architectural Experience

# 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 (i.e.3cp), the duration of the subject, indicated as semester weeks, if applicable, and the number of formal contact hours each week (i.e. four hpw); 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, the method of assessment and name of the subject coordinator, if known, 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.

# **11011 CONSTRUCTION I** (5cp); two hpw

The nature of buildings as interlocking systems and subsystems. The production of buildings: traditional, rationalised, component and systems building. Authorities controlling building. Site investigation, survey instruments and methods. An introduction to small-scale (domestic) building construction by detailed examination of function, forms, materials, methods, costs and detailing on an elemental basis.

#### **11012 DESIGN I** (10cp); four hpw

Introduction to design processes. Development of graphic communication skills and model making. Anthropometrics, site analyses, design exercises.

## 11013 MATERIALS AND SYSTEMS (5cp); two hpw

Identification, classification and testing of soils. Elements of materials science: relationship between structure and properties. Concepts of stress, strain, yield and fracture strengths for timber, steel, concrete, masonry, rubbers and plastics. Functions of the structural system. Examination of structural forms, action and behaviour by load path analysis. Posts and beams, arches, planar and threedimensional frames, load transfer and jointing methods.

## 11014 CONTEXTUAL STUDIES I A (3cp); one hpw

An introduction to the study of the natural physical environment as it affects the human habitat.

## 11015 CONTEXTUAL STUDIES I B (3cp); one hpw

An introduction to concepts, language, communication and criticism in architectural design.

# 11016 CONTEXTUAL STUDIES I C (3cp); one hpw

Basic concepts of sociology: culture, institutions, social class, pressure groups as social contexts within which architecture is performed.

## 11017 SERVICES I (3cp); one hpw

Elementary physical principles underlying the architectural context of heat, light and sound.

## 11021 CONSTRUCTION II (7cp); three hpw; prerequisites 11011 Construction I, 11013 Materials and Systems

Extended examination of small-scale building construction, developing into a detailed examination of more complex forms: wall and roof framing for small buildings, external cladding systems, internal linings and finishes. Windows, doors, glass, glazing, cabinet work and hardware. Basement construction. Roofing systems.

# **11022 DESIGN II** (10 p); four hpw

Development of design processes and languages. Relationship of human activities, construction systems and building ecologies.

## 11023 STRUCTURAL ANALYSIS I (3cp); one hpw

Introduction to mathematics for structural design purposes: calculus, coordinate geometry, trigonometry. The concepts and conditions of static equilibrium, resolution forces, bending moments, centroids. Algebra and its application to structural theory.

## **11024** CONTEXTUAL STUDIES II A (3cp); one hpw

A study of human ecology related to the emergence and development of the city. Evolution of cultures and social practices and their relationship to settlement patterns.

# **11025 CONTEXTUAL STUDIES II B** (3cp); one hpw

Presentation of aspects of architectural history with reference to design concepts and theoretical models drawn from both historic and contemporary works.

# **11026 CONTEXTUAL STUDIES IIC** (3cp); one hpw

Presentation of a series of topics, selected to develop an understanding and critical analysis of communications between individuals and social groups.

## **11027** SERVICES II (3cp); one hpw

The provisions of thermal comfort by means of passive and active services, fundamentals of thermal comfort, effects of temperature, humidity, air velocity. Principles of air-conditioning and ventilation, systems and equipment. Principles of passive design.

## 11031 CONSTRUCTION III (5cp); two hpw; prerequisite 11013 Materials and Systems

Load bearing masonry, multi-storey. Concrete materials and methods: normal and prestressed reinforced concrete construction and floor systems. Structural steel materials and methods: low and high rise frames, jointing and detailing. Patent structural/ construction systems. Alternate systems: grids, nets, shells, domes, membranes and air supported structures. Footings for large buildings, piles and pile caps. Internal subdivision of more complex buildings. Facade elements including precast concrete, in situ concrete, curtain walls. Communication of design intent: documentation systems, dimensional coordination, specifications and scheduling. Administration of the building process: introduction to network diagrams and time scheduling, builders plant and site organisation, materials handling as a constraint on construction and design decisions.

## 11032 DESIGN III (10cp); four hpw

Application of design theory to the resolution of planning relationships, structure construction, services, environment and human needs to the design of buildings.

# 11033 STRUCTURAL ANALYSIS II (3cp) one hpw; prerequisite 11023 Structural Analysis I

An examination of statically determinate structures; conditions of equilibrium, determination of reactions, shear and axial forces, bending moments; conditions for maximum moment. Review of centroids and extension to the second moment of area. Determination of deflection of beams by integration and use of formulae. Wind loads on buildings, theory of wind derived from fluid mechanics and application of the Wind Code to particular buildings.

## **11035** CONTEXTUAL STUDIES III B (3cp); one hpw

History of architecture in Europe and the Mediterranean, from Greek to Gothic.

# **11036 CONTEXTUAL STUDIES III** C (3cp); one hpw

The dynamics of social change, especially with reference to changing patterns of urbanism.

## **11037** SERVICES III (8cp); three hpw

Specialised design practices applied to lighting, acoustics, sound isolation, electrical and vertical transport systems. Hydraulics: water supply for domestic and commercial purposes, plumbing, soil and waste installations and sprinkler hydraulics.

## **11042 DESIGN IV** (10 p); four hpw

Continuation of the objectives of Design III into more complex buildings.

## 11043 STRUCTURAL DESIGN (5cp); two hpw; prerequisites 11033 Structural Analysis II, 11031 Construction III

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.

## 11045 CONTEXTUAL STUDIES IV B (3cp); one hpw

History of architecture from the Renaissance to the precursors of the Modern movement.

# **11046 CONTEXTUAL STUDIES IV C** (3cp); one hpw

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

# 11047 SERVICES IV (3cp); one hpw

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.

## 11048 ARCHITECTURAL PRACTICE I A (3cp); one hpw

Law and management: (i) 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. (ii) an introduction to management theory and the processes of forecasting, organising, planning, motivating, controlling, coordinating and communicating.

# **11049** ARCHITECTURAL PRACTICE I B (5cp); two hpw

Estimating and cost control: (i) 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. (ii) parameters of cost planning and elemental analysis, their use in design and documentation stages and the development of final cost analysis.

## 11052 DESIGN V (11cp); four hpw

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

## 11055 CONTEXTUAL STUDIES V B (5cp); two hpw

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

## **11056 CONTEXTUAL STUDIES V** C (5cp); two hpw

A study of the Modern movement in architecture and its development into current considerations.

# **11058** ARCHITECTURAL PRACTICE II A (3cp); one hpw

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.

# **11059** ARCHITECTURAL PRACTICE II B (3cp); one hpw

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

**11071 ELECTIVE PROJECT** (5cp); two hpw Written dissertation on selected topics: an independent study approved and supervised by staff on an aspect of architecture.

# **11062 DESIGN VI** (11cp); four hpw

Development and presentation of a design thesis embodying all aspects of the design process and the achievement of buildings within the physical cultural environment.

# **11066** ELECTIVE STUDIES (8cp); three hpw

This subject provides an opportunity for students to extend their activities into areas which may not normally be covered by the formal course structure and to exercise choice and realisation of personal objectives. Subject to the approval of the Head of School, this subject may be taken in year 5 or 6 either separately or in parallel with Elective Project 11071.

## 11068 ARCHITECTURAL PRACTICE III A (5cp); two hpw

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.

# **11069** ARCHITECTURAL PRACTICE III B (3cp); one hpw

Marketing: theory and practice related to architectural practice.

**11071** ELECTIVE PROJECT (5cp); two hpw Written dissertation on selected topic: an independent study approved and supervised by staff on an aspect of architecture.

# **13998** ARCHITECTURAL EXPERIENCE *three hpw*

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 Faculty Board in the relevant Experience subject, as determined from time to time, in order to graduate.

# **POSTGRADUATE COURSES**

## DOCTOR OF ARCHITECTURE

The Doctor of Architecture program has two main intentions:

- to encourage architects to contribute to the intellectual body of architectural theory and knowledge
- \* to enable students 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.

## **Admission requirements**

To gain admission to the course, applicants must apply in writing to the Head of School and submit a documented portfolio of their built and projected architectural works over a period of at least the previous six years.

Applicants without a minimum of six years professional experience will not be considered.

Candidates will normally be expected to have a degree in architecture, with honours or equivalent, and extensive experience and achievement in architectural practice.

Candidates will be required to satisfy the admission panel of the Higher Degree Committee of the Faculty as to their standing as an architect and their ability to fulfil the theoretical discourse demands of the program.

### Study program

Attendance pattern is six years part-time or three years full-time. Over the duration of the enrolment, candidates may continue in their architectural practice and document their design intentions, processes, conflicts, resolutions and achievements as this work proceeds.

The architectural work produced prior to and during the period of enrolment is the substance of the program, together with a thesis of a theoretical nature.

No set coursework will be required. Candidates will submit work progressively during their enrolment period.

For final assessment, candidates will submit a portfolio of documented work, plus a theoretical dissertation of approximately 30,000 words.

In terms of quality, the work will be required to achieve the equivalent of doctoral thesis work – that is, to demonstrate professional practice at a standard of excellence as judged by professional peers, and an extent of innovation equivalent to that expected in PhD level work.

## DOCTOR OF PHILOSOPHY (ARCHITECTURE) MASTER OF ARCHITECTURE (BY THESIS)

The School of Architecture wishes to encourage the study of Australian architecture. Academic staff within the School specialise in a number of areas which lend themselves to this purpose. Specialists in both Federation and Modern architecture are involved in investigating the historical development of Australian architecture, and scholars in the faculty are engaged in an investigation of the theoretical premises which underpin this development. The unique response of architecture to the Australian climate in terms of the form and siting of buildings is receiving the expert attention of staff engaged in environmental research, while the study of Australian urban development, encompassing all these areas, is being explored under the umbrella of urban design and the built environment.

Academic staff welcome enquiries from those interested in undertaking postgraduate studies in any of these areas.

## 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 multi-disciplinary 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:

- (a) designing and facilitating within interdisciplinary groups engaged in the regeneration of urban projects at both micro and macro levels of planning;
- (b) 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;

(c) presenting sound design arguments in which the economic, social, financial, legal, aesthetic, technical, and environmental issues have been properly assessed.

### Structure

The course is structured to specifically 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 programed implementation. It is intended that the results of these studies be published.

## **Educational 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.

# Special Additional Qualifications for Admission

Only students with a minimum of three years experience since graduation will be admitted.

## Admission of Mature Age Students

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.

# **COURSE STRUCTURE**

Credit point values are shown in brackets.

# Year 1

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

# Year 2

Semester S	+ 4
12570	Urban Regeneration Process I (6cp)
12588	Design Management I (6cp)
12575	Urban Regeneration Process II (7cp)
12589	Design Management II (5cp)
Year 3	

#### 

semester s	+0
12579	Urban Regeneration Process II III (7cp)
12590	Design Management III (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 (i.e. 3cp), the duration of the subject, indicated as semester weeks, if applicable, and the number of formal contact hours each week (i.e. *four hpw*); 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, the method of assessment and name of the subject coordinator, if known, 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.

# 12564 SOCIOLOGY (MBEnv) (2cp); one hpw

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 I (6cp); two hpw

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 II (7cp); two hpw

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

# 12579 URBAN REGENERATION PROCESS III (7cp); two hpw

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 PROJECT – RESEARCH METHODOLOGY (2cp); one hpw

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

# 12583 DESIGN PROJECT (12cp); four hpw

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

# 12584 URBAN ARCHITECTURE (6cp); two hpw

A general introduction to the subject is followed by a study of typologies; an analysis of historical precedents, and their influence and inter-action 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); two hpw

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

## 12586 BUILDING TECHNOLOGY (MBEnv) (5cp); two hpw

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); two hpw

An introduction to aspects of macro and micro economics relevant to property development and property management. The nature and methods of financing development of the built environment; basic formulae and the 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.

# 12588 DESIGN MANAGEMENT I (6cp); two hpw

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.

# **12589 DESIGN MANAGEMENT II** (5cp); two hpw

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.

# **12590 DESIGN MANAGEMENT III** (3cp); one hpw

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.

# SCHOOL OF BUILDING STUDIES

# **COURSE RULES**

These rules shall be read in conjunction with the University's rules and By-Law:

- 1. The appropriate Examination Review Committee, in making its decisions, shall take into consideration the student's performance in all subjects and may concede a pass in an individual subject.
- 2. On the recommendation of the appropriate Examination Review Committee, Faculty Board may in exceptional circumstances exempt a student from provision of the rules relating to progression.
- 3. The year/stage in these rules is defined as the program for a year shown in the current edition of the Calendar.
- 4. A student may not enrol in subjects spanning more than two consecutive years of the course
- 5. 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.
- 6. 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 students total program to not more than 42 credit points.
- 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 students total program to not more than 28 credit points.
- In exceptional circumstances, course programs at variance with the above rules may be approved by the Head of School.

## Guidelines for the Award of Honours in Undergraduate Degree Courses and Graded Awards in Graduate Diploma Courses.

The award of Honours in undergraduate degree courses and graded awards in graduate diploma course are recommended by 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.

Faculty Board would not normally consider for Honours or Graded Awards any student who has not obtained the following numeric levels:

**Undergraduate Degree Courses:** on the basis of a weighted average mark over the whole of the course with a double weighting on the subjects in the final

three years of the part-time program as indicated in the Faculty Handbook, regardless of the attendance pattern actually undertaken

75 and above	1st Class Honours
65 to less than 75	2nd Class Honours

Graduate Diploma Courses: 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

Note: For the purposes of the guidelines a weighted average mark may be calculated by multiplying each subject mark by the credit points allocated to each subject and dividing the result by the total credit points undertaken. Where a subject has been passed on a second or subsequent attempt the maximum mark to be used for calculation will be 50.

# 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 are 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 rules govern the operation of Examination Review Committees for each Course:

- 1. The Examination Review Committee is a subcommittee of 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 fulltime academic staff of the school offering the course; the Dean shall be a member exofficio.
- The Examination Review Committee may modify the assessment of any examiner, subject to rules 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% to 49%.
  - (b) The student's Weighted Average Mark (WAM) for the stage or year is 55% or greater.
  - (c) Only one failure is recorded for that assessment period.

- 5. Rule 4 may be varied in exceptional circumstances.
- 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 Committee.
- (a) The Architecture Examination Review Committee may delegate its powers to the Portfolio Review Committee in respect of the subjects Design 1-6, and shall make available to the Portfolio Review Committee any extenuating evidence which it has relating to a student's performance. The Portfolio Review Committee shall indicate to the Examination Committee, in the case of a student who is judged to have failed, whether:

(i) failure is such that the student should not be permitted to progress.

(ii) failure is such that the student should only be permitted to progress if results in the remainder of the course in that semester average 65% or more;
(iii) failure is marginal, and Design shall not be specially treated in determining progression.

- (b) The decisions of the Portfolio Review Committee shall not be subject to review by the Examination Committee, except that the latter body shall be empowered to award a conceded pass in circumstances (ii) and (iii) above.
- 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.
- The Dean or Heads of School may amend the decisions of the Examination Review Committee in the case of obvious clerical or arithmetic errors.
- Except as to (9), no alterations may be made to the subject assessments of the Examination Review Committee other than by the use of the official review procedure,
- The Head of School may amend the progression of a student as determined by the Examination Committee in the light of subject reassessments.
- 12. All alterations made under (9) to be reported to the Faculty Board.

In light of the University's adoption of the credit point system in 1993, Rule 4 above is currently under review, and students will be notified accordingly.

## University Medal

A student who displays exceptional merit in any of the degree courses may be recommended for the award of the University Medal in addition to graduating with First Class Honours.

#### **Checking of Enrolment Details**

It is the student's responsibility to check that his/her 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/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 a student's responsibility to make sure that the receipt of his/her assignment is noted by the lecturer.

Lecturers may, at their discretion, accept late assignments (and exact appropriate penalties), only if students make arrangements in advance.

Where appropriate arrangements have been made beforehand on time, submissions may be left in the assignment box on level 7 of Building 2 and are to be clearly marked for whom they are intended.

## Withdrawal from Subjects

Students are referred to University Rule 2.11 regarding withdrawal from subject(s) and their program of study.

Heads of Schools in the Faculty may grant approval for students to withdraw without 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 Head of School.

## Queries and Counselling

Heads of School 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 1993 University Calendar).

# PROFESSIONAL MEMBERSHIP

Students who intend to apply for membership of a professional body in due course are strongly advised to become student members of the body concerned whilst they are enrolled at the university.

Students should note that the faculty's rules 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 Valuers Registration Board.

## **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

The Construction Economics course satisfies the academic requirements for corporate membership of the Australian Institute of Quantity Surveyors. There are also professional experience requirements concerning which students should refer to that body for details.

## Australian Institute of Building

The Construction Management course satisfies the academic requirements for corporate membership of the Australian Institute of Building. There are also professional experience requirements concerning which students should refer to that body for details.

# **UNDERGRADUATE COURSES**

The School of Building Studies offers three courses of cooperative education relating to property and the built environment:

## 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 on 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.

Ful- time students will undertake practical studies as part of the program included in core subjects. They will also be required to gain approved professional experience in the final two full-time years of their programs. The experience required will need to be equivalent to eight weeks continuous employment in each year of the final two years. Students will be 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 experience will normally 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 of building projects. Extensive technological skills go hand in hand with the capacity to manage people, machines and products in order to carry out this task as effectively as possible.

The Construction Management course is offered four years full time and six years part-time.

## **COURSE STRUCTURE**

Credit points are shown in brackets.

Four Year Full-Time Program

Year 1	······
16115	Construction I (8cp)
16201	Drawing and Surveying (4cp)
16541	Quantities I (4cp)
51388	Communications (2cp)
16211	Computations (6cp)
16701	Materials I (6cp)
16711	Building Science (4cp)
16301	Services I (6cp)
16901	Structures I (4cp)
16601	Contextual Studies I (4cp)
Year 2	
16116	Construction II (8cp)
16542	Quantities II (4cp)
16611	Building Design (4cp)
16602	Contextual Studies II (4cp)
16531	Estimating I (4cp)
16402	Management II (6cp)
16702	Materials II (4cp)
16902	Structures II (6cp)
16801	Legal Studies I (4cp)
16403	Management III (4cp)
Year 3	
16117	Construction III (8cp)
16802	Legal Studies II (6cp)
16404	Management IV (6cp)
16405	Management V (4cp)
16903	Structures III (6cp)
16511	Economic Management I (6cp)
16197	Building Experience
Year 4	
16118	Construction IV (8cp)
16406	Management VI (4cp)
16532	Estimating II (6cp)
16512	Economic Management II (4cp)
16131	Professional Practice (4cp)
16221	Project (10cp)
16197	Building Experience
Six Year	Part-Time Program

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

Year 2	
16116	Construction II (8cp)
16901	Structures I (4cp)
16211	Computations (6cp)
16542	Quantities II (4cp)
16301	Services I (6cp)
16198	Building Experience
Year 3	
16117	Construction III (8cp)
16601	Contextual Studies I (4cp)
16402	Management II (6cp)
16902	Structures II (6cp)
16611	Building Design (4cp)
16198	Building Experience
Year 4	
16118	Construction IV (8cp)
16531	Estimating I (4cp)
16702	Materials II (4cp)
16602	Contextual Studies II (4cp)
16801	Legal Studies I (4cp)
16403	Management III (4cp)
16198	Building Experience
Year 5	
16802	Legal Studies II (6cp)
16404	Management IV (6cp)
16405	Management V (4cp)
16903	Structures III (6cp)
16511	Economic Management I (6cp)
16198	Building Experience
Year 6	
16406	Management VI (4cp)
16532	Estimating II (6cp)
16512	Economic Management II (4cp)
16131	Professional Practice (4cp)
16221	Project (10cp)
16198	Building Experience
	0 - 1

# 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;
- (b) 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, business agent, stock and station agent and auctioneer, registration as a valuer and practice as a property manager or project manager.

The Land Economics course is offered four years full-time and six years part-time.

# COURSE STRUCTURE

Credit point values are shown in brackets.

Four Year Full-Time Program

Year 1	
16163	Appraisal and Statistics (8cp)
16162	Computing (6cp)
16351	Introduction to Valuation (4cp)
16361	Real Estate Fundamentals (6cp)
16551	Economics (8cp)
16552	Financial and Trust Accounting (8cp)
16851	Introduction to Law (6cp)
51388	Communications (2cp)
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
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

#### Six Year Part-Time Program

Year 1		
16163	Appraisal and Statistics (8cp)	
16351	Introduction to Valuation (4cp)	
16361	Real Estate Fundamentals (6cp)	
16551	Economics (8cp)	
51388	Communications (2cp)	

Year 2	
16162	Computing (6cp)
16352	Valuation Methodology (8cp)
16552	Financial and Trust Accounting (8cp)
16851	Introduction to Law (6cp)
16998	Land Economics Experience
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
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
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
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
	-

# BACHELOR OF BUILDING IN CONSTRUCTION ECONOMICS

The course provides the qualifications to practice as a quantity surveyor and, subject to professional assessment, to become a corporate member of the Australian Institute of Quantity Surveyors.

The quantity surveyor is concerned with the investigation, analysis and definition of building work for design and procurement purposes through the provision of cost management services relating to the economic development and deployment of national resources in the construction industry.

The Construction Economics course is offered four years full-time and six years par- time.

## **COURSE STRUCTURE**

Credit point values are shown in brackets.

# Four Year Full-Time Program

Year 1	
16115	Construction I (8cp)
16501	Quantity Surveying I (8cp)
16161	Mathematics and Statistics (4cp)
16721	Material Science (8cp)
16502	Quantity Surveying II (8cp)
16162	Computing (6cp)
16301	Services I (6cp)
Year 2	
16116	Construction II (8cp)
16531	Estimating I (4cp)
16503	Quantity Surveying III (8cp)
16621	Design Evaluation (8cp)
16521	Building Economics I (8cp)
16622	Environmental Planning (8cp)
16801	Legal Studies I (4cp)
Year 3	
16117	Construction III (8cp)
16802	Legal Studies II (6cp)
16411	Contract Administration (8cp)
16522	Building Economics II (8cp)
16511	Economic Management I (6cp)
16597	Quantity Surveying Experience
Year 4	
16118	Construction IV (8cp)
16523	Building Economics III (8cp)
16532	Estimating II (6cp)
16512	Economic Management II (4cp)
16506	Quantity Surveying Practice (10cp)
	or
16224	Quantity Surveying Project (10cp)
16597	Quantity Surveying Experience

#### Six Year Part-Time Program

Year 1		
16115	Construction I (8cp)	
16161	Mathematics and Statistics (4cp)	
16501	Quantity Surveying I (8cp)	
16721	Material Science (8cp)	
Year 2		
16116	Construction II (8cp)	
16162	Computing (6cp)	
16301	Services I (6cp)	

16502 Quantity Surveying II (8cp)

16598 Quantity Surveying Experience

Year 3	
16117	Construction III (8cp)
16503	Quantity Surveying III (8cp)
16531	Estimating I (4cp)
16621	Design Evaluation (8cp)
16598	Quantity Surveying Experience
Stage 4	
16118	Construction IV (8cp)
16521	Building Economics I (8cp)
16622	Environmental Planning (8cp)
16801	Legal Studies I (4cp)
16598	Quantity Surveying Experience
Year 5	
16411	Contract Administration (8cp)
16511	Economic Management I (6cp)
16522	Building Economics II (8cp)
16802	Legal Studies II (6cp)
16598	Quantity Surveying Experience
Year 6	
16506	Quantity Surveying Practice (10cp)
	or
16224	Quantity Surveying Project (10cp)
16512	Economic Management II (4cp)
16523	Building Economics III (8cp)
16532	Estimating II (6cp)
16509	Ourseling Company's Francis

16598 Quantity Surveying Experience

# 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 (i.e 3cp), the duration of the subject, indicated as semester weeks, if applicable, and the number of formal contact hours each week (i.e. four hpw); 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, the method of assessment and name of the subject coordinator, if known, 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 fieldwork as part of the requirements do not show hours per week.

#### 16115 **CONSTRUCTION I** (8cp)

Every part of typical domestic buildings is covered in detail. Reference is made to the relevant ordinances and standards. The present day building industry is placed in its historical context by reference to building practices through the ages. Practical studies and fieldwork are included as part of the requirements for this subject. Part-time students may be exempted from this practical studies component.

#### 16116 **CONSTRUCTION II** (8cp); prerequisite 16115 Construction I

The construction details for industrial and commercial (including multi-storey) buildings. Practical studies and fieldwork are included as part of the requirements for this subject. Part-time students may be exempted from this practical studies component.

#### 16117 **CONSTRUCTION III** (8cp); prerequisite 16115 Construction I

The construction details for industrial and commercial (including multi-storey) buildings. Construction equipment and methods. Practical studies and fieldwork are included as part of the requirements for this subject. Part-time students may be exempted from this practical studies component.

# 16118 CONSTRUCTION IV (8cp); prerequisite 16115 Construction I

The general and project environment in terms of the constraints that impinge on the project process and the response of project organisations. Practical studies and fieldwork are included as part of the requirements for this subject. Part-time students may be exempted from this practical studies component.

# **16131 PROFESSIONAL PRACTICE** (4cp); one hpw

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); one hpw; prerequisite 16163 Appraisal and Statistics

The interpretation of survey plans; types of surveys; use of instruments; aerial photography.

## **16153 BUILDING TECHNOLOGY** (6cp); three hpw

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); two hpw; 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); two hpw

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.

# 16162 COMPUTING (6cp); two hpw

Introduction to computing: BASIC language and writing of simple programs; problem solving techniques; use of software packages such as word processing, spreadsheet and statistical applications.

# 16163 APPRAISAL AND STATISTICS (8cp)

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.

# 16197 BUILDING EXPERIENCE three hpw and 16198

### 16201 DRAWING AND SURVEYING (4cp); two hpw

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); three hpw

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); four hpw

A major project, undertaken by each student involving the detailed study of an individual topic with the preparation of a comprehensive report.

# **16224 QUANTITY SURVEYING PROJECT** (10cp); three hpw

Preparation and submission of a major project, involving the detailed study of an individual topic related to the field of quantity surveying.

# 16301 SERVICES I (6cp); three hpw

An introduction to hydraulic, electrical, mechanical and fire protection services and systems.
# **16351 INTRODUCTION TO VALUATION** (4cp); one and a half hpw

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); 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 fieldwork 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); 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 fieldwork are included as part of the requirements for this subject. Part-time students may be exempted from this practical studies component.

#### 16354 RURAL VALUATION (6cp); corequisites 16352 Valuation Methodology, 16551 Economics

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 fieldwork are included as part of the requirements for this subject. Part-time students may be exempted from this practical studies component.

#### 16355 SPECIALISED VALUATION TOPICS (8cp); 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 replace cost approaches are developed. Practical studies and fieldwork are included as part of the requirements for this subject. Part-time students may be exempted from this practical studies component.

#### 16356 STATUTORY VALUATION AND LITIGATION (4cp); one and a half hpw; 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); two hpw

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 II (6cp); two hpw; prerequisites 51388 Communications Management I, 16115 Construction I

Organisation theory, the individual in the workplace, leadership, needs hierarchy, motivation, communication, problem solving, organisational variables, buildability and construction planning of domestic scale projects.

#### 16403 MANAGEMENT III (4cp); one hpw; prerequisites 16402 Management II, 16117 Construction III

Statistics, operation research and mathematical methods associated with quality control.

16404 MANAGEMENT IV (6cp); two hpw 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. By case studies, an examination of the administrative requirements for efficient contracts.

#### 16405 MANAGEMENT IV (4cp); two hpw; prerequisite 16403 Management III

Management of organisation to achieve objectives and the management of quality.

#### 16406 MANAGEMENT VI (4cp); two hpw; prerequisites 16405 Management V, 12058 Legal Studies II

Building process as a system, project constraints, project management, complex project analysis, roles of licensing boards, advanced site safety, safety and design, industrial relations.

#### 16411 CONTRACT ADMINISTRATION (8cp); three hpw; prerequisite 16801 Legal Studies I

The principles and practice involved in the administration of building contracts from the

quantity surveyor's viewpoint, including preparation of variations, progress claims, activity reports, cash flows and package-deal documentation. Building price indices, cost escalation and rise and fall. General conditions of contract. Specification writing. Construction planning for residential projects.

#### 16452 REAL ESTATE ORGANISATION AND MANAGEMENT THEORY (4cp); one and a half hpw; 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); one and a half hpw; prerequisite 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); one and a half hpw; prerequisites 16352 Valuation Methodology, 16553 Real Estate Finance, 16453 Development Management

In-depth study of the methods and techniques of real estate market and feasibility studies. A study of portfolio management with an introduction to the techniques of investment and portfolio analysis.

#### 16455 PROFESSIONAL PRACTICE REVIEW (4cp); two hpw; prerequisites 16854 Real Estate Law and Conveyancing, 16456 Property Management and Maintenance

Definition of responsibilities of consultant to client, ethics and regulations, third party and community; conditions of engagement; indemnity insurance; the auctioneering profession: duties and responsibilities.

#### 16456 PROPERTY MANAGEMENT AND MAINTENANCE (6cp); three hpw; prerequisites completion of years 1-2 part-time (or year 1 full-time) and 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 I** (8cp); two and a half hpw

An introduction to quantity surveying purposes and methods. The measurement and calculation of simple quantities. Principles of measurement set-out and notation. Professional quantity surveying activities and opportunities, including membership of the Australian Institute of Quantity Surveyors. Written communication skills.

#### 16502 QUANTITY SURVEYING II (8cp); three hpw; corequisite 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 Method of Measurement of Building Works. Measurement rules and procedures.

#### 16503 QUANTITY SURVEYING III (8cp); three hpw; prerequisite 16502 Quantity Surveying II

Measurement of complex building trades, specifically hydraulics and bulk earthworks, in accordance with the current Australian Standard Method of Measurement. Measurement of civil projects in accordance with AS1181-1982. Computer measurement benefits and problems. Alternative methods of measurement.

# **16506 QUANTITY SURVEYING PRACTICE** (10cp); three hpw

A critical evaluation of the quantity surveying profession and an examination of non-technical areas essential to a professional, including preparation of two major papers.

#### **16511** ECONOMIC MANAGEMENT I (6cp); *three hpw*

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 II (4cp); two hpw

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.

#### **16521 BUILDING ECONOMICS I** (8cp); three hpw

An examination of principles and practices relating to building economics, including feasibility studies, cost planning, preliminary estimating, elemental cost analysis and budgeting. Cost modelling techniques and expert systems are discussed. Computer solutions are used to solve cost problems.

### **16522** BUILDING ECONOMICS II (8cp); two hpw

Basic macro and microeconomic theories and their relationship with building economics are examined. Analysis of the economic forces that underlie design and construction processes. Investment in residential property.

#### 16523 BUILDING ECONOMICS III (8cp); three hpw; prerequisite 16521 Building Economics 1

Techniques used by building economists in evaluating design alternatives are examined, specifically life-cost planning, taxation cost planning, cost-benefit analysis, multi-objective decision analysis, value analysis and post occupancy evaluation.

#### 16531 ESTIMATING I (4cp); two hpw; prerequisites 16116 Construction II, 16542 Quantities II or 16502 Quantity Surveying II

Estimating brings together a wide variety of construction industry practices and principles, particularly those of the operating trades, and translates these practices into costs. The builder's estimate, and the relevant unit rates, are related to the quantity surveyor's methods of measurement.

#### **16532** ESTIMATING II (6cp); two hpw; prerequisite 16531 Estimating I

A review of the techniques used in preparation of competitive tenders for building projects is undertaken. Specifically, tendering objectives, methods of preparing estimates and methods of predicting optimum mark-up are examined in detail.

# **16541 QUANTITIES I** (4cp); one and a half hpw

An introduction to quantity surveying purposes and methods. The measurement and calculation of quantities.

#### **16542 QUANTITIES II** (4cp); two hpw; prerequisite 16541 Quantities 1

Measurement of work involving most trades from documents prepared by the School.

#### 16551 ECONOMICS (8cp); three hpw

Microeconomics – largely traditional microeconomic theory but with an emphasis on the property market. Each topic covered is directly and indirectly related to the property market to ensure student understanding of the relevance and application of each concept. An introduction to macroeconomics. Analytical tools are developed to provide insight into the nature and causes of major problems currently confronting Australia. The interrelationship of macroeconomic variables as well as the influence of microeconomic reform on the economy's overall efficiency is emphasised.

#### **16552 FINANCIAL AND TRUST ACCOUNTING** (8cp); three hpw

An introduction to basic accounting: the preparation and use of accounting information; the tools used. Accounting related to business funds and cash flows; trust accounting; requirements under the Auctioneers and Agents Act; use of data processing.

#### 16553 REAL ESTATE FINANCE (6cp); two hpw; prerequisite 16552 Finance and Trust Accounting, 16163 Appraisal and Statistics

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; primary and secondary mortgage markets; financing techniques.

#### 16554 URBAN ECONOMICS (6cp); two hpw; prerequisites 16551 Economics, 16651 Urban Planning

Economic theories of land use including location theory, urbanisation, demographics of cities, role of levels of government, urban problems, decentralisation and transportation.

QUANTITY SURVEYING
EXPERIENCE three hpw

## **16601 CONTEXTUAL STUDIES I** (4cp); two hpw

The relationship of people to the physical environment. The function of human and natural systems; their responses. The environmental impact of cities.

## **16602 CONTEXTUAL STUDIES II** (4cp); two hpw

Social and political systems in the urban situation. Urban planning.

#### 16611 BUILDING DESIGN (4cp); two hpw; 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); three hpw

An examination of the factors that affect building design; the problems that architects face in designing buildings; building orientation and thermal performance. Sun path diagrams. Solar and earthsheltered housing. Structural evaluation of building systems. Design exercises.

#### 16622 ENVIRONMENTAL PLANNING (8cp); three hpw

Contextual issues relating to humanity's impact on the environment. Urban planning and sociology. Environmental impact statements. 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.

## **16651** URBAN PLANNING (4cp); one and a half hpw

An introduction to planning examining the major planning issues facing Australian cities; Sydney's future in the context of postwar metropolitan planning; density and form of development; learning to analyse urban patterns and formulate development policy.

#### 16652 ENVIRONMENTAL DESIGN (4cp); two hpw

Introduction to the history of architecture and building design as an art form. The relationship of mankind to the physical environment. The function of human and natural systems; their responses. The environmental impact of cities.

#### 16701 MATERIALS I (6cp); two hpw

An introductory course in the properties of building materials. Most commonly used materials are covered, but not in depth.

#### 16702 MATERIALS II (4cp); two hpw; prerequisite 16701 Materials I

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); one hpw

The physics of heat, light and sound are covered with reference to applications in buildings.

#### 16721 MATERIAL SCIENCE (6cp); three hpw

An introductory course in the properties of building materials. Most commonly used materials are covered but not in depth. Heat, light and sound principles applied to materials are investigated.

#### 16751 INTERNATIONAL REAL ESTATE (6cp); one and a half hpw; 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 I (4cp); two hpw The legal system in Australia; sources of law; the court system; legal personalty; the law of business association; an introduction to criminal law, civil law, industrial law and the law of torts, commercial arbitration and insurances. A detailed study of contract law.

#### 16802 LEGAL STUDIES II (6cp); two hpw; prerequisite 16801 Legal Studies I

The tortious liability imposed by the law upon professionals, some major contractual problems and an outline of private land and statutory industrial regulations.

#### 16851 INTRODUCTION TO LAW (6cp); two hpw

The structure and functioning of the Australian legal system: structure of the court system; the sources of law; statute and case law; the notion of precedent. An introduction to common law; the law of business association, commercial arbitration and insurance, especially contract law applicable to building and engineering works.

#### 16853 PLANNING AND ENVIRONMENTAL LAW (6cp); two hpw; 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); two hpw; 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 I (4cp); two hpw

Equilibrium; properties of sections; axial stress and strain; bending moment and shear force; bending and shear stress deflection.

#### **16902** STRUCTURES II (6cp); three hpw; prerequisite 16901 Structures I

Loading; structural timber, structural steel, soil properties, soil mechanics, small retaining walls, temporary soil retaining structures.

#### **16903** STRUCTURES III (6cp); two hpw; prerequisite 16902 Structures II

Deformation of statically indeterminate structures; ultimate strength of reinforced concrete, stress in prestressed concrete, cracking in buildings, joint movements, computing.

#### **16961 PROJECT** (10cp); four hpw

Project can only be undertaken in the final years. Requirement: Students cannot enrol in project if they have more than 36 credit points in total (fulltime) or 28 credit points in total (part-time) to complete the degree. A detailed study, under supervision, of an individual topic with the presentation of a comprehensive report.

#### 16997 LAND ECONOMICS EXPERIENCE and three hpw 16998

51388 COMMUNICATIONS (2cp); one hpw

Develops human communication skills and to promote 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.

#### 51388 COMMUNICATIONS MANAGEMENT I (2cp); one hpw

The subject is designed to give students entering the course an orderly approach to their studies, to acquaint them with the facilities available, and to structure their attitude to the construction industry. Simple management approaches.

### **POSTGRADUATE COURSES**

#### DOCTOR OF PHILOSOPHY (BUILDING) MASTER OF APPLIED SCIENCE (BY THESIS)

The School offers a limited number of places each year for suitably qualified students to read for these degrees in any of its disciplines.

To qualify for admission to a Masters degree program, applicants should possess a Bachelor degree or equivalent degree. Non-graduates with outstanding professional qualifications and experience may also apply and may be required to complete some undergraduate studies during a qualifying period prior to acceptance.

To qualify for admission to a doctoral degree, applicants will possess a Bachelor degree with First or Second Class Honours, Division 1, or a Masters degree from UTS, or equivalent.

Intending applicants are advised to contact the Head of School or another senior academic staff member to discuss their research interests prior to submitting their application for admission.

#### MASTER OF PROJECT MANAGEMENT

Project Management has emerged as a powerful method for administering complex tasks. It has been used to manage most of the large building and construction projects in this country. It is increasingly used in other industries and technologies to facilitate efficient and effective completion of complex tasks. As projects have become more complex and costly the need for greater efficiency in terms of cost, time and quality performance has become evident. Good management practices are generally enhanced by a sound appropriate educational background. The purpose of the course is to provide such a background.

#### Aim

The aim of this course in Project Management is to produce project managers who will be:

- (a) competent to lead a group of specialist professionals engaged in the overall management planning and control of projects, particularly in building or civil engineering, but not excluding other industries or technologies;
- (b) able to demonstrate an understanding of project management principles and practices in the management of the design and construction process and project delivery;
- (c) able to demonstrate an understanding of the roles and practices of specialist consultants and

contractors used in the design and construction of projects and how these can be effectively integrated;

- (d) able to communicate effectively, and lead and motivate individuals and project teams;
- (e) able to make decisions on the basis of either complete or incomplete information, and to formulate policies and/or solutions to complex problems;
- (f) able to satisfy economic, social, financial, legal, environmental and building constraints;
- (g) able to estimate the social costs and benefits of development and the community acceptance of this.

#### **Teaching/Learning Strategies**

The three year, part-time program, unique to Australia, has been designed with10 week-unit attendance sessions so that senior executives and industry leaders can attend the course with minimal disruption to their working lives.

The program is stimulating and demanding and has been designed for students who already have a degree and at least five years experience.

The course consists of three parts. The first part contains the core subjects of generic project management, that is, project management which is independent of industry or technology. This will be presented by way of coursework and assignments occupying the whole of the first three semesters.

The second part comprises significant blocks of the core subjects treated in greater detail, and on an industry-specific basis, with the building/ construction industry as the primary exemplar industry. This will also be presented by way of coursework and assignments, and will occupy the fourth and fifth semesters.

The sixth semester is set aside for the completion of a major project. In summary, the course structure resembles a project, the project process, its context and the management thereof.

#### COURSE STRUCTURE

Credit point values are shown in brackets.

Semeste	r 1 + 2
17101	Project Process I (7cp)
17105	Project Management Studies I (5cp)
17201	Project Process II (7cp)
17205	Project Management Studies II (5cp)
Semeste	r 3 + 4
17301	Project Process III (7cp)

17305 Project Management Studies III (5cp)

17401 Bu	uilding and	Construction	Project
----------	-------------	--------------	---------

17405	Process (7cp) Building and Construction Project Management Studies L (5cp)
Semeste	r 5 + 6
17506	Building and Construction Project

	Management Studies 2 (6cp)
17600	Major Report (18cp)

#### 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 attendance pattern involves full-time attendance of separate week-long sessions. This allows an intensive, integrated multi-disciplinary approach structured around project work. Busy practitioners and other professionals, including those living in the country or interstate, are thus able to attend the course.

#### 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 enquiry, 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 Educational Approach

The aims of the course can best be met if a significant component emulates planning practice (see the description of 17510 Planning I, below). 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 I - III. This subject consists primarily of a continuing planning project; its

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.

Each of the first two years of the course includes four separate attendance weeks between which there are reading, fieldwork and assignments. In each week there are: keynote presentations on the economics of development and regulation; four strands consisting of knowledge areas and issues, feeding into the core area; and the core area, Planning, which consists of a continuing planning project and is used as a vehicle to teach techniques of organisation, planning and design.

#### Attendance

The first two years are offered as a terminating course leading to the Graduate Diploma in Planning. These two years cover all of the formal subjects including the full extent of the planning process taught in the core subject, Planning. In the third year, Masters students undertake a review of the planning process employed in the planning project and a review of its outcome; they study specific issues in planning, and complete a graduate project.

#### **COURSE STRUCTURE**

Credit point values are shown in brackets.

Year 1:	Graduate Diploma and Masters Degree
17510	Planning I (8cp)
17511	Urban Economics and Finance I (4cp)
43710	Environment and Infrastructure I (4cp)
17513	Urban Design and Management I (4cp)
17514	Law for Planners I (2cp)
51710	Social and Political Aspects I (2cp)
Year 2:	Graduate Diploma and Masters Degree
17520	Planning II (8cp)
17521	Urban Economics and Finance II (4cp)
17522	Environment and Infrastructure II (4cp)
17523	Urban Design and Management II (4cp)
17534	Social and Political Aspects II (2cp)
17544	Law for Planners II (2cp)
Year 3.	Masters Degree

17530	Planning III (4cp)
17751	Specific Issues in Planning (4cp)
17755	Graduate Project (16cp)

#### GRADUATE DIPLOMA IN URBAN ESTATE MANAGEMENT

The purpose of Urban Estate Management is to preserve or enhance the value of the resources of the urban estate, for the benefit of the community. This course is offered on a part-time basis only.

#### Aims

On completion of this course the student should be able to:

- (a) understand social, economic, managerial, legal and physical systems which collectively contribute to the success or failure of the development and management of the Urban Estate.
- (b) initiate proposals for the development of property and, as part of the process: satisfy economic, finance, legal and planning constraints; establish an appropriate management structure (including joint ventures) to allow the development to be completed as efficiently as possible; monitor the development process ensuring that consultants and contractors satisfy the needs of the client organisation; estimate the social costs and benefits of development and community acceptance of this.
- (c) manage a group of properties or a property portfolio in order to: provide and maintain an adequate return to the owner/investor; satisfy the needs of the tenants; protect and maintain the urban environment.
- (d) develop and advise on appropriate investment strategies in isolation or as part of an overall investment portfolio.
- (e) participate as a member of an organisation's management team or as the leader of such a team, and develop corporate policy.
- (f) appreciate a professional ethic which emphasises responsibility and responsiveness to community needs.
- (g) operate as a specialist or a generalist with regard to the above.
- (h) operate at middle to senior level in an organisation.

#### **COURSE STRUCTURE**

Credit point values are shown in brackets.

Semeste	r 1*
12511	Building Technology (UEM) (3cp)
12515	Property Economics I (UEM) (3cp)
12518	Legal Procedures I (UEM) (3cp)
12524	Property Development Management I (3cp)
Semeste	r 2
10516	

12516	Urban Sociology (UEM) (2cp)
12525	Property Economics II (UEM) (3cp)
12527	Property Finance (UEM) (3cp)
12528	Legal Procedures II (UEM) (2cp)
12549	Organisational Policy and Management
	(2cp)

Semester 3		
12517	Property Management (3cp)	
12526	Urban Planning I (3cp)	
12535	Property Economics III (3cp)	
12538	Legal Procedures III (3cp)	
Semeste	r 4	
12536	Urban Planning II (2cp)	
12542	Marketing (UEM) (2cp)	

12543	Property Development Management II
	(4cp)
12545	Property Economics IV (4cp)
12550	Project ** (6cp)

\* Students may be exempted from two of the four Semester 1 subjects depending on experience and qualifications.

**\*\*** UEM Project may be substituted for any two of the above Semester 3 and 4 subjects, totalling six credit points.

### GRADUATE DIPLOMA IN BUILDING SURVEYING AND ASSESSMENT

#### Aim

The aim of this two-year part-time course is to enable students to lead, coordinate and/or participate in the Local Government Approvals Process as multi-skilled 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) Multi-skilled surveyors and facilitators within multi-disciplinary 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 etc.), certifiers/checkers, design consultants, contractors, asset managers, and the like, and 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 that the social, legal, technical, safety, health and environmental issues have been taken and 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.

Applications are invited from the disciplines of building surveying, architecture, engineering, building, and valuation.

The major topic areas for the course are: environmental health/building surveying practice; building (construction, codes, regulations); environmental issues (including planning and development control); engineering; legal matters and procedures; and social issues and needs.

#### **COURSE STRUCTURE**

Credit point values are shown in brackets.

Semester 1		
12156	Legal Procedures I (2cp)	
12159	Building Construction <b>**</b> (3cp)	
12160	Engineering Fundamentals A * (2cp)	
12161	Engineering Fundamentals B * (2cp)	
12157	Risk Management and Local Govt (2cp)	
12158	Codes and Standards I (2cp)	
Semeste	r 2	
12162	Legal Procedures II (2cp)	
12165	Structural Performance* (2cp)	
12166	Advanced Construction (2cp)	
12163	Public Health and Safety (2cp)	
12164	Fire Engineering I (3cp)	

Semeste	r 3
12167	Legal Procedures III (2cp)
12168	Development Control Interface (4cp)
12169	Fire Engineering II (4cp)
12170	Building Assessment (2cp)
Semeste	r 4
12171	Certification Process and Practice (4cp)
12172	Codes and Standards II (2cn)

12173 Certification Project (6cp)

\* Engineers may be granted exemption in the subjects Engineering Fundamentals A and B, and Structural Performance.

**\*\*** Those holding building related qualifications may be exempted from Building Construction.

### 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 (i.e. 3cp), the duration of the subject, indicated as semester weeks, if applicable, and the number of formal contact hours each week (i.e. *four hpw*); 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, the method of assessment and name of the subject coordinator, if known, 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.

#### 12156 LEGAL PROCEDURES I (BS) (2cp); one and a half hpw

Structure of legal system, health and building matters under the Local Govt Act, relationship of planning to development control issues in environmental law, occupational health and safety matters, associated acts and regulations.

#### 12157 RISK MANAGEMENT AND LOCAL GOVERNMENT (2cp); one and a half hpw

Risk assessment techniques and regimes, quantitative methods, risk reduction and management, approvals and risk, decision making in approvals process.

#### 12158 CODES AND STANDARDS I (2cp); one and a half hpw

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.

#### **12159 BUILDING CONSTRUCTION** (3cp); three hpw

Indepth study of building assembly, use of materials and details of residential, industrial and commercial building construction.

## **12160** ENGINEERING FUNDAMENTALS A (2cp); one and a half hpw

Forces, statics, properties of sections, loading and load paths, structural elements and frames, frame analysis, use of computer software in structural analysis, case studies.

# **12161** ENGINEERING FUNDAMENTALS B (2cp); one and a half hpw

Basic concepts and properties of fluids, liquids and gases, thermodynamic properties, theory of work and heat thermodynamics and heat transfer, rainfall runoff and flow through pipes.

#### 12162 LEGAL PROCEDURES II (BS) (2cp); one and a half hpw

Powers and duties of building surveyors and councils, Local Government Acts, considerations in approvals, court system versus Referees, Land and Environment court practice and procedures, legal relationships between parties.

# **12163 PUBLIC HEALTH AND SAFETY** (*lcp*); one hpw

Environmental issues concerning noise, air, water and waste, waste management, construction safety issues, design of special public areas, internal environmental control, barrier free access, building safety, crowd behaviour and control.

## **12164** FIRE ENGINEERING I (4cp); two and a half hpw

Chemistry and physics of fire, fire initiation and development, design fires, passive fire protection, smoke management, radiant heat assessment.

# **12165** STRUCTURAL PERFORMANCE (2cp); one and a half hpw

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.

### **12166** ADVANCED CONSTRUCTION (2cp); one and a half hpw

Building performance concepts, heat and thermal performance, acoustical performance, righting, vibration, and human factors.

#### 12167 LEGAL PROCEDURES III (BS) (2cp); one and a half hpw

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); two and a half hpw

Urban design issues, physical planning at precinct level, compatibility of building and development standards, other requirements of Local Government Acts, heritage and conservation issues, environmental issues, management of change.

## **12169** FIRE ENGINEERING II (4cp); two and a half hpw

Occupant behaviour and egress in fires, detection and early warning systems, emergency lighting, active fire protection, maintenance of essential services, regulations, basic risk assessment.

**12170 BUILDING ASSESSMENT** (2cp); one and a half hpw

Building services, maintenance, technological change, diagnostic, security systems and assessment practice.

# **12171 CERTIFICATION PROCESS AND PRACTICE** (4cp); three hpw

Principles of/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 II (2cp); two hpw

Drafting of building regulations, policies and codes, preparation of explanatory documents and commentaries, appropriate styles, case studies.

#### 12173 CERTIFICATION PROJECT (6cp); three hpw

Certification process, certification of a major building.

#### 12511 BUILDING TECHNOLOGY (UEM) (3cp); two hpw

This subject highlights some of the technological principles of the construction and operation of major buildings in order to introduce entrants, who have not come from an architectural, building, engineering or quantity surveying background, to these areas. The main systems are isolated and various forms for each are discussed in the context of the development process and maintenance. Examples of typical building types are discussed.

#### 12515 PROPERTY ECONOMICS I (UEM) (3cp); two hpw

An introduction to aspects of macro and microeconomics relevant to property development and property management.

#### 12516 URBAN SOCIOLOGY (UEM) (2cp); two hpw

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); one and a half hpw

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 LEGAL PROCEDURES I (UEM) (3cp); two hpw

A short course in property law, both real and personal, and although it begins with contracts and ends with the contract for sale of land it contains an intensive coverage of many of the major principles relating to property law in NSW.

#### 12524 PROPERTY DEVELOPMENT MANAGEMENT I (3cp); two hpw

Organisations as systems, building procurement, client needs determination, management of the development process, development of organisations.

#### 12525 PROPERTY ECONOMICS II (UEM) (3cp); two hpw

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.

**12526** URBAN PLANNING I (*3cp*); two hpw Physical and historical aspects of urban and regional planning: land use planning; urban design; drainage road and service design as it affects town planning; transportation, reuse of existing building stock.

## **12527 PROPERTY FINANCE** (UEM) (3cp); one and a half hpw

Rent collection; administration, compensation, taxation, risk management, portfolio management, social responsibilities, building management, acquisition and disposal, and accounting principles.

#### 12528 LEGAL PROCEDURES II (UEM) (2cp); one and a half hpw

Some time is devoted to landlord and tenant matters and also to common law relating to the ownership of real property in order to round out Legal Procedures I. However, this subject deals mainly with legislative planning control and the operation of the Land and Environment Court.

#### 12535 PROPERTY ECONOMICS III (3cp); two hpw

The preparation of economic feasibility studies for individual projects including detailed analysis of income/expenditure and required rates of return, methods for determining the impact of critical variables.

# 12536 URBAN PLANNING II (2cp); one and a half hpw

Economics of development; environmental impact assessment; survey techniques and process; graphic and other communication techniques used in planning.

## **12538** LEGAL PROCEDURES III (3cp); one and a half hpw

Following the overview of planning control from Legal Procedures II, this subject confines itself in the main to local government matters involving subdivision, building control and changes in use.

# **12542** MARKETING (UEM) (2cp); one and a half hpw

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 MANAGEMENT II (4cp); two hpw

Integration of the property development process from initiation of development proposal to completion of project in case studies and assignments. Aspects of professional practice: ethics, professional indemnity. Industrial relations; the Australian system; unions, employer organisations.

#### 12545 PROPERTY ECONOMICS IV (4cp); two hpw

Corporate strategy, investment market and portfolio analysis, property investment as a component, investment portfolio management, financing and risk management.

#### 12549 ORGANISATIONAL POLICY AND MANAGEMENT (2cp); one hpw

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.

#### 12550 PROJECT (6cp); four hpw

Topics selected by students dealing with Urban Estate Management. The Urban Estate Management Project may be substituted for any two of the semester 3 and 4 subjects, totalling six credit points.

### **17101 PROJECT PROCESS I** (7cp); forty hours per semester

Introduction to the four major generic phases of the project process (sometimes called the project life cycle); discussion of the first of these phases, project initiation and concept, in detail. Including basic needs determination, feasibility of alternative solutions, leading to product requirement determination, and approvals.

#### 17105 PROJECT MANAGEMENT STUDIES I (5cp); forty hours per semester

Examination of the first four generic project management functions most relevant to Project Process I, namely time, cost, quality and risk management, plus the management of integration of these functions. Identification of the general environmental constraints which impinge on projects, and examination of some aspects most relevant to Project Process I, including economic constraints. The project organisation as an open system; the five primary subsystems, namely goals and values, structural, psychosocial, technology and management.

# **17201 PROJECT PROCESS II** (7cp); forty hours per semester

The second of the four major generic phases of the project process: project planning and development, including institution of planning and controls, concept development, design and documentation, prototyping and approvals.

#### 17205 PROJECT MANAGEMENT STUDIES II (5cp); forty hours per semester

Examination of three further generic project management functions which are particularly relevant to Project Process II, namely management of project scope, decision making and project organisation. Examination of three further environmental constraints identified in Project Context I, namely financial, political and legal constraints. Economic and financial aspects as they apply specifically to projects.

## **17301 PROJECT PROCESS III** (7cp); forty hours per semester

The third and fourth of the four major generic project processes, namely project execution and implementation, and project commissioning and handover.

#### 17305 PROJECT MANAGEMENT STUDIES III (5cp); forty hours per semester

Examination of the three remaining generic project management functions, namely the management of project human resources, its closely associated function communications, and the management of project contracts and procurement. Examination of the last two of the environmental constraints identified in Project Context I, namely sociological/ demographic and physical; and marketing and technology in the context of projects. Legal aspects applying specifically to projects and project organisations; some specific aspects of marketing at the project level; corporate social responsibility in project management; and computer applications in project management.

#### 17401 BUILDING AND CONSTRUCTION PROJECT PROCESS (7cp); forty hours per semester

The four phases of the project process as they apply specifically to building and construction, namely initiation and concept, planning and development, project execution and implementation, and project commissioning and handover.

#### 17405 BUILDING AND CONSTRUCTION PROJECT MANAGEMENT STUDIES I (5cp); forty hours per semester

Examination of seven of the basic project management functions as they apply specifically in building and construction, namely time, cost, quality, risk and scope management, management of project decision making, and management of project organisations. Examination of certain factors and constraints which are especially relevant to building and construction projects, namely town planning principles, building project law, approvals management, construction economics and finance, and aspects of construction technology. Detailed examination of two specific topics from the project process which are particularly important in the context of building and construction, namely feasibility studies, and aspects of property management and project marketing.

#### 17506 BUILDING AND CONSTRUCTION PROJECT MANAGEMENT STUDIES II (6cp); fifty hours per semester

An examination of the remaining basic project management functions as they apply specifically to building and construction projects, namely 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, namely 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, namely industrial arbitration, organisations and policies, dispute resolution and cost of disputes.

**17510 PLANNING I** (*8cp*); two and a half hpw 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 I (4cp); one hpw

The concepts of micro 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 I (4cp); one hpw

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.

# 17514 LAW FOR PLANNERS I (2cp); half hpw

Environmental law: relating to the air, water, waste, and heritage; the law and practice of environmental impact assessment; the jurisdictions and procedures of the relevant courts. Development law: legislative systems and models for statutory planning in Australia and elsewhere; legislative systems and models for health and building control in Australia and elsewhere; health and building control issues for planning.

**17520 PLANNING II** (8cp); two and a half hpw 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.

#### 17521 URBAN ECONOMICS AND FINANCE II (4cp); one hpw

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.

#### 17522 ENVIRONMENT AND INFRASTRUCTURE II (4cp); one hpw

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.

#### 17523 URBAN DESIGN AND MANAGEMENT II (4cp); one hpw

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.

### **17530 PLANNING III** (4cp); one and a quarter hpw

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.

#### 17534 SOCIAL AND POLITICAL ASPECTS II (2cp); half hpw

Perception of the built environment: environmental psychology and the problems of settlements, with particular reference to the physical and spatial aspects of the neighbourhood community, security and safety. Political issues: as a demonstration of the techniques of political analysis, and to examine issues in depth, an investigation of one or more of the following topics: urban consolidation; regional structure and centres policies; current developments such as office parks; access – physical and social, micro and macro.

### 17544 LAW FOR PLANNERS II (2cp); half hpw

Property and administrative law: aspects of property law (occupier's liability, tenancy, resumption and compensation) and historical aspects of nuisance; principles of administrative law, with particular reference to local government law. Legal innovations and controversies: an examination of current issues in the legal aspects of planning, including some or all of the following topics: developer contributions; designated development; integrated development control; recent and possible changes in the practices of the Land and Environment Court; changes in the treatment of legal standing in environmental litigation.

#### 17600 MAJOR REPORT (18cp); 110 hours over two semesters

A major study, undertaken by each student individually involving a detailed study of an individual topic and the preparation of a comprehensive report.

## 17751 SPECIFIC ISSUES IN PLANNING (4cp); one hpw

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 (16cp); four how

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.

#### 43710 ENVIRONMENT AND INFRASTRUCTURE I (4cp); one hpw

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.

# 43710 SOCIAL AND POLITICAL ASPECTS I (2cp); half hpw

Social investigation: constructing social theories and testing hypotheses; statistics, social survey research methods, and the collection and interpretation of demographic data. Decision-making structures: the concepts of social structure, values, beliefs, attitudes and social justice; an examination of democratic institutions, interest groups and public participation in planning.

### FACULTY BOARD

Associate Professor G Caban (Chair) Associate Professor D J Lenard (Deputy Chair) Mr A M Boddy Associate Professor W Barnett Mr M D Chapman Mr P Clarke Associate Professor M Cosgrove Mr J Dawkins Mr D Denne Ms K Flower Ms S Gibson Ms K Hanton Dr M I Hallidav Mr S Harfield Mr R Haves Mr P Healy Mr K A Heathcote Ms V Horridge Mr C A Langston Mr T Laurence Mr B S Jobson Mr S F Johnston Mr A C Karantonis Mr K J Madden Mr G Moor Mr J Muir Mr J O Oluwoye Mr K Pearson-Smith Dr J Phillips Professor N D Ouarry Mr J Quoyle Mr C F Roberts Mr M Roxburgh Mr N Shooter Ms J Slater Mr P Smith Mr W K Smith Ms V Tibbertsma Associate Professor D Tomkin Mr R Trembath Dr K Trigwell Dr P Towson Mr S Wattanasarnvechakul Ms J Wilson Mr G Youett

### SCHOOL OF DESIGN ADVISORY COMMITTEE

Chairperson Dean of the Faculty

Head of School Staff of the School

Professional Representatives

Recent Graduates

Vacant Associate Professor G Caban Mr K Smith Ms V Horridge Associate Professor D Tomkin Mr T Laurence Ms J Wilson

Mr G Bennett Mr A Crick Mr K White Ms J Gough

Ms M Elford Mr P Lelievre Ms D Lorentz Ms L Naar Mr J Hockney

### SCHOOL OF ARCHITECTURE ADVISORY COMMITTEE

Chairperson Dean of the Faculty

Head of School

Staff of the School

Representatives from the Profession

Academic Representative

Recent Graduates

Representatives from Professional Bodies Mr D Gazzard Associate Professor G Caban Associate Professor W Barnett Professor N Quarry

Mr R Dyke Mr T Caro Ms W Lewin Mr C Johnson Mr M Willett

Professor J Lang

Ms M McGlinchey Ms M Krempff

Mr P Hardiman Mr K Maher Mr R Fuller

### SCHOOL OF BUILDING STUDIES ADVISORY COMMITTEE

The Advisory Committee for the School of Building Studies is currently being constituted.

### FACULTY OF DESIGN, ARCHITECTURE AND BUILDING STAFF LIST

Dean of Design, Architecture and Building G Caban, BA, MEd (Syd), DipEd (Syd Teach Coll), GradDipCommunication (NSWIT), MDIA (ED), AADM

### City campus (Broadway)

Faculty Administrator S A Martin, BA (NSW), MBA (UTS)

Administrative Officer, Services L Alford, BA (Hons) (LaT)

Secretary to the Dean L Wright

Student Liaison Officer R A O'Connor, BA (Auck) (until March) J Lanagan, BA (Macq) (from March)

Information Assistant N Singh

Faculty Assistant M A Morris

Postgraduate Assistant S A Hewson

#### **Balmain campus**

Administrative Officer, Finance R D M Squirchuk, BA (Macq)

Executive Assistant M A Bastock, BA (Macq)

Campus Secretary Vacant

### **School of Architecture**

Associate Professor and Head of School W Barnett, DipArch (Dunelm), MPhil (Soton), FRSA, FRIBA

Secretary to Head of School V M A Tibbertsma

Technical Officer A J Pearson Professor of Architecture N D Quarry, BArch (Melb), MArch (Rice), LFRAIA

Senior Lecturers A M Boddy, BArch (Melb), ARAIA M D Chapman, ASTC, LFRAIA, MRIBA, FIArbA B S Jobson, BArch, MBldgSc (Syd) K J Madden, BArch (NUI), DipPP (Dub), MUrbDes (Arch) (Syd), MRIAI, ARAIA P G Towson, BE, MEngSc (NSW), BE (NSWIT), LLM (UTS), MSc (Camb), MBdgSc, PhD (Syd), MIEAust

Lecturers S J Harfield, BArch, MArchSt (Adel) K E Pearson-Smith, BArch (Hons) (NSWIT), ARAIA, AIArbA J G Phillips, BA (Hons) (Syd), PhD (Lon) G A Youett, ArchDip (Cov)

Visiting Professor G Murcutt, ASTC

### **School of Building Studies**

Associate Professor and Head of School D J Lenard, BAppSc, MAppSc (NSWIT), FAIQS, MAIB

Secretary to Head of School P A O'Loughlin

Technical Manager G J Moor

Technical Assistant N J Hey

Computer Laboratory Manager H Trisnodjojo, MEEng (UKSW)

### **Postgraduate and Continuing Education**

Associate Professor and Director H A MacLennan, BBuild, MSc (Build), GradDip H and NP (NSW), MAIB

### **Department of Building**

Senior Lecturer and Head of Department P L Healy, BE (NUI), DIC, MSc (Lond), MBA (NSW), MIEAust

Senior Lecturers B R Longfoot, BE, MEngSc (NSW), ASTC, MIEAust, MAIB L Crawford, BArch (Hons), MTCP (Syd), GradDipHRM (MCAE), FRAIA, AAIB

#### Lecturers

P H Clarke, BBuild (NSW), DipEd (SCAE), GradDipEdStuds (UTS) K A Heathcote, BE (Hons), MEngSc, MCom (NSW), DipEd (SCAE), MIEAust, MAIB D P Miller, BAppSc (NSWIT), DipEd (Syd Teach Coll), MBldgSc (Syd) N R Shooter, StructEngCert (STC), BAppSc (NSWIT), AAIM, AAIB S T K West, BBldg, MAppSci (NSW), DipEd (SCAE)

### **Department of Land Economics**

Senior Lecturer and Head of Department P Waxman, BA (SUNY), DipEc (Stockholm), MBA (Wash)

Visiting Associate Professor M R G Fiedler, BCom, MCom (Melb), PhD (Qld), DipFinPlan (Deakin)

Senior Lecturers J E Dawkins, BSc (WA), MTCP (Syd), MRAPI A C Karantonis, BEc (UNE), MComm (NSW), ESLE G H Searle, BA (Hons) (Adel), PhD (Macq), MIAG

Lecturers P B Cashmore, BA, MUP (Melb), GradDipUrbanSociology (SIT), GradDipProp (RMIT) G de Valence, BEc (Hons) (Syd) G R Small, BSurv, MCom (NSW), JP

Research Fellow J O Oluwoye, DipCart (UWM), BSc (USA), MCP (How), PhD (NSW), MABSM, MAPA, MNITP, MCIT, MPBAAA

### Department of Quantity Surveying

Senior Lecturer and Head of Department C F Roberts, ASTC, LLB, FAIQS, AIAARB (Aust), Barrister of the Supreme Court of NSW

Senior Lecturer C A Langston, BAppSc, MAppSc (NSWIT), AAIQS

Lecturers T M Havard, BA (Hons) (Sheff), DipQS, DipLE (Aberd) D T Luttrell, BAppSc (NSWIT) P V Smith, BAppSc (NSWIT), AAIQS

### **School of Design**

*Head of School* Vacant

Secretary to Head of School V M Cains

Equipment Coordinators O Berlin M R Barbagello

### Department of Fashion and Textile Design

Senior Lecturer and Head of Department V G Horridge, MDes (RCA)

Senior Lecturer G F Hardwick, DA (Manc Coll Art)

Lecturers R S Cumpstone, CertClothing& Textiles (Wgtn Poly) E N Hagen, MDes (RCA) R L Landers, BA (SCA) L J Marchant, DipAD (Prahan CAE)

Technical Assistant, Textiles P P Inwood, CertTypDipTextDes (Wgtn Poly)

Technical Officer, Fashion M V Spear

Technical Assistant, Fashion Vacant

#### **Department of Industrial Design**

Associate Professor and Head of Department D Tomkin, DipDesign (RMIT), MDes (RCA)

Associate Professors J S Montague, PhB (Chicago), IDSA C Nielsen, MA (Design) (SCA), FDIA, FRSA

Lecturers A L Elton V Kokotovich, BSc (IndEd), MID (Purdue), MIEd (Maryland), IDSA

Workshop Manager, Industrial Design Workshop W Feinberg

Technical Officer, Industrial Design Workshop LF Brown

### **Department of Interior Design**

Senior Lecturer and Head of Department T M Laurence, BSc (Arch), BArch (NSW), MDIA

Senior Lecturer G C Wilkie, GradDip T&C Planning (Syd), DipEd (Syd Teach Coll), ARAIA

Lecturers N F Baker, ADMT (NSWCM), BSc (Arch), BArch (Syd), GradDipAdultEd (SCAE) K A Hanton, Dip (IntDes) (SCA), MDIA J M Quoyle, BSc (Arch), BArch (Syd)

Research Officer J A F Powell, DipAd (IntDes) (SCA)

### **Department of Visual Communication**

Senior Lecturer and Head of Department M J Wilson, DA (Edin)

Associate Professor C McGregor, BA (Syd)

Lecturers C Beard, NatCertEng, Higher NatCertStructural Eng (Leic Coll Tech) J Gothe, Graphic Design Dip (Randwick TC), BA (Syd) B Hart M Hill, CertGroupwork (SAIT), GradDipMedia (AFTS), ASIFA J W Kesteven, BA (NSWIT)

Production Coordinator, Film & Video G F Trad, DipTeach (Arm CAE)

Production Coordinator, Printery M J Watson

Production Coordinator, Photography M W D Roxburgh, BA, GradDip (SCAE)

Technical Officer, Typesetting Vacant

#### **Unit for Design Computing**

Senior Lecturer and Head of Unit K W Smith, BComm (NSW)

Lecturers D G Thompson, DipArt& Design (Preston Poly), CertEd (Dist) (Hatfied Poly), MCSD R Trembath, StructEngCert (STC), MDesign (UTS), MDIA, AADM Computer Laboratory Manager M A Hacker, BAppSc (UTS)

Assistant Laboratory Managers N I Glettner M B Mariano

### Unit for Integrated Design Studies

Senior Lecturer and Head of Unit J A Broadbent, BSc, PhD (Reading), GradDipEnvStudies (Macq), AADM, MDIA

Lecturers R V Hayes, BArch (Syd), MEnvStudies (Macq), MRAIA J G Muir, BArch (NSW), ARAJA

### Unit for Postgraduate Design Studies

Senior Lecturer and Head of Unit D Denne, MA (York), DipBldSc (Syd), GradDipLD (NSW), DipEd (Syd Teach Coll), ASTC (Hons), FDIA, AADM

### **PRINCIPAL DATES FOR 1993**

#### **AUTUMN SEMESTER**

#### JANUARY

- Release of HSC results
  School of Legal Practice enrolment day at St Leonards
  Closing date for changes of preference to the Universities Admissions Centre (UAC) from 1992 NSW HSC applicants (by 4.30 pm)
   Enrolment of students at City campus
- 26 Australia Day
- 29 Public School Holidays end

#### FEBRUARY

- 3-5 Enrolment of new undergraduate students at City campus includes UAC and direct applicants
- 4 5 Enrolment of all Faculty of Nursing students at Kuring-gai campus
- 10 11 Enrolment of all School of Teacher Education students at Kuring-gai campus
- 22 Enrolment of School of Biological and Biomedical Science students at St Leonards campus

#### MARCH

1	Classes	begin
---	---------	-------

- 12 Last day to enrol in a course or add subjects
- 12 Last day to change to upfront HECS payment
- 26 Last day to apply for leave of absence without incurring financial penalty
- 31 HECS Census Date

#### APRIL

8	Last day to drop a subject without academic penalty*
8	Last day to withdraw from a course without academic penalty*
9	Public School Holidays begin
9	Good Friday
12	Easter Monday
13	Graduation period begins
13 - 16	Vice-Chancellors' Week (non-teaching)
16	Public School Holidays end
25	Anzac Day
30	Graduation period ends
30	Last day to apply to graduate in Spring 1993
MAY	
28	Closing date for undergraduate applications for Spring semester
JUNE	

#### JUNE

- 14 Formal examination period begins
- 28 Public School Holidays begin

#### SPRING SEMESTER

#### JULY

- 2 Formal examination period ends
- 5 School of Legal Practice enrolment day at St Leonards campus
- 5 9 Vice-Chancellors' Week (non-teaching)
- 9 Public School Holidays end
- 21 Release of Autumn Semester examination results
- 26 30 Confirmation of Spring programs
- 27 28 Enrolment of new students

#### AUGUST

- 2 Classes begin
- 5 Last day to withdraw form full year subjects without failure\*
- 13 Last day to enrol in a course or add subjects
- 13 Last day to change to upfront HECS payment
- 27 Last day to apply for leave of absence
- 31 HECS Census Date
- 31 Last day to apply to graduate in Autumn 1994

#### SEPTEMBER

- 10 Last day to drop a subject without academic penalty\*
- 10 Last day to withdraw from a course without academic penalty\*
- 27 Public School Holidays begin
- 27 Vice-Chancellors' Week (non-teaching) begins
- 27 Graduation period begins
- 27-29 Conference on Cultural Diversity
- 30 Closing date for undergraduate applications via UAC (without late fee)
- 30 Closing date for inpUTS Special Admission Scheme applications
- 30 Closing date for postgraduate applications to be confirmed

#### OCTOBER

- 1 Vice-Chancellors' Week (non-teaching) ends
- 1 Graduation period ends
- 8 Public School Holidays end
- 29 Closing date for postgraduate research and course award applications
- 29 Closing date for undergraduate applications via UAC (with late fee)
- 29 Closing date for undergraduate applications direct to UTS (without late fee)

#### NOVEMBER

15 Formal examinations begin

#### DECEMBER

- 3 Formal examinations end
- 20 Public School Holidays begin
- 24 Release of Spring Semester examination results

\* HECS or Postgraduate Course Fees still apply after the HECS Census date.

BALMAIN CAMPUS











.

.

.

University of Technology, Sydney P O Box 123 Broadway NSW 2007 Australia Telephone: (02) 330 1990

P

ISSN 1036-0654