UNSW

Architecture

1993 Handbook

THE UNIVERSITY OF NEW SOUTH WALES

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THE UNIVERSITY OF NEW SOUTH WALES

Subjects, courses and any arrangements for courses including staff allocated as stated in this Handbook are an expression of intent only. The University reserves the right to discontinue or vary arrangements at any time without notice. Information has been brought up to date as at 3 November 1992, but may be amended without notice by the University Council.

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It is University policy to promote equal opportunity in education (refer to EOE Policy Statement, The University of New South Wales Calendar (Summary Volume) and *Student Guide 1993).*

Contents

Undergraduate Study: Subject Descriptions 27

Graduate Study 61

Introduction

The Faculty of Architecture offers courses that are designed to provide an education and qualification to practice the professions of architecture, building, industrial design, landscape architecture, quantity surveying and town planning. It also provides opportunities for graduate and professional development studies, and for research in and across these and related fields.

Architecture is a dynamic profession which has a profound influence on the way we live and interact with our environment. It is not just about the design and erection of buildings - it is also about how we use them, and about the world we chose to live in. Creativity is the keystone of the profession, but architects must also have soundly based technical knowledge. For those whose interests lie in other areas of architecture, study at the undergraduate level is also available which provides the opportunity for specialization in a number of architecture related fields.

Modern building is about the organization and management of people, materials and machinery for projects that may cost up to several hundred million dollars. It is about planning and programming, co-ordination, contracts administration, quality management, industrial relations, cash flows and information technology.

Industrial design involves the design of a whole range of consumer and capital products as diverse as telephones and cranes, gas fires and exhibition centres, toothbrushes and motor cars. Ideally, the industrial designer works as part of a team involving engineering, production and marketing.

Landscape architecture is concerned with the environment as a whole. Its principal focus is the theory and practice of landscape planning, cultural studies and conservation of the environment. Landscape architects seek creative strategies for environmental protection, sustainable development, land-use planning, site design and heritage conservation.

Town planning is a wide-ranging profession which has a major impact on the form and functioning of cities, suburbs, towns and the non-urban environment. Town planners deal with the social aspects of urban and rural life, with the economics of development, and with the appearance and functioning of the environment. They consider the needs and futures of both existing places and newly developing areas.

This handbook provides information on courses of study offered by the Faculty of Architecture, at both undergraduate and graduate levels, together with descriptions of subjects available and areas in which research may be undertaken. Those who work in the Faculty are enthusiastic about the courses offered, and feel that these provide challenges and rewards in both the academic and professional spheres. I hope that this is also your experience!

Professor A. Ray Toakley
Dean

Calendar of Dates

The academic year is divided into two sessions, each containing 14 weeks for teaching. There is a recess of approximately six weeks between the two sessions and there are short recesses of one week within each of the sessions.

Session 1 commences on the Monday nearest 1 March.

Faculties other than Medicine

	1993	1994
Session 1 (14 weeks)	1 March to 8 April	28 February to 31 March
Recess:	9 April to 18 April 19 April to 11 June	1 April to 10 April 11 April to 10 June
Study Recess:	12 June to 17 June	11 June to 16 June
Examinations	18 June to 6 July	17 June to 5 July
Midyear Recess:	7 July to 25 July	6 July to 24 July
Session 2 (14 weeks)	26 July to 24 September	25 July to 23 September
Recess:	25 September to 4 October 5 October to 5 November	24 September to 3 October 4 October to 4 November
Study Recess:	6 November to 11 November	5 November to 10 November
Examinations	12 November to 30 November	11 November to 29 November

Important Dates for 1993

January 1993

F 1 New Year's Day - Public Holiday
M 11 Term 1 begins - Medicine IV
Term 1 begins - Medicine VI
M 18 Term 1 begins - Medicine V
T 26 Australia Day - Public Holiday

February 1993

T 2 Enrolment period begins for new undergraduate students and undergraduate students repeating first year
M 8 Re-enrolment period begins for second and later year undergraduate and graduate students enrolled in formal courses. Students should consult the *Re-enrolling 1993* leaflet for their course for details.
F 26 Last day for acceptance of enrolment by new and re-enrolling students. (Late fee payable thereafter if enrolment approved.)

March 1993

M 1 Session 1 begins - all courses except Medicine IV, V, VI
Term 1 begins - Australian Graduate School of Management
Su 7 Term 1 ends - Medicine VI
M 8 Session 1 begins - University College, Australian Defence Force Academy
F 12 Last day applications are accepted from students to enrol in Session 1 or whole year subjects
Su 14 Term 1 ends - Medicine IV
M 15 Term 2 begins - Medicine IV
Term 2 begins - Medicine VI

Su 21 Term 1 begins - Medicine V
M 29 Term 2 begins - Medicine V
W 31 HECS Census Date for Session 1
Last day for students to discontinue without failure subjects which extend over Session 1 only

April 1993
F 9 Good Friday - Public Holiday
S 10 Easter Saturday - Public Holiday
Mid-session Recess begins
M 12 Easter Monday - Public Holiday
Su 18 Mid-Session Recess ends
Su 25 Term 2 ends - Medicine IV
Term 2 ends - Medicine VI
M 26 Anzac Day - Public Holiday

May 1993
M 3 Term 3 begins - Medicine IV
Term 3 begins - Medicine VI
F 7 Term 1 ends - Australian Graduate School of Management
S 8 May Recess begins - University College, Australian Defence Force Academy
T 11 Publication of Provisional Timetable for June examinations
W 19 Last day for students to advise of examination clashes
Su 23 May Recess ends - University College - Australian Defence Force Academy
Su 30 Term 2 ends - Medicine V
M 31 Term 2 begins - Australian Graduate School of Management

June 1993
T 1 Publication of Timetable for June Examinations
T 8 Term 3 begins - Medicine V
F 11 Session 1 ends
S 12 Study Recess begins
College of Fine Arts assessment week begins
Su 13 Term 3 ends - Medicine IV
Term 3 ends - Medicine VI
M 14 Queen's Birthday - Public Holiday
Term 4 begins - Medicine IV
Term 4 begins - Medicine VI
Th 17 Study Recess ends
F 18 Examinations begin
College of Fine Arts assessment week ends
F 25 Session 1 ends - University College, Australian Defence Force Academy
S 26 Mid-year Recess begins - University College, Australian Defence Force Academy
M 28 Examinations begin - University College, Australian Defence Force Academy

July 1993
T 6 Examinations end
W 7 Midyear Recess begins
S 10 Examinations end - University College, Australian Defence Force Academy
Su 11 Midyear Recess begins - University College, Australian Defence Force Academy
Su 25 Midyear Recess ends
Midyear Recess ends - University College, Australian Defence Force Academy
M 26 Session 2 begins - all courses except Medicine IV, V, and VI
Session 2 begins - University College, Australian Defence Force Academy

August 1993
F 6 Term 2 ends - Australian Graduate School of Management
Last day applications are accepted from students to enrol in Session 2 subjects
Last day for students to discontinue without failure subjects which extend over the whole academic year.
Su 8 Term 4 ends - Medicine IV
Term 3 ends - Medicine V
Term 4 ends - Medicine VI
M 16 Term 5 begins - Medicine IV
Term 4 begins - Medicine V
Term 5 begins - Medicine VI
M 30 Term 3 begins - Australian Graduate School of Management
T 31 HECS Census Date for Session 2
Last day for students to discontinue without failure subjects which extend over Session 2 only

September 1993
S 25 Mid-Session Recess begins
September Recess begins - University College, Australian Defence Force Academy
Su 26 Term 5 ends - Medicine IV
Term 5 ends - Medicine VI
M 27 Term 6 begins - Medicine IV
Term 6 begins - Medicine VI
Th 30 Closing date for applications to the Universities Admission Centre

October 1993
M 4 Labour Day - Public Holiday
Mid-Session Recess ends
September Recess ends - University College, Australian Defence Force Academy
T 5 Publication of provisional timetable for November examinations
W 13 Last day for students to advise of examination clashes
Su 17 Term 4 - Medicine V
T 26 Publication of Timetable for November Examinations
F 29 Session 2 ends - University College, Australian Defence Force Academy

November 1993
M 1 Examinations begin - University College, Australian Defence Force Academy
F 5 Session 2 ends
Term 3 ends - Australian Graduate School of Management
S 6 Study Recess begins
College of Fine Arts assessment week begins
Su 7 Term 6 ends - Medicine IV
Term 6 ends - Medicine VI
Th 11 Study Recess ends
F 12 Examinations begin
College of Fine Arts assessment week ends
F 19 Examinations end - University College, Australian Defence Force Academy
T 30 Examinations end

December 1993
Th 23 Last day for acceptance of applications by Admissions Section for transfer to another undergraduate course within the University
M 27 Christmas Day - Public Holiday
T 28 Boxing Day - Public Holiday

Comprises School of Architecture, including Department of Industrial Arts; Schools of Building, Landscape Architecture, Town Planning; and Graduate School of the Built Environment, including the Department of Industrial Design.

Dean
Professor A. R. Toakley

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Senior Administrative Officer
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School of Architecture

Associate Professor of Architecture and Head of School
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School of Building

Head of School
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Peter Ashton Murphy, BA *Syd.*, PhD *Macq.*

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Susan Margaret Thompson, BA DipEd Macq., MTCP *Syd.*

Visiting Professor
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Graduate School of the Built Environment

Head of School
Professor A.R. Toakley

Presiding Member School Executive Committee
Dr B.H. Judd

Course Co-Ordinator MBEnv (Building Conservation)
D. Godden

Department of Industrial Design

Senior Lecturer and Head of Department
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Senior Lecturer
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Lecturer
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Technical Officer
Antony Yarham, BEd *Kuring-gai C.A.E.*, DipEd *U.T.S.*

Some People Who Can Help You

If you require advice about enrolment, degree requirements, progression within courses, or any other general faculty matters, contact:

Mr Brian Newell, Senior Administrative Officer, Faculty of Architecture, Room 510, Architecture Building, Extension 4771.

For information and advice about subject content and requirements contact the appropriate person below:

Associate Professor John Ballinger, School of Architecture, Room 100, Architecture Building, extn 4786.

Professor James Weirick, School of Landscape Architecture, Room 208, Old Main Building, extn 4844.

Dr Ojars Greste, School of Building, Room 402, Architecture Building, extn 4826.

Associate Professor Robert Zehner, School of Town Planning, Room 205, Old Main Building, extn 4837.

Professor Ray Toakley, Graduate School of the Built Environment, Room 501, Architecture Building, extn 4768.

Mr John Redmond, Department of Industrial Design, Room 211, Sir Robert Webster Building, extn 4849.

Faculty of Architecture Enrolment Procedures

Architecture Degree Course

All students re-enrolling in Architecture courses in 1993 should obtain a copy of the free booklet Architecture Enrolment Procedures 1993 available from the School Office. This booklet provides detailed information on enrolment procedures and enrolment timetable.

Town Planning Degree Course

Before proceeding on practical experience, Town Planning students are required to obtain instruction relating to enrolment procedure from the School of Town Planning office. This particularly applies to students in Years 3 and 4.

Bachelor of Building Degree Course

The Building course is offered on a credit point semester system basis and students are required to enrol for the full year (two semesters) on the dates and at the times shown in the booklet Building Enrolment Procedures 1993.

Students are required to complete 6 months of practical experience as part of their course. Building students who elect to take their industrial program in Session 1 in any year are required to enrol at the beginning of that year.

Enrolment for Session 2 subjects is a preliminary enrolment and accepted subject to the student having obtained the appropriate prerequisites before commencement of that session.

Rules for Progression

Progression in courses offered in the Faculty of Architecture is generally dependent on the successful completion of prerequisites and/or co-requisites for subjects as listed in the schedules of subjects for each course.

Where the academic record of students is not of a satisfactory standard, the Head of School may recommend a restricted program. This applies to all undergraduate courses offered by the Faculty.

Library Facilities

Although any of the university libraries may meet specific needs, the staff and students of the Faculty of Architecture are served mainly by the Physical Sciences Library and the Studio Collection housed in the Faculty of Architecture.

There is also some material still contained in the undergraduate collection located in the Library tower.

The Physical Sciences Library

This library, located on Levels 6 and 7 of the Library tower, caters for the information needs of staff, postgraduate students and undergraduates in the pure and applied sciences, engineering and architecture.

Physical Sciences Library materials are listed in the Library's online catalogues, microfiche book finding list or microfiche serials catalogue.

The Library provides reference, reader assistance and reader education services, including interlibrary loan, online search and CD-ROM facilities. Photocopying facilities are also available.

Trained Library staff are always available on Level 7 to assist readers with their enquiries.

Physical Sciences LibrarianRhonda Langford

Undergraduate Services

- The undergraduate collection caters for the needs of students in Years 1 and 2 and other groups where large numbers require mass teaching. Levels 3 and 4.
- The Open Reserve section, houses books and other material which are required reading. Level 2.
- The Audio-Visual section, contains multimedia, videos and cassette tapes of lectures.. The Audio-Visual section has wired study carrels and cassette players for student use. The map collection is also housed here. Level 3.
- The Reader Education program provides orientation tours and introductory library research method lectures to students.

Faculty Laboratories

Research Laboratories

The Faculty controls research laboratories situated on campus at Kensington and at the University of New South Wales Research Station, King Street, Randwick. The laboratories have sections equipped for work on environment and climate, materials, model testing, services, lighting and acoustics. Extensive testing and research equipment and workshop facilities are available, including a wind-rain machine, an artificial sky and sun, a structural modelling facility and a structural testing bay. The equipment and facilities of the laboratories are continually being expanded.

Research work and testing programs carried out in the laboratories include:

Condensation behaviour of double-glazed windows.

Transfer of heat and moisture through wall elements.

Penetration of moisture into and through concrete.

Development of methods of extending the use of solar energy in domestic architecture.

Study of noise transmission in buildings.

Investigation of traffic noise measurement, analysis and prediction.

The effectiveness of artificial luminous environments.

The Building Research Centre is now located in the King St. laboratories and offers additional services to the building industry.

Computing Facilities Laboratory

The Faculty has a number of computing laboratories available to undergraduate and postgraduate students. This includes 3 PC laboratories, two containing 15 286-based machines and one with 30 386-based machines on a Novelle network, supporting a variety of commercial packages including word processing, databases, spreadsheets, programming tools and specialist application programs. A CAD laboratory, consisting of 16 high performance graphics workstations (SUN SPARCstations), provides a state-of-the-art facility for computer-aided drafting, modelling and 3D visualisation of building forms. In addition, the Faculty runs a UNIX fileserver providing access to a pen plotter, a high resolution camera device and a gateway to the University's campuswide network. Through the ever-expanding network capabilities within the Faculty, staff and students now have access to the international electronic mail network and a variety of mainframe computers (mainly DEC and IBM) that can be used for compute-intensive tasks.

Active research is underway in the following areas:

- The use of computer graphics and other computing techniques in architectural design and teaching.
- The development and use of management information systems in the building industry.
- Analysis and development of computer methods in landuse planning and design.
- Use of computers in transportation and strategic planning, social analysis and census data interpretation.

Student Clubs and Societies

Students have the opportunity of joining a wide range of clubs and societies. Many of these are affiliated with the Students' Union. There are numerous religious, social and cultural clubs and also many sporting clubs which are affiliated with the Sports Association.

Clubs and societies seeking to use the name of the University in their title, or seeking University recognition, must submit their constitutions either to the Students' Union or the Sports Association if they wish to be affiliated with either of these bodies, or to the Academic Registrar for approval by the University Council.

Students With Disabilities

The University of New South Wales has a policy of equal opportunity in education and seeks wherever possible to ensure maximum participation of students with disabilities.

The University offers a range of assistance: examination support; specialized equipment; educational support; parking provisions; library assistance.

A Resource Guide for students and staff with disabilities and a map showing wheelchair access is available from the Adviser to Students with Disabilities, the EEO Unit, the Library and the Students Union.

It is advisable to make contact with the Adviser to Students with Disabilities prior to, or immediately following enrolment, to discuss your support needs.

The Adviser can be contacted on 697-5418 or at the Student Services Huts, Physics Road (near Barker Street).

General Education Requirement

The University requires that all undergraduate students undertake a structured program in General Education as an integral part of studies for their degree.

Among its objectives, the General Education program provides the opportunity for students to address some of the key questions they will face as individuals, citizens and professionals.

The program requires students to undertake studies in three categories of the program.

The key questions addressed by the Program are:

Category A: The External Context: An introduction in non-specialist terms to an understanding of the environments in which humans function.

Course requirement: 56 hours

1. How do we, can we, generate wealth? (Australia and the Development of the World Economy)

2. How can we, ought we, distribute wealth, status and power? (Human Inequality)

3. What steps should we take, and what policies should we adopt, in science and technology? (Science and Civilization)

4. What effects do our wealth generating and techno-scientific activities have on the environment? (Ecosystems, Technology and Human Habitation)

5. What are the effects of the new mass media of communications? (Mass Media and Communications)

6. What are the key social and cultural influences on Australia today? (Australian Society and Culture)

Category B. The Internal Context of Assumptions And Values: An introduction to, and a critical reflection upon, the cultural bases of knowledge, belief, language, identity and purpose.

Course requirement: 56 hours

1. How do we define ourselves in relation to the larger human community? (The Self and Society)

2. How do our conceptions of human nature and well being influence both individual and social behaviour? (Changing Conceptions of Human Nature and Well-Being)

3. What are the prevailing conceptions of and challenges to human rationality? (The Pursuit of Human Rationality)

4. How do language, images and symbols function as means and media of communications (The Use of Language, Images and Symbols)

5. What is the impact of the computer on human society and culture? (The Computer: Its Impact, Significance and Uses)

6. Which systems of belief and configurations of values are most conducive to the survival and enhancement of the human species and the planet earth? (Beliefs, Values and the Search for Meaning)

Category C. An Introduction To The Design And Responsible Management Of The Human And Planetary Future: An introduction to the development, design and responsible management of the systems over which human beings exercise some influence and control. This category is required only of students in four-year professional and honours programs.

The central question to be addressed by students in a systematic and formal way is: For what purpose or purposes will I use my intellectual skills, my expertise, or my technological prowess?

Will these abilities be used, for example:

- in a creative and innovative way?
- to widen the circle of human participation in the benefits they bring?
- to break down the barriers of exclusion and discrimination?
- to enhance the prospects for survival of the human species?
- to enhance the capacity of the planet earth to sustain life?

There are differing requirements for Category C for students commencing before, in, and after 1988. Students must complete a program of general education in accordance with the requirements in effect when they commenced their degree program. Students Should Consult The Appropriate Course Authority or The Centre for Liberal and General Studies in Morven Brown Building, Room G58.

Handbook Guide

This Handbook is divided into two main sections comprising undergraduate study and graduate study. Initially, course outlines are presented in each section, providing a guide to the degrees within organizational units. This is followed by a full listing of subject descriptions in each section, which provide full details of subject content, contacts and session/prerequisite details.

As changes may be made to information provided in this Handbook, students should frequently consult the noticeboards of the schools and the official noticeboards of the University.

Information Key

The following key provides a guide to abbreviations used in this book:

C	credit points
F	full year (Session 1 plus Session 2)
HPW	hours per week
L	lecture
P/T	part-time
S1	Session 1
S2	Session 2
SS	single Session, but which Session taught is not known at time of publication
T	tutorial/laboratory
U	unit value
WKS	weeks of duration
X	external

Prefixes

The identifying alphabetical prefixes for each organizational unit offering subjects to students in the Faculty of Architecture follow.

Prefix	Organizational Unit	Faculty/Board
ACCT	School of Accounting	Commerce & Economics
ARCH	School of Architecture	Architecture
BLDG	School of Building	Architecture
COMP	School of Computer Science & Engineering	Engineering
GENS	Centre for Liberal & General Studies	
GEOG	School of Geography	Applied Science
GSBE	Graduate School of the Built Environment	Architecture
IDES	Department of Industrial Design	Architecture
LAND	School of Landscape Architecture	Architecture
PHYS	School of Physics	Science
SURV	School of Surveying	Engineering

The Faculty of Architecture consists of the School of Architecture, the School of Building, the School of Landscape Architecture, the School of Town Planning and the Graduate School of the Built Environment and the Department of Industrial Design. These schools and this department conduct undergraduate courses in the fields of architecture, industrial design, building, landscape architecture and town planning. The courses provide education and training in the arts and sciences involved in the design and construction of buildings, in the development of cities, in landscape and the development of manufactured products. In addition to professional and vocational training the courses include general education subjects to provide graduates with a broad understanding of the humanities and the social sciences.

School of Architecture

Head of School
Associate Professor John Ballinger

Architecture today is an art, a technology and a business. In the modern building industry the architect is the one person who considers the building as a whole end product: serving a purpose, built of materials using technology, to a cost, for a client, providing an environment of space, light and climate, changing its context by its location and form, conveying artistic meaning.

For small buildings the architect can lead and manage the whole process. As projects become larger and more complex the architect becomes a member of a team, sometimes captain of the team, often just one member but always from the beginning seeing the end product as a whole. From a comprehensive study of the requirements for a building the architect prepares a design concept which is continually adjusted and refined over the life of the project. The architect's role is one of continual creativity.

The BArch course provides graduates with an understanding of the forces that shape buildings and with the skills to guide those forces to a desired end product.

3260
Bachelor of Architecture Course

Bachelor of Architecture
BArch

This course provides the academic education and practical experience leading to professional qualifications in architecture. It aims to equip students with the theoretical and practical knowledge, skills and techniques needed in the design and construction of buildings.

General Description of the Course

The course requires full time attendance for five years with an additional six months practical experience taken after the end of third year. Theoretical knowledge is covered by lectures in the following seven areas:

1. Architectural Communication
2. Theory of Architecture
3. History of Architecture
4. Architectural Construction
5. Architectural Structures
6. Environmental Control
7. Architectural Practice

Progression through the course is by Design Stages comprising Studio and Seminar components. The first three Design Stages are of one year duration and the final four Design Stages are of one session, or half-year duration. Admission to each Design Stage is subject to completion of a majority of the components of the preceding Design Stage and certain pre-requisite lecture subjects.

In the Studios a graded sequence of exercises in the form of projects provides experience in architectural design. Each Studio is accompanied by Seminars which draw on the theoretical material and demonstrate its practical application. The architectural projects designed in the Studios thus provide the means for integrating all aspects of architecture.

In the final four sessions of the course the selection of electives gives students the opportunity to concentrate their study on particular aspects of architecture. Elective subjects are offered according to demand and the availability of staff and resources.

Students at the end of First Year are required to seek the advice of a course advisor about progression to later years.

General Education Requirement

General Education subjects totalling twenty credit points must be taken from Categories A (10 credit points = 567 hours) and B (10 credit points = 56 hours). The Category C requirement of the General Education Program is satisfied as follows:

1. The 28 hour subject ARCH0002 is taken in Year 5;

2. The following subjects include Category C issues: ARCH6105, ARCH6115, ARCH6301, ARCH6302, ARCH6501 and ARCH6806.

Practical Experience

Each student is required to obtain, before enrolling in Year 5, practical experience under a registered architect for a period of six months. The experience is to be recorded in a log book and should conform to the categories required for professional accreditation.

Assessment is only within the terms of the subject ARCH6904 Practical Experience in the Bachelor of Architecture degree course 3260. The School of Architecture takes no responsibility for any assessment or consideration for registration with the Board of Architects of New South Wales or membership of the Royal Australian Institute of Architects.

No other subject may be taken concurrently with practical experience.

Honours

The Bachelor of Architecture degree may be awarded with Honours based upon the quality of performance in the course and in accordance with current Faculty regulations. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

Registration and Professional Recognition

The degree of Bachelor of Architecture of the University of New South Wales is recognized by the Board of Architects of New South Wales for the purposes of legal registration. In addition, to become registered the candidate must satisfy the following requirements:

1. Produce evidence of two years' approved practical experience, at least one of which has been subsequent to completion of the course; and 2. Pass a special examination in Architectural Practice.

Graduates with two years' approved practical experience, at least one of which is subsequent to completion of the course, are eligible for Associate Membership of the Royal Australian Institute of Architects.

Students enrolled in the BSc(Arch) program (3265) or the BArch program(3260) are eligible to become Student Members of the Royal Australian Institute of Architects.

The foregoing is a general statement and students are strongly advised to obtain further particulars from the RAIA and the Board of Architects of New South Wales.

Schedule of Subjects

Year 1		**C**
Sessions 1 and 2		
ARCH6201	Architectural Computing 1 (S2)	6
ARCH6301	Theory of Architecture 1	6
ARCH6401	History of Architecture 1	9
ARCH6501	Architectural Construction 1	9
ARCH6601	Architectural Structures 1	6
ARCH6701	Environmental Control 1	9
Design Stage 1		
ARCH6101	Design Studio 1	24
ARCH6211	Communication Seminar 1	18
ARCH6311	Theory Seminar 1	9
ARCH6511	Construction Seminar 1	12
ARCH6611	Structures Seminar 1	6
ARCH6711	Environmental Control Seminar 1	6
Total		120
Year 2		
Sessions 1 and 2		
ARCH6302	Theory of Architecture 2	6
ARCH6402	History of Architecture 2	12
ARCH6502	Architectural Construction 2	12
ARCH6602	Architectural Structures 2	6
ARCH6702	Environmental Control 2	12
General Education Elective/s Cat A (56 hours)		10
Design Stage 2		
ARCH6102	Design Studio 2	30
ARCH6212	Communication Seminar 2	12
ARCH6312	Theory Seminar 2	9
ARCH6512	Construction Seminar 2	9
ARCH6612	Structures Seminar 2	6
ARCH6712	Environmental Control Seminar 2	6
Total		130
Year 3		
Sessions 1 and 2		
ARCH6303	Theory of Architecture 3	6
ARCH6403	History of Architecture 3	12
ARCH6503	Architectural Construction 3	12
ARCH6603	Architectural Structures 3	6
ARCH6703	Environmental Control 3	12
General Education Elective/s Cat B (56 hours)		10
Design Stage 3		
ARCH6103	Design Studio 3	30
ARCH6213	Communication Seminar 3	12
ARCH6313	Theory Seminar 3	9
ARCH6513	Construction Seminar 3	9
ARCH6613	Structures Seminar 3	6
ARCH6713	Environmental Control Seminar 3	6
Total		130
Year 4		
Session 1		
Either		
ARCH6804	Architectural Practice 1	6
Elective Subjects*		24
Design Stage 4		
ARCH6104	Design Studio 4	24
ARCH6114	Design Seminar 1	3

ARCH6514 Technology Seminar 1	3
Total	60
or	
ARCH6904 Practical Experience	

Year 4
Session 2
Option remaining from Session 1.

Year 5
Session 1

ARCH6205 Architectural Computing 2	6
Elective Subjects*	24
General Education Elective Cat C: ARCH0002	5

Design Stage 5

ARCH6105 Design Studio 5	24
ARCH6115 Design Seminar 2	3
ARCH6515 Technology Seminar 2	3
Total	65

Year 5
Session 2

ARCH6806 Architectural Practice 2	6
Elective Subjects*	24

Design Stage 6

ARCH6106 Design Studio 6	24
ARCH6116 Design Seminar 3	3
ARCH6516 Technology Seminar 3	3
Total	60

Year 6
Session 1

ARCH6807 Architectural Practice 3	6
Elective Subjects*	24

and

Design Stage 7

ARCH6107 Design Studio 7	24
ARCH6117 Design Seminar 4	3
ARCH6517 Technology Seminar 4	3
or	
ARCH6127 Major Design Project	30
or	
ARCH6907 Major Research Project	30
Total	60

*** Elective Subjects**
A range of electives will be offered each year selected from the list below. Electives may also be chosen from subjects within the BSc(Arch) course. Generally, the minimum enrolment for an elective to be offered will be 12 students. The listing for electives includes an allowance for Dissertation which is a prerequisite for Design Stage 7. Students are advised to enrol in Dissertation only in the session they intend to submit for assessment and not before.

ARCH5220 Computer Graphics Programming 1	6
ARCH5221 Computer Graphics Programming 2	12
ARCH5222 Computer Applications 1	12
ARCH5223 Computer Applications 2	6
ARCH5227 Advanced Graphics	6
ARCH5228 Drawing	6
ARCH5229 Painting	6
ARCH5230 Pottery & Ceramics	6
ARCH5231 Rendering	6
ARCH5320 Theory of Form	6
ARCH5321 Criticism and Evaluation	6
ARCH5322 Imagination	6
ARCH5323 Spirit in Architecture	6
ARCH5420 Building Conservation	6
ARCH5421 Recent Australian Architects	6
ARCH5422 Great Architects	6
ARCH5423 The City - Sydney	6
ARCH5424 Urban Design	6
ARCH5425 Landscape Design	6
ARCH5426 The Modern Movement in Architecture	6
ARCH5427 Post Modernism in Architecture	6
ARCH5520 Advanced Building Materials (Ceramics)	6
ARCH5521 Advanced Construction Systems	6
ARCH5522 Construction Planning & Management	6
ARCH5523 Advanced Building Materials (Organics)	6
ARCH5524 Advanced Building Materials (Metals)	6
ARCH5620 Conceptual Structural Design	12
ARCH5621 Advanced Structural Design	12
ARCH5622 Lightweight Structural Design	12
ARCH5720 Design for Energy Efficiency	6
ARCH5721 Design of Lighting	6
ARCH5722 Acoustics Studies	6
ARCH5723 Applied Environmental Psychology	6
ARCH5820 Building Economics & Development	6
ARCH5821 Project Management	6
ARCH5822 The Architect and the Law	6
ARCH5823 Quality Management Concepts	6
ARCH5824 Quality Management Practice	6
ARCH5920 Architectural Research 1	12
ARCH5921 Architectural Research 2	12
ARCH5922 Architectural Research 3	12
ARCH5950 Industrial Archaeology 1	6
ARCH5951 Industrial Archaeology 2	6
ARCH5952 Traditional Technology 1	6
ARCH5953 Traditional Technology 2	6
ARCH6906 Dissertation	18

3265
Bachelor of Science (Architecture) Course

Bachelor of Science (Architecture)
BSc(Arch)

This course provides architectural education for those whose interests and ambitions lie outside the field of professional practice. It offers an opportunity to select subjects on the basis of a student's individual interests.

General Description of the Course

The course may be completed in three years of full-time study. The first year is taken in common with BArch students. In each of the following three sessions an approved special research programme is undertaken followed by a research project in the final session. A selection of subjects is taken from those offered by the

School of Architecture with the option of subjects totalling up to forty five credit points from outside the School.

General Education Requirement

General Education subjects totalling twenty credit points must be taken during the course.

Honours

The Bachelor of Science (Architecture) degree may be awarded with honours after the successful completion of a two-semester honours program following the completion of the BSc(Arch) program, and in accordance with current Faculty regulations. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

BSc(Arch) Interior Design Major

This is a structured study program within the BSc(Arch) course specifically tailored to the needs of the student seeking an education to professional qualification level in Interior Design. The common first year of the course is followed by two years of gradually more specialized studies at the completion of which the student is eligible to undertake an Honours year to seek the award of the degree BSc(Arch) Honours in Interior Design.

Schedule of Subjects

Year 1		C
Sessions 1 and 2		
ARCH6201	Architectural Computing 1(S2)	6
ARCH6301	Theory of Architecture 1	6
ARCH6401	History of Architecture 1	9
ARCH6501	Architectural Construction 1	9
ARCH6601	Architectural Structures 1	6
ARCH6701	Environmental Control 1	9
Design Stage 1		
ARCH6101	Design Studio 1	24
ARCH6211	Communication Seminar 1	18
ARCH6311	Theory Seminar 1	9
ARCH6511	Construction Seminar 1	12
ARCH6611	Structures Seminar 1	6
ARCH6711	Environmental Control Seminar 1	6
Total		120

Year 2		
Session 1		
ARCH5912	Research Methods	6
ARCH5914	Special Research Programme 1	15
ARCH5930	Science Seminar 1	6
Choice of BArch subjects		33
General Education Elective Cat A (28 hours)		5
Total		65

Year 2		
Session 2		
ARCH5915	Special Research Programme 2	15
ARCH5930	Science Seminar 1	6
Choice of BArch subjects		39
General Education Elective Cat A (28 hours)		5
Total		65

Year 3		
Session 1		
ARCH5916	Special Research Programme 3	15
ARCH5931	Science Seminar 2	3
Choice of BArch subjects		42
General Education Elective Cat B (28 hours)		5
Total		65

Year 3		
Session 2		
ARCH5917	Research Project	24
ARCH5931	Science Seminar 2	3
Choice of BArch subjects		33
General Education Elective Cat B (28 hours)		5
Total		65

Year 4		
Session 1 (Optional Honours year)		
ARCH5918	Honours Project 1	60
General Education Elective Cat C: ARCH0002		5
Total		65

Year 4		
Session 2		
ARCH5919	Honours Project 2	60
Total		60

Interior Design Major

Year 1		C
Sessions 1 and 2		
ARCH6201	Architectural Computing 1 (S2)	6
ARCH6301	Theory of Architecture 1	6
ARCH6401	History of Architecture 1	9
ARCH6501	Architectural Construction 1	9
ARCH6601	Architectural Structures 1	6
ARCH6701	Environmental Control 1	9
Design Stage 1		
ARCH6101	Design Studio 1	24
ARCH6211	Communications Seminar 1	18
ARCH6311	Theory Seminar 1	9
ARCH6511	Construction Seminar 1	12
ARCH6611	Structures Seminar 1	6
ARCH6711	Environmental Control Seminar 1	6
Total		120

Year 2		
Session 1		
ARCH5428	History of Art and Design 1	6
ARCH6804	Architectural Practice 1	6
General Education Elective Cat A (28 hours)		5

Year 2		
Session 2		
ARCH6205	Architectural Computing 2	6
ARCH5525	Furniture Design 1	6
General Education Elective Cat A (28 hours)		5

Year 2		
Sessions 1 and 2		
ARCH5960	Interior Design Studio 1	36
ARCH6320	Theory of Architecture 2	6
ARCH6212	Communication Seminar 2	12
ARCH6502	Architectural Construction 2	12

ARCH6602	Architectural Structures 2	6
ARCH6612	Structures Seminar 2	6
ARCH6702	Environmental Control 2	12
ARCH6712	Environmental Control Seminar 2	6
Total		130

Year 3
Session 1

ARCH5429	History of Art and Design 2	6
ARCH5526	Furniture Design 2	6
ARCH5527	Interior Materials	6
ARCH5528	Interior Finishes	6
ARCH6806	Architectural Practice 2	6
ARCH5223	Computer Applications 2	6
General Education Elective Cat B (28 hours)		5

Year 3
Session 2

ARCH5529	Fabric Design	6
ARCH5230	Pottery and Ceramics	6
ARCH5222	Computer Applications 1	12
ARCH5820	Building Economics and Development	6
General Education Elective Cat B (28 hours)		5

Year 3
Sessions 1 and 2

ARCH5961	Interior Design Studio 2	36
ARCH6703	Environmental Control 3	12
ARCH6713	Environmental Control Seminar 3	6
Total		130

Year 4
Session 1 (Honours Year)

ARCH5962	Interior Design Studio 3	18
ARCH5224	Computer Applications 3	6
ARCH5821	Project Management	6
ARCH5963	Interior Design Research Project	12
General Education Elective Cat C: ARCH0002		5
Choice of BArch & Elective Subjects		18

Year 4
Session 2

ARCH5964	Interior Design Graduation Project	60
Total		125

The Special Research Programs, Science Seminars and Research Project may only be credited to the BSc(Arch) degree programme. The Honours Projects may only be credited to the BSc(Arch) degree programme at Honours level.

The subjects in the BArch and BSc(Arch) courses are offered on a credit point basis which indicates the level of commitment and workload. While there is normally a relationship between credit points and class contact hours, this may not necessarily be so in all subjects.

Department of Industrial Arts

Acting Head of Department
Dr W. R. Lawson

The Department of Industrial Arts offered a BSc(IndArts) DipEd course (3320) which was available through full-time study in the general field of Industrial Arts. This course was discontinued from 1982 and no new students may be enrolled. Students already enrolled may continue with their studies until completion of the degree.

Students who wish to pursue their studies in Industrial Arts at graduate level may apply to enrol in the Master of Science and Doctor of Philosophy degree courses (by research) offered by the School of Architecture.

3320
Industrial Arts Course - Full-time Bachelor of Science (Industrial Arts)/Diploma in Education

BSc(IndArts) DipEd

This course was discontinued from 1982 and no new students may be enrolled. Students already enrolled may continue with their studies until completion of the degree. Students should consult pages 37 and 38 of the 1984 Architecture Faculty handbook for details of this course.

School of Building

Head of School
Mr Graham Levido

Undergraduate Course Co-ordinator
Dr Ojars Greste

3330
Building Degree Course

Bachelor of Building
BBuild

The Bachelor of Building is a four year full-time course which allows the students to specialize for careers in Construction and Project Management, Quantity Surveying, Property Development and Property Management.

This course prepares students for professional and executive employment within one of Australia's largest industries, the construction industry. Careers in a wide variety of areas, in both private enterprise and in the public sector are available to building graduates. More specifically, these include positions as project manager, master builder, construction consultant, building surveyor, building estimator, quantity surveyor, building economist, property manager and building scientist.

General Description of the Course

The course is offered on a semester basis. Students are required to complete a minimum of eight semesters

(sessions). The course leads to the award of the degree of Bachelor of Building (BBuild).

The eight semesters of the course are structured as follows:

- semesters 1 to 6 consist of a fixed program of compulsory subjects,
- semesters 7 and 8 consist of electives and a compulsory Thesis.

In a normal semester program, this usually results in six subjects requiring 17-18 class hours/week.

Credit points are allocated to all subjects. Usually a subject having one hour of classes per week for one session is rated at one credit point.

To qualify for a Bachelor of Building degree a student must complete a total of 139 credit points as follows:

All compulsory subjects	109 credit points
Elective subjects	20 credit points
General Education subjects	10 credit points
Industry Programme	26 weeks

General Education Requirements

All students are required to satisfy the University's General Education requirements by completing:

- 56 hours of Category A General Education subjects
- 56 hours of Category B General Education subjects
- Part of the Category C requirement is met through components of the compulsory subjects: BLDG3005, BLDG1091, BLDG3264 and BLDG1311. The Category C requirement is completed by the subject ARCH0002 (2 credit points).

Progress through the Course

Progression through the course is by subject, provided that:

- the necessary subject prerequisites are completed;
- failed subjects are repeated the next time they are offered.

In the event of failure in one or more subjects, the student may carry the failed subject(s) provided that:

- prerequisite subjects have been completed to the satisfaction of the Head of School
- the total number of subjects taken at any time does not exceed 7 including General Education; and
- the total contact hours do not exceed 20 per week.

Practical Experience

Prior to graduation, students are required to have gained a minimum of 6 months practical experience by appropriate employment in the building industry.

The proposal for employment must be submitted to the Head of the School of Building for approval prior to starting work and students will be required to produce documented evidence of their work experience. In order to formally complete the industry experience requirement, students must enrol in BLDG9999 Industry Program.

Elective Subjects

The availability of elective subjects will depend on the student demand for individual subjects. Subjects listed in this handbook may not necessarily be available in the year or session indicated.

Award of the Degree at Honours Level

The award of honours is based on performance throughout the whole course, without requiring an additional honours program. Honours are determined on the basis of a score which is calculated by weighting more heavily the subjects taken in the later years of the course.

Professional Recognition

The award of the degree, Bachelor of Building, is recognized for admission to membership by:

(1) The Australian Institute of Building

(2) The Australian Institute of Quantity Surveyors, subject to completion of the following electives in addition to all compulsory subjects:

BLDG4006 Construction 6
BLDG4274 Commercial Arbitration
BLDG4303 Quantity Surveying 3
BLDG4313 Building Economics 3
BLDG9999 Industry Program to be taken as 6 months *continuous* employment with a Quantity Surveying firm, and to be completed before the start of the final session of the course.

(3) The Institution of Surveyors Malaysia, subject to completion of the following electives in addition to all compulsory subjects:

BLDG4006 Construction 6
BLDG4303 Quantity Surveying 3
BLDG4313 Building Economics 3
BLDG4274 Commercial Arbitration

(4) The Australian Institute of Valuers and Land Economists, subject to the completion of the following electives in addition to all compulsory subjects:

(a)

BLDG4267 Management 7
BLDG4273 Law for Builders 3
BLDG4313 Building Economics 3
BLDG4390 Property Valuation
BLDG4391 Land Economics
BLDG4392 Property Development
BLDG4393 Management of Buildings

and

(b) submitted a thesis on a Land Economics subject.

The course is also recognised as an educational qualification for licencing by the Building Services Corporation.

Schedule of Subjects

Year 1 (All subjects compulsory) **C**

Semester 1

BLDG1001	Construction 1 (Domestic Buildings)	3
BLDG1010	Communications and Resource Usage	3
BLDG1091	Built Environment 1	2
BLDG1111	Building Science 1 (Materials)	4
BLDG1170	Mathematics for Builders	4
BLDG1261	Management 1(Management Principles)	2

Semester 2

BLDG1002	Construction 2 (Low Rise Domestic)	4
BLDG1051	Structures 1	3
BLDG1151	Building Services 1 (Hydraulics)	2
BLDG1271	Law for Builders 1	2
BLDG1311	Building Economics 1	3
PHYS1939	Physics for Builders	4

Year 2 (All subjects compulsory)

Semester 3

ACCT9001	Introduction to A	2
BLDG2003	Construction 3 (Framed Buildings)	4
BLDG2052	Structures 2	4
BLDG2262	Management 2 (Planning)	3
BLDG2281	Introduction to Computing	2
SURV0411	Surveying for Builders	2

Semester 4

ACCT9002	Introduction to Accounting B	2
BLDG2112	Building Science 2 (Concrete & Metals)	4
BLDG2152	Building Services 2 (Mechanical)	2
BLDG2263	Management 3 (Contracts)	3
BLDG2301	Quantity Surveying 1	4
General Education Elective Cat A (28 hours)		2

Year 3 (All subjects compulsory)

Semester 5

BLDG3004	Construction 4(High Rise Buildings)	4
BLDG3264	Management 4 (Personnel Management)	3
BLDG3272	Law for Builders 2	2
BLDG3282	Computer Applications in Building	2
BLDG3302	Quantity Surveying 2	4
General Education Elective Cat A (28 hours)		2

Semester 6

BLDG3005	Construction 5 (Techniques)	4
BLDG3050	Soil Mechanics for Building	2
BLDG3265	Management 5 (Project Management)	3
BLDG3312	Building Economics 2	3
BLDG3321	Estimating 1	2
General Education Electives Cat B (56 hours)		4

Year 4

(Thesis preparation and Thesis are compulsory. Students must also enrol in BLDG9999 Industry program to present their industrial experience documentation. Students must take a total of 20 elective credit points.)

Semester 7

Compulsory Subject

BLDG4401	Thesis preparation	6
ARCH0002	Social Responsibility and Professional Ethics (General Education Category C elective)	2

Elective Subjects

BLDG4006	Construction 6 (Industrialization and Technological Change)	2
BLDG4266	Management 6 (Corporate Strategy)	2
BLDG4267	Management 7 (Marketing)	3
BLDG4273	Law for Builders 3	3
BLDG4313	Building Economics 3	2
BLDG4322	Estimating 2	2
BLDG4390	Property Valuation	3

Semester 8

Compulsory Subject

BLDG4402	Thesis	6
BLDG9999	Industry Program	

Elective Subjects

BLDG4113	Building Science 3 (Energy & Thermal)	3
BLDG4114	Building Science 4 (Timber)	2
BLDG4274	Commercial Arbitration	3
BLDG4284	Building Information Systems	3
BLDG4303	Quantity Surveying 3	3
BLDG4391	Land Economics	3
BLDG4392	Property Development	2
BLDG4393	Management of Buildings	2

Department of Industrial Design

Head of Department
John Redmond

Industrial design involves the research and design of the whole range of consumer and capital products used by people. Products as diverse as telephones and cranes, gas fires and exhibition systems, toothbrushes and motor cars. Ideally, the industrial designer works as part of a team involving engineering, production and marketing. The industrial designer initially concentrates on establishing the concept as a marketable, produceable, usable and socially responsible product; and subsequently details the human factors (ergonomics), appearance (style) and mode of operation. Frequently the designer becomes involved in the corporate image of companies and their products as well as the graphics of the product's packaging and the associated retail support systems.

The course prepares students for professional and executive employment in areas involving the research, design and development of new manufactured products. Whilst it is anticipated that most graduates will be initially employed in an industrial design capacity either in manufacturing companies or consultancies, it is likely that some graduates may subsequently choose to specialise in aspects of marketing, engineering, product management or design management.

3385
Industrial Design Degree Course

Bachelor of Industrial Design
BIndDes

The course is an innovative 4 year industry co-operative program comprising approximately 50 percent industrial design and related subjects, 20 percent Faculty of Commerce, School of Marketing subjects and 25 percent engineering design and science subjects. This range of subjects offers graduates the capability to integrate their design work with industrial and commercial objectives, as well as offering a range of career paths.

The course is offered predominantly on a semester basis. Students are required to complete a minimum of eight semesters (sessions) including at least three months of industrial experience, taken either during the academic recesses or upon the completion of the academic part of the course, but in units of not less than one month.

Industrial design and ergonomics subjects make up approximately half the subjects and are taken within the Department. The industrial design studio work emphasises the need to find a balance between the requirements of design, ergonomics, marketing, engineering and production. Social and environmental issues as well as the professional and ethical responsibilities of the designer are also emphasised.

The industrial design subjects link their subject material to certain of the material covered in engineering and marketing subjects. In addition, a link subject (Product Studies Seminar), is given involving industrial design, engineering, production, and marketing disciplines in which product case studies are given and analysed.

Student progression may be subject to review by the Head of Department. If a student fails the industrial design studio subject of a particular stage, he/she would not normally be permitted to take any of the subjects in the next stage until that subject had been satisfactorily repeated.

Co-op education mode

The course is operated in a co-op mode. Selected industrial and commercial companies will have the opportunity to provide practical experience and recess employment to selected students or alternatively to offer scholarships, in which case students will work for the companies in certain of the recesses without additional remuneration. Companies will also be involved in providing briefings, consultations, and evaluations for studio project work.

Three months approved practical experience are a requirement of the course.

General Education Requirement

General Education Elective/s totalling 56 hours must be taken from each of Categories A and B of the General Education Program. The times allowed for this in the degree program are shown below. The Category C requirement of the General Education Program is satisfied as follows:

1. The 28 hour subject ARCH0002 is taken in Year 4;

2. The following subjects include Category C issues: IDES1073, IDES2091, IDES2111, IDES2151, IDES2193, IDES3241, IDES4291, IDES4321, IDES4371, IDES4361 and IDES4382.

Honours

The Bachelor of Industrial Design degree may be awarded with Honours based upon the quality of performance in the course. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

Professional Recognition

The Department will be seeking recognition of the course by the Design Institute of Australia for the eligibility of students enrolled in the course to become student members of the Institute and Licentiates automatically upon graduation.

Schedule of Subjects

Credit points generally indicate the numbers of hours per week of student/staff contact for one session.

Students who have not taken physics or science at HSC level, are recommended to take the relevant Unisearch bridging courses, after consultation with the Head of Department.

It should be noted that there will be some variation of order of subjects, as some subjects may, from time to time, not be available in a particular session. The course averages 22 hours per week over the four years and when finalising timetables for any particular year every attempt will be made to keep close to the average number of hours per week, and to the program outlined in this schedule.

Prerequisite: Mathematics either 2-unit Mathematics HSC score range 60-100, *or* 3-unit Mathematics HSC score range 1-50, *or* 4-unit Mathematics HSC score range 1-100.

Note: The 2-unit Mathematics subject cannot be the Mathematics in Society subject.

Year 1

Session 1

IDES1021	Basic Design
IDES1041	Visual Thinking & Drawing
IDES1051	Geometrical & Mechanical Drawing
IDES1061	History of Art, Architecture & Design
IDES1073	Principles of Ergonomics
MATH1011	General Mathematics 1B
GEP	General Education Program

Session 2

IDES1011	Workshop Technology
IDES1031	Design Studio 1
IDES1082	Engineering Design Mechanics
IDES2121	Introduction to Computing
MATH1021	General Mathematics 1C
PHYS1939	Physics

Year 2

Session 1

ACCT9001	Introduction to Accounting A
IDES2091	Design Methodology
IDES2101	Perspective & Rendering Techniques
IDES2111	Industrial Design Studio 2

IDES2132 Introduction to Materials Science
IDES2142 Mechanics of Solids for Industrial Design
IDES2151 Product Studies Seminar
MATH2819 Statistics SA

Session 2
ACCT9002 Introduction to Accounting B
IDES2151 Product Studies Seminar
IDES2161 Industrial Design Studio 2
IDES2171 Computer Aided Design
IDES2182 Materials & Manufacturing Processes for Industrial Design, A
IDES2193 Applied Ergonomics
MATH2819 Statistics SA
GEP General Education Program

Year 3
Session 1
IDES2151 Product Studies Seminar
IDES3202 Materials & Manufacturing Processes for Industrial Design, B
IDES3212 Principles of Electrical Engineering for Industrial Design
IDES3221 Industrial Design Studio 3
IDES3231 Computer Graphic Applications
MARK2012 Marketing Fundamentals
MARK2032 Consumer Behaviour A

Session 2
IDES2151 Product Studies Seminar
IDES3241 Industrial Design Studio 3
IDES3252 Electrical Engineering Applications in Industrial Design
IDES3262 Production Design & Technology for Industrial Design
IDES3271 Form Theory
IDES3281 Photography
MARK2042 Consumer Behaviour B
MARK2052 Marketing Research
GEP General Education Program

Year 4
Session 1
IDES2151 Product Studies Seminar
IDES4291 Industrial Design Studio 4
IDES4301 Project Research
IDES4311 Graphic Design for Industrial Designers
IDES4321 Environmental & Interior Design for Industrial Designers
IDES4331 History of Consumer Products
IDES4341 History of Industrial Design
MARK3073 Brand Management
ARCH0002 General Education Program (Cat C)

Session 2
IDES2151 Product Studies Seminar
IDES4351 Project
IDES4361 Professional Practice
IDES4371 Managing Product Innovation & Development
IDES4382 Product Management for Industrial Design
IDES4391 Industrial Experience
MARK3083 Strategic Marketing Management
GEP General Education Program

It should be noted that, subject to the approval of the Faculty of Architecture, certain subjects from other Schools of the University may be substituted for the subjects shown.

School of Landscape Architecture

Head of School
Professor James Weirick

Landscape Architecture Degree Course

Bachelor of Landscape Architecture BLArch

Landscape Architecture is a design discipline which is concerned with the environment as a whole. Landscape Architecture aims to create and sustain habitats for people and other living things in ways which conserve and celebrate ecological relationships, cultural values and symbolic associations.

The principle focus of Landscape Architecture is the theory and practice of landscape design with a strong emphasis on landscape planning, cultural studies and conservation of the environment.

At the University of New South Wales students are strongly encouraged to consider the study of landscape architecture as both a powerful way of thinking and as education for a specific vocation. On graduating from the course, students should have developed a critical awareness of social and environmental issues, a creative approach to landscape design and landscape planning, and a sound foundation in the technical and professional requirements of Landscape Architecture practice. In addition, the course aims to impress an ethical commitment to care of the environment and a strongly responsible attitude to the wider community.

General Description of the Course

The Bachelor of Landscape Architecture course is of four years duration and requires full-time attendance throughout. Students are introduced to the theory and practice of landscape architecture through an exploration of design principles, graphic techniques, ecological processes and ,studies of human modification of the environment. As students progress through the course, increasing emphasis is laid upon creative design with particular application to Australian conditions. Projects related to the subject matter of concurrent lectures, and culminate in landscape studies of regional and national significance.

The majority of subjects are taught specifically within the School of Landscape Architecture. However, contact with the students and staff of other Schools is assured by the inclusion of subjects from the Schools of Botany, Geography, Town Planning and the Centre for Liberal and General Studies. Staff from the Schools of Civil Engineering

and Geography also provide instruction within the curriculum.

The course seeks the synthesis of knowledge and skills through project-based learning in a sequence of eight Design Studios. Support subjects are grouped into five broad strands: ecology and plant materials; history and theory of landscape architecture; communication skills; landscape planning; design documentation, construction and management.

General Education Requirement

Students are required to complete 56 hours of Category A and 56 hours of Category B Electives. The General Education Category C requirement is met as follows:

1. In Year 3 the subject ARCH0002 is taken;

2. A number of compulsory subjects include Category C issues. These are: LAND1132, LAND1210, LAND2110, LAND2171, LAND3210, LAND3191, LAND3291, LAND4170, LAND4717, LAND4270, LAND3150 and LAND3250.

Practical Experience

Students of the undergraduate course must obtain a total of four months' practical experience prior to graduation, of which a minimum of two months must be in a design office and a minimum of two months must be in landscape industry work. This normally takes the form of employment during long vacations under a landscape architect, landscape contractor or nurseryman. Each student entering upon practical experience must obtain prior approval of the Practical Experience Co-ordinator. Each student must obtain from the employer a statement of experience gained, maintain an accurate record in logbook form and submit a written report describing the work undertaken during the various practical experience components. This practical experience must be obtained prior to enrolling in LAND4270 Landscape Design 6.

Honours

The Bachelor of Landscape Architecture degree may be awarded with Honours based upon the quality of performance in the course and in accordance with current Faculty regulations. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

Professional Recognition

The course is recognized by the Australian Institute of Landscape Architects and graduates holding the BLArch degree may qualify for corporate membership of the Institute after a specified period of graduate experience and formal examination.

3380
Landscape Architecture Course

Bachelor of Landscape Architecture
BLArch

The course structure shown below represents the normal pattern of progression which students entering course 3380 are expected to follow. In exceptional circumstances the Head of School may allow variation of the normal pattern, and in such cases progression in individual subjects will be governed by the prerequisites as indicated.

A student may be enrolled concurrently in the subjects of only two consecutive years, but this will not apply to students entering with advanced standing in their first year of attendance or to modifications of the course which are initiated by the School.

Students are required to participate in field exercises and practical construction programs outside the metropolitan area.

Schedule of Subjects

Year 1

Session 1

BIOS3004	Botany for Landscape Architects	5
GEOG1051	Global Environmental Problems & Processes	4
GEOL5110	Geology for Landscape Architects	1
LAND1130	Landscape Graphics 1	4
LAND1131	Introduction to Computer Applications	2
LAND1132	Introduction to Landscape Architecture	1
LAND1170	Design 1	3
General Education Elective (Cat A)		
Total		22

Session 2

LAND1210	Landscape Analysis*	6
LAND1211	Horticulture for Landscape Architects	2
LAND1230	Landscape Graphics 2	4
LAND1270	Design 2	3
LAND1290	Landscape Materials and Construction	3
General Education Elective (Cat A)		2
Total		20

* These subjects include a number of lectures and field trips for the purpose of practical observation. Students are expected to make their own transport arrangements for these trips.

Year 2

Session 1

LAND2110	Environmental Sociology for Landscape Architects	2
LAND2171	History of Landscape Architecture	2
LAND2170	Landscape Design 1	10
LAND2190	Landscape Technology A	3
General Education Elective (Cat B)		2
Total		19

Session 2

LAND2270	Landscape Design 2	12
LAND2271	Planting Design	2
LAND2290	Landscape Technology B	3

General Education Elective (Cat B)		2
Total		19

Year 3

Session 1

ARCH0002	Social Responsibility and Professional Ethics	2
LAND3130	Research Methods	1
LAND3151	Landscape Management 1	2
LAND3170	Landscape Design 3	8
LAND3190	Landscape Engineering A	3
LAND3191	Professional Practice A	2
PLAN9111	Town Planning	2
Total		20

Session 2

LAND3252	Landscape Management 2	2
LAND3270	Landscape Design 4	8
LAND3290	Landscape Engineering B	3
LAND3291	Professional Practice B	2
Total		15

Year 4

Session 1

LAND4031	Landscape Thesis A	10
LAND4170	Landscape Design 5	3
LAND4171	Urban Landscape Design	6
Total		19

Session 2

LAND4032	Landscape Thesis B	4
LAND4270	Landscape Design 6	12
Four months practical experience		
Total		16

Note: Due to course revisions some subjects as listed are subject to approval by the University.

School of Town Planning

Head of School
Associate Professor Robert B. Zehner

3360
Town Planning Course

Bachelor of Town Planning
BTP

Town planning has as its focus the existing and future environment, ranging from small local precincts to metropolitan areas and regions. The town planner's task in this regard is to integrate and coordinate the aims and actions of a large number of government and private organizations and individuals to provide an equitable and efficient distribution of resources. This involves collecting and analysing information, identifying needs, making forecasts, preparing policies, plans and programs for consultation, decision and implementation, exercising development control, evaluating development proposals and evaluating results.

The objectives of the course are to create an awareness of the context in which planning operates, impart knowledge of how planning can influence the community and the physical environment, equip students with the competence to apply this knowledge at different levels in a wide range of situations, create an understanding of the contribution other disciplines can make to planning and vice versa, and develop skills in policy formulation, land use allocation and control, design and communication.

General Description of the Course

The course is of five years' duration and requires full-time attendance throughout Years 1, 2 and 5. Students are required to attend the University on a full-time basis for the first session of Year 3 and for the second session of Year 4, the intervening period being devoted to practical experience.

The course leads to the award of the degree of Bachelor of Town Planning (BTP).

General Education Requirement

Students are required to complete 56 hours (= 4 credit points) of Category A and 56 hours (= 4 credit points) of Category B Electives. The General Education Category C requirement is met as follows:

1. In Year 5 the subject ARCH0002 is taken;

2. A number of compulsory subjects include Category C issues. These are: PLAN1111, PLAN1121, PLAN1131, PLAN1141, PLAN1151, PLAN1161, PLAN1171, PLAN2217 and PLAN2311.

Practical Experience

For the period covered by Session 2 of Year 3 and Session 1 of Year 4 the students must be engaged in approved employment related to the course: for example, in government planning and housing authorities, in municipal and shire councils preparing or implementing town and country planning schemes, in private development companies or with planning consultants. The type of employment proposed must be submitted to the Head of the School of Town Planning for approval.

Honours

Honours are awarded in the Bachelor of Town Planning degree course on the basis of quality of performance throughout the whole course and in accordance with current Faculty regulations.

For the purpose of calculating Honours at graduation, the Honours value of each subject is indicated by the credit points associated with that subject. Credit points generally reflect the workload required of students in subjects in which grades are awarded.

Professional Recognition

The course is recognized by the Royal Australian Planning Institute as an academic qualification for corporate membership. The Institute requires that for corporate

membership graduates must also have at least one year of practical experience subsequent to graduation.

Schedule of Subjects

Year 1		C
Session 1		
PLAN1111	Introduction to Planning	14
PLAN2411	Communication Techniques I	4
PLAN2413	Computers and Information Systems	3
SURV0901	Introduction to Mapping	2
Total		23
Session 2		
PLAN1121	Planning Studies	14
PLAN2112	The Development Process	6
PLAN2421	Communication Techniques II	4
GENS0000	General Education Elective Cat A (56 hours)	4
Total		28
Year 2		
Session 1		
PLAN1131	Local Planning 1	14
PLAN2211	Environmental Science 1	1
PLAN2215	Engineering A	3
PLAN2216	Engineering B	2
PLAN2221	Environmental Science 2	3
Total		23
Session 2		
PLAN1141	Regional Planning 1	14
PLAN2114	History of Town Planning	4
PLAN2212	Transportation Planning	3
PLAN2213	Urban Design	4
Total		25
Year 3		
Session 1		
PLAN1151	Planning Law and Administration 1	14
PLAN2217	Urban Society and Sociology	4
LAND0001	Landscape Architecture	3
GENS0000	General Education Elective Cat B (56 hours)	4
		25
Session 2		
PLAN1301	Practical Experience	
Year 4		
Session 1		
PLAN1301	Practical Experience	
Session 2		
PLAN1161	Local Planning 2	9
PLAN1162	Integrated Planning Project 1	8
PLAN2218	Heritage and Conservation Planning	4
PLAN2321	Planning Law and Administration 2	4
Total		25
Year 5		
Session 1		
PLAN1171	Regional Planning 1	9
PLAN1172	Integrated Planning Project 2	10
ARCH0002	Social Responsibility and Professional Ethics (General Education Category C)	2
Session 2		
PLAN2111	Professional Practice	2
PLAN2311	Politics, Power and Policy	4
Full Year		
PLAN1181	Thesis	20
PLAN3000	Planning Elective*	4
Total		51

*Students are required to complete one Planning Elective. A selection of electives from the list below will be offered, depending on demand and staff availability, as Session 1, Session 2 or Full Year subjects.

PLAN3211	Residential Planning	4
PLAN3112	Regional Planning 3	4
PLAN3212	Rural Planning	4
PLAN3213	Urban Conservation	4
PLAN3311	Planning Law and Administration 3	4
PLAN3113	Urban Studies	4
PLAN3114	Social Planning	4
PLAN3214	Environmental Psychology	4
PLAN3216	Transport and Environmental Management	4
PLAN3217	Urban Design 2	4
PLAN3414	Computer Applications in Planning 1	4
PLAN3421	Computer Applications in Planning 2	4

Note: Due to course revisions, there is a transition period during which some subjects may be taught in different sessions than those indicated above, while other subjects may be phased in progressively. Details will be provided prior to enrolment.

Subject Descriptions

Descriptions of all subjects are presented in alphanumeric order within organizational units. For academic advice regarding a particular subject consult with the the contact for the subject as listed. A guide to abbreviations and prefixes is included in the chapter 'Handbook Guide', appearing earlier in this book.

Bachelor of Architecture

Core Subjects

Architectural Design Studio

Architectural synthesis is the central function of the design studio, the locus of the application of knowledge gained in the lectures and seminars. The vehicles for study are projects and exercises of increasing depth and complexity covering a wide range of building types. Students are encouraged to seek design solutions which cater for the full range of human needs and aspirations. The studios provide continuing opportunities to consider environmental, social, historic, aesthetic, technical and professional factors affecting architecture and the architect's role in the community.

ARCH6101
Design Studio 1
Staff Contact: School Office
C24

Analysis of the natural and built environment to develop an awareness of physical environment and the forces determining built form. An understanding of man's functions, activities and aspirations and of the architects' essentially creative and conceptual role.

Introductory studio focusing on the application of design method through simple three dimensional design exercises culminating in the design of simple, small-scale buildings and an understanding of the parameters of design.

ARCH6102
Design Studio 2
Staff Contact: School Office
C30
Prerequisites: ARCH6101, ARCH6501, ARCH6601, ARCH6701, four from ARCH6211, ARCH6311, ARCH6511, ARCH6611, ARCH6711

The design of simple residential and non-residential buildings with few spaces, relatively simple functional relationships for clearly defined and familiar user groups on straightforward sites requiring basic contextual understanding. Integration of basic structural, constructional, servicing and environmental control concepts. The development of design method.

ARCH6103
Design Studio 3
Staff Contact: School Office
C30
Prerequisites: ARCH6102, ARCH6502, ARCH6602, ARCH6702, four from ARCH6212, ARCH6312, ARCH6512, ARCH6612, ARCH6712

The design of non-residential projects of moderate complexity and scale with more demanding siting and contextual consideration and more complex and less familiar user needs including some adaptive re-use.

Further emphasis on design method. Development of structure, construction, services, environmental control, building regulations and landscape design. Some group work, but largely individual work.

ARCH6104
Design Studio 4
Staff Contact: School Office
C24
Prerequisites: ARCH6103, ARCH6503, ARCH6603, ARCH6703, four from ARCH6213, ARCH6313, ARCH6513, ARCH6613, ARCH6713

The design of small-scale buildings in considerable depth including detailed design of internal and external spaces including material and colour choices, fixtures and fittings, construction detailing, services and environmental control.

ARCH6105
Design Studio 5
Staff Contact: School Office
C24
Prerequisites: ARCH6104, ARCH6114, ARCH6514, ARCH6904

The design of a relatively complex and large scale development, incorporating residential, involving a range of user groups. Resolution of conflicting issues such as site constraints, planning controls and building regulations, environmental context and the social role of the development. Group and individual work with an emphasis on urban design.

ARCH6106
Design Studio 6
Staff Contact: School Office
C24
Prerequisites: ARCH6105, ARCH6115, ARCH6515

Exploration and resolution of relatively complex human activities not necessarily of a familiar pattern for non-residential buildings, with emphasis on integration of structure, construction, services and environmental controls at an advanced level and contemporary technology.

ARCH6107
Design Studio 7
Staff Contact: School Office
C24
Prerequisites: ARCH6106, ARCH6116, ARCH6516, ARCH6906

This subject represents the culmination of the BArch course for all students except those who take the Major Design Project or Research Project. It comprises a design project resolved in depth in all areas of architecture, including architectural design, urban design, interior design, construction, structure, services, acoustics, lighting and practice and management.

ARCH6114
Design Seminar 1
Staff Contact: School Office
C3
Prerequisites: ARCH6103, ARCH6503, ARCH6603, ARCH6703, four from ARCH6213, ARCH6313, ARCH6513, ARCH6613, ARCH6713

Understanding of the relation between building cost and architectural design. Preparation of a cost plan for design project in Design Studio 4.

ARCH6115
Design Seminar 2
Staff Contact: School Office
C3
Prerequisites: ARCH6104, ARCH6114, ARCH6514, ARCH6904

An understanding of the town planning process as a community based contextual system of decision-making directing the physical, social and economic fabric of human settlements. A detailed account of the role and function of environmental studies, planning controls, performance standards, statutory mapping, the development application process, the design review committee and process, the appeal process, the settlement of disputes. Lectures, seminars, case studies associated as appropriate with studio exercises covering community development and urban design issues.

ARCH6116
Design Seminar 3
Staff Contact: School Office
C3
Prerequisites: ARCH6105, ARCH6115, ARCH6515

Understanding of the role of the architect when engaged by a developer. Preparation of a timetable, submissions and reports for a developer client for design project in Design Studio 6.

ARCH6117
Design Seminar 4
Staff Contact:School Office
C3
Prerequisites: ARCH6106, ARCH6116, ARCH6516, ARCH6906

Development and presentation of the theoretical basis of the students own design work in Design Studio 7.

ARCH6127
Major Design Project
Staff Contact: School Office
C30
Prerequisite: By approval

Under supervision of an individual member of staff, with a supportive package of Electives (C24) which are closely related to and form part of the final submission.

The scope and size of this project will have been agreed between the student, his/her supervisor and the School Committee set up to oversee these projects at the start of Year 5 Session 1. Much of the preliminary information gathering, site information, and associated research will have been done in the seminars and architectural research project during Year 5 Session 2.

The end result of this Major Design Project would be a building or a group of buildings of extremely high standard - resolved in detail-structure, finishes, furnishings, environmental control, etc.

Architectural Communication

Objectives: To develop skills in oral, written and graphic communication; to introduce students to experimentation with materials and techniques in the context of current architectural thinking, and to expose them to new or less well known techniques and media. To that end, the first year of the course is geared to the development of skills and the later years to more experimental work.

ARCH6201
Architectural Computing 1
Staff Contact: School Office
C6

An introduction to the technology of computing as it pertains to the practice of Architecture and Design. The computer is presented as a tool for storing and manipulating information by means of application programs which model the real-world needs and activities of architects. Typical applications explored include word processing, spreadsheet modelling and database management. Basic principles of technology and programming are explained. Students engage in hands-on computer exercises to consolidate the knowledge gained in the lectures.

ARCH6205
Architectural Computing 2
Staff Contact: School Office
C6
Prerequisite: ARCH6201

Introduction to the techniques and processes of two-dimensional computer-aided drafting for the production of architectural drawings. Hands-on experience: staged tutorial exercises and self-directed documentation tasks.

ARCH6211
Communication Seminar 1
Staff Contact: School Office
C18

By the end of first year, students will be expected to present their final design project by means of the following: a set of presentation drawings, rendered in colour - orthographics, axonometric or isometric, perspective and simple construction drawings as required to explain the project

fully. A model, written statement of intent and a verbal presentation to a jury will also be required.

To achieve this, they will receive information and practice in the following: drafting and drawing skills, with instruments and freehand, orthographic projection, axonometric, isometric, perspective, colour theory, rendering techniques, variety of media, model making, library use, study and research skills, scholarly writing, report and letter writing and oral presentation.

ARCH6212
Communication Seminar 2
Staff Contact: School Office
C12
Prerequisites: ARCH6101, ARCH6501, ARCH6601, ARCH6701, four from ARCH6211, ARCH6311, ARCH6511, ARCH6611, ARCH6711

To experiment with a range of dry techniques for presentation. Elementary exercises in two and three dimensional composition in combination with advanced colour theory studies. Architectural model making using various techniques. Observational drawing exercises. Library use, study and research skills.

Use of the computer for simple three-dimensional modelling of building form: form analysis; massing; visualization and perspective. Hands-on tutorial exercises linked to Studio design work. (3 cp segment of whole.)

ARCH6213
Communication Seminar 3
Staff Contact: School Office
C12
Prerequisites: ARCH6102, ARCH6502, ARCH6602, ARCH6702, four from ARCH6212, ARCH6312, ARCH6512, ARCH6612, ARCH6712

To experiment with a range of wet techniques for presentation. Advanced exercises in three dimensional composition and the display of this through two dimensional presentation techniques including overlays and collages. Introduction to architectural and model photography, dark room techniques, and lighting theory. Jury and sales techniques. Advanced exercises in scholarly writing, report and letter writing and oral presentation.

Theory of Architecture

Objective: To understand and to apply the principles directing design, in particular architectural design; the enhancement of life-events by spatial arrangements, the logic of the process of designation, the central idea of a composition, the formal characteristics of wholes and parts and the conditions of their fitting into the sensible and the intelligible environment.

ARCH6301
Theory of Architecture 1
Staff Contact: School Office
C6

The meaning of design as designation for a purpose: aim, possibilities, acts, fulfilment, the four cornerstones of design around the central idea. The task of composition, the whole and its parts generally. Introduction to form and its principal characteristics; the notion of fit.

Specific studies of measure, extension and size related to architecture. The human body taken in the singular and in the plural, as the basis of sizes in architectural interiors and exteriors. Subtle connotations of varied spatial extensions.

Introductory studies in compositions in plane and volume. Ordered and systematic relations between whole and part. Unity multiplicity, continuity - alternation, rhythm, proportion.

Studies and readings of selected writings and theories in architecture and related disciplines.

ARCH6302
Theory of Architecture 2
Staff Contact: School Office
C6
Prerequisite: ARCH6301

Methodical study of the design process. Analysis as means of understanding the fabric of life to be served by architecture. Detailed analysis of explicit and implicit human aims and spatial possibilities. The architectural idea as the unifying principle of creative synthesis and as contribution to the fabric of life.

Further studies of the world order: the meaning of place, light, orientation, direction and sequence. The natural divisions of space and time, the regular solids, the geometrical order. Methodical studies of context and architectural fit by character, size, order, proportion and material selection.

Specific studies of patterns of behaviour. Detailed consideration of instinct, emotion, perception, memory, reason, imagination and intention. The nature of behaviour - environment relationship, notions of personal space, territory, privacy and crowding. Cultural and personal variables. The meaning of built environments.

Studies and readings of selected writings and theories in architecture and related disciplines.

ARCH6303
Theory of Architecture 3
Staff Contact: School Office
C6
Prerequisite: ARCH6302

Systematic and detailed analysis of a complex life-event to be served by architecture. Correct and incorrect divisions and separation of parts. Recognition of different human roles and experiences. Systematic studies of architectural ideas generating appropriate spatial arrangements. Detailed quantification of space requirements and material configurations dealing with control of climate, light and sound and with structural and constructional necessities.

Further studies of form as principle: authority - dependence, completeness - transformation. Subtle influences of regions localities and the cultural milieu. Introduction to the meaning of signs, symbols, styles and trends.

Specific studies in the history of architectural theory from antiquity to the present day. Relationship between the theoretical percept, the cultural milieu and architecture as art. Careful consideration of the architectural ideas and of their translation into the built fabric by ordered geometrical relations. Studies in geometry and design. Introduction to the meaning of basic geometric symbols.

Studies and readings of selected writings and theories in architecture and related disciplines.

ARCH6311
Theory Seminar 1
Staff Contact: School Office
C9

Exercises in the application of ARCH6301 Theory of Architecture 1 related to projects in Design Studio 1.

ARCH6312
Theory Seminar 2
Staff Contact: School Office
C9
Prerequisites: ARCH6101, ARCH6501, ARCH6601, ARCH6701, four from ARCH6211, ARCH6311, ARCH6511, ARCH6611, ARCH6711

Exercises in the application of ARCH6302 Theory of Architecture 2 related to projects in Design Studio 2.

ARCH6313
Theory Seminar 3
Staff Contact: School Office
C9
Prerequisites: ARCH6102, ARCH6502, ARCH6602, ARCH6702, four from ARCH6212, ARCH6312, ARCH6512, ARCH6612, ARCH6712

Exercises in the application of ARCH6103 Theory of Architecture 3 related to projects in Design Studio 3.

History of Architecture

Objective: To provide an overall view of the historical development of architecture, and its achievements within different cultural traditions, with reference, where appropriate, to Australian architecture, with a view to giving the student a fuller awareness of design, and the objectives and influences that shape it.

ARCH6401
History of Architecture 1
Staff Contact: School Office
C9

Discussion of historical buildings and texts and the tools of the architectural historian, ie formal analyses of buildings, the use of manifestos and texts, and historiographical conventions.

General chronological exploration of selected buildings and architectural practices with emphasis on the range of influences on architecture, eg, cultural institutions and power structures; other arts such as music, painting, theatre; technology and material developments; models of urbanity; history of ideas in architecture.

Discussion and analysis of past definitions of history and architecture examining issues regarding taste, morality, style, continuity and an examination of many of the ideologies and attitudes arising from modernism.

ARCH6402
History of Architecture 2
Staff Contact: School Office
C12
Prerequisite: ARCH6401

A selection of theme units which broach both the conceptual structures and theoretical borders of architecture. Themes for this subject will include Aspects of Classicism; Romantic Classicism and the Picturesque; Craft Traditions and the Vernacular; Rituals in Urban Settlement; Historiography.

ARCH6403
History of Architecture 3
Staff Contact: School Office
C12
Prerequisite: ARCH6402

Extends the range of theme units initiated in History of Architecture 2, including the following: Modernity and Modernism; Australia and the Architecture of Western Imperialism; National and Regional Images in Australian Architecture; Power Structures and Popular Culture as Architectonic Forces in The City; Readings on Modern and Post-Modern Imagery.

Architectural Construction
Objective: To develop breadth and depth in the understanding of the basic rationale governing the construction of buildings. Emphasis is placed upon design decisions which lead firstly to the selection of appropriate constructional systems and then to careful detail design. The theoretical field is mapped in the lecture series with complimentary exercises in practical application pursued in seminars, generally linked to studio projects. Progression is made from the study of the more familiar and small scale building types to that of larger scale buildings of a more complex technological nature.

ARCH6501
Architectural Construction 1
Staff Contact: School Office
C9

Introduction to the principles of architectural construction and their application to the design of simple, small-scale buildings. Architectural construction as a design activity and its relationship to building materials, structure, services, process and regulation. Basic building materials, systems and processes and their historic development. Introduction to materials science. Basic structure, properties, manufacturing techniques, use and performance of materials in building and artifact design. Introduction to construction drawing practice and use of resource materials.

ARCH6502
Architectural Construction 2
Staff Contact: School Office
C12
Prerequisite: ARCH6501

The principles of architectural construction applied to the design of buildings of moderate scale and complexity through a detailed analysis of common constructional systems, their elements, components, assembly methods, detailing, construction processes and regulatory controls. Suitability, application and performance of principal construction materials including timber, masonry, steel and concrete. Durability, movement and moisture control. Resource materials, dimensional co-ordination and construction drawing practice.

ARCH6503
Architectural Construction 3
Staff Contact: School Office
C12
Prerequisite: ARCH6502

The principles of architectural construction applied to the design of complex and large scale buildings. Appropriate construction systems, materials and organisation of the building process. Detailed analysis of junctions and connections between elements, components, materials and finishes. Construction durability, weathering and failure, regulatory controls, fire safety and protection. Rationalised systems, prefabrication, modular co-ordination and construction documentation.

ARCH6511
Construction Seminar 1
Staff Contact: School Office
C12

Exercises in the practical application of materials science and the principles of architectural construction. Emphasis on the exploration of basic building materials, systems and processes, dimensional coordination and construction drawing related where possible to Design Studio 1 communication and design projects.

ARCH6512
Construction Seminar 2
Staff Contact: School Office
C9
Prerequisites: ARCH6101, ARCH6501, ARCH6601, ARCH6701, four from ARCH6211, ARCH6311, ARCH6511, ARCH6611, ARCH6711

Exercises in the practical application of the principles of architectural construction to the design of small scale buildings. Emphasis on common constructional systems using timber, masonry, steel and concrete, resource and reference information, dimensional coordination and construction drawing practice related where possible to Design Studio 2 design projects.

ARCH6513
Construction Seminar 3
Staff Contact: School Office
C9
Prerequisites: ARCH6102, ARCH6502, ARCH6602, ARCH6702, four from ARCH6212, ARCH6312, ARCH6512, ARCH6612, ARCH6712

Exercises in the practical application of the principles of architectural construction to the design of buildings of moderate scale and complexity. Emphasis on construction detailing as well as the general resolution of constructional systems related where possible to Design Studio 3 design projects.

ARCH6514
Technology Seminar 1
Staff Contact: School Office
C3
Prerequisites: ARCH6103, ARCH6503, ARCH6603, ARCH6703, four from ARCH6213, ARCH6313, ARCH6513, ARCH6613, ARCH6713

Studies in the selection and application of structural and constructional systems, building materials and processes appropriate to Design Studio 4 design projects.

Aspects of climate, thermal, lighting or acoustics will be incorporated into the seminar program, appropriate to the current studio topics.

ARCH6515
Technology Seminar 2
Staff Contact: School Office
C3
Prerequisites: ARCH6104, ARCH6114, ARCH6514, ARCH6904

Studies in the selection and application of structural and constructional systems, building materials and processes appropriate to Design Studio 5 design projects.

Aspects of climate, thermal, lighting or acoustics will be incorporated into the seminar program, appropriate to the current studio topics.

ARCH6516
Technology Seminar 3
Staff Contact: School Office
C3
Prerequisites: ARCH6105, ARCH6115, ARCH6515

Studies in the selection and application of structural and constructional systems, building materials and processes appropriate to Design Studio 6 design projects.

Aspects of climate, thermal, lighting or acoustics will be incorporated into the seminar program, appropriate to the current studio topics.

ARCH6517
Technology Seminar 4
Staff Contact: School Office
C3
Prerequisites: ARCH6106, ARCH6116, ARCH6516, ARCH6906

Studies in the selection and application of structural and constructional systems, building materials and processes appropriate to the Design Studio 7 design project.

Aspects of climate, thermal, lighting or acoustics will be incorporated into the seminar program, appropriate to the current studio topics.

Architectural Structures

Objective: To understand basic forces and the means of resisting them, to know the main structural systems used in buildings, to understand the relation of structure to architectural form as a basis for creative collaboration with structural consultants.

ARCH6601
Architectural Structures 1
Staff Contact: School Office
C6

General introduction to structures, their development and their role; natural and man-made structures.

Basic structural concepts; load, force, flow of force (loadpath); graphical and mathematical resolution of forces, equilibrium; moment (overturning); stability (element, assembly), strength and stiffness, supports and

connections; types of loads; stress (tension, compression, shear, bending, torsion), strain, modulus of elasticity.

Basic structural elements and assemblies: cable and arch, strut and column, beam, truss, frame, grid, plate/slab, vault and dome, tent and pneumatic.

Elemental structural behaviour applied to the above: load application, loadpaths, connections, reactions at supports/connections, internal forces (stresses).

Graphical techniques and models as means for structural behaviour studies.

ARCH6602
Architectural Structures 2

Staff Contact: School Office
C6
Prerequisite: ARCH6601

The structural design and analysis process: definition of the structural task in relation to an architectural concept, system options and choice, establishment of loads and loadpaths (stability concept), estimation of loads, structural safety concept; satisfying equilibrium requirements; establishment of external and internal forces; sizing of elements.

Selective study of structural behaviour and application of the structural design and analysis process to simple structural assemblies (post/beam, frame, cable-stayed systems, truss, grid, plate/slab etc.) Graphic techniques and models as means for structural behaviour studies.

ARCH6603
Architectural Structures 3

Staff Contact: School Office
C6
Prerequisite: ARCH6602

Constructional aspects of structures; structural design related to materials (timber, steel, concrete and composites), foundations, connections and joints.

The morphology of structures, structural shape, structural systems; efficiency (the "lightweight" concept), structural systems for wide-spanning and high-rise structures, selective studies of structural behaviour.

ARCH6611
Structures Seminar 1

Staff Contact: School Office
C6

Exercises aimed at developing an understanding of basic structural concepts and the fundamental behaviour of structural elements, related where appropriate to Design Studio 1 design projects.

ARCH6612
Structures Seminar 2

Staff Contact: School Office
C6
Prerequisites: ARCH6101, ARCH6501, ARCH6601, ARCH6701, four from ARCH6211, ARCH6311, ARCH6511, ARCH6611, ARCH6711

Exercises in the behaviour, selection, analysis and design of simple structural assemblages, related where appropriate to Design Studio 2 design projects.

ARCH6613
Structures Seminar 3

Staff Contact: School Office
C6
Prerequisites: ARCH6102, ARCH6502, ARCH6602, ARCH6702, four from ARCH6212, ARCH6312, ARCH6512, ARCH6612, ARCH6712

Exercises in the constructional aspects of structures, with particular emphasis on the characteristics of current and evolving structural systems, related where appropriate to Design Studio 3 design projects.

Environmental Control

Objective: To present to students the theory in thermal behaviour, daylight, electric lighting, acoustics and air quality of buildings and the services to buildings in the context of contemporary building design. To present the principles of energy conservation and environmental impact to enable students to develop appropriate design strategies.

ARCH6701
Environmental Control 1

Staff Contact: School Office
C9

Human response to the environment, thermal, visual and acoustic comfort and air quality. Climate and the sunlighting and daylighting of buildings. Subjective and objective assessments of aural, visual and thermal environments and their integration. Laboratory work and field studies.

The building envelope: Thermal performance; principles of heat transfer, solar radiation effects, absorptivity, reflectivity, conduction, thermal gradients, condensation and thermal insulation. Acoustic performance; properties and behaviour of sound, sound transmission loss, external noise levels, selection of building envelope elements. Daylighting performance: traditional methods of daylighting buildings, application of prediction methods, patterns of innovation and change, advanced glazing technologies. Integration of heat, light and sound in building envelope design.

ARCH6702
Environmental Control 2

Staff Contact: School Office
C12
Prerequisite: ARCH6701

Thermal evaluation design tools, correlation and simulation models, degree day concept, the control of sunlight. Quantitative and qualitative aspects of lighting design, electric light sources, light control and prediction methods. Design of rooms, basic shape and volume, acceptable ambient sound levels, structure borne and impact sound, reverberation times, selection of interior building materials and elements.

Thermal mass and its effects, air movement and ventilation, introduction to solar passive design and case studies. Integration of daylight with electric light, lighting for energy conservation, application and evaluation of light in interiors, case and field studies. Buildings for education, music and places of assembly. Integration of thermal, lighting and acoustic design implications.

ARCH6703
Environmental Control 3
Staff Contact:School Office
C12
Prerequisite: ARCH6702

Building services; Sources and distribution of water, wastes and energy supplies, application of electric power, hydraulics, vertical transport, fire protection in buildings, equipment selection and space allocation.

Air conditioning, heating and ventilating of buildings, design of systems, selection of equipment and allocation of space.

ARCH6711
Environmental Control Seminar 1
Staff Contact: School Office
C6

Emphasis on the implications of sun and climate in the design of comfort conditions in buildings, the relation between climate, occupants and envelope design, and envelope design and energy consumption; and the application of strategies to modify envelope properties; experimentation with innovative methods to introduce daylight into buildings for human well-being by model studies in design projects in Design Studio 1.

ARCH6712
Environmental Control Seminar 2
Staff Contact: School Office
C6
Prerequisites: ARCH6101, ARCH6501, ARCH6601, ARCH6701, four from ARCH6211, ARCH6311, ARCH6511, ARCH6611, ARCH6711

Lighting, acoustics and thermal design linked where appropriate to design projects in Design Studio 2.

ARCH6713
Environmental Control Seminar 3
Staff Contact: School Office
C6
Prerequisites: ARCH6102, ARCH6502, ARCH6602, ARCH6702, four from ARCH6212, ARCH6312, ARCH6512, ARCH6612, ARCH6712

Emphasis on mechanical engineering systems in buildings. Analysis, calculation and design, selection of equipment and allocation of space. Application of thermal, lighting and acoustics principles to promote human comfort in buildings.

Architectural Practice

Objective: To introduce aspects of professional ethics, management and administration and to develop communication skills relevant to architectural practice.

ARCH6804
Architectural Practice 1
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Contract documentation and specification writing techniques. Estimating, cost planning and bills of quantities.

ARCH6806
Architectural Practice 2
Staff Contact: School Office
C6
Prerequisite: ARCH6804

Introduction to the legal system; aspects of the law of contract, torts, property, copyright. Legal consequences of architectural practice. Liability of architects. Professional indemnity insurance. Authorities controlling building. Types of building contract. Tendering and negotiating. The architect/client agreement. Budgets and estimates. Engagement of consultants. Contract administration procedures. Professional ethics.

ARCH6807
Architectural Practice 3
Staff Contact: School Office
C6
Prerequisite: ARCH6806

Alternative methods of building procurement. Detailed comparison of standard contracts in current use. Advanced contract administration procedures. Partial architectural services and liability. Professional defensive measures and crisis management.

Introduction to management theory. The structure and organisation of an architectural office; aspects of company and partnership law and insurance. Business principles and management procedures relevant to an architectural office.

Other Required Studies

ARCH6904
Practical Experience
Staff Contact: School Office
C0
Prerequisite: ARCH6103

Each student is required to obtain, before enrolling in Year 5, practical experience under a registered architect for a period of six months. The experience is to be recorded in a log book to be signed by the registered architect. No other subject may be taken concurrently with Practical Experience.

ARCH6906
Dissertation
Staff Contact: School Office
C18
Prerequisite: ARCH6103

An individual study, on an approved topic, taken under staff supervision, with the purpose of allowing the student either to gain knowledge in some aspect of architecture which is not covered in the course, or to increase knowledge in some aspect which has been covered. It requires the gathering of data, analysing that material and reaching a conclusion. The work is typewritten, in concise and clear English, properly ordered and referenced and presented in A4 format. The work is normally about 10,000 words, illustrated as necessary. Introductory lectures will be given in the processes and methods of research, writing and referencing for publication of academic works.

Students may prepare material over more than one session but should enrol in the subject only in the session in which they intend to submit for assessment. This will avoid the

risk of paying extra fees. Students should note that Dissertation is a prerequisite for Design Stage 7.

ARCH6907
Major Research Project
Staff Contact: School Office
C30
Prerequisite: By approval

Under supervision of an individual member of staff, with a supportive package of Electives (C24) which are closely related to and form part of the final submission. Students who have approval to take this subject may be exempt from Dissertation and permitted to make up credit points by taking appropriate electives.

The scope and format of this project will have been agreed between the student, his/her supervisor and the School Committee set up to oversee these projects at the start of Year 5 Session 1. Much of the preliminary information gathering will have been done in the seminars and architectural research project during Year 5 Session 2.

The end result of this project will be a research project of extremely high quality in a discipline related to the study of Architecture and of particular interest to the student.

Elective Subjects

ARCH5220
Computer Graphics Programming 1
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Introduction to the fundamentals of interactive computer graphics programming; techniques of computer programming utilising a high-level language; use of graphics library functions; PC graphics; user interaction techniques. Controlled series of programming exercises.

ARCH5221
Computer Graphics Programming 2
Staff Contact: School Office
C12
Prerequisite: ARCH5220

Advanced techniques of interactive computer graphics programming; graphic techniques for user input; menu-based interfaces; colour manipulation; three-dimensional modelling. Design and development of a graphics-based application program.

ARCH5222
Computer Applications 1
Staff Contact: School Office
C12
Prerequisite: ARCH6205

The application of three-dimensional computer graphics techniques to represent built form in Architecture; form description; colour shading techniques; use of multiple light sources; modelling surface textures. Design modelling exercises.

ARCH5223
Computer Applications 2
Staff Contact: School Office
C6
Prerequisite: ARCH6205

The advanced use of CAD in the practice of architecture: three-dimensional modelling; presentation techniques; customisation; macros and libraries; system management. Hands-on exercises and office visits.

ARCH5227
Advanced Graphics
Staff Contact: School Office
C6
Prerequisite: ARCH6103

A theoretical and practical study of the relationship between the visual and the plastic arts. Media and material studies. Development of a professional level of performance in adapting graphic theory and techniques to contemporary needs.

ARCH5228
Drawing
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Direct drawing from life and man-made environment to develop technical and perception skills, media studies, gallery visits and drawing theory.

ARCH5229
Painting
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The theory and practice of painting. Figure and ground interaction, colour and media studies. Individual style and thematic development encouraged. Gallery visits.

ARCH5230
Pottery and Ceramics
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Introduction to the geology of ceramic raw materials and their physical and chemical nature. The characteristics of earthenware, stoneware, and porcelain. Glazes, kilns and forming methods. Laboratory and studio; handbuilding, introductory throwing and design in pottery and ceramics.

ARCH5231
Rendering
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Advanced architectural rendering.

ARCH5320
Theory of Form
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The ontological basis and the antinomical qualities of form in the causal sense, reflected in nature, art and architecture. Practical investigation of the antinomical qualities of form with special emphasis on the brief and on the built fabric of contemporary architecture, and practical attempts to identify shortcomings and develop corrective measures.

ARCH5321
Criticism and Evaluation
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The nature, function and value of criticism. Subjective and objective criticism. A short history of architectural criticism, architectural critics, past and present. Discrimination and values in a changing society; fashion, the influence of mass opinion, communication media, advertising, propaganda. Collection of data; establishment and application of critical criteria; effective communication of conclusions; recommendations and feedback. The use of criticism and evaluation during and after the design process. Practical evaluation of examples of architectural criticism, past and present. Criticism of contemporary buildings and projects. Criticism of current work by self and others.

ARCH5322
Imagination
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Architecture built in the image of the cosmic order and of the ideas directing that order. The nature of imagination, analogy and proportion. The meaning of number, of the elements of space and time and of the geometrical order, and this image in architecture. Seminars and practical projects focus on selected case studies.

ARCH5323
Spirit in Architecture
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Spatial symbolism and intellectual intuition, principles, and methods of sacred architecture. Spiritual doctrine reflected in the layout of Judao-Christian architecture with reference to the Architecture of sacred traditions. Seminars and practical projects focus on selected case studies.

ARCH5420
Building Conservation
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The role of building conservation in the field of architecture and planning. Guidelines for conservation and the role of statutory and voluntary bodies. Historical research and fabric documentation leading to the assessment of buildings and the preparation of conservation policies and conservation plans.

ARCH5421
Recent Australian Architects
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Detailed study of the theories and work of selected Australian architects.

ARCH5422
Great Architects
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Detailed study of the theories and work of selected architects throughout history. Normally four architects will be studied, two from the 20th century and two prior to the 20th century.

ARCH5423
The City-Sydney
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Studies of the social and technological systems that determine the form of contemporary cities. Government systems and controls, land and development economics, land use, transport, services. Sydney as a case study.

ARCH5424
Urban Design
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Design Studies in the integration of buildings and groups of buildings in their urban context, and of spaces between buildings, accommodation of pedestrian and vehicular movement, micro-climate.

ARCH5425
Landscape Design
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Aesthetic appreciation of chosen environments both urban and natural. The treatment of spaces between and upon buildings. 'Hard' and 'soft' landscape treatments. Functional uses of open space within the built environment and the design of street furniture.

ARCH5426
The Modern Movement in Architecture
Staff Contact: School Office
C6
Prerequisite: ARCH6103

A detailed illustrated examination of the architecture and architects who make up this movement from 1885-1965 from Chicago to Europe then to USA and Europe. A study of Australian examples of this movement.

ARCH5427
Post Modernism in Architecture
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The rise of Post Modernism as both a reaction to, and a continuation of the Modern Movement. The subject will attempt to define the various aspects of Post Modern architecture to include Deconstruction. Period covered 1964-1991.

ARCH5520
Advanced Building Materials (Ceramics)
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Ceramic materials; the nature of cements, concrete, glass bonded ceramics and glass. Building products and techniques using these materials and their implications including construction, maintenance and deterioration. Industrial visits and laboratory.

ARCH5521
Advanced Construction Systems
Staff Contact: School office
C6
Prerequisite: ARCH6103

A review of recent developments, current trends and possible future directions in building design, construction systems, detailing and documentation. Case studies, projects, seminars.

ARCH5522
Construction Planning and Management
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The role of the architect in construction planning and management. Pre-planning and building technology design for improved performance and management of the building process. Recent developments in constructional and structural engineering. Erection methods and equipment. Construction management and co-ordination of the building process. Building economics and cost planning, case studies, reports, seminars.

ARCH5523
Advanced Building Materials (Organics)
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Organic materials; the nature of wood and synthetic polymers. Building products and techniques using these materials and their implications including construction, maintenance and deterioration. Industrial visits and laboratory.

ARCH5524
Advanced Building Materials (Metals)
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Metals, ferrous and non-ferrous, their nature and use. Building products and techniques using these materials and their implications including construction, maintenance and deterioration. Industrial visits and laboratory.

ARCH5620
Conceptual Structural Design
Staff Contact: School Office
C12
Prerequisites: ARCH6103, ARCH6503, ARCH6603

Choice of systems and their behaviour; scale, structural shape as a visual element in architectural design; conceptual design methods and structural shape-finding and shape-determination methods using analytical, model and computer methods. Model and computer laboratory exercises and project.

ARCH5621
Advanced Structural Design
Staff Contact: School Office
C12
Prerequisite: ARCH5620

The behaviour and analysis of indeterminate structures. Computational techniques for indeterminate and other complex structural systems. Structural CAD applications. Architectural/Structural design issues: envelope - structure interaction, structural detailing and structural expression; dynamic loads; new materials and systems; assembly and erection techniques etc.

ARCH5622
Lightweight Structural Design
Staff Contact: School Office
C12
Prerequisites: ARCH6503, ARCH6603, ARCH6104

Integrated architectural/ structural/ constructional/ environmental design of cable, cable-net, membrane, tensegrity, shell and folded surface structures in lightweight materials (concrete, timber, metals and composites). Current issues related to on-going research and development. Structural ideologies. Seminar and project(s). Model and computer laboratory work and occasional construction workshop.

ARCH5720
Design for Energy Efficiency
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The development of the design of buildings and building types incorporating technological means of energy conservation and generation, use of energy-efficient materials, maintaining ecological balance and developing suitable structural techniques.

ARCH5721
Design of Lighting
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Major factors influencing design and application in buildings. Evaluation of impact of current technologies on lighting using computer simulations, appraisals and model studies. Design project.

ARCH5722
Acoustics Studies
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Experimental investigation and research in a selected aspect of acoustics. Laboratory and field work, methodology of results, development of techniques of application. Laboratory work.

ARCH5723
Applied Environmental Psychology
Staff Contact: School Office
C6
Prerequisite: ARCH6103

Designing with and for people; environmentally benign design; interactions between people and places; spatial behaviours; the meaning of the environment; user satisfaction; post occupancy evaluation.

ARCH5820
Building Economics & Development
Staff Contact: School Office
C6
Prerequisite: ARCH6103

1.The Economy: structure of the economy. History and development of modern economics. 2. Investment investigation in buildings, property (public and private), large scale, small scale. 3. Valuation; statutory valuations, market value, unimproved and improved land depreciation and obsolescence, valuation of improvements, valuation law, land laws. 4. Feasibility; economic models, optimisation, feasibility studies on small-, medium-, large-scale development and subdivisions. 5. Rationalised Building: dimensional control, component technology, building systems, cost planning. 6. Seminars.

ARCH5821
Project Management
Staff Contact: School Office
C6
Prerequisite: ARCH6103

1. Principles of scientific management and organisation, individual group behaviour, management functions, planning, organising, staffing, directing, coordinating, monitoring, appraisals and evaluation. 2. Operations research techniques; network analysis, multi-activity charting. 3. Decision theory and procedures. 4. Contract and contract documents. 5. Industrial relations, employment. 6. Industrial organisation. 7. Seminars.

ARCH5822
The Architect and the Law
Staff Contact: School Office
C6
Prerequisite: ARCH6103

1. Arbitration and litigation. 2. Appeals to the Land and Environment Court. 3. Environment law. 4. Industrial Law. 5. Case studies.

ARCH5823
Quality Management Concepts
Staff Contact: School Office
C6
Prerequisite: ARCH6806

The basic principles of quality management including quality control, quality assurance and the design of quality systems. Exploration of issues relating to the quality of design and procurement process and of the end product of the construction process. Relevance of Australian standards and professional manuals in quality assurance.

ARCH5824
Quality Management Practice
Staff Contact: School Office
C6
Prerequisites: ARCH5823

Application of the concepts of quality management. Preparation, documentation and evaluation of quality systems. Industrial and site visits.

ARCH5920
Architectural Research 1
Staff Contact: School Office
C12
Prerequisite: ARCH6103

The processes and methods of research including: identifying the problem and forming an hypothesis; designing the research project including an explanation of the research procedures and techniques; accumulating data (libraries, archives, surveys, interviews); interpreting/analysing data (theories of models, explanations, values); verifying and documenting results. Positive and normative theories. Above all, students must demonstrate that they understand something of the research process including critical thinking and scholarly referencing.

The subject will be taught in a flexible lecture/seminar/small group teaching format. Assessment based on student contributions to seminars/small group discussions; a critical journal based on readings related both to the class-based topics and individual projects; a short individual research project.

ARCH5921
Architectural Research 2
Staff Contact: Staff Office
C12
Prerequisite: ARCH6103

An elective designed for students wishing to pursue an independent course of study in a field of architecture not falling specifically within the domain of any existing elective. Students are required to present a detailed program of study for approval by the Head of School by the end of the session preceding that in which it is intended to enrol in this elective. For special conditions consult Head of School. All students must attend a short lecture series on research methods. It is recommended that students enrolling for this subject should first have done ARCH5920.

ARCH5922
Architectural Research 3
Staff Contact: School Office
C12
Prerequisite: ARCH6103

An elective designed for students wishing to pursue an independent course of study in a field of architecture not falling specifically within the domain of any existing elective. Students are required to present a detailed program of study for approval by the Head of School by the end of the session preceding that in which it is intended to enrol in this elective. For special conditions consult Head of School. All students must attend a short lecture series on research methods. It is recommended that students enrolling for this subject should first have done ARCH5920.

ARCH5950
Industrial Archaeology 1
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The range of industrial sites and individual engineering structures of heritage significance still extant in Sydney. Documentation of sites and structures. The conservation strategies for the protection of industrial sites and engineering structures.

ARCH5951
Industrial Archaeology 2
Staff Contact: School Office
C6
Prerequisite: ARCH5950

The history and development of selected industries in Sydney, including hydraulic power, electricity generation, rail and tram transport and engineering. Techniques of historical research into industrial sites and structures. Field excursions, recording, preparation of listing proposals and the use of statutory regulations for the protection of relevant sites.

ARCH5952
Traditional Technology 1
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The scope of traditional technologies with particular reference to the building technologies of foundry work, blacksmithing, plastering and stained glass manufacture. Methods of recording including sketching, photography and the unstructured interview. The role of the architect in conservation of traditional technologies.

ARCH5953
Traditional Technology 2
Staff Contact: School Office
C6
Prerequisite: ARCH6103

The detailed study of a selected traditional technology. Interview and documentation techniques for recording processes and activities. The role of traditional craftspeople in the conservation of heritage buildings. The assessment of the work of traditional craftspeople and the role of authenticity in conservation.

Students may also, with the approval of the Head of School, select subjects as electives from the BSc(Arch) course.

Bachelor of Science (Architecture)

Core Subjects

ARCH5912
Research Methods
Staff Contact: School Office
C6
Prerequisite: ARCH6101

The processes and methods of research. Problem solving, data gathering and processing, structuring and compilation of research reports.

ARCH5914
Special Research Programme 1
Staff Contact: School Office
C15
Prerequisite: Head of School's approval

Introductory programme on a topic area selected by the student in accordance with his or her field of specialisation. Approval of topic by Head of School and supervision by appropriate staff is required. The special research programmes provide the opportunity to practice research methods, planning, organising and conducting and documenting study in the chosen field.

ARCH5915
Special Research Programme 2
Staff Contact: School Office
C15
Prerequisites: ARCH5914 or equivalent, Head of School's approval

Further development of the topic previously selected by the student in ARCH5914. Approval of topic by Head of School and supervision by appropriate staff is required.

ARCH5916
Special Research Programme 3
Staff Contact: School Office
C15
Prerequisites: ARCH5915 or equivalent, Head of School's approval

Culmination of study in topic area previously undertaken in ARCH5914 and ARCH5915. Approval of topic by Head of School and supervision by appropriate staff is required.

ARCH5917
Research project
Staff Contact: School Office
C24
Prerequisite: ARCH5916 or equivalent

This project represents the culmination and integration of knowledge and skill gained in the student's field of specialisation, including social, environmental and ethical aspects. The research project report should be presented in a thesis format.

ARCH5918
Honours Project
Staff Contact: School Office
C60
Prerequisite: ARCH5917 or equivalent

The honours project provides opportunity for advanced study in a particular area of specialisation.

ARCH5919
Honours Project 2
Staff Contact: School Office
C60
Prerequisite: ARCH5918

The honours project provides opportunity for advanced study in a particular area of specialisation.

ARCH5930
Science Seminar 1
Staff Contact: School Office
C12
Prerequisite: ARCH6101

Student preparation of research programmes, methodologies, results and conclusions. Discussion and Debate of ethical, environmental and related issues. Exercises in aspects of communication, computing, structures and environmental control.

ARCH5931
Science Seminar 2
Staff Contact: School Office
C6
Prerequisite: ARCH5930

Student presentation of research programs. Discussion and debate of ethical, environmental and related issues. Exercises in architectural construction, particularly relating to building defects and their prevention.

Core subjects specific to BSc(Arch) Interior Design major

ARCH5960
Interior Design Studio 1
C36
Prerequisite: ARCH6101

Subject not offered in 1993

A series of interior design projects dealing predominantly with small to medium scale domestic and commercial interiors interspersed with a number of basic design and colour theory exercises.

ARCH5961
Interior Design Studio 2
C36
Prerequisite: ARCH5960

Subject not offered in 1993.

A series of interior design projects dealing with subjects selected from small to large scale community, commercial, heritage, public and semi-public interiors interspersed with a number of basic design and colour theory exercises.

ARCH5962
Interior Design Studio 3
C18
Prerequisite: ARCH5961

Subject not offered in 1993.

A subject requiring a very high level of development of a design project selected from predominantly large-scale community, commercial, heritage, public and semi-public interiors.

ARCH5963
Interior Design Research Project
C12
Prerequisite: ARCH5961

Subject not offered in 1993.

Research specifically for the Graduation Project submitted for assessment based on the demonstration of a professional level of research and presentation skills.

ARCH5964
Interior Design Graduation Project
C60
Prerequisite: ARCH5963

Subject not offered in 1993.

An approved interior design project thoroughly executed from first client contact to at least the completion of all documentation - to a standard accepted as fully professional. To be monitored by means of regular appointments with a supervising member of staff.

ARCH5224
Computer Applications 3
C6
Prerequisite: ARCH5222

Subject not offered in 1993.

Advanced techniques in computer aided modeling and visualisation.

ARCH5428
History of Art & Design 1
C6
Prerequisite: ARCH6401

Not offered in 1993.

A series of lectures dealing with the cultural significance of art and design throughout history with particular reference to the cultural and artistic heritage of the western world.

ARCH5429
History of Art and Design 2
C6
Prerequisite: ARCH5428

Subject not offered in 1993.

A series of lectures devoted to a study of the history of art and design with particular reference to furniture design and interior design of the twentieth century.

ARCH5525
Furniture Design 1
C6
Prerequisite: ARCH6101

Subject not offered in 1993.

A series of research and design projects concentrating on the design and manufacture of furniture and furnishings. Practical work.

ARCH5526
Furniture Design 2
C6
Prerequisite: ARCH5525

Subject not offered in 1993.

A series of research and design projects following on from Furniture Design 1 concentrating on the design and manufacture of furniture and furnishings. Practical work.

ARCH5527
Interior Materials
C6
Prerequisite: ARCH6101

Subject not offered in 1993.

A series of lectures dealing with the manufacture, properties, characteristics and uses of a range of materials commonly used in interiors.

ARCH5528
Interior Finishes
C6
Prerequisite: ARCH6101

Subject not offered in 1993.

A series of lectures dealing with a range of interior finishes.

ARCH5529
Fabric Design
C6
Prerequisite: ARCH6101

Subject not offered in 1993.

A series of fabric design projects exploring the history, practice and theory of a wide range of techniques of weaving, dying, printing and use of fabrics used in interiors.

Elective Subjects

ARCH5940
Theory of Architectural Computing 1
Staff Contact: School Office
C6
Prerequisite: ARCH6201

A study of the knowledge that underlies the application of computers to the theory and practice of architecture. This subject looks at traditional approaches to architectural computing including space planning, facilities and management, building performance analysis, information systems and operations research. Assessment is by means of project work.

ARCH5941
Theory of Architectural Computing 2
Staff Contact: School Office
C6
Prerequisite: ARCH5940

Further study of the application of computers to the theory and practice of architecture, focussing generally on the field of knowledge engineering. This subject deals with knowledge-based systems and knowledge representation techniques, shape grammars, expert systems and design information systems. Assessment is by means of project work.

ARCH5942
Architectural Computing Seminar
Staff Contact: School Office
C15
Prerequisite: ARCH6205

Hands-on implementation and application of computing theory. Students are engaged in a self-directed project involving significant usage of either an existing application program or the development of new software. The aim of this subject is to gain significant exposure to some aspect of architectural computing that is related to the particular interests of the student.

General Education Subjects

Categories A and B:

The student is to refer to the General Education Handbook for details of subjects available in these areas.

Category C:

ARCH0002
Social Responsibility and Professional Ethics
Staff Contact: C. de Lorenzo
C5

The aim of the subject is to expose students in the Faculty to issues of social responsibility in their future professional activities. This is done by selecting for analysis two case studies. The exchange of information and the affirmation and contestation of values by students is considered as important a part of the learning process as the professional input through lectures. Instruction includes common lectures and small seminar groups made up of students from all schools in the Faculty. Assessment will include individual and collaborative submissions.

Building

Construction Stream

SURV0411
Surveying for Builders
Staff Contact: Mr P. Amin
C2 S3 HPW4
Notes: Compulsory

Introduction. Chaining, methods of measurement, corrections, chain surveys. Level, differential levelling, booking. Contours, volumes of earthworks. Theodolite, methods of reading angles, applications in building. Traversing, setting out.

BLDG1001
Construction 1 (Domestic Buildings)
Staff Contact: Mr C.D. Smythe
C3 S1 HPW3
Notes: Compulsory.

Functional requirements and methods of building single family dwellings: brick, brick veneer and timber frame; domestic joinery; staircase construction; finishes; plumbing, drainage and electrical services; methods of setting out and supervision, on site observation and report on house construction.

BLDG1002
Construction 2 (Low Rise Domestic)
Staff Contact: Mr C.D. Smythe
C4 S2 HPW4
Prerequisite: BLDG1001, BLDG1010
Notes: Compulsory

Small multi-storey buildings from the functional and construction operation viewpoints. Quality control and supervision. Basement, ground floor and upper floor construction; methods of roofing, waterproofing; joinery; internal finishes; minor construction plant, formwork. Construction drafting, on-site observation and report on home unit building.

BLDG1010
Communications and Resource Usage
Staff Contact: Mr J. Kim and Mr D. Lawson
C3 S1 HPW3
Notes: Compulsory.

Using the library. Accessing information: reading, summarizing and report writing. Organization of and participation in meetings, seminars and lectures. Graphic communication: photography, drafting and detailing.

BLDG1051
Structures 1
Staff Contact: Dr O. Greste & Mr J. Senogles
C3 S2 HPW3
Notes: Compulsory.

Loads on structures; external and internal forces; conditions of force and moment equilibrium. Analysis of statically determinate beams, bending moment and shear force diagrams; bending and shear stresses; deflections. Qualitative structural behaviour of arch, cable, membrane, plate and shell structures; the function of bracing.

BLDG1091
Built Environment 1
Staff Contact: Professor J. Haskell
C2 S1 HPW2
Notes: Compulsory.

The intention is to develop an understanding of the relevance of man's "culture" (that thing which his social, economic, political, religious and physical environment gives rise to) to the nature of buildings and settlements which he devises, and an appreciation of the architecture and building (in particular in terms of materials and construction) of those cultures which can be seen to be providing the line to modern "western" building from as far back as "the stone ages".

BLDG2003
Construction 3 (Framed Building)
Staff Contact: Mr C.D. Smythe
C4 S3 HPW4
Prerequisites: BLDG1002, BLDG1151
Notes: Compulsory.

Study of structural steel and concrete frames; large span factory roofing, precast concrete walling, welding techniques, fire requirements, cladding methods, installation of cranes and machine footings, site works, dewatering, shoring, piling on site observation and report on factory building.

BLDG2052
Structures 2
Staff Contact: Dr O. Greste
Prerequisites: BLDG1051
C4 S3 HPW4
Notes: Compulsory.

Analysis of statically determinate frames; principles of structural design; design of beams and columns in timber and steel for strength, deflection and stability criteria; combination of axial and bending stresses. Joints in timber and steel structures: bolting, nailing, welding. Design of reinforced and prestressed concrete beams, columns and slabs for strength and serviceability.

BLDG3004
Construction 4 (High-rise Buildings)
Staff Contact: Mr D. Lawson
C4 S5 HPW4
Prerequisites: BLDG2003, BLDG2052
Notes: Compulsory.

Functional requirements and building techniques of high-rise buildings and major building projects; structural systems, enclosure systems and environmental control systems and their inter-relation from a building standpoint; various methods and materials commonly used to solve functional demands; comparison of systems of construction, selection of plant and equipment cranes hoists concrete pumps etc.; building loads and load factors; stability of structures and structural components; creep, settlement and other movement; principles of fire protection in high-rise projects; cladding in concrete, metal and glass; ceiling and partition systems; integration and coordination of services. On site observation and report on high rise building.

BLDG3005
Construction 5 (Techniques)
Staff Contact: A/Professor R. Miller & Mr D. Lawson
C4 S6 HPW4
Prerequisite: BLDG3004
Notes: Compulsory.

Specialized building techniques employed on major projects including the use of plant, equipment and various construction systems: excavation equipment, shoring, ground anchorage, pile drivers, formwork, slip form, craneage, concrete handling. Construction methods with minimal impact on the environment. Integrated construction systems. Students undertake on-site studies. Emphasis on method of construction rather than the attributes of the finished product.

BLDG3050
Soil Mechanics for Building
Staff Contact: Dr S. Valliappan
C2 S6 HPW2
Notes: Compulsory.

The origins and formation of soils; clay mineralogy; classification of soils; soil as an engineering material; site investigation; boring, sampling and insitu testing; shear strength of soils; stress distribution in earth masses; consolidation and settlement; earth pressure calculations; bearing capacity; improvement of soil properties by compaction and stabilization; introduction to foundation design; laboratory testing of soils.

BLDG4006
Construction 6 (Industrialization and Technological Change)
Staff Contact: A/Professor M. Marosszeky
C2 S7 L2
Prerequisite: BLDG3005
Notes: Elective.

Factors influencing change in building techniques: technological change in building; implication of level of demand; new products, materials and processes; the regulatory system; the effect of government policy. The implications of changing techniques; the changing structure of work, skills loss, methodologies for coordinating building components; the evaluation of performance, social consequences of industrialization. Teaching centres around case studies of Australian and overseas building techniques, building systems, construction systems, portable buildings and mobile homes.

BLDG4007
Construction 7 (Special Project)
Staff Contact: Mr G. Levido
S8 L2
Prerequisite: BLDG3005
Notes: Elective.

The study of special advanced topics in building construction on either a group or individual basis.

Building Science Stream

BLDG1111
Building Science 1 (Materials)
Staff Contact: Mr D. Lawson
C4 S1 HPW4
Notes: Compulsory.

Properties of materials; plasticity, elasticity, density, porosity, hardness. Optical, electrical, thermal and acoustic properties. Deterioration. Properties and manufacture of building materials; wood, wood products, cements, limes, concrete, bricks, metals, fibre cement, ceramics, plastics, sealants and mastics, stones.

BLDG1151
Building Services 1 (Hydraulics)
Staff Contact: Me N. Kenny
C2 S2 HPW2
Notes: Compulsory.

Hydraulic services pertaining to small and medium size projects; hot and cold water reticulation; sewer and storm water drainage; sanitary plumbing, introduction to fire fighting equipment and services; regulatory authorities and requirements.

BLDG1170
Mathematics for Builders
Staff Contact: Professor A.R. Toakley
C4 S1 HPW4
Notes: Compulsory.

Calculus: differentiation and integration; practical applications. Probability: sample spaces and probabilities; probability trees; distribution of random variables; expected value and decision analysis. Statistics: mean, mode, median, standard deviation and variance; normal and binomial distributions; linear regression.

BLDG2112
Building Science 2 (Concrete and Metals)
Staff Contact: Dr N. Gowripalan & Dr S. Bandyopadhyay
C4 S4 HPW4
Notes: Compulsory.

Concrete technology: cement, aggregates, water and admixtures; properties of fresh concrete; strength considerations; durability, shrinkage and creep; special concretes; non-destructive testing; mix design. Metals in building: structural ferrous alloys; structural and architectural non-ferrous alloys; corrosion and protection; welding; types of failure, brittle fracture, fatigue, creep; impact resistance; tensile properties; hardness; strain hardening. Fire: behaviour of building materials and structures.

BLDG2152
Building Services 2 (Mechanical)
Staff Contact: Mr G. Hogan
C2 S4 HPW2
Prerequisites: PHYS1939, BLDG1151
Notes: Compulsory.

Ventilation theory; ventilation systems and equipment; refrigeration theory; air conditioning heat loads; air conditioning equipment; electrical equipment; telephones and security; lifts and escalators; recess; plumbing; fire protection; garbage and incinerators.

BLDG4113
Building Science 3 (Energy and Thermal)
Staff Contact: Mr D. Hassall
C3 S8 HPW3
Notes: Elective.

Thermal design of buildings. Climate, thermal comfort. Heat flow through building materials, thermal storage, resistance, insulation. Ventilation and infiltration. Solar radiation, sun-charts, sun control, solar reflections, shade and shading, solar access. Passive design. Daylight and artificial light.

BLDG4114
Building Science 4 (Timber)
Staff Contact: Mr D. Lawson
C2 S8 HPW2
Notes: Elective.

The production and marketing of timber; test methods and properties; stress grading of timber, codes of practice, chemical, physical and biological attack and weathering of timber, protection and preservation; thermal, acoustic and aesthetic properties: factory techniques, plywood, particle board, hardboard, softboard, prefabricated building components, laminated beams.

PHYS1939
Physics 1 (Building and Design)
Staff Contact: First Year Director
C4 S2 HPW4

Energy transfer: concepts of temperature and heat; catorimetry; gas laws; phase changes and humidity; heat transmission; refrigeration. Electrostatics and electromagnetism: electric and magnetic fields; DC circuits; electromagnetic induction. Sound: wave properties; absorption of sound. Properties of matter: atomic bond

types and their relation to elasticity, plasticity and fracture; pressure in stationary and moving fluids.

Management Stream

BLDG1261
Management 1 (Management Principles)
Staff Contact: Mr G.E. Levido
C2 S1 HPW2
Notes: Compulsory.

Basic management principles, scientific management, management objectives. Structure of building industry. Building Acts and Regulations, codes, local government authority powers.

BLDG1271
Law for Builders 1
Staff Contact: Mr I. George
C2 S2 HPW2
Notes: Compulsory.

Law, including brief outline of sources of law in New South Wales and the system of judicial precedent. General principles of law of contracts. Contractual rights and obligation. Court structures; sale of goods; a general introduction to the law of bankruptcy. General principles of law of agency. Law of partnership.

BLDG2262
Management 2 (Planning)
Staff Contact: Dr T. Uher
C3 S3 HPW3
Prerequisite: BLDG1261
Notes: Compulsory.

Operation Research techniques and their relevance to building, concept of planning and control, CPM, PERT, Line of Balance, Multi-activity Chart, computer applications of CPM. Principles and application of Work Study. Risk analysis, decision making process.

BLDG2263
Management 3 (Contracts)
Staff Contact: Dr T. Uher & Mr P. Davenport
C3 S4 HPW3
Prerequisite: BLDG2262
Notes: Compulsory.

Concept of contracting and subcontracting, different options for project delivery. Contract law, building contracts and contract administration, standard forms of contracts, contract claims and disputes, contract negotiation. Principles of insurance, contract insurance, professional negligence.

BLDG2281
Introduction to Computing
Staff Contact: Dr O. Greste
C2 S3 HPW2
Notes: Compulsory.

Introduction to computer programming and applications. Description of computer hardware and peripheral equipment; use of time-sharing computing facilities; development of basic programming skills.

BLDG3264
Management 4 (Personnel Management)
Staff Contact: Mr D. Dombkins
C3 S5 HPW3
Prerequisite: BLDG2263
Notes: Compulsory.

Personnel management, human motivation, employment, industrial relations, employers and employer groups, unions and unionism. Conciliation and arbitration. Site organization (labour aspects), safety management.

BLDG3265
Management 5 (Project Management)
Staff Contact: Mr G.E. Levido
C3 S6 HPW3
Prerequisite: BLDG3264
Notes: Compulsory.

Project management and site organization. Theory and concept of project management. Alternative organization of the building process. Application of project management in building. Management of pre-design, design and construction activities. Strategic planning, construction strategy. Site organization (physical), planning of materials handling. Project management control.

BLDG3272
Law for Builders 2
Staff Contact: Mr P. Davenport & Mr I. George
C2 S5 HPW2
Prerequisite: BLDG1271
Notes: Compulsory.

General principles of insurance law. Law related to non-commercial succession to property. Real property and local government law, company and administrative law.

BLDG3282
Computer Applications in Building
Staff Contact: Dr O. Greste
C2 S5 HPW2
Prerequisite: BLDG2281
Notes: Compulsory.

Extensions of flowchart and program development via time-sharing processing with emphasis on structured programming and internal program documentation. Introduction to data file structures and access modes. Microcomputer wordprocessing and spreadsheet programs. Applications in quantity surveying, estimating and construction management.

BLDG4266
Management 6 (Corporate Strategy)
Staff Contact: Dr J. Hutcheson
C2 S7 HPW2
Prerequisite: BLDG3265
Notes: Elective.

Corporate strategy and the overall general management of an enterprise in the building and development industry, derivation of policy by top management together with planning of policy implementation; tax planning. There is an integration and application of knowledge acquired in previous and concurrent courses. By using case studies students appraise the present position and future prospects of enterprises in the building industry; assess potential risks and opportunities; plan the human and physical resources

and activities of the enterprises required to achieve corporate objectives.

BLDG4267
Management 7 (Marketing)
Staff Contact: Dr J. Hutcheson
C3 S7 HPW3
Prerequisite: BLDG3265
Notes: Elective.

Marketing for builders and developers in the Australian and Pacific environment with particular emphasis on the marketing mix, the relationship between a marketing system and its environment, development of marketing, tactics and strategy, market segmentation and the buyer decision process. Listing, selling and the auction process.

BLDG4273
Law for Builders 3
Staff Contact: Mr I. Morrison
C3 S7 HPW3
Prerequisite: BLDG3272
Notes: Elective.

Recognition of the significance of different land titles, tenures and interests in land; understand the construction and content of contracts, leases and other forms of agreement required for property dealings and use; develop a familiarity with public and private controls and restrictions on land use and development; appreciate the relationship between planning policies at all levels and the valuation process; a knowledge of the valuation review and determination processes of the Land and Environment Court and similar tribunals; appreciate the requirements for presentation of evidence as an expert witness; acquire a familiarity with major court cases, relevant to a valuer, which establish valuation principles; understand the major objectives of principal New South Wales Acts dealing with real estate or interests therein.

BLDG4274
Commercial Arbitration
Staff Contact: Mr P. Davenport
C3 S8 HPW3
Prerequisite: BLDG2263
Notes: Elective.

The nature and function of arbitration in relation to building contract disputes, the parties to arbitration, the arbitrator, his /her duties and powers. Case studies, moot arbitration.

BLDG4284
Building Information Systems
Staff Contact: Dr O. Greste & A/Professor R. Miller
C3 S8 HPW3
Prerequisite: BLDG3282
Notes: Elective.

The specification, development and use of computer based information systems in the management of building companies. Information system components, attributes and lifecycle; system and procedure representation tools. Data files structures and access modes; database systems. Information system response, distribution, size and controls; logical and physical design. Computer hardware; communications; local area networks. Case studies of computer systems in building construction and management companies. The subject involves extensive use of microcomputer based database and spreadsheet packages.

Building Economics Stream

ACCT9001
Introduction to Accounting A
Staff Contact: Mr B. Booth
C2 S3 HPW2
Notes: Compulsory.

An introduction for non-commerce students to the nature, purpose and conceptual foundation of accounting. Information systems including accounting applications. Analysis and use of accounting reports.

ACCT9002
Introduction to Accounting B
Staff Contact: Mr B. Booth
C2 S4 HPW2
Prerequisite: ACCT9001
Notes: Compulsory.

An introduction for non-commerce students to managerial accounting. Long-range planning, budgeting and responsibility accounting: cost determination, cost control and relevant cost analyses.

BLDG1311
Building Economics 1
Staff Contact: Mr B. Reece
C3 S2 HPW3
Notes: Compulsory.

Introduction to building economics, the interrelationship between the national economy and the building industry; quantitative techniques and the interpretation of economic data, economic principles applied to aspects of the building industry; introductory investment analysis and decision theory.

BLDG2301
Quantity Surveying 1
Staff Contact: Mr P. Marsden
C4 S4 HPW4
Notes: Compulsory.

Quantity surveying; historical background; functions of the quantity surveyor; introduction to Australian Standard Method of Measurement of Building Works, its importance and application; methods of recording dimensions, checking and correlating plans and specifications; principles of measurement and billing; Bill of Quantities format; elementary billing and measurement of basic trades including finishes, brickwork, woodwork, roofing, concrete and groundworks.

BLDG3302
Quantity Surveying 2
Staff Contact: Mr P. Marsden
C4 S5 HPW4
Prerequisite: BLDG2301
Notes: Compulsory.

Advanced billing and measurement of structural and services trades; preliminaries, etc in accordance with Standard Method of Measurement of Building Works; contract administration; exercises in variations, cost

adjustment and progress claims; relationship between the Specification and the Bill of Quantities.

BLDG3312
Building Economics 2
Staff Contact: Dr J. Hutcheson
C3 S6 HPW3
Prerequisite: ACCT9002
Notes: Compulsory.

The business environment; business structures; taxation, depreciation; operating costs; economics of building plant and materials handling systems; financial control in the erection, management and demolition of buildings.

BLDG3321
Estimating 1
Staff Contact: Mr P. Marsden
C2 S6 HPW2
Prerequisite: BLDG2301
Notes: Compulsory.

Introduction to techniques used by building estimators. Topics include the analysis of costs of material, plant and labour, and the estimation of unit rates; labour and plant scheduling, preliminary items, general and site overheads, the preliminary estimate.

BLDG4303
Quantity Surveying 3
Staff Contact: Mr P. Marsden
C3 S8 HPW3
Prerequisite: BLDG3302
Notes: Elective.

Functions of the cost planner; liaison with consultants; cost planning techniques including practical exercises; cost control and design economics; professional practice.

BLDG4313
Building Economics 3
Staff Contact: Dr J. Hutcheson
C2 S7 HPW2
Prerequisite: BLDG3312
Notes: Elective.

Capital investment analysis; advanced investment evaluation; feasibility studies; financial management and analysis; growth and development; the financial market.

BLDG4322
Estimating 2
Staff Contact: Mr P. Marsden
C2 S7 HPW2
Prerequisite: BLDG3321
Notes: Elective.

Advanced estimating techniques, competitive tendering, contract cost adjustments; computer techniques applied to estimating.

BLDG4390
Property Valuation
Staff Contact: Mr C.D. Smythe
C3 S7 L3
Notes: Elective.

General principles of valuation. Judicial valuations, legal precedent, land titles and rights. Depreciation assessment. Building maintenance cycles. Time value of money and equivalence. Methods and philosophies of determining market value. Case studies of property valuations.

BLDG4391
Land Economics
Staff Contact: Mr G. Beckett
C3 S8 HPW3
Prerequisite: BLDG3312, BLDG4390
Notes: Elective.

Ability to apply relevant valuation techniques to a broad range of common land use types; acquisition of knowledge of efficient property management techniques; identification of a range of unusual property types which require specialised valuation skills and knowledge and the means of developing such skills and knowledge; knowledge to develop novel valuation techniques for application to specific property types; ability to determine the highest and best use for nominated property types; the application of inspection techniques for broad property types; competency in the use of property valuation and inspection aids; familiarity with resource materials and information sources required to undertake specific types of valuation.

BLDG4392
Property Development
Staff Contact: Dr J. Hutcheson
C2 S8 HPW2
Prerequisite: BLDG3312
Notes: Elective.

A total approach to the building process through the four stages of pre-design, design, construction and post-construction. Market research, establishing client's needs, site selection and analysis, feasibility studies and financing methods. Selection and monitoring the work of the design team, preliminary designs, preparation of development applications, cost value analysis, value management, life cycle costing and services integration. Preplanning the building process, utilization of construction and management consultants. Development control during construction and in completion, tenant fit-outs and handing over to clients of the completed project.

BLDG4393
Management of Buildings
Staff Contact: Dr J. Hutcheson
C2 S8 HPW2
Notes: Elective.

Maintenance and obsolescence; economics of refurbishment; marketing; tenancy management; building control and security systems; management of commercial, retail, industrial and large scale residential complexes; legal aspects of tenancy management; energy conservation; taxation law and implications.

Other Subjects

BLDG4401
Thesis Preparation
Staff Contact: Mr G. Runeson
C6 S7 HPW2
Notes: Compulsory.

Thesis research requirements, format, writing style, mode of referencing, information sources, library facilities and thesis topic selection. Students will be required to produce

a summary of objectives, a plan for their subsequent thesis research and a preparatory table of contents.

BLDG4402
Thesis
Staff Contact: Mr G. E. Levido
C6 S8
Prerequisite: BLDG4401
Notes: Compulsory.

Results of research on selected Thesis topic, written up in technical report format. The Thesis requires the student to survey the literature on the chosen topic, collect information and data, effectively process and document the research results and draw reasoned conclusions from them.

BLDG9000
Special Programme
Staff Contact: Mr G. E. Levido
S7 or 8 HPW2
Notes: Elective.

This subject, to be presented by visiting lecturers, would allow presentation of subject material not covered elsewhere in the course. The subject is to be presented on an occasional basis; subject content dependent on lecturer.

BLDG9999
Industry Program
Staff Contact: Mr B. Reece
S1-8
Notes: Compulsory.

6 months of approved building industry experience at any time prior to graduation. Submission requirements are a daily diary, report and a completed form from the employer.

Industrial Design

Design Studios

IDES1021
Basic Design
Staff Contact: Department Office
C4 S1 L1 T3

The basic elements of two and three dimensional design, and the development of the analytical and communication skills necessary for their understanding. Development of the creative processes concerned with the exploration and manipulation of the elements. Studies are undertaken within the context of art and design.

IDES1031
Design Studio 1
Staff Contact: Department Office
C4 S2 L1 T3

Co-requisite: IDES1021

Theoretical and project work to introduce design methodologies and their application to three dimensional design problems.

IDES2161
Industrial Design Studio 2
Staff Contact: Department Office
C10 F L1 T4
Prerequisite: IDES1031

The introduction of industrial design and research methodologies. Studies and projects are undertaken within the context of social, commercial and industrial requirements.

IDES3221
Industrial Design Studio 3
Staff Contact: Department Office
C10 F L1 T4
Prerequisite: IDES2161

Continuation of the theoretical and project work of Industrial Design Studio 2. These two subjects cover examples from the range of major industrial design problems.

IDES4291
Industrial Design Studio 4
Staff Contact: Department Office
C5 S1 L1 T4
Prerequisite: IDES3221

Advanced theoretical and project work taking a particular project to an advanced state of development, preparatory to undertaking the Project.

IDES4301
Project Research
Staff Contact: Department Office
C4 S1 L1 T3
Prerequisite: IDES3221

Product research methodologies and their application to an individual project chosen in conjunction with the School. This work provides the research basis for the Project.

IDES4321
Environmental & Interior Design for Industrial Designers
Staff Contact: Department Office
C2 S1 L1 T2
Prerequisite: IDES2161

Understanding the nature of environmental space and spatial ambience, and the relationship of objects and products to the surrounding space. Environmental and interior design projects.

IDES4351
Project
Staff Contact: Department Office
C12 L1 T11
Prerequisite: IDES3221

Co-requisite: IDES4301

A project within the practice areas of industrial design, chosen by the student in consultation with the School at the commencement of Project Research. The project is based upon the research base established in Project Research.

Design Skills

IDES1011
Workshop Technology
Staff Contact: Department Office
S2 L0.5 T1.5

Introduction to workshop techniques involved in the production of models and prototypes. Development of safe working practices using a range of hand tools and basic machining processes.

IDES1041
Visual Thinking & Drawing
Staff Contact: Department Office
C4 S1 L1 T3

The development of the capacity to see and the hand/eye co-ordination skills to record what is seen using a variety of media and methods. The capacity to develop and express visual concepts. The relationship between visual thinking and creative processes.

IDES1051
Geometrical & Mechanical Drawing
Staff Contact: Department Office
C4 S1 L1 T3

Introduction to orthographic drawing with particular reference to the Australian Engineering Drawing Standard. Mechanical projections other than perspective. Descriptive geometry and the analysis and synthesis of form and spatial relationships.

IDES2101
Perspective & Rendering Techniques
Staff Contact: Department Office
C4 S2 L1 T3
Prerequisites: IDES1041 and IDES1051

Review of the major mechanical perspective systems and rendering techniques with particular reference to their applications in product design. Project studies are undertaken within the range of systems and media.

IDES2121
Introduction to Computing
Staff Contact: Department Office
C3 S2 L1 T2

Introduction to the computer with emphasis on its application in industrial design, engineering and information systems. Hardware and software. Experience in the use of equipment and development of basic programming skills.

IDES2171
Computer Aided Design
Staff Contact: Department Office
C4 L2 T2
Prerequisite: IDES2121

Computer aided design and drafting systems and their applications in product development. Mathematical optimization techniques.

IDES3231
Computer Graphic Applications
Staff Contact: Department Office
C4 L2 T2
Prerequisite: IDES2171

Development of Computer Aided Drafting with particular reference to perspective and rendering techniques using computing equipment, as well as the application of computing to other graphic problems.

IDES3281
Photography for Industrial Design
Staff Contact: Department Office
C2 S2 L1 T1
Prerequisite: IDES2161

The theory and practice of colour and black and white photography with particular reference to product and design presentation applications. Projects develop studio and dark room skills.

IDES4311
Graphic Design for Industrial Designers
Staff Contact: Department Office
C3 S1 L1 T2
Prerequisite: IDES1031

The major graphic production processes, and their application in graphic design. Type and typesetting systems. Graphic design projects.

Design Theory

IDES1061
History of Art/Architecture/Design
Staff Contact: Department Office
C1 S1 L1

General overview of the history of art, architecture and design from earliest times to the present, within the context of aesthetic and socio-cultural influences.

IDES2091
Design Methodology
Staff Contact: Department Office
C1 2 L1
Prerequisite: IDES1031

Design methodology and its applications in the industrial situation, analysis of problems, strategy planning, the application of research methods. The methods. The problem of problem solving.

IDES2151
Product Studies Seminars
Staff Contact: Department Office
C2 T2
Prerequisite: IDES1031
Corequisite: IDES2161

A series of case studies, in which products and their related systems are analysed for design, engineering, marketing and production factors and qualities. The Seminars are given by panels of staff experts and professional practitioners. The subject is taken during years 2, 3 and 4. Students undertake an assignment based on the Seminars and submit it during Year 4.

IDES3271
Form Theory
Staff Contact: Department Office
C1 S2 L1
Prerequisite: IDES1021

Study of form in nature, art and design. Theories of form. Form organisation, typology, and description.

IDES4331
History of Consumer Products
Staff Contact: Department Office
C0.5 LO.5
Prerequisite: IDES1061
Corequisite: IDES4341

Products as an aspect of our culture/society and commerce/industry from 1750 to the present day. The development of consumer products is examined within the context of the changes taking place in industry and society.

IDES4341
History of Industrial Design
Staff Contact: Department Office
C0.5 LO.5
Prerequisite: IDES1061
Corequisite: IDES4331

This subject is normally taken in conjunction with IDES229 and is a chronological study of the emergency and development of industrial design from 1850 to the present day.

IDES4361
Professional Practice
Staff Contact: Department Office
C1 L1
Prerequisite: IDES2161

Professional practice in industry and on consultancies. Organisation and management of design offices and projects. Professional and ethical responsibilities. Contracts, determination of fees, patents, design registrations, legal responsibilities and liabilities.

IDES4371
Managing Product Innovation and Development
Staff Contact: Department Office
C1 L1
Prerequisite: IDES2091

The problem of integrating innovative product design and development within the overall managerial and financial structure of industry. Australian and overseas case studies are given. Particular emphasis is placed on the development of appropriate design management structures and methods for the Australian situation.

Ergonomics

IDES1073
Principles of Ergonomics
Staff Contact: Department Office
C2 S1 L2

Applied anatomy and kinesiology, anthropometrics and application in product and environmental design. Physiological and psychological aspects of ergonomics, work, environment effects, man-machine interface. Principles of ergonomics research methods.

IDES2193
Applied Ergonomics
Staff Contact: Department Office
C3 L1.5 T1.5
Prerequisite: IDES1073

Analysis of ergonomic requirements within the context of product development. Ergonomic methodology and experimental methods and their application in the product research and development process.

Industrial Experience

IDES4391
Industrial Experience
Staff Contact: Department Office
C2 S2
Prerequisite: IDES2161

Students obtain 3 months of approved practical experience in a design office. The subject may be taken from the end of the second year but at least half of the requirement must be taken from the end of the third year. The subject cannot be taken in units of less than 1 month. The experience is to be recorded in a logbook to be signed by the employer.

Science and Engineering Subjects

IDES1082
Engineering Design Mechanics
Staff Contact: Department Office
C4 S2 L2 T2
Prerequisites: MATH1021 and PHYS1939

Equilibrium, Friction Systems of multiforce members, co-planar. Mass centre; centroid. Fluid statics. Plane particle kinematis; rectilinear, motion. Plane particle kinetics; equations motion; work, power, energy; impulse, momentum, impact.

IDES2132
Introduction to Materials Science
Staff Contact: Department Office
C1 S1 L1
Prerequisite: PHYS1939

Structure and properties of major engineering materials, including polymers and timbers. Including materials recognition and design potential.

IDES2142
Mechanics of Solids for Industrial Design
Staff Contact: Department Office
C3 S1 L2 T1
Prerequisite: IDES1082

Stress and strain. Bars under axial loading. Stresses and deformation due to bending. Strain energy. Flexibility and stiffness. Stress and deformation due to torsion. Helical springs.

IDES2182
Materials and Manufacturing Processes for Industrial Designers A
Staff Contact: Department Office
C2 L2 T1
Prerequisite: IDES2132

Engineering materials including polymers and timbers and their application in manufacturing processes. The range of processes.

IDES3202
Materials and Manufacturing Process for Industrial Designers B
Staff Contact: Department Office
C3 S2 L2 T1
Prerequisite: IDES2182

Economics of production processes, design constraints alternate design and manufacturing strategies. Test procedures.

IDES3212
Electrical Engineering for Industrial Design A
Staff Contact: Department Office
C2 L1.5 TO.5
Prerequisite: PHYS1939

Ohm's law, concepts of AC and DC voltage and current. The basics of transformers, motors and electromechanical product systems. Electromagnetic interference, shielding and earthing.

IDES3252
Electrical Engineering for Industrial Design B
Staff Contact: Department Office
C2 S2 L1 T1
Prerequisite: IDES3212

Feedback Systems. Thermo, active and passive control elements. Analog and digital systems. Microprocessor systems and instrumentation.

IDES3262
Production Design and Technology for Industrial Design
Staff Contact: Department Office
C2 S2 L1.5 TO.5

Basic metrology and tolerancing, introduction to plasticity theory and its application to theories for machining and forming, economics of production processes; interaction of machines and tools; principles of process selection; review of major processes, interaction of design, production quantity, materials and processes; value analysis, design constraints. Quality assurance.

IDES4382
Production Management for Industrial Design
Staff Contact: Department Office
C2 S2 L1.5 TO.5
Prerequisite: IDES2182

Methods engineering, motion and time study, financial incentives, applications to machine controlled processes, work sampling and data collection. Factory layout. Control of jobbing, repetitive batch and continuous production. Manufacturing organisations, functions, inter-relationships and information flow. Sampling techniques in quality control, control charts, quality assurance. Economic objectives of the firm. Economic measure of performance net present value, annual equivalent value and the DCF rate of return (including the incremental rate of return) and their application in the selection and replacement of processes and equipment.

MATH1011
General Mathematics 1B
Staff Contact: School of Mathematics First Year Office.
U1 S1 HPW6
Prerequisite: HSC Exam Score Required: 2 unit Mathematics (60-100) or 2 and 3 unit Mathematics (1-50) or 3 and 4 unit Mathematics (1-200). (2 unit Mathematics in this instance refers to the 2 unit Mathematics subject which is related to the 3 unit Mathematics subject. It does not refer to the subjects Mathematics in Society or mathematics in Practice. These numbers may vary from year to year.
Notes: Excluded MATH1032, MATH 1042, ECON2200, ECON2201, ECON2202

Functions (and their inverses), limits, asymptotes, continuity; differentiation and applications; integration, the definite integral and applications; inverse trigonometric functions; the logarithmic and exponential functions and applications; sequences and series; mathematical induction; the binomial theorem and applications; introduction to probability theory; introduction to 3-dimensional geometry; introduction to linear algebra.

MATH1021
General Mathematics 1C
Staff Contact: School of Mathematics First Year Office.
U1 S2 HPW6
Prerequisite: MATH1011
Notes: Excluded MATH1032, MATH1042, ECON2200, ECON2201, ECON2202

Techniques for integration, improper integrals, Taylor's theorem; first order differential equations and applications; introduction to multivariable calculus; conics; finite sets; probability; vectors, matrices and linear equations.

MATH2819
Statistics SA
Staff Contact: School Office
U1 F HPW2
Prerequisite: MATH1032 or MATH1021
Notes: Restricted to Science students in programs 6832, 6833 and course 3950.

Probability, random variables, independence, binomial, Poisson and normal distributions, transformations to normality, estimation of mean and variance, confidence intervals, tests of hypotheses, contingency tables, two sample tests of location, simple and multiple linear regression, analysis of variance for simple models.

PHYS1939
Physics 1 (Building and Design)
Staff Contact: First Year Director
C4 S2 HPW4

Energy transfer; concepts of temperature and heat; catorimetry; gas laws; phase changes and humidity; heat transmission; refrigeration. Electrostatics and electromagnetism: electric and magnetic fields; DC circuits; electromagnetic induction. Sound: wave properties;

absorption of sound. Properties of matter: atomic bond types and their relation to elasticity, plasticity and fracture; pressure in stationary and moving fluids.

Commerce Subjects

ACCT9001
Introduction to Accounting A
Staff Contact: School Office
S1 L1.5
Notes: Architecture - 2 credit points compulsory for BBuild degree course students.

An introduction for non-commerce students to the nature, purpose and conceptual foundation of accounting. Information systems including accounting applications. Analysis and use of accounting reports.

ACCT9002
Introduction to Accounting B
Staff Contact: School Office
S2 L1.5
Prerequisite: ACCT9001
Notes: Architecture - 2 credit points; compulsory for BBuild degree course students.

An introduction for non-commerce students to managerial accounting. Long-range planning, budgeting and responsibility accounting: cost determination, cost control and relevant cost analyses.

MARK2012
Marketing Fundamentals
Staff Contact: School Office
S1 L2 T2
Prerequisite: ACCT1511, ECON1102, ECON1203
Corequisite: MARK2032

Conceptual framework for developing and understanding of marketing including the marketing process, marketing environment and marketing planning. Coverage of product, service, consumer, industrial, global and social aspects of marketing. Introduction to the marketing mix, market segmentation, positioning and product differentiation

MARK2032
Consumer Behaviour A
Staff Contact: School Office
S1 L2 T2
Prerequisite: ACCT1511, ECON1102, ECON 1203
Corequisite: MARK2012

Consumer Behaviour A studies in detail the internal influences on behaviour as they apply to the consumption process. The course is designed to understand how consumers process information and the emotions and motivations that impact on that process. The focal topics include: The study of cognition, memory, learning, perception, motivation, and the communication process as these relate to marketplace behaviour.

MARK2042
Consumer Behaviour B
Staff Contact: School Office
S2 L2 T2
Prerequisite: MARK2012, MARK2032
Notes: Excluded MARK7042.

Consumer Behaviour B studies in detail the external influences on behaviour and the role of the marketplace in the sociopolitical system. Topics of study include attitude formation, the impact of reference groups and institutions on marketplace behaviour. Specific attention is given to the purchase and consumption situation in terms of individual and group purchase behaviour. In the latter particular attention is given to household and organisational buying behaviour.

MARK2052
Marketing Research
Staff Contact: School Office
S2 L2 T2
Prerequisite: ECON1203 or approved substitute, MARK2012
Notes: Excluded MARK7052.

Sources and types of marketing information relevant to marketing management. Problem definition and research design, questionnaire design, sampling, data collection, interpretation and reporting. Management control of research including briefing, evaluation of proposals and distinction between research results and marketing implications. Use of continuous research and new developments in market research.

MARK3073
Brand Management
Staff Contact: School Office
S1 L2 T2
Prerequisite: MARK2012
Notes: Excluded MARK7073.

An overview of marketing planning for products and services with a focus on planning at the brand level. Marketing concepts such as segmentation, differentiation, positioning and product lifecycle will be re-examined from a strategic perspective. The marketing mix will be expanded to address strategies of new product development, pricing, distribution and promotions management. Case analysis will be introduced to develop strategic thinking.

MARK3083
Strategic Marketing Management
Staff Contact: School Office
S2 L2 T2
Prerequisite: MARK3073
Notes: Excluded MARK7083.

Concepts introduced in previous subjects will be broadened to address issues at the business unit level. Corporate mission, competitive stance of the organisation, pricing policies, trade relations, internal marketing and logistics will be addressed. The management of organisational resources such as financial and human resources are considered using, for example, portfolio analysis. Decision support systems are also examined.

General Education Program

12 credit points of General Education Program subject taken throughout the course.

Town Planning

Core Subjects

PLAN1111
Introduction to Planning
Staff Contact: Mr S. Harris
C14 S1

Nature and scope of planning and planning education. Basic planning skills and knowledge. Problem solving techniques. The physical, social, economic and political environment of planning, the methodology of planning, and the activities of planners. Collection, analysis, recording and presentation of information; organisation of problems; preparation of proposals.

PLAN1121
Planning Studies
Staff Contact: A/Professor R. Zehner
C14 S2

Lectures, seminars and projects concerning principles of research related to assessment of the urban environment. Role of planning studies in the planning process, relationship to planning objectives and decision making. Research Methodology: social science research methods. Study design, sampling techniques, questionnaire design, data collection, data analysis using packaged computer programs. Introduction to statistics. Introduction to demographic concepts and methods. Social Science Research and Planning Issues: a series of student-led seminars that focus on topics of importance to planning (e.g.,measuring environmental quality, social indicators, social mix, community design and crime) which have been studied from a variety of viewpoints using various research techniques.

PLAN1131
Local Planning 1
Staff Contact: Dr T. Lukovich
C14 S1
Prerequisites: PLAN1111 and PLAN1121

A lecture, seminar and practical exercise program dealing with the principles and practice of planning, from the small scale of housing to the larger scale of urban districts. Factors which influence the shape of urban areas, and which affect the quality of life within them: physical factors - noise, sunlight and shade, microclimate and wind, soils and other site engineering factors, traffic and accessibility, design and aesthetics; socio-economic factors - demography, ethnicity, and politics. Processes of urban change. Students undertake reading and exercises in integrated planning, are brought to the level at which they will be able to prepare simple local environmental studies, and to assess development applications with a full awareness of the issues to be considered and the implications of their decisions.

PLAN1141
Regional Planning 1
Staff Contact: Dr P. Murphy
C14 S2
Prerequisites: PLAN1111 and PLAN1121

Introduction to major land-use and infrastructure patterns, economic and social processes, in large urbanised and less urbanised regions; examples of the latter include, respectively, metropolitan Sydney and the far north coast of NSW. Biophysical, social, and economic dimensions of regional systems, and the typical public management issues to which their operation gives rise, are analysed. Regional management is presented as a means of meeting social and economic objectives of the community, both in itself and by providing a policy framework within which local government planning operates. Lecture and tutorial format.

PLAN1151
Planning Law and Administration
Staff Contact: School Office
C14 S1
Prerequisites: PLAN1131 and PLAN1141

Theory and practice of techniques and administrative procedures needed to transform policies and details of planning proposals into documents which have legal effect.

The subject comprises three parts, Planning Law, Planning Administration and Land Valuation. Planning Law: conceptual/theoretical nature of the law; relationship between the environmental context, the Crown, the parliament and the judiciary; ways in which the laws are made and promulgated, relationship between laws and regulations, the legal concept of property in land, definition of various legal concepts of interests in land, Australian Constitution and legal relationship between Commonwealth and States, particularly in regard to matters affecting land, the place of administrative law. An historical introduction to planning law in Australia. A detailed account of principles and practice of strategic and statutory planning in Australia. State environmental planning policies, regional environmental plans, local environmental plans, the role and function of environmental studies, statutory mapping, the development application process, the appeal process, the settlement of disputes. Planning Administration: administrative context within which planning operates as a function of government, especially the role and function of statutory bodies in the planning and environment area, the administration of the planning function at national, state and local levels, the art of management, administrative theory, personnel administration, the role and responsibility of the professional planner in the public and private sector. Land Valuation: principles and practice of land valuation in Australia. Definitions of value, methods of valuation, the role of the valuer, compensation and betterment.

PLAN1161
Local Planning 2
Staff Contact: Ms S. Thompson
C9 S2
Prerequisites: PLAN1131 and PLAN1151
Corequisite: PLAN1162

The subject focuses on the concept of the humane city and on the detail of living in urban communities. The subject aims to develop an understanding of the nature of different community groups, their characteristics, special needs and difficulties. Planning policy is critically assessed in terms of

its ability to respond to different community groups. Practical skills and research approaches are explored; better communication in conflict situations is developed. The subject is undertaken by a series of lectures, site visits, critical readings, practical exercises and seminars.

PLAN1171
Regional Planning 2
Staff Contact: Dr R. Freestone
C9 S1
Prerequisite: PLAN1151 and PLAN1141
Corequisite: PLAN1172

Treats, at a higher level, selected issues raised in Regional Planning 1. Current issues in regional spatial and economic development planning, both in Australia and in other parts of the world, are examined. Detailed treatment is given to strategies for the management of complex regional systems. Teaching is mostly in seminar format.

PLAN1181
Thesis
Staff Contact: A/Professor R. Zehner
C20 F

A specialized individual study taken under staff supervision with the object of allowing students either to gain knowledge in some aspect of town planning which is not covered in the course or to increase their knowledge of some aspect which has been covered. The study does not require original experimental research for the purpose of discovering new facts or the testing of an hypothesis; neither is it an essay permitting the student's unsupported opinion. The thesis topic is submitted by the student for the approval of the Head of the School of Town Planning at the end of Year 4 of the course and the completed thesis is submitted for examination towards the end of Year 5.

Students participate in seminars on report and thesis writing during Year 5 and present progress reports on their theses at the seminars. The subject is not complete until a bound copy has been submitted.

Related Subjects

PLAN1162
Integrated Planning Project 1
Staff Contact: Ms S. Thompson
C8 S2
Corequisite: PLAN1161

Each year a project is designed which requires knowledge and skills from the several sub-disciplines of planning. The aim of the project is to further develop skills in the complementarity of knowledge and perspectives typically required to deal with complex problems in the real world. Depending on the topic under investigation, students may be required to attend an off-campus survey camp of up to one week's duration. The project will involve research, analysis, planning and design, and implementation.

PLAN1172
Integrated Planning Project 2
Staff Contact: Dr R. Freestone
C10 S1
Corequisite: PLAN1171

Each year a project is designed which requires knowledge and skills from the several sub-disciplines of planning. The aim of the project is to further develop skills in the complementarity of knowledge and perspectives typically required to deal with complex problems in the real world. Depending on the topic under investigation, students may be required to attend an off-campus survey camp of up to one week's duration. The project will involve research, analysis, environmental planning and implementation.

PLAN1301
Practical Experience
Staff Contact: School Office

For the purpose of practical experience covered by Session 2 of Year 3 and Session 1 of Year 4 the student shall be engaged in approved employment related to the course; for example, in government planning and housing authorities, in municipal and shire councils preparing or implementing town and country planning schemes, in private development companies or with planning consultants. The type of employment proposed must be submitted to the Head of the School of Town Planning for approval.

Students are expected to attend a seminar to discuss their experience approximately half way through their year off campus and are required to submit a diary describing and assessing their experience when they enter Year 4, Session 2.

PLAN2111
Professional Practice
C2 S2

Planning as a profession, professional standards, ethics, preparing studies and plans, preparing and giving evidence, briefing and consulting, management, corporate planning, continuing education.

PLAN2112
The Development Process
Staff Contact: School Office
C6 S2

Introduction to land development process in N.S.W. Basics of investment analysis, elemental costing and marketing. Society, the market place, land development and the role of town planning.

PLAN2114
History of Town Planning
Staff Contact: Dr R. Freestone
C3 S2

Planning theories and practices before the Industrial Revolution and in the late 19th and early 20th century. The birth and development of the town planning profession in Australia and overseas. The development of Australian towns and suburbs. Recent planning theories and practices. The material is covered through lectures, essay projects and discussion seminars.

PLAN2211
Environmental Science 1
Staff Contact: Dr P. Murphy
C3 S1

Elements of the bio-physical environment which may have direct significance for people and their occupation of the earth. These elements are considered both as controls on peoples' activities and as targets for society's impacts, in ways relevant to the work of urban and regional planners. Physical processes directly related to planning problems;

human occupation of areas subject to natural hazards; impact of urbanization on the environment; environmental issues in general; skills in map interpretation.

PLAN2212
Transportation Planning
Staff Contact: Dr T. Lukovich
C4 S2

The relationship between the planning and management of transport and the planning and management of land-use and the environment. Transport demand and supply at strategic, tactical and operational levels; networks; policies for the integrated management of precincts, corridors and centres; transport assessment of development applications; environmental assessment of transport proposals. At least one computer application is tested, and there are one further assignment and a number of small exercises to develop basic skills in analysis.

PLAN2213
Urban Design
Staff Contact: Dr T. Lukovich
C4 S2

The aim is to develop a greater awareness of the character and quality of our physical surroundings and to provide some knowledge as to how improvements can be made. Slide lectures and site visits are used to illustrate good or interesting developments in Australia and overseas. Townscape elements are studied and performance standards and other controls affecting the appearance are discussed. Small design exercises and, where feasible, at least one bigger project dealing with a real situation are undertaken.

PLAN2215
Engineering A
Staff Contact: Dr T. Lukovich
C2 S1

Transport engineering: road hierarchy, road geometry, arterial roads, access streets, intersections, cross sections, road layouts in residential areas, public transport. Traffic and environment: accidents and safety, noise, air pollution. Traffic engineering: characteristics of road vehicle, driver, and road system, levels of performance, traffic management.

PLAN2216
Engineering B
Staff Contact: Dr T. Lukovich
C1 S1

The provision of public utilities: town water supplies, sewerage, drainage, flood management, electricity and gas supply, telecommunications, waste disposal.

PLAN2217
Urban Society and Sociology
Staff Contact: A/Professor R. Zehner
C4 S1

A series of lectures and seminars on the relationship between planning and the social structure of urban areas with reference to both social theorists and empirical studies. The origins and concerns of the discipline of sociology and of urban sociology. Urban effects on living patterns. The relationships between different groups, including town planners, in the urban context. The evaluation of planning objectives and outcomes. Sociological views of the planner's role in contemporary urban society.

PLAN2218
Heritage and Conservation Planning
Staff Contact: Dr R. Freestone
C4 S2

Definitions and philosophy of heritage and conservation planning. Setting objectives and formulating policy, criteria for selecting and assessing heritage and conservation areas; planning considerations to protect and enhance the community fabric; legislation and mechanisms for heritage and conservation existing in New South Wales and elsewhere; potential; some effects of heritage and conservation (physical, social, economic); attitudes to heritage and conservation. Case study of selecting and planning a heritage and/or conservation area.

PLAN2221
Environmental Science 2
Staff Contact: Dr P. Murphy
C3 S1

Introduction to methods used to incorporate consideration of physical environmental variables into the planning process. Environmental impact studies.

PLAN2311
Politics, Power and Policy
Staff Contact: School office
C4 S2

The aim of the subject is to create an understanding of the complex forces and processes (political, ideological, economic etc) which operate in the management of urban areas. Issues covered will include relationships between urban government, politics, planning, the community and various interest groups. Urban theory. The relationship between public policy and planning. The social context of planning. The different social needs within Australian society. The formulation and implementation of policy.

PLAN2321
Planning Law and Administration 2
Staff Contact: School Office
C4 S2

The objective of this subject is to provide practical guidance on the operation of the Land and Environment Court, the significance of court judgments and the role of planners. While emphasis is placed on taking steps in plan making, urban design and development control to avoid planning appeals the major concern is with preparing for an appeal, legal research, preparation of evidence, appearing as a professional witness and small-group psychology.

PLAN2411
Communication Techniques 1
Staff Contact: Ms S. Thompson
C4 S1

Graphics as an effective communication medium for town planners. Technical information and studio experience in essential skills for creative graphics as a functional tool for communicating factual information to peers and clients. Exercises in basic drawing, drafting and lettering.

PLAN2413
Computers and Information Systems
Staff Contact: A/Professor R. Zehner
C3 S2

Computer use in the planning professions. Components of computers and their interrelationships; time sharing, batch and stand-alone processing. Exercises using integrated software including data bases, spreadsheets, graphics and word processing. Planning information systems: applications, establishment, maintenance.

PLAN2421
Communication Techniques 2
Staff Contact: Mr S. Harris
C4 S2

The range of non-graphic techniques of planners' information communication: reports and letters - language, structure, style; audio-visual presentation - video and slide/tape; public speaking - telephone, one-to-one, small groups, large meetings; physical models - basic techniques and uses.

PLAN7128
Research Methodology
Staff contact: A/Professor R. Zehner

C6 SS

Social science research methods. Sampling techniques, questionnaire design, interviewing, data processing, use of packaged computer programs. Introductory statistical methods, applications to data.

PLAN7212
Economic Issues in Planning
S2

The market mechanism and market failure. Macroeconomic policy, investment patterns and economic change in cities and regions. Financing urban services and the impact of growth on local government. Economic impacts of development proposals.

Planning Electives

Students are required to select an elective from the topics listed (subject to availability) for the session where such an elective is part of the course program. Students are permitted to select electives offered by other schools subject to approval of the lecturer concerned and the Head of the School of Town Planning.

PLAN3000
Planning Elective
Staff Contact: School Office
C4 F or SS

For initial enrolment only.

PLAN3111
Local Planning 3
Research and design into a topic at the neighbourhood, district or town scale of current concern in planning.

PLAN3112
Regional Planning 3
C4 F or SS

Planning methodology in metropolitan areas; a critical overview and a detailed examination of planning processes, policies and programs for selected areas/functions/institutions.

PLAN3113
Urban Studies
C4 F or SS

An evaluation of the effects of one or more aspects of the urban environment on individuals and/or communities. Emphasis on individual research which expands the student's experience in methodological and substantive areas beyond what is encountered elsewhere in the course.

PLAN3114
Social Planning
C4 F or SS

Planning responsibilities in equalizing resources distribution. Discussion of consensual goal definition and achievement versus social engineering. Popular participation in planning: why, where and how. Methodology and aids to social planning. Policy formulation and case studies. Parts of the program may be presented by and with practitioners in the field and include role playing games and a problem solving essay. Involvement in an area project may be substituted for some of the program.

PLAN3211
Residential Planning
F or SS

Procedures and legal controls over land subdivision in NSW, land studies in terms of climate, terrain, vegetation, slopes, soils, drainage, etc; land development in relation to earthworks, roads, drainage and other utilities; detailed consideration of road and drainage design; subdivision design, land values and land economics. Innovatory designs.

PLAN3212
Rural Planning
C4 F or SS

Original research into a topic of current concern in rural planning.

PLAN3213
Urban Conservation
C4 F or SS

Definitions and philosophy of urban conservation; setting objectives and formulating policy, criteria for selecting and assessing conservation areas; planning consideration to protect and enhance the urban fabric; legislation and mechanisms for urban conservation existing in NSW and elsewhere; potential; some effects of urban conservation (physical, social, economic); attitudes to urban conservation; case study of selecting and planning a conservation area.

PLAN3214
Environmental Psychology
C4 F or SS

The environment considered subjectively and objectively. The individual as a social and psychological rather than a strictly economic being. The significance for decision-making, of individual and group values held on the environment (natural and built), from individual decision on where to live through to government decisions on policy.

Forces influencing the formation of these values. The distinction between value held and actual behaviour. The emergence of different viewpoints and resultant conflicts. The role of planning in understanding, anticipating and reconciling such conflicts.

PLAN3216
Transport and Environmental Management
C4 F or SS

The integration of transport and environmental management at the local level.

PLAN3217
Urban Design 2
C4 F or SS

Research into and design of an area, from an urban design perspective.

PLAN3311
Planning Law and Administration 3
C4 F or SS

Aimed at increasing knowledge and awareness of issues in the general areas of Planning Law, Planning Administration and Statutory Planning.

PLAN3414
Computer Applications in Planning 1
C4 F or SS

Computer applications in planning and related fields. An exploration and documentation of available software of use to the planning profession which has not been covered earlier in the course. Students also may develop and document their own planning-related software.

PLAN3421
Computer Applications in Planning 2
C4 F or SS

Exploration in depth of an application of personal computers in planning.

Subjects Offered to Other Schools

PLAN7123
Environmental Planning
Staff Contact: School office
S2 L2

PLAN7124
Environmental Planning
Staff Contact: School office
S2 L2 T2

The aim of this subject is to provide the student with an understanding of the objectives of environmental planning and how the system operates with particular reference to New South Wales. The nature of planning philosophy, environmental law and administrative structures are the core aspects of the course. Within this framework specific areas of concern are introduced and discussed the central business district of cities, housing and equity, land-use and transport interaction, urban design, location theory, and urban and rural conservation.

As planning is a temporal concept, historical, contemporary, and future themes are built into the subject. At the completion of the program the student should understand the environmental planning process and the individual's rights under it.

PLAN7124 is also offered as a half elective (PLAN7123) consisting of the lecture sessions only. Assessment is by written assignment, tutorial paper, and class participation. The assignment is based on the lecture material, and students are also required to prepare a written paper for tutorial discussion.

PLAN9111
Town Planning
Staff Contact: Ms S. Thompson
S1 L2 T1

Introduction to the purpose, scope and application of planning. The urban planning process. Objectives and means of planning environmental policies, regional environmental plans, local environmental plans. Problems in planning: equitable distribution of resources. Environment and environmental impact statements. Planning law and administration. Future of cities.

Landscape Architecture

LAND1130
Landscape Graphics 1
Staff Contact: Ms E. Mossop
S1 L2 T2

Basic techniques of creative drawing with emphasis upon two dimensional graphics, use of pencil techniques. Assorted point media. Basic technical drawing with emphasis on two-dimensional graphics. Pencil techniques, drafting conventions, layouts, lettering, instruments and scale presentation. The principles and application of orthographic, axonometric and isometric projection. Development of plan and section drawing techniques.

LAND1131
Introduction to Computer Applications
Staff Contact: Ms A. Todd
S1 L1 T1

The use of computers by landscape architects. Necessary knowledge to make full use of opportunities that the computer can provide including time sharing, batch processing and the use of graphic output. Components of the computer and their interrelationships, data processing, file management, use of library programs, interpretation of results, basic programming.

LAND1132
Introduction to Landscape Architecture
Staff Contact: Ms H. Evans
S1 L1

Introduction to the discipline of landscape architecture. Outline of the program and its major stands of planning; design and implementation; natural and social sciences; skills (graphic, verbal and written communication). Brief exposure to examples of landscape planning, design and implementation throughout history, both overseas and in Australia. Issues and opportunities for landscape architects.

LAND1170
Design 1
Staff Contact: A/Professor F. Thorvaldson; Ms C. Duffy
S1 L1 T2

Basic visual design exploration to appreciate the language of design elements and principles. Investigation into the methods of expression and media used in art and design. Practical exercises in communication of ideas in both two and three dimensional projects. Sketching, painting and construction exercises in both studio work and assignments.

LAND1210
Landscape Analysis
Staff Contact: Ms A. Todd; Mr C. Burton
S2 L2 T4
Prerequisites: GEOG1051, BIOS3004, GEOL5110, LAND1130
Notes: This subject includes a number of lectures and field trips for the purpose of practical observation. Students are expected to make their own transport arrangements for these trips.

Observation and interpretation of both physical and biological environment and their interrelationships. Landscape character through sensory inputs and prehistory. Fundamental characteristics of biological systems, with emphasis on relationships with the physical environment, particularly geology, soils. Survey of Australian plant communities and associated fauna with particular emphasis on the Sydney Region. Recording and presentation techniques associated with landscape surveys, field excursions.

LAND3151
Landscape Management 1
Staff Contact: Mr D. Crawford; Ms A. Todd
S1 L1 T1
Prerequisite: LAND1210, LAND2110

Basic methods and techniques of resource data collection, analysis and valuation. Emphasis on an ecological approach to the investigation of resources and their management in relation to a range of land use types.

LAND3252
Landscape Management 2
Staff Contact: Mr D. Crawford; Ms A. Todd
S2 L1 T1
Prerequisite: LAND3151

Planning and management of both natural and cultural landscapes. Historical review of landscape planning and management in Australia and overseas. Examination of a range of landscape management methodologies and processes. Projects will include critical evaluation of three case studies.

LAND1211
Horticulture for Landscape Architects
Staff Contact: Ms A. Todd; Mr J. Stowar
S2 L1 T1
Prerequisite: BIOS3004

General horticultural study of propagation techniques, current nursery practice, impact of weeds, plant diseases, planting techniques and forestry practice. Plant collecting and identification.

LAND1230
Landscape Graphics 2
Staff Contact: Ms E. Mossop
S2 L2 T2
Prerequisite: LAND1130

Advanced techniques of creative drawing with emphasis on various media. Advanced technical drawing techniques including the use of various media, with emphasis on three-dimensional graphic concepts. Investigation of the basic principles of perspective theory. Application of perspective drawing to landscape architectural works, including landforms and other elements.

LAND1270
Design 2
Staff Contact: A/Professor F. Thorvaldson; Ms C. Duffy
S2 L1 T2
Prerequisite: LAND1170, LAND1130

Design theory and processes of spatial design and composition in both two and three dimensional projects, with references to present day and historical examples. Explorations of the geometry of form and principles of organisation. Development of a definite thought process and sequence of design development using two and three dimensional exercises in selected media. Concepts of abstraction and naturalism. Studio work includes sketching, photography and model making in order to develop conceptual awareness, perceptual sensitivity and visual literacy.

LAND1290
Landscape Materials and Construction
Staff Contact: Ms H. Evans
S2 L1 T2

Materials science: the relationship between the properties and structure of materials. The derivation, conversion or production of materials commonly used in landscape construction. Investigation of structures: elements and systems, loads and structural requirements and basic structural form.

LAND2110
Environmental Sociology for Landscape Architects
Staff Contact: Ms H. Armstrong
S1 L1 T1

Perception of human requirements through behavioural studies, including territoriality and personal space identity. The effect of environmental changes on people. Sociological techniques for understanding user requirements. Post design evaluation. Application of simple statistical methods.

LAND2170
Landscape Design 1
Staff Contact: Ms E. Mossop
S1 L2 T8
Prerequisite: LAND1270, LAND1210, LAND1230 (OR LAND3203 see p.24)

Basic Design. The interpretation of aesthetic values of sites and environments used in design exercises. Freehand drawing in the field. Applied Design. Logical design process applied to simple landscape design exercises with emphasis on site survey, site analysis and functional

analysis. Applied graphic presentation techniques for site survey and analytical drawings.

LAND2171
History of Landscape Architecture
Staff Contact: Ms H. Armstrong; Mr C. Burton
S1 L2

Chronological development of cultural landscapes described by the investigation of philosophical, aesthetic and social aspects of Eastern and Western cultures with an emphasis on the Australian context. Changing attitudes to nature as reflected in land uses. The development of garden design and landscape architecture.

LAND2190
Landscape Technology A
Staff Contact: Ms H. Evans
S1 L1 T2
Prerequisite: LAND1290

Site surveying and mapping techniques. Land surface manipulation including contour planning and basic earthworks. Field work exercises.

LAND2270
Landscape Design 2
Staff Contact: Professor J. Weirick
S2 L2 T8
Prerequisite: LAND2170

Basic Design. Aesthetic appreciation of chosen environments both urban and natural. Graphic communication using selected media. Seminars on design philosophy. Applied Design. An understanding of materials and construction as applied to a range of medium scaled projects with an emphasis on practical relationships between design, use of appropriate materials and construction detailing.

LAND2271
Planting Design
Staff Contact:Ms H.Armstrong
S2 L1 T1
Prerequisite: LAND1211, LAND2170

Plants as design elements; management of plant designs. Plant designs for specific sites; water plants, indoor plants, roof gardens, industrial and reclaimed sites. Observation of existing landscape schemes. Documentation of plant design.

LAND2290
Landscape Technology B
Staff Contact: Ms H. Evans
S2 L1 T2
Prerequisite: LAND2190

Landscape construction methods, including documentation of grading, drainage, earthworks and structures. Application of materials in detailed design development.

LAND3130
Research Methods
Staff Contact: Ms A. Todd
S1 L1

Investigation of various research methods with application to study in landscape architecture. Development of the critical logical and stylistic skills involved in researching, writing and presenting essays, thesis, articles, papers and reports.

LAND3170
Landscape Design 3
Staff Contact: Ms H. Evans
S1 L2 T6
Prerequisites: LAND2270, LAND2110, LAND2290

More advanced design exercises within the context of both natural and urban environments. Emphasis is on gaining a knowledge of site planning with specific reference to sites located within the geological areas of the Sydney Region. Projects are of a large scale and further emphasis is directed towards consideration of appropriate environmental management and realisation of required maintenance ends in relation to design solutions.

LAND3190
Landscape Engineering A
Staff Contact: Mr P. Bliss
S1 L2 T1
Prerequisite: LAND2290, LAND2270

Design and construction techniques related to basic civil works, including earthworks, hydraulics, municipal services, urban and rural drainage. Interpretation of engineering design and development documents. Projects incorporating detail resolution of civil works.

LAND3191
Professional Practice A
Staff Contact: Ms E. Mossop
S1 L2
Prerequisites: LAND2270, LAND2290

The Landscape Architect's responsibilities in Law. A study of the development of Law in Australia. Project procedure, the stages of a capital development project. Cost planning and feasibility studies. Construction contracts, including tender documentation, subcontract conditions and subconsultative responsibilities. The specification, its function and styles. A comparative analysis of various standard contract forms.

LAND3270
Landscape Design 4
Staff Contact: Ms H. Evans
S2 L2 T6
Prerequisite: LAND3170

Experience of dealing with medium to large scale projects of specific land uses such as schools and residential sub-divisions, in which research is encouraged to assess environmental impacts, both physical and social. Emphasis on practical solutions and the preparation of contract documents including preliminary costing of design proposals.

LAND3290
Landscape Engineering B
Staff Contact: Mr P. Bliss
S2 L1 T2
Prerequisite: LAND3190, LAND3170

Design and construction techniques related to transport planning and route alignment. Overview of the principles of transportation systems including railway permanent ways, airports, ports and harbours.

LAND3291
Professional Practice B
Staff Contact: Ms H. Evans; Mr P. Knox
S2 L2
Prerequisites: LAND3191, LAND3170

Preparation of contract documentation, including technical sections. Contract administration and project supervision, the role of the consultant. Tender evaluation, award of contracts, site inspections, variation procedure, claims and certificate issue and general site administration. Practical completion and final certification. The rights and duties of the principal and contractor, including the relationship with consultants. Post-contract activities, maintenance manuals, appraisal of design and construction, and retention of records.

LAND4031
Landscape Thesis A
Staff Contact: A/Professor F. Thorvaldson; Ms A. Todd
S1 or S2 HPW10
Prerequisite: LAND3130, LAND3270

A specialized individual study, enabling each student to gain or extend knowledge and understanding in some aspect of landscape architecture. The thesis is essentially evidence of this individual study, under staff supervision, which is completed as two subjects - Landscape Thesis A followed by Landscape Thesis B, culminating in a written document deposited in the Faculty library.

The Landscape Thesis A subject allows each student to carry out the required research, organisation or material, and writing in order to submit a complete draft of a written thesis at the end of Session. This one session subject is graded as either Satisfactory or Fail. The proposed topic area and title must be submitted and approved by the Head of the School of Landscape Architecture prior to enrolment in Landscape Thesis A.

LAND4032
Landscape Thesis B
Staff Contact: A/Professor F. Thorvaldson; Ms A. Todd
S2 or S1 HPW4
Prerequisite: LAND4031

The Landscape Thesis B subject, follows on from Landscape Thesis A and allows each student to refine the draft material submitted previously. It also allows the preparation of illustrative material and completion of all necessary references and bibliography, before the submission of the final unbound manuscript for assessment, usually in week 8. The unbound manuscript is assessed by at least two readers and returned with corrections noted (if necessary), so that a bound copy of the thesis can be lodged with the School by the end of the Session. This one session subject is graded in accordance with the normal University grading system, although it reflects the assessment and worth of the final thesis document prepared over two sessions in both landscape Thesis A and Landscape Thesis B.

LAND4170
Landscape Design 5
Staff Contact: Professor J. Weirick
S1 L1 T2
Prerequisites: LAND3270, LAND3250

Investigation of the relationship between design and planning issues through a major Regional Study. Preparation of a masterplan for a selected site to be used in conjunction with Landscape Design 6. Discussions on contemporary environmental planning, design and management issues.

LAND4171
Urban Landscape Design
Staff Contact: Professor J. Weirick; Ms H. Armstrong
S1 L1 T5
Prerequisites: LAND3270

An exploration of the relationships within the fabric of the urban environment including concepts of city functions and the analysis of disparate parts of the city with physical design being the primary focus. Context and place, history and theory are considered as well as analytical techniques. Design studios, lectures and seminars.

LAND4270
Landscape Design 6
Staff Contact: Ms E. Mossop
S2 L2 T10
Prerequisites: LAND4170, Four months approved practical experience

Students are called upon to employ all the knowledge, skill and understanding they have gained in previous years. The graduating design project follows from LAND4170 Landscape Design 5 and involves sketch design, detail design development and construction documentation. Emphasis on professional standard. Graduating project is related to the natural, urban or rural environment.

Landscape Electives for Students of Architecture and Related Disciplines

The following landscape electives require attendance of two hours per week over a period of 14 weeks. They are offered subject to demand and availability of resources, consequently students are advised to contact the School before finalizing their program. Credit point values specifically refer to students of Architecture enrolled in courses 3260 or 3265.

LAND0002
Site Planning Elective
Staff Contact: Professor J. Weirick
C6 S2 L2

Recognition of natural processes and factors in site analysis. Opportunities and constraints with respect to potential development. Development of a logical approach to site planning.

LAND0003
Planting Design Elective
Staff Contact: Professor J. Weirick
C6 S2 L2

The selection and use of plant materials within the built environment with particular reference to visual and ecological considerations.

LAND0004
Urban Landscape Elective
Staff Contact:Professor J. Weirick
C6 S1 L2

The treatment of spaces between and upon buildings 'hard' and 'soft' landscape treatments. Functional uses of open space within the built environment and the design of street furniture.

LAND0005
Recreation Planning Elective
Staff Contact: Professor J. Weirick
C6 S1 L2

Various recommended provisions for open space allocation for recreation are examined and classified in terms of contemporary needs. Specific requirements of a range of recreation facilities are studied in detail and successful Australian and overseas examples evaluated.

Subjects Offered to Other Schools

LAND0001
Landscape Architecture
Staff Contact: Ms H. Evans
C3 S1 or S2 L2

Landscape and planting within the built environment with particular reference to functional, ecological and aesthetic considerations; the treatment of spaces between buildings and in road reservations; hard and soft landscape treatments; establishment and maintenance cost.

Botany

BIOS3004
Botany for Landscape Architects
Staff Contact: Dr R. Vickery
S1 L2 T3

The life of flowering plants from germination to seed-set. An introduction to non-flowering plants. How plants grow and what they need from the environment. Their structure. Observing plants and reading and writing about them.

Mines

GEOL5110
Geology for Landscape Architecture
Staff Contact: A/Prof A.D. Albani
S1 L1

Minerals and rocks. Igneous, sedimentary and metamorphic rocks; their origin and their relationship with the landscape. Geological structures and their graphic representation. Interpretation of geological maps and sections.

Geography

GEOG1051
Global Environmental Problems and Processes
Staff Contact: Dr I. Prosser
S1 L2 T2

The subject outlines the principles and processes necessary to appreciate the physical background behind major global-scale environmental problems. Principles and processes include the linkages between the lithosphere, hydrosphere and biosphere, atmospheric circulation, energy and radiation balance and ecosystem function. Problems covered are the issues of desertification, deforestation, 'greenhouse', ozone depletion, energy conservation and pollution.

Faculty of Architecture Graduate Enrolment Procedures

All students enrolling in graduate courses should obtain a copy of the free booklet Enrolment Procedures 1993 available from School Offices and the Admissions Office. This booklet provides detailed information on enrolment procedures and fees, enrolment timetables by faculty and course, enrolment in miscellaneous subjects, locations and hours of cashiers and late enrolment.

Higher Degrees - Research

Following the award of a first degree in Architecture, Building, Industrial Design, Landscape Architecture or Town Planning of the University of New South Wales or other approved university, graduates may apply to register for study leading to the award of the degree of:

1. Doctor of Philosophy (available in each School)
2. Master of Architecture
3. Master of Building
4. Master of the Built Environment
5. Master of Industrial Design
6. Master of Landscape Architecture
7. Master of Town Planning
8. Master of Science (available in Architecture and in Town Planning)

For details concerning these degrees see Conditions for the Award of Higher Degrees later in this handbook or write to The Head of School concerned.

Summary of the Conditions for the Award of a Masters Degree

1. Every candidate for the degree shall be required to carry out a program of advanced study, to take such examinations, and to perform such other work as may be prescribed by the Faculty. The program shall include the preparation and submission of a thesis embodying the results of an original investigation or design relative to architecture, building, industrial design, landscape architecture, town planning or the built environment. The candidate may also submit any work published, whether or not such work is related to the thesis.

2. No candidate shall be considered for the award of the degree until the lapse of four complete sessions from the date from which the registration becomes effective, save that in the case of a candidate who has obtained the degree of Bachelor at Honours level or who has had previous research experience, this period may, with the approval of the Faculty, be reduced by not more than two sessions.

3. For each candidate there shall be two examiners appointed by the Academic Board, one of whom shall, if possible, be an external examiner.

4. Every candidate shall submit three copies of the thesis as specified in the University Calendar, and it shall be understood that the University retains three copies of the thesis and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act 1968, the University may issue the thesis in whole or in part in photostat or microfilm or other copying medium.

Higher Degrees - Coursework

In addition to the facilities available for the pursuit of higher degrees by research, formal courses are offered as follows:

1. Master of Science (Acoustics)
2. Master of Project Management
3. Master of Science (Industrial Design)
4. Master of the Built Environment (Building Conservation)
5. Master of Industrial Design
6. Master of Construction Management
7. Master of Landscape Planning
8. Master of Architecture
9. Master of Architectural Design
10. Graduate Diploma in Landscape Planning
11. Graduate Diploma in Town Planning
12. Graduate Diploma in Housing and Neighbourhood Planning.

Duration

Each course is programmed over one year full-time or two years part-time study in the University, involving attendance on two or three evenings per week. Subjects in the Master of Project Management course are normally timetabled on two evenings and one afternoon per week. Subjects in the Master and Diploma of Landscape Planning courses are normally timetabled on three afternoons per week.

The Diploma of Housing and Neighbourhood Planning, Master of Architecrual Design and the Master of Science (Acoustics) are under review, and no new enrolments in these courses are currently being accepted.

Graduate School of the Built Environment
Studies in Building Conservation and Urban Design

Head of School
Professor A.R. Toakley

Chair, Graduate School Executive Committee
Dr B.H. Judd

The purpose of the Graduate School is to provide opportunities for inter-disciplinary postgraduate research and advanced study in the area of the built and natural environment across the various disciplines that make up the Faculty of Architecture. It offers research degrees at doctoral and masters level as well as a coursework masters degree in Building Conservation. An additional program in Housing Studies is currently being planned which will involve both research and coursework.

Areas of built-environment research of particular interest to the school include Urban Design and Planning, Urban History, Urban and Building Conservation, Housing, Environment-Behaviour Relationships, and Facilities Planning and Management. Research students follow a largely self-determined program of study with joint supervision arranged from the wide range of expertise available in the Faculty and, where necessary, from elsewhere in the University.

The School welcomes applications from graduates in disciplines represented in the undergraduate programs of the Faculty of Architecture, as well as from graduates in any other relevent discipline. Prospective students are advised to contact the Head of School to discuss their academic interests and objectives before lodging a formal application.

1120
Doctor of Philosophy

Doctor of Philosophy
PhD

This is a research degree requiring an original and significant contribution to knowledge in an approved subject.

2240
Master of the Built Environment

Master of the Built Environment
MBEnv

This degree provides for research work of an interdisciplinary nature relevant to the built environment. Graduates holding a minimum four year degree of Bachelor of the University of New South Wales or other approved university in any appropriate discipline may apply to register for the degree of Master of the Built Environment by research. General conditions governing registration for this degree are given later in this handbook.

8130
Master of the Built Environment (Building Conservation) Course

Master of the Built Environment (Building Conservation)
MBEnv

Course Co-ordinator
Mr D.M. Godden

This course consists of graduate work in the major areas of building conservation. It is designed for graduates who wish to specialize in the conservation of the built environment by working actively in the preservation, restoration, reconstruction, adaptation or related treatments of existing structures.

Admission Requirements

The conditions governing registration as a candidate for this course are given later in this handbook. In summary, admission is open to applicants who have completed at least a four year full-time university course in an appropriate area of an approved discipline.

In certain cases it may be necessary for applicants to complete a program of preparatory subjects set out by the Higher Degree Committee of the Faculty of Architecture, whose decision is influenced by the education and experience of each applicant.

Course Structure

The minimum duration of the course is two sessions of full-time study or four sessions of part-time study. The availability of the full-time and part-time programs of study will depend upon student demand and the University's resources at that time.

The course comprises 36 credit points, each credit point representing class contact of approximately 14 hours.

Full-time study normally requires an attendance of 18 hours per week while part-time study normally requires attendance of an average of 9 hours per week for the duration of the course.

Most of the work is done in the School, but approved practical experience forms an important component of the course. The program is so arranged that eminent visitors as well as guest lecturers may participate.

Normally, subjects are timetabled on one afternoon and evening, and one other evening each week. In addition to timetabled commitments, students may occasionally be required to attend for site visits and building inspections.

The requirements for this course include a period of at least eight weeks of approved practical experience.

Course Subject Areas (Total Contact Hours)

GSBE0102	Contextual Studies	14	1
GSBE0202	Architectural History	42	3
GSBE0302	Conservation Management	84	3
GSBE0402	Analysis and Documentation A	56	4
GSBE0502	Analysis and Documentation	84	6
GSBE0602	Conservation Technology A	28	2
GSBE0702	Conservation Technology B	70	5
GSBE0802	Conservation Technology C	56	4
GSBE0902	Conservation Technology	210	15
GSBE1002	Graduate Project	112	8

Typical Pattern of Full-time Study

Session 1
GSBE0102 Contextual Studies
GSBE0202 Architectural History
GSBE0402 Analysis and Documentation A
GSBE0502 Analysis and Documentation B
GSBE0602 Conservation Technology A
GSBE0802 Conservation Technology C
GSBE1002 Graduate Project

Session 2
GSBE0302 Conservation Management
GSBE0702 Conservation Technology B
GSBE0902 Conservation Technology D
GSBE1002 Graduate Project

Typical Pattern of Part-time Study

Session 1
GSBE0102 Contextual Studies
GSBE0202 Architectural History
GSBE0402 Analysis Documentation A
GSBE0602 Conservation Technology A

Session 2
GSBE0502 Analysis and Documentation B
GSBE0702 Conservation Technology B
GSBE1002 Graduate Project

Session 3
GSBE0802 Conservation Technology C
GSBE1002 Graduate Project

Session 4
GSBE0302 Conservation Management
GSBE0902 Conservation Technology D
GSBE1002 Graduate Project

Department of Industrial Design

Head of Department
Mr. John Redmond.

8145
Master of Industrial Design Course

Master of Industrial Design
MID

8146
Master of Science (Industrial Design) Course

Master of Science (Industrial Design)
MSc(IndDes)

These courses of graduate study have a common core of subjects in the major areas of industrial design. They are designed for graduates in industrial and environmental design, architecture, engineering, and marketing and business studies who wish to make careers in industrial design or to be involved in industrial design as a part of their career activity, eg, mechanical engineering with industrial design.

The MID degree course is intended for holders of four year industrial design degrees who wish to specialize and develop expertise in particular areas of industrial design. In addition to the common core of subjects, MID degree students are also required to submit a major graduate project, a design theory report and have a greater choice of electives related to their field of specialization.

The MSc(IndDes) degree course is intended for graduates from design fields related to industrial design, such as architecture or engineering, or for graduates from non-design areas, such as marketing, who have satisfactorily completed preparatory studies. The course is designed to adapt and apply the students' existing design knowledge and experience to the methodology and practice of industrial design. The project work is less specialized and covers a broad range of industrial design

problems. The students are required to submit a minor graduate project. There are additional compulsory subjects in this course, with a more restricted range of electives, closely related to industrial design.

Admission Requirements

The conditions governing registration as a candidate for the MSc(IndDes) degree course are given later in this handbook: see below under Conditions for the Award of Higher Degrees. In summary, admission is open to applicants who have been admitted to an appropriate degree of at least four years' full-time duration, or its equivalent. For the MID degree course, admission is restricted to applicants who have been admitted to a degree with a major in industrial design of at least four years' full-time duration, or its equivalent. Candidates who have completed part or all of the requirements for the award of the degree of the MSc(IndDes) course may elect to apply for admission to the MID degree course, subject to the recommendation of the School and the approval of the Higher Degree Committee of the Faculty of Architecture.

In certain cases, particularly for applicants from non-design undergraduate courses, it is necessary to complete a qualifying program of preparatory units in industrial design, as prescribed by the Higher Degree Committee of the Faculty. These units are selected from appropriate undergraduate courses. The Committee's decision is influenced by the academic and professional experience of each applicant.

Course Structure

The minimum duration of both courses is two sessions of full-time study or four sessions of part-time study. The availability of the full-time and part-time programs of study depends upon student demand the University's resources at that time.

The MID degree course comprises 38 credit points. The MSc(IndDes) degree course comprises 36-38 credit points. One credit point is normally equivalent to one hour per week for one session. Full-time study normally requires an attendance of approximately 18 hours per week, while part-time study normally requires approximately 9 hours per week for the duration of the course. The project work for both degree courses, part and full-time, is run simultaneously and is staffed according to the requirements of each project.

Most of the work is undertaken within the School, but industrial visits and experience forms an important component of the course.

The program is so arranged that eminent visitors as well as guest lecturers and designers may participate.

To avoid duplication of classes for full-time and part-time students, subjects are timetabled wherever possible on afternoons and evenings. In addition to timetabled commitments, the studios and laboratories are available during normal University hours for industrial design project work. Occasionally students are required to attend professional and industrial visits and lectures at other institutions.

The requirements for the course include an equivalent period of at least four weeks of approved professional or industrial experience. Part-time students with approved employment are exempt from this requirement.

Course Subjects

Common Core

IDES5071	Industrial Design Studies
IDES5193	Ergonomics for Industrial Designers
IDES5124	Business Studies for Industrial Designers
IDES5152	Manufacturing Technology
IDES6171	Industrial Experience*

MID only

IDES6081	Graduate Project (MID)
IDES6101	Design Theory
IDES5131	Industrial Design
Approved Electives**	

MSc(IndDes) only

IDES5091	Design Media and Communication
IDES5111	Visual Thinking***
IDES5141	Industrial Design A
IDES6161	Industrial Design B
IDES6181	Graduate Project (MSc(IndDes))
Approved electives**	

** 4 week block during recesses. Part-time students in approved employment are exempt.*

*** Approved electives may be taken from subjects offered in other schools of the University of New South Wales, subject to the approval of the Heads of the Graduate School of the Built Environment and the school offering the subject.*

MID electives may be chosen to increase specialist knowledge relevant to the student's theory studies, project report or planned career activities. At least six credits must be taken of which up to four credits may be taken in undergraduate units at half their point value.

MSc(IndDes) electives are taken in approved subjects directly related to the development of the student's industrial design knowledge and skill. At lest four credits must be taken of which up to two credits may be taken in undergraduate units at half their point value.

**** Graduates of visually oriented courses, eg architecture, are normally exempt.*

Depending upon course requirements, the availability of University staff and Faculty resources, it may be possible to substitute some existing graduate or undergraduate courses in other faculties for certain subjects of the course. This development would be subject to the approval of the Higher Degree Committee of the Faculty of Architecture and the Heads of the schools offering the courses. Where the credit point of subjects is increased by substitution of subjects from other schools, the requirement for the stated number of credits in elective subjects is correspondingly reduced.

Typical Full-time Study Patterns for MID and MSc(IndDes)

Common Core

IDES5071	Industrial Design Studies
IDES5193	Ergonomics for Industrial Designers
IDES5124	Business Studies for Industrial Designers
IDES5152	Manufacturing Technology
IDES6171	Industrial Experience*

MID only
Common Core
IDES6081 Graduate Project (MID)
IDES6101 Design Theory
IDES5131 Industrial Design
Approved Electives
Ten hours per week MID

MSc(IndDes) only
IDES5091 Design Media and Communication
IDES5111 Visual Thinking***
IDES5141 Industrial Design A
IDES6161 Industrial Design B
IDES6181 Graduate Project (MSc(IndDes))
Approved Electives

Typical Part-time Study Patterns for MID and MSc(IndDes)

Common Core
IDES5071 Industrial Design Studies
IDES5193 Ergonomics for Industrial Designers
IDES5152 Manufacturing Technology
IDES6171 Industrial Experience *
Session 3
IDES5124 Business Studies for Industrial Designers
IDES6171 Industrial Experience*

MID only
Sessions 1 and 2
IDES6081 Graduate Project (MID)
IDES6101 Design Theory
IDES5131 Industrial Design
Approved Electives
Sessions 3 and 4
IDES6081 Graduate Project (MID)
IDES6101 Design Theory
Approved Electives

MSc(IndDes) only
Sessions 1 and 2
IDES5091 Design Media and Communication
IDES5111 Visual Thinking***
IDES5141 Industrial Design A
Approved electives

MSc(IndDes) only
Sessions 3 and 4
IDES6161 Industrial Design B
IDES6181 Graduate Project MSc(IndDes)
Approved Electives

Total hours per week MSc(IndDes)

** A four week period during the recess. Part-time students in approved employment are normally exempt.*

*** Nominal hours.*

**** Graduates of visually oriented courses, eg architecture, are normally exempt.*

School of Architecture

The School of Architecture offers facilities for research and welcomes enquiries from students who wish to pursue programs for the degrees of Master of Architecture (MArch) or Doctor of Philosophy (PhD). Prospective students should consult the Head of School to discuss their research interests prior to making a formal application.

1130
Doctor of Philosophy

Doctor of Philosophy
PhD

This is a research degree requiring an original and significant contribution to knowledge in an approved subject.

2200
Master of Architecture (by Research)

Master of Architecture
MArch

This degree is available to part-time and external candidates in addition to full-time candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

8100
Master of Science (Acoustics) Course

Master of Science (Acoustics)
MSc(Acoustics)

This course is currently under review and no new admissions will be made in 1993. Students already enrolled may continue with their studies until completion of the degree. Students should consult pages 61 and 62 of the 1992 Architecture Faculty handbook for details of this course.

8140
Master of Architectural Design Course

Master of Architectural Design
MArchDes

This course is being discontinued from 1993 and no new students may be enrolled. Students already enrolled may continue with their studies, with subjects selected from the Master of Architecture program 8142, until completion of the degree. They may also apply to transfer their enrolment to the Master of Architecture program 8142.

8142
Master of Architecture Program

with majors in:

Architectural Design
Architectural Computing
History and Theory of Architecture

Master of Architecture
MArch

This Program provides for graduate study and research in one of several specialised aspects of the discipline of architecture. At the present time, three strands of study are offered to prospective candidates: architectural design; the history and theory of architecture; and architectural computing. The School does, from time to time, adjust the specialist strands that are available, subject to both demand and available staff resources.

The Programs are primarily designed for graduates in architecture and other relevant disciplines who wish to advance their knowledge in these specialised areas as either practitioners, consultants or academics. They are also suitable for specialist members of multi-disciplinary teams in industry or architectural practice.

The degree is awarded as Master of Architecture with a statement on the testamur identifying the area of specialisation undertaken by the candidate.

Admission Requirements

The conditions governing registration as a candidate for the degree of Master of Architecture are described later in this handbook, but the attention of applicants is drawn to the following admission requirements.

Registration is offered to candidates who have been awarded an appropriate degree of Bachelor of minimum 4 years duration from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Architecture (hereinafter referred to as the Committee). Candidates may, where considered appropriate (including insufficient background in the proposed area of specialisation) be required to undertake a qualifying programme as determined by that Committee.

Those applicants wishing to pursue the architectural design strand of the Course are specifically required to hold a Bachelor of Architecture degree at Honours level and to have had at least 12 months professional practice experience. In addition, all such applicants are required to submit a design portfolio demonstrating the range and quality of their architectural design experience prior to their final acceptance into the Program.

Notwithstanding any other provisions of these conditions, the Committee may require an applicant to demonstrate fitness for registration by carrying out such work and sitting for such examinations, as the committee may determine.

Program Structure

Students undertaking the Program are required to select their area of specialisation before commencement. They must then complete a set of prescribed core subjects in that area of specialisation, supplemented by elective subjects to bring their total credit points to 120 for the degree. Note that each of the general core and elective subjects offered have a credit point value of 10. Most strands, as part of the core component, require the completion of a Graduate Project to the value of 60 credit points, representing half the requirement for the award of the degree. This is not so for the architectural design strand which is centred around two compulsory studio design and research projects (in lieu of the Graduate Research Project), in this case representing two-thirds of the total requirement for the award of the degree.

The degree may be commenced in either Session of the academic year subject to the availability of places in the Programs as well as appropriate subjects being offered at that time. It is normally undertaken over two full-time sessions or four part-time sessions. In general, candidates are required to complete as many core subjects as possible before undertaking their elective options.

Note that where a candidate is required to undertake a Graduate Research Project as part of their area of specialisation, it is normally expected that they would complete the subject GSBE0503 Postgraduate Research and Design Methodology at the beginning of their candidature. Exemptions from this requirement may be granted by the Head of School where candidates can demonstrate prior research experience or the completion of an equivalent subject. Where that is the case, the candidate is required to undertake an approved elective subject in its place.

Notwithstanding the above, work on a Graduate Research Project is always spread over the entire period of candidature as follows: during the first half of the programme (one session for full-time and two sessions for part-time students), candidates are expected to complete one-third of the work on their Graduate Research Project, leading to the presentation of a graduate seminar introducing the topic of the project, outlining current work in the area from the literature and indicating their research strategy; during the second half, candidates must complete that work, leading to the preparation of a Research Thesis and its defense in a second graduate seminar.

Candidates wishing to undertake the architectural design strand on a part-time basis must note that the studio design subjects (Architectural Design Project 1 & 2) must each be

undertaken and completed within a single session, even though they represent two-thirds of a session workload.

For each area of specialisation, candidates are required to take each of the prescribed core subjects as listed in the programs given below. These generally make up the bulk of the requirements for the degree. The remaining credit points are then earned by taking electives, generally selected from the recommended list provided for each strand. Notwithstanding that, candidates may, with the permission of the Head of School, undertake electives chosen from among other graduate subjects offered by the Faculty or University. Subject to the same conditions, students may also enrol in undergraduate subjects offered in the University, but only to a maximum contributing a total of 20 credit points calculated at an agreed credit point value as graduate subjects.

Notwithstanding any of the above, the coursework subjects offered in any one academic session will depend on student numbers and interests. Students must therefore plan their programs in consultation with Course Advisers. As a guide, the following table shows the number of credit points that would normally be taken in each Session for a full-time or part-time program, depending on the selected major.

Architectural Design Major

Full-time	**Credit points**	
	S1	**S2**
Architectural Design Project	40	40
Core and Elective Subjects	20	20
Total	60	60
Part-time		
Year 1		
Core and Elective Subjects	20	
Architectural Design Project		40
Year 2		
Core and Elective Subjects	20	
Architectural Design Project		40
Total	40	80

Architectural Computing and History Major

Full-time		
Core and Elective Subjects	30	20
Research Design and Methodology	10	
Graduate Research Project	20	40
Total	60	60
Part-time		
Year 1		
Core and Elective Subjects	20	
Research Design and Methodology	10	
Graduate Research Project		20
Year 2		
Core and Elective Subjects	10	10
Graduate Research Project	20	20
Total	60	60

The following sections detail the prescribed academic program for each of the specialisation strands available at the present time.

Master of Architecture majoring in Architectural Design

Prescribed Academic Programme:		**C**
ARCH7101	Architectural Design Project 1	40
ARCH7102	Architectural Design Project 2	40
Electives		40
Total		120
Recommended Electives:		
ARCH7320	Architectural Theory	10
ARCH7301	Architecture and the City	10
ARCH7302	Theories in History	10
ARCH7303	Theory and Contemporary Architectural Practice	10
ARCH7321	The New Functionalism in Architectural Theory	10
ARCH7220	Computer-Aided Architectural Drafting	10
ARCH7221	Computer Modelling & Rendering	10

Master of Architecture majoring in Architectural Computing

Required Academic Program:		
ARCH7001	Graduate Research Project	60
GSBE0503	Postgraduate Research Design and Methodology	10
ARCH7201	Computational Design	10
ARCH7202	Computer Graphics Programming	10
ARCH7203	Information Technology in Architecture	10
Electives		20
Total		120
Recommended Electives		
COMP9021	Introduction to Computer Science	10
COMP9024	Data Structures, File Systems and Data Bases	10
GEOG9210	Computer Mapping and Data Display	10
GEOG9240	Principles of GIS	10
GEOG9241	Advanced GIS	10

Master of Architecture majoring in the History and Theory of Architecture

Required Academic Programme:		
ARCH7001	Graduate Research Project	60
GSBE0503	Postgraduate Research Design and Methodology	10
ARCH7301	Architecture and the City	10
ARCH7302	Theories in History	10
ARCH7303	Theory & Contemporary Architectural Practice	10
Electives		20
Total		120
Recommended Electives		
ARCH7320	Architectural Theory	10
ARCH7321	The New Functionalism in Architectural Theory	10
ARCH7201	Computational Design	10
LAND9010	Environmental Heritage Series	10

2206
Master of Science (by Research)

Master of Science
MSc

The conditions governing the award of the degree of Master of Science by research are set out in the next section.

School of Building

The School of Building has active programs of coursework and research studies and welcomes enquiries from students who wish to pursue programs for the degrees of Master of Building (MBuild), Master of Project Management (MPM) (part-time), Master of Construction Management (MCM) (full-time) or Doctor of Philosophy (PhD). Graduates enrolled in these courses need not necessarily be building graduates. Prospective students should consult the Head of School to discuss their research interests prior to making a formal application.

The School also offers each year a series of short non-credit mid-career courses* which are designed to provide practical on-going education for experienced members of the building industry.

For further information contact:

Continuing Education Co-ordinator
Dr. J. Hutcheson

1140
Doctor of Philosophy

Doctor of Philosophy
PhD

This is a research degree requiring an original and significant contribution to knowledge in an approved subject.

2210
Master of Building

Master of Building
MBuild

This degree is available to part-time and external candidates in addition to full-time students. It requires the submission of a thesis embodying the results of an original investigation or design relative to building.

8116
Master of Project Management Course

Master of Project Management
MProjMgt

Course Co-ordinator
Mr Jinu Kim

This four-session course has been designed to provide opportunities for advanced study in project management and building economics. It allows for study in two interrelated areas:

1. Planning and management aspects of a design or construction organization, including programming, evaluation, costing, performance feedback, feasibility and management of properties.

2. Operations and control aspects of a design or construction organization, concentrating on estimating and cost analysis, contract or design administration and building economics.

The course aims at attracting the qualified practitioner who wishes to widen his/her knowledge and understanding of construction planning, operation and economics related to project management.

Admission Requirements

The general conditions governing registration as a candidate for the degree Master of Project Management are given later in this handbook but the attention of intending applicants is directed to the following specific requirements:

1. Applicants will have been admitted to the degree of Bachelor of Architecture or Bachelor of Building in the University of New South Wales or an equivalent degree in another approved university and have appropriate industrial experience.

2. Graduates with a Bachelor of Architecture or Engineering or other four year degree, who have appropriate experience in building may be admitted to the course depending on the individual case.

3. Eligible applicants may be required to complete a program of preparatory or concurrent study set out by the Head of the School of Building whose decision will be influenced by the education and experience of each applicant.

Graduate experience and involvement in the building industry is considered an advantage in the selection of candidates.

Course Structure

The Master of Project Management is a formal four session part time degree course comprising 12 subjects. The subject program comprises studies in management, computations, building economics, operations planning, contract law and documentation. A student must successfully complete all the subjects in one session before progressing to the next session. Students with a grade average of Credit or better in their course may choose to write a Project Report to qualify for the degree with honours.

Course Program

Subjects are offered on a four-session cycle. Subjects are normally timetabled on two evenings and one afternoon per week. Except in exceptional circumstances, a student is required to be concurrently enrolled in all subjects in a given session to allow for syllabus integration between subjects.

Session One
BLDG5101 Economics and Finance
BLDG5102 Management Framework
BLDG5103 Computers in Management

Session Two
BLDG5201 Managerial Economics
BLDG5203 Project Planning and Control
BLDG5204 Personnel Management Techniques

Session Three
BLDG5301 Project Feasibility
BLDG5302 Building Contracts
BLDG5303 Management of the Design and Construction Process

Session Four
BLDG5401 Management of Buildings
BLDG5402 Project Applications
BLDG5403 Process Applications

Sessions Five and Six
BLDG5100 Project Report (full-time or part-time)

8125
Master of Construction Management

Master of Construction Management
MConstMgt

Course Co-ordinator
Dr Thomas E. Uher

Construction Management comprises all the modern management methodologies directed at the control of time, cost and quality in the design and construction of buildings and other structures.

This two-session full-time full-fee course has been designed to provide opportunities for advanced study in construction technology, project management and building economics. The course aims at improving proficiency of qualified practitioners in the construction industry to meet present and future challenges.

Admission Requirements and Fees

1. Applicants must hold degrees acceptable to the University of New South Wales in either building, civil engineering, architecture, quantity surveying or equivalent and must have appropriate industrial experience.

2. Applicants may proceed directly into the course, or be required to complete prerequisite or corequisite programs of reading or study, with assessed assignments.

3. Applicants from non-English speaking countries must supply a certified statement of results in the IELTS Test or another equivalent recognised test.

4. The tuition fee is $A11,000.

Course Structure

The Master of Construction Management course is a formal one year full-time full-fee degree course comprising two semesters of academic study, up to 6 weeks of industry training and the Project Report. A student must successfully complete all the subjects in the first semester before progressing to the second semester.

Course Program

Session One
BLDG6151 Construction Methods and Techniques
BLDG6154 Economics in Construction
BLDG6155 Computers in Construction Management
BLDG6253 Construction Planning and Control
BLDG6158 Principles and Practice of Management
BLDG6257 Quantitative Methods in Management

Session Two
BLDG6153 Management of Construction
BLDG6157 Property Management
BLDG6251 International Construction Practice
BLDG6255 Contracts Management and Law
BLDG6256 Cost Planning and Analysis
BLDG6258 Construction Management Applications

Other Subjects
BLDG6150 Industry Training
BLDG6250 Research Report

School of Landscape Architecture

The School of Landscape Architecture has an active program of research and advanced study and encourages enquiries from students who wish to pursue graduate education. The degrees Doctor of Philosophy (PhD) and Master of Landscape Architecture are available for those wishing to engage in research. The degrees Master of Landscape Planning (MLP) and Graduate Diploma in Landscape Planning (GradDipLP) are available as course programs. Prospective students should consult the Head of School to discuss their research interests and educational objectives prior to making a formal application.

1160
Doctor of Philosophy

Doctor of Philosophy
PhD

This is a research degree requiring an original and significant contribution to knowledge in an approved subject.

2220
Master of Landscape Architecture

Master of Landscape Architecture
MLArch

This degree is available to part-time and external candidates in addition to full-time candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

8135
Master of Landscape Planning

Master of Landscape Planning
MLP

The course offers advanced education and study opportunities for graduate landscape architects, town planners, surveyors, geographers, engineers, and architects in landscape planning.

The intent is to offer students the opportunity to develop an understanding of the complex relationships between natural environments and expanding human population and to acquire the skills needed for planning and management of emerging landscapes. Principles and concepts from the natural and social sciences along with techniques and methods of geographic information systems, remote sensing and other technologies are emphasized.

Admission Requirements

A four year degree of appropriate standing in landscape architecture, architecture, town planning, surveying, geography or other approved degree in a relevant area of land management or resource and environmental science or a Graduate Diploma in Landscape Planning is required. A qualifying or concurrent program may be required in some cases.

Course Structure

The course will be offered as a full-time program that can be completed in three sessions. To accommodate the practising professionals in the Sydney metropolitan area, the course can also be taken part time and would normally be completed in six sessions or less.

The course is built upon a core of eight required subjects totalling 24 credit points. As far as possible, these core subjects are offered between the times of 2 pm and 9 pm on Monday through Friday to accommodate the working professional. Beyond these core requirements students may select from project alternatives. In all cases the course requires the completion of 36 credit points. This would require the completion of a Landscape Project, Landscape Planning Exercise and/or electives. Topics for Landscape Research Projects and Landscape Projects will be determined in consultation with academic staff of the school.

Course Program

Core Subjects		C
LAND9010	Environmental Heritage Studies	3
GEOG9270	Legislative Aspects	3
LAND9111	Landscape Planning	3
LAND9212	Landscape Planning Methods	3
LAND9213	Land Systems and Management	3
LAND9214	Visual Landscape Assessment	3
LAND9215	GIS in Landscape Architecture	3
GSBE0503	Postgraduate Research Design and Methodology	3

Electives		
GEOG9150	Remote Sensing Applications	3
GEOG9210	Computer Mapping and Data Display	3
GEOG9300	Vegetation Management	3
GEOG9310	River Management	3
GEOG9320	Soil Degradation and Conservation	3
SURV9604	Land Information Systems Project	3
LAND9001	Landscape Project	9
LAND9002	Landscape Research Project	18
LAND9301	Landscape Planning Exercise	6

Note: Due to course revisions some subjects as listed are subject to approval by the University.

5215
Graduate Diploma in Landscape Planning

Graduate Diploma
GradDipLP

This course is designed for people who wish to obtain formal qualifications in Landscape Planning through a program in which the emphasis is on completion of subjects. There is no research or independent project requirement.

The intent is as described above for the Master of Landscape Planning course but the program is offered in a more structured setting.

Admission Requirements

A three year degree from an approved university and/or qualifications deemed appropriate by the Higher Degree Committee of the Faculty of Architecture is required.

Course Structure

The course is offered as a one year full time, or two year part time program. Students are required to complete a program totalling at least 24 credit points. The required core subjects comprise 21 of these credit points and the remaining 3 credit points are from electives. After successful completion of the course the student may elect to transfer into the Master of Landscape Planning course. This would require the completion of one additional core subjects and a Landscape Research Project or a Landscape Project, a Landscape Planning Exercise and/or electives.

Course Program

Core Subjects		C
GEOG9270	Legislative Aspects	3
LAND9111	Landscape Planning	3
LAND9212	Landscape Planning Methods	3
LAND9214	Visual Landscape Assessment	3
LAND9010	Environmental Heritage Studies	3
LAND9213	Land Systems and Management	3
LAND9215	GIS in Landscape Architecture	3
Electives		
GEOG9150	Remote Sensing Applications	3
GEOG9210	Computer Mapping and Data Display	3
GEOG9300	Vegetation Management	3
GEOG9310	River Management	3
GEOG9320	Soil Degradation and Conservation	3
SURV9604	Land Information Systems	3

Note: Due to course revisions some subjects as listed are subject to approval by the University.

School of Town Planning

Head of School
Associate Professor R.B. Zehner

The School fo Town Planning has significant commitment to research and to the training and involvement of postgraduate students in a variety of research areas. The School welcomes enquiries from individuals who wish to pursue the Doctor of Philosophy (PhD), Master of Town Planning (MTP) and Master of Science (Town Planning). Prospective students should contact the Head of School to discuss their research interests prior to making a formal application. Although direct entry into the research degree programs is possible, candidates may be asked to complete qualifying work of one or two sessions duration. Formal conditions governing the award of these degrees are set out later in this Handbook.

1150
Doctor of Philosophy

Doctor of Philosophy
PhD

The Doctor of Philosophy is a research degree on an approved topic which requires an original and significant contribution to knowledge. Students enrol in a Research Seminar program as part of their candidacy.

2230
Master of Town Planning (by research)

Master of Town Planning
MTP

The Master of Town Planning is a research degree awarded on the basis of a thesis which embodies the results of an original investigation. The research program is normally undertaken over a minimum of four sessions, but the period may be reduced in certain circumstances. Students enrol in a Research Seminar program as part of their candidacy.

Admission Requirements

A four year degree (or equivalent) of appropriate standing from an approved university in the field of Town Planning and/or qualifications deemed appropriate by the Higher Degree Committee of the Faculty of Architecture.

Professional Recognition

The degree is recognized by the Royal Australian Planning Institute as an academic qualification for corporate membership. The Institute requires that for corporate membership graduates must also have at least one year of practical experience subsequent to graduation

Course Work

Candidates with a primary degree in a subject other than Town Planning may be required to complete an additional program of study. The actual program is determined by the Higher Degree Committee of the Faculty of Architecture on the recommendation of the Head of the School of Town Planning. Candidates should contact the Head of the School about the guidelines used in formulating such a program.

2335
Master of Science (by Research)

MSc

The Master of Science (Town Planning) is a research degree awarded on the basis of a thesis embodying the results of an original investigation. This degree is designed for students with prior degrees not in planning, who want to undertake masters-level research in the planning field, but do not wish to pursue the MTP. Students enrol in a Research Seminar program as part of their candidacy.

Admission Requirements

A four year degree (or equivalent) of appropriate standing from an approved university and/or qualifications deemed appropriate by the Higher Degree Committee of the Faculty of Architecture.

5200
Housing and Neighbourhood Planning Graduate Diploma Course

Graduate Diploma
GradDip

This course provides for graduate study in the field of housing including the physical structure and form of new and old residential neighbourhoods; and the elements of the neighbourhood including dwellings, open spaces, shopping and community centres. In addition to design considerations, specific study is made of housing policy and social and economic factors in the provision of public and private housing.

PLAN0511 Theory of Neighbourhood Planning 1
PLAN0512 Theory of Neighbourhood Planning 2
PLAN0171 Practice of Neighbourhood Planning 1
PLAN0172 Practice of Neighbourhood Planning 2
PLAN0173 Practice of Neighbourhood Planning 3
PLAN0174 Practice of Neighbourhood Planning 4
PLAN0211 Communications and Public Utilities
PLAN0212 Land and Housing Economics
PLAN0213 Urban Sociology
PLAN0142 Housing Law and Administration

This course is under review and intending applicants are advised to contact the School at the first opportunity to obtain further information.

5205
Town Planning Graduate Diploma Course

Graduate Diploma
GradDip

The Graduate Diploma course in Town Planning is tailored to meet the objectives of individual students. It is normally taken as a one year full-time course (or two years part-time) and includes postgraduate coursework, and/or independent study programs to address the needs of particular students.

The course is designed to provide training for graduates who wish to pursue a higher research degree (PhD, MTP or MSc (Town Planning)) in the School, and performance in the GradDip will be considered when applications for entry into higher degree programs are reviewed.

Admission

An applicant for the Graduate Diploma shall have a degree of a minimum length of three years full-time from an approved institution or have such other qualifications as may be approved by the Higher Degree Committee of the Faculty of Architecture.

Course Structure

The course includes three required core subjects, with the remaining content, which may include additional coursework and/or programs of independent study, determined to provide a foundation for postgraduate research in the field.

Core subjects
GSBE0503 Postgraduate Research Design and Methodology
GSBE0504 Quantitative Methods for Built Environment Research
PLAN0851 Research Seminar 1

Individual Programs are defined in consultation with the academic staff of the School and are subject to approval by the Head of the School. Application for exemption from GSBE0504 may be considered by the Head of School for students with appropriate prior experience with statistical techniques and data analysis.

Subject Descriptions

Descriptions of all subjects are presented in alphanumeric order within organizational units.

For academic advice regarding a particular subject consult with the the contact for the subject as listed. A guide to abbreviations and prefixes is included in the chapter 'Handbook Guide', appearing earlier in this book.

Architecture

ARCH7001
Graduate Research Project
Staff Contact: School Office
C60
Prerequisite: Nil.
Corequisite: GSBE0503 (unless exempt by Head of School)

A research project relating to the theory or practice of architecture selected by the student and approved by the Head of the School of Architecture. The research should represent a synthesis of the knowledge and skills that have been acquired during the course of study and will be supervised by a member of the academic staff. Appropriate research methodologies and techniques will be used in all aspects of the work.

The research project is to be completed in two phases: the first phase encompasses one-third of the work and involves the presentation of a graduate seminar introducing the topic of the research, outlining current work in the area from the literature and indicating the proposed research strategy; the second phase, encompassing the remaining two-thirds of the work, leads to the preparation of a written research project and its presentation in a second graduate seminar.

ARCH7101
Architectural Design Project 1
Staff Contact: School Office
C40

Theory, research and studio practice, in the form of graduate research projects in design, applied to general architectural themes of high priority in the contemporary context. After thorough theoretical foundation and research analysis, the theme is adapted to a specific and concrete situation to achieve an architectural synthesis of all relevant influences arising from the physical and human context. **(Old Subject: ARCH9010 Architectural Synthesis 1)**

ARCH7102
Architectural Design Project 2
Staff Contact: School Office
C40

Theory, research and studio practice, in the form of graduate research projects in design, applied to general architectural themes of high priority in the contemporary context. After thorough theoretical foundation and research analysis, the theme is adapted to a specific and concrete situation to achieve an architectural synthesis of all relevant influences arising from the physical and human context. **(Old Subject: ARCH9020 Architectural Synthesis 2)**

ARCH7201
Computational Design
Staff Contact: School Office
C10

A examination of the theoretical basis of computational design, covering topics such as: design as problem-solving and decision-making; design analysis, simulation and optimisation; theory of form and shape grammars; conceptual modelling; expert systems and knowledge engineering. This subject also touches on the techniques of architectural computing, such as: procedural programming; object-oriented programming; logic programming; expert systems programming; and spreadsheets and databases. Assessment is based on project work and class seminars.

ARCH7202
Computer Graphics Programming
Staff Contact: School Office
C10

A study of the principles and techniques of interactive computer graphics programming using a high-level procedural language. Topics include: procedural language concepts; computer graphics techniques; interactive programming and graphics input; use of graphics libraries; menuing systems; three-dimensional modelling; and colour manipulation. The subject involves a staged series of programming exercises and the development of an interactive graphics-based application.

ARCH7203
Information Technology in Architecture
Staff Contact: School Office
C10

This subject reviews the current state of information technology and its application to the practice of architecture. It includes topics such as: database systems; interaction with CAD system graphics databases; transmission of data; networking and communication technologies; shared technical databases; establishment of product information standards; conceptual modelling techniques; and design information systems. Assessment is by means of projects and student seminars.

ARCH7220
Computer-aided Architectural Drafting
Staff Contact: School Office
C10
Excluded: ARCH6205, ARCH5223 or equivalents.

Introduction to the concepts and techniques of computer-aided drafting with particular reference to architectural communication. The subject deals with both two-dimensional drawing and three-dimensional modelling. The lectures provide a conceptual understanding of computer-aided drafting systems, including both hardware and software aspects. The laboratory segments provide hands-on instruction on how to use a specific example of a drafting system. A set project task reinforces the learning and is used as the vehicle of assessment.

ARCH7221
Computer Modelling and Rendering
Staff Contact: School Office
C10
Excluded: ARCH5222 or equivalent.

Introduction to the concepts and techniques of three-dimensional computer modelling and rendering and their application to the practice of architecture. Topics include: three-dimensional representation of objects and buildings; constructive solid geometry; visualisation techniques; ray tracing and radiosity techniques; use of multiple light sources; shading; reflections; transparency; texture mapping and colour manipulation. This subject involves extensive hands-on use of computers, computer laboratory exercises and project work.

ARCH7301
Architecture and the City
Staff Contact: School Office
C10

This subject investigates the historical formation of selected international cities, with attention focussed on past and present theories. Australian developments are studied along with the contributions of Sulman and Boyd. Classes also explore contemporary debates through the projects or writings of the Kriers, Rowe, Rossi et al.

ARCH7302
Theories in History
Staff Contact: School Office
C10

This subject investigates the writings of architectural theorists from Vitruvius to the present. Authors to be studied include Alberti, Quatremère de Quincy, Semper, Loos and Le Corbusier. Interpretations of the texts will be focussed around specific issues critical to modern practice. These will range from broad social concerns , such as the ethical role of the architect, to the qualities of architectural form, such as the relationship of structure to ornament. The aim of the subject is to provide a theoretical foundation capable of responding to the problems we now face.

ARCH7303
Theory and Contemporary Architectural Practice
Staff Contact: School Office
C10

Presents theoretical issues which have arisen in late 20th century practice and criticism, raises a number of ethical issues in relation to architectural practice and their impact on theory, examines the validity of certain architectural positions currently adopted within the architectural profession, and finally discusses prospects for a viable architectural future by reviewing ideas informing both visions for and the projected context of the profession.

ARCH7320
Architectural Theory
Staff Contact: School Office
C10

A general and theoretical approach to synthesis in art and architecture considering sensible and intelligible influences in the context of history and the present age. **(Old Subject: ARCH9300 Architectural Theory)**

ARCH7321
The New Functionalism in Architectural Theory
Staff Contact: School Office
C10

'Form follows function' was the slogan of the Modern Movement in Architecture. This subject reviews the proposition that the movement's work (of architects in both its Empiricist and Rationalist branches) was not functional enough. Implicit in this statement is a revised definition of 'function' developed from the empirical and phenomenological research of the last twenty years and particularly on the development of ecological theory in psychology during that time. It argues that the concept of basic human needs and cognitive needs developed by Abraham Maslow is a sound basis for thinking about the purposes served by the architectural environment.

Building

Master of Project Management

BLDG5100
Project Report
Staff Contact: Mr G.E. Levido
Students with a grade average of Credit or better in their course work may choose to write a Project Report to qualify for the degree with honours. This will require a specialized individual study taken under staff supervision, with the objective of allowing the student to expand knowledge in some aspect of building management.

The Project Report may be taken full-time over one session or part-time over two sessions following the satisfactory completion of all course work subjects. As part of the examination of the Project Report, students will be required to make an oral presentation and defence of the subject matter covered in their report.

BLDG5101
Economics and Finance
Staff Contact: Mr B. Reece
S1 L2 T1

Economic modelling; a model of the Australian economy; economic targets and instruments; fiscal and monetary policies; the structure of the building industry; productivity and competition; land use theory; the structure of the financial market; sources of finance; costs of finance.

BLDG5102
The Management Framework
Staff Contact: Mr J. Senogles
S1 L2 T1

Introduces the general principles of management. Special considerations of Project Management; the role of the Project Manager. The functions of management: organisations; planning; control. Management communications; report writing; presentation skills. Scientific management; the human relations approach; theories of motivation; situational leadership. The decision making process; decision theory; group decision-making. Strategic management: long-term planning; analytical tools; applications.

BLDG5103
Computers in Management
Staff Contact: Dr O. Greste & A/Professor R. Miller
S1 L2 T1

Nature and scope of information for building construction estimating, planning and management; overview of computer hardware and software; MS-DOS operating system; spreadsheet, data base and word processing programs and application areas; design of data base structures for relational data bases; data communication and networks; programs for cost estimating, network based project scheduling, cost monitoring, and project management; CAD systems; computer system specification, selection, installation and operation. The subject involves practical use of leading spreadsheet, data base and word processing packages.

BLDG5201
Managerial Economics
Staff Contact: Mr B. Reece
S2 L3

Topics included are: discounted cash flow technique; time series and forecasting.

BLDG5203
Project Planning and Control Techniques
Staff Contact: Dr T. Uher
S2 L2 T1

The concept of construction planning and control; planning and control techniques - barchart, CPM, PERT, line of balance, multiple activity chart; computer based planning and control; applications of planning and control techniques in construction; principles and applications of work study.

BLDG5204
Personnel Management Techniques
Staff Contact: Mr D. Dombkins
S2 L2 T1

Australian labour market, recruitment and remuneration and training. Interpersonal relationships in the work place, motivation and negotiation, group behaviour and individual behaviour. Industrial relations in Australia with particular emphasis on the building industry. Statutory responsibilities of employing labour (safety, welfare, superannuation, awards, equal opportunity, etc.).

BLDG5301
Project Feasibility
Staff Contact: Dr J. Hutcheson
S1 L2 T1

Design feasibility: feasibility studies; cost planning practice; economics of services in building; maintenance methods and costs. Land economies: land resources; market and location of urban land uses; spatial and urban growth; property and investment markets; economics of development; investment appraisal; environmental impact studies.

BLDG5302
Building Contracts
Staff Contact:Dr T. Uher & Mr P. Davenport
S1 L2 T1

Principles of administration of construction contracts; formation of construction contracts and subcontracts; contract administration of different phases of construction projects; options for project delivery; principles and practice of tendering; analysis of AS2124-1986 and JCC-A & B contracts; contract disputes - arbitration, mediation, litigation; contract claims; risk allocation in construction contracts; international contracting.

BLDG5303
Management of the Design and Construction Process
Staff Contact: Mr D. Dombkins & Mr J. Kim
S1 L2 T1

Organisation of projects; facility procurement options; management of the design process; briefs _ clients and consultants; Cost management of fundamentals; project team building and motivation; application of value management; management of the design and construction overlap; Legal aspects of project management; project control systems.

BLDG5401
Management of Buildings
Staff Contact: Dr J. Hutcheson
S2 L2 T1

Maintenance and obsolescence; economics of refurbishment; marketing; tenancy management; building control and security systems; management of commercial, retail, industrial and large scale residential complexes; legal aspects of tenancy management; energy conservation; taxation law and implications.

BLDG5402
Project Applications
Staff Contact: Mr D. Dombkins
S2 L2 T1

Introduction to case studies; the structure, purpose and value of case studies. Detailed analysis of each phase of the project case study: economic planning and feasibility; design, design management buildability; construction, program, process, cost, personnel management. Presentation of case studies. Tutorial sessions. Presentation of student case studies.

BLDG5403
Process Applications
Staff Contact: A/Professor M. Marosszeky
S2 L2 T1

Topics vary from year to year to cover main industry-wide issues. They could include: industrial relations (a specific issue); superannuation; labour training, apprenticeship; safety; the use of prefabricates; formwork sophistication; project communication; contractual trends; structure of the materials supply sector.

Master of Construction Management

BLDG6150
Industry Training
Staff Contact: Dr T. Uher
Students will be based on a project for a period and be required to attend inspections of other major construction projects, demonstrations of plant and equipment, and short courses on specific building materials and construction systems.

BLDG6151
Construction Methods and Techniques
Staff Contact: A/Prof. M. Marosszeky
S1 L2 T1

Appropriate selection and use of current techniques and systems in all construction phases.

BLDG6153
Management of Construction
Staff Contact: Mr J. Kim & Mr J. Senogles
S2 L2 T1

Project delivery strategies; Organisation of projects from design to commissioning; Team building and motivation; Design and quality management; Time and value management; Construction site and resources management; Project control systems.

BLDG6154
Economics in Construction
Staff Contact: Mr B. Reece
S1 L2 T1

Economics of the construction industry; its inter-relationship with national and trans-national economics.

BLDG6155
Computers in Construction Management
Staff Contact: Dr O Greste
S1 L2 T1

Nature and scope of information for building construction estimating, planning and management; overview of computer hardware and software; MS-DOS operating system; spreadsheet, data base and word processing programs and application areas; design of data base structures for relational data bases; data communication and networks; programs for cost estimating, network based project scheduling, cost monitoring, and project management; CAD systems; computer system specification, selection, installation and operation. The subject involves practical use of leading spreadsheet, data base and word processing packages.

BLDG6157
Property Management
Staff Contact: Mr J. Kim
S2 L2 T1

The property development process; rent or buy decision; property management; property maintenance; economics of refurbishment; investment performance; taxation.

BLDG6158
Principles and Practice of Management
Staff Contact: Mr J. Senogles
S1 L2 T1

Introduces the general principles of management: Basic management functions; planning process, organizing; control of time, cost and quality. Organisation structure; functional/divisional matrix structures, concepts of management communication; motivation; delegation; team building. Decision theory and risk management.

BLDG6250
Research Report
Staff Contact:
A specialised individual research study, under staff supervision, into an approved aspect of construction management or a related topic.

BLDG6251
International Construction Practice
Staff Contact: Mr D. Dombkins
S2 L2 T1

A comparison of construction practices in various nations. The impact of local economic, labour and technical parameters on construction management.

BLDG6253
Construction Planning and Control
Staff Contact: Dr T. Uher
S1 L2 T1

The concept of construction planning and control; planning and control techniques - barchart, CPM, PERT, line of balance, multiple activity chart; computer based planning and control; applications of work study.

BLDG6255
Contracts Management and Law
Staff Contact: Dr T. Uher & Mr P. Davenport
S2 L2 T1

Principles of administration of construction contracts; formation of construction contracts and subcontracts; contract administration of different phases of construction projects; options for project delivery; principles and practice of tendering; analysis of AS2124-1986, JCC-A & B and FIDIC contracts; contract disputes - arbitration, mediation, litigation; contract claims; risk allocation in construction contracts; international contracting.

BLDG6256
Cost Planning and Analysis
Staff Contact: Mr P. Marsden
S2 L2 T1

An introduction to construction estimating, elemental cost planning, design variables, cost control procedures, feasibility studies and risk management.

BLDG6257
Quantitative Methods in Management
Staff Contact: Mr B. Reece
S1 L2 T1

Statistical analysis and modelling methods in construction management.

BLDG6258
Construction Management Applications
Staff Contact: Mr N. Yates
S2 L2 T1

The objective of the subject is to expose students to the realities of involvement with a large building or construction project. Detailed analysis of each stage of the project case study: Feasibility, Design and Documentation, Pre-Construction, Construction and Commissioning.

Town Planning

PLAN0111
Introduction to Planning (G)
Staff Contact: Mr S. Harris
SS

Structure of towns, cities and regions. Needs and activities of people. Land use, transport and service systems. Planning theories, aims and objectives. Planning at different scales and in different time frames. Planning as a process. Planning studies.

PLAN0121
Local Planning 1 (G)
Staff Contact: Dr T. Lukovich
SS

Theories at the local level: neighbourhood and precinct concepts, local community structure, survey and analysis. Subdivision and housing layout, basic transportation planning and management, street design, landscaping, utilities. Practice of planning new neighbourhoods and proposals for conservation and redevelopment.

PLAN0131
Regional Planning 1 (G)
Staff Contact: Dr P. Murphy
SS

Theories at the metropolitan level. Accessibility, equity, economics, politics. Structure and organization, land use and transportation relationships. Forecasting, alternative futures. Incremental decision making. Integrating local and metropolitan planning.

PLAN0141
Planning Law and Administration
Staff Contact: School Office
SS

Theory and practice of statutory planning. The legal framework. The administrative framework. Environmental planning and related legislation. Techniques and procedures in transforming policies and proposals into statutory instruments. Development control. Planning appeals and the operation of the Land and Environmental Courts.

PLAN0151
Local Planning 2 (G)
Staff Contact: Ms S. Thompson
SS

Theories at district/new town level. Structure, survey and analysis. Environmental and social analysis. Elements, industrial and commercial areas, transport systems, community services, open space, institutional land use. Integrated planning: alternatives, impacts, evaluation. Costing and programming. Implementation and development management

PLAN0161
Regional Planning 2 (G)
Staff Contact: Dr R. Freestone
SS

Theories at the regional level. Location theory, strategies of regional policy. Trends in tourist, rural and extractive industries. Ecological land use planning, recreation and conservation. Environmental impact and assessment.

PLAN0211
Communications and Public Utilities
SS

Interaction of land use and transportation. Vehicular and pedestrian circulation patterns. Traffic function and capacity of district and neighbourhood roads. Principles and practice of local road construction, water supply, sewage treatment and disposal, and drainage. Local supply of electricity, gas, telephone, and other services.

PLAN0212
Land and Housing Economics
SS

Outline of principles and practice of land valuation with special emphasis on valuation of residential land and buildings. Rating and taxing systems. Effect of zoning and redevelopment on land values. National income and its distribution. Goals of a modern economy. Demand and supply analysis. Economics of road transport and public utilities in urban development. The costs of urban growth. Cost-benefit analysis.

PLAN0213
Urban Sociology
Staff Contact: A/Professor R. Zehner
SS

A sociological approach to the study of urban phenomena. Lectures deal with both methodological and theoretical issues relating to the study of urban social structures. Seminars provide students with the opportunity to examine critically a number of community studies.

PLAN0811
Planning (Special Subject)
Staff Contact: Head of School
C2 SS

PLAN0812
Planning (Special Subject)
Staff Contact: Head of School
C4 SS

Students have the opportunity to pursue a subject of special interest related to planning, depending on staffing resources.

PLAN0851
Research Seminar 1
F or SS

PLAN0852
Research Seminar 2
F or SS

PLAN08**
Research Seminar**
F or SS

A program of supervised ,independent study in an area of planning in which the student is undertaking, or expects to undertake, research. Students present a seminar on their current or proposed research, take part in discussions at other student seminars, and may be asked to attend comparable postgraduate seminars within the University and at other institutions.

*** Students enrolled in the PhD (Course 1150), MTP (Course 2230), MSc(Town Planning) (Course 2235) and GradDip (Course 5205) are expected to enrol in this subject each year, starting with Research Seminar 1 in their first year, Research Seminar 2 in their second year, and so forth. Those taking the subject as part of a qualifying program must obtain a grade of Credit or higher to be considered for progression to candidacy for a research degree. The seminar presentations of research degree candidates are graded only on a satisfactory/unsatisfactory basis, and contribute to the annual reviews of those students' progress.*

PLAN0911
The Organization of Town Planning
Staff Contact: School Office
SS

Aims, means and consequences of town planning in Australia. Aims of planning: organization of the environment in respect of space and time, interrelationship of functions, equity of resource distribution, human satisfaction, the nature of the planning approach. Means of planning: overview of the planning process, laws related to planning, planning assessment procedures, environmental management at different levels, decision-making processes — financiers', firms' and private decisions, changes in public values, public participation, political and economic constraints. Consequences of planning: illustrative case studies, evaluation of planning methodology and procedures.

Landscape Architecture

LAND9001
Landscape Project
Staff Contact: A/Professor F. Thorvaldson
C6 F

A project relating to the practice of landscape architecture selected by the student and approved by the academic staff of the school. The project should represent a synthesis of the knowledge and skills that have been acquired during the course of study and will be supervised by a member of the academic staff. Appropriate methodologies and techniques will be used for assessment, analysis, and evaluation of project parameters.

LAND9002
Landscape Research Project
Staff Contact: A/Professor F. Thorvaldson
C12 F

A research project directed at furthering the body of knowledge relating to the art and science of landscape architecture selected by the student and approved by the academic staff of the school. The research project should be a synthesis of the knowledge and skills acquired during the course of study, and should further the student's knowledge or expertise in a specialized field of study. Emphasis will be placed on continued development of research skills in the areas of data collection, analysis, interpretation and presentation. The research project will be supervised by members of the academic staff of the University.

LAND9213
Land Systems and Management
Staff Contact: Ms A. Todd
C3 S2 L1 T2

An investigation of resources and their management in relation to a range of land use types with an emphasis on an ecological approach. Subject material includes consideration of management of cultural as well as natural landscapes. Studies of specific examples relating to the effects of human impacts are included. Methods of conservation and rehabilitation are considered. Field excursions are included.

LAND9010
Environmental Heritage Studies
Staff Contact: Ms H. Armstrong
C3

An investigation of the concepts of environmental heritage concerning aspects of landscape architecture and conservation issues. The application of environmental heritage in the fields of planning and design. Investigation of case studies of the natural and cultural environment. Projects to investigate problems of planning and managing heritage environments. Methods of conservation analysis with an emphasis on Australian environments and their history.

LAND9111
Landscape Planning
Staff Contact: Mr D. Crawford
C3 S1 L2 T1

Introduction to the discipline of landscape planning. Explores a range of basic methods and techniques for the collection, analysis, and valuation of landscape resource data. Application of this knowledge in the development of simple landscape planning models. Participation in a planning exercise applying these skills and knowledge using simple computing techniques.

LAND9212
Landscape Planning Methods
Staff Contact: Mr D. Crawford
C3 S2 L2 T1

Examination and comparison of a range of landscape planning methods using examples from Australia and overseas. Students conduct research relating to the physical parameters of models for land use evaluation and environmental impact assessment. Participation in planning exercises involving the application of these models using advanced computing techniques.

LAND9212
GIS in Landscape Architecture
Staff Contact: Mr. D. Crawford
C3 S1 L2T1

Principles of geographic information systems, techniques of data collection, storage analysis, modelling and display. Applications and procedures specific to Landscape Architecture and Landscape Planning. Laboratory exercises using the IDRISI GIS.

LAND9301
Landscape Planning Exercise
Staff Contact: Mr. D. Crawford; A/Professor F. Thorvaldson
C6 S1 T6

Prerequisite: Core subjects of course.

Application of Landscape Planning to a major land resource allocation and management project undertaken as a group exercise.

LAND9214
Visual Landscape Assessment
Staff Contact: A/Professor F. Thorvaldson
C3 S2 L2 T1

Examination of visual analysis, assessment and evaluation techniques and their incorporation into landscape planning models. Research and study of recent Australian and overseas examples of visual resource management programs. Students will undertake visual planning exercises using relevant computer software.

Graduate School of the Built Environment

Not all graduate course subjects are necessarily offered in any one year.

GSBE0101
Mechanical Shock and Vibration
Staff Contact:
C2 S1 L1 T1

Vibrating systems, strings, rods, beams, plates, shells; radiation characteristics of noise sources; random vibration; structures; fatigue, filters, isolators, attenuators, dampers; impedance.

GSBE0102
Contextual Studies
Staff Contact:
C1 or C3 (check) S1 Total CCH14T

The scope and international context of conservation. History, concepts and philosophies of the discipline. Definition of conservation processes, including preservation, restoration, rehabilitation, reconstruction, alteration, repair, adaptation and reuse, infill, urban conservation. Conservation as a heritage consideration, including the criteria for selecting, listing and classifying structures; as a non-heritage consideration, including aspects of economics and co

uction; and as a planning, landscape and townscape consideration. The current legal framework. Government, semi-government and community conservation organizations and their roles.

GSBE0201
Acoustic Measuring Systems and Electroacoustics
Staff Contact:
C2 S1 L2

Transducers; microphones; amplifiers; loudspeakers; filters, recorders, pick-ups; noise generators; acoustic measuring instruments. Sound reinforcement systems; ambiophony; assisted resonance. Special requirements for translation, language laboratories.

GSBE0202
Architectural History
Staff Contact:
C3 S1 Total CCH42

The rationale, investigation and interpretation of architectural history. The cause-and-effect relationships, particularly social, underlying architecture. Influences upon Australia from other countries. Detailed studies of selected aspects of architectural and building history, mainly Australian. Traditional technology. Development of technology and the manifestation of style. Histories of selected building types, methods, materials and finishes.

GSBE0301
The Ear, Hearing and Hearing Conservation
Staff Contact:
C2 S1 L1 T1

Physiological and psychoacoustic factors in sound perception; discrimination, masking; loudness and annoyance; subjective scales and units; hearing threshold shift; damage risk criteria, hearing conservation programs and audiometry; standards and regulations.

GSBE0302
Conservation Management
Staff Contact:
C4 S2 Total CCH42

Environmental psychology and conservation. Individual, group and community processes and responsibilities. Public policy and public opinion. The organization of conservation treatments and processes, projects, and procedures. Professional, contractual and legal roles and responsibilities. Evaluation of historic and non-historic old buildings and their sites. Feasibility and economic considerations. Revolving funds. Acts and ordinances. Labour and materials resources. Model management plans. Case studies.

GSBE0401
Community Noise
Staff Contact:
C4 S2 L2 T2

Sources of community noise; sound propagation out of doors; barrier theory; road, rail and air transportation noise; land-use zoning; measurement and assessment of community noise annoyance; standards, acts and regulations.

GSBE0402
Analysis and Documentation A
Staff Contact:
C4 S1 Total CCH56

Interpretation of extant structures. Introduction to historical, industrial and structural archaeology. Research methodology. Comparative analysis, typologies and surveys. Case studies.

GSBE0403
New Development Studies
Staff Contact:
S1 T2

Seminar group study in new ideas, activities and resources which affect the future development of research, education and practice in the man-made environment.

GSBE0501
Noise Control in Buildings
Staff Contact:
C4 S2 L2 T2

Airborne and impact sound transmission theory and measurement; vibration isolation; single, multiple-leaf and composite partitions; ventilation, plumbing and services noise control; criteria; regulations and standards.

GSBE0502
Analysis and Documentation B
Staff Contact:
C2 S2 Total CCH28

Preparation of documentary studies: measurement, photography, reportage. Photogrammetry and its applications.

GSBE0503
Research Studies
Staff Contact:
S1 T2

Research viewed within a framework of priorities, policies, and interdependencies including case studies, resources, methodology and the preparation of research proposals.

GSBE0601
Noise Control in Industry
Staff Contact:
C4 S1 L2 T2

Hearing conservation and community noise; standards and regulations; industrial noise sources; mechanical noise, electrical machinery, aerodynamic noise, jets, ventilation system noise, combustion noise, vibration; noise-reduction techniques: transmission and insertion loss; absorbers; impedance mismatch, vibration isolation; enclosures, barriers; room acoustics; practical measurement of sound power, sound pressure and directivity.

GSBE0602
Conservation Technology A
Staff Contact:
C2 or C3 (check) S1 Total CCH28

The integrity of old buildings and their environments, including planning, landscape and architectural considerations. Effects of acts and ordinances.

GSBE0603
Directed Studies
Staff Contact:
S1 T2

The conduct and report of findings of a short research project in the area of the student's concentration designed to meet the individual's needs and interests and supportive to the major research topic.

GSBE0701
Advanced Physical Acoustics
Staff Contact:
C4 S1 L3 T1

Vibrating systems: coupled oscillators, beams, membranes, plates, resonators, acoustic filters, analogs, analogue computer simulation of vibrating systems; transfer of energy from one system to another. Reflection and transmission at walls, rigid walls, flexible walls, multiple walls, impulsive excitation. Sound absorbers: porous absorbers, perforated panel absorbers, sonic and ultrasonic measurement techniques, relation to properties of materials.

GSBE0702
Conservation Technology B
Staff Contact:
C5 S2 Total CCH70

Identification, understanding and diagnosis of deterioration in traditional structure, construction, decoration and building environments. Development of general techniques for preservation, restoration, reconstruction and adaptation. Comfort criteria and other functional considerations.

GSBE0801
Auditorium Acoustics
Staff Contact:
C3 S1 L2 T1

Subjective and objective criteria for speech and music; speech intelligibility; characteristics of musical sources; reverberation theory, diffusion; steady-state and transient room response; design methods including graphic and model analysis; sound reflectors; sound absorbents.

GSBE0901
Graduate Project A
Staff Contact:
C5 S1

An individual research project on an approved topic in acoustics; preliminary report.

GSBE0902
Conservation Technology D
Staff Contact:
S2
Prereqisite: 39.107G or equivalent

Policies and techniques appropriate to adaptive reuse and other treatments of non-heritage structures. Integration of new services and functions. Case studies.

GSBE1001
Graduate Project B
Staff Contact:
C10 S2
Prereqisite: 39.994G or equivalent

An individual research project on an approved topic in acoustics; final report.

GSBE1002
Graduate Project
Staff Contact:
F Total CCH112

An appropriate conservation topic from any apposite area, including such fields as historical archaeology, documentation, legislation, economics, technology, or a specific building restoration project. Conditions governing submission of the Project Report appear in the Calendar.

GSBE1101
Community Noise Control
Staff Contact:
C2 S1 L1 T1

Introduction; sound and sound propagation, sound power, sound pressure, decibels; sound perception, psychoacoustics loudness, annoyance, phons and dB(A); hearing conservation; acoustic measuring and analysing instruments _ sound level meters, filters, analysers, recorders; sound sources; community noise assessment; the NSW Noise Control Act; practical exercises in sound recording, analysis and assessment; noise control_source noise reduction, use of barriers, enclosures, distance, sound absorbing materials; sound transmission through building elements; noise components of environmental impact statements.

Department of Industrial Design

IDES5071
Industrial Design Studies
Staff Contact:
C2 F HPW2

The objectives and methods of graduate study in industrial design: contemporary industrial design trends, the relationship between academic and practice objectives, the relationship of industrial design methodology and research techniques to those of other disciplines at the University. A diverse range of current professional and theoretical interests, design and design related activities in Australia and overseas, current ideologies and historical assessments. Seminars are given by students, theorists, and practitioners in design and design related areas.

IDES5091
Design Media Communication
Staff Contact:
C2 S1 HPW2

The major two and three dimensional media and computer techniques are analysed and demonstrated within the context of industrial design problem solving: orthographic techniques, the Australian Engineering Drawing Standard, graphic art processes, photography, current rendering and illustration techniques, modelling in automotive clay, plastic sheet and rigid foams, timbers and metals. The current state of computer aided design as well as its potential in design and the restructuring of engineering decision-making and drafting. Particular emphasis given to each method's role in problem analysis and communication at the concept, detail and final design stages. The social and physiological aspects of communicating design in industry are also examined.

IDES5193
Ergonomics for Industrial Designers
Staff Contact:
C2 S2 HPW2

Objectives, methodology and research techniques of ergonomics. Man/machine, interaction, human perception and performance, anthropometrics, product evaluation, the establishment of ergonomic parameters in product design and the application of ergonomics in design, the interrelationship of ergonomics and industrial design in the product development process. Students carry out laboratory experiments related to project work and also contribute to the development of a data bank.

IDES5111
Visual Thinking
Staff Contact:
C2 S1 HPW2
Notes: Graduates of visually oriented courses, eg architecture, are normally exempt.

Visual language, media, problems and problem solving methods. The relationship between visual thinking and creative processes. Studies are undertaken in two and three dimensions and are developed within the context of art and design.

IDES5124
Business Studies for Industrial Designers
Staff Contact:
C2 S1 HPW2

The theory and practice of business and industrial management, and marketing. Its application in the product development process and the relation of the process to other business and industrial objectives. Special reference to the Australian industrial context and potential developments resulting from technological and socio-economic change. Professional practice and the

management of design organizations in the general context of business and industrial management.

IDES5131
Industrial Design
Staff Contact:
C4 S1 HPW4
Corequisite: IDES5071 or equivalent.

Industrial design project work intended to integrate the student's previous experience and the course units in preparatory work for the Graduate Project. A part of the course may be undertaken on a group basis.

IDES5141
Industrial Design A
Staff Contact:
C6 S1 or S2 HPW6
Corequisite: IDES5071 or equivalent

Project work designed to introduce industrial design research and studio methodologies. Studies undertaken within a broad range of product areas and related to the concurrent course work.

IDES5152
Manufacturing Technology
Staff Contact:
C2 S1 HPW2

Industrial processes and materials, production costing and changing production economics. Objectives and structures of the engineering professions and their integration with industrial design in the product development process. Students assist in the development of a data bank.

IDES6081
Graduate Project (MID)
Staff Contact:
C14 F
Corequisite: IDES5131

A project within the practice areas of industrial design, selected by the student subject to the approval of the School; conducted within an approved methodology. Documentation of the methodology, research strategy and techniques, monitoring of the design process, resultant design, and evaluation of the methodology, research and final design. Students should give consideration to the School's specialist areas.

IDES6101
Design Theory
C4 F
Prerequisite: IDES5071 or equivalent

Research into a theory aspect of industrial design, selected by the student subject to the approval of the School, in the general area of design and design related studies. Students should give consideration to the School's specialist areas. The study may be taken in product design but should not be directly linked to studio project work being undertaken by the student.

IDES6161
Industrial Design B
Staff Contact:
C6 F
Corequisite: IDES5141

Advanced project work combining the research and practice methodologies of industrial design in product research, development and design, preparatory to undertaking the Graduate Project.

IDES6171
Industrial Experience
Staff Contact:
C2
Prerequisite: Enrolment in one of the degrees

A four week period of approved industrial experience undertaken by full-time students in the mid-year recess and by part-time students in either the mid-year or summer recess. The period is intended to give students first hand interaction with industrial and commercial operations. Normally students are expected to be involved in design activities, however involvement in production, engineering, management and marketing is also considered. Part-time students in approved employment are exempt.

IDES6181
Graduate Project (MSc(IndDes))
Staff Contact:
C8 S2 HPW8

A project within the practice areas of industrial design, proposed by the student in consultation with the School and conducted within an approved methodology; documentation of the methodology, research strategy and techniques, monitoring of the design process, resultant design, and evaluation of the methodology, research and design.

Conditions for the Award of Degrees

First Degrees

Rules, regulations and conditions for the award of *first degrees* are set out in the appropriate **Faculty Handbooks.**

For the list of undergraduate courses and degrees offered see Table of Courses by Faculty (Undergraduate Study) in the Calendar.

The following is the list of *higher degrees, graduate diplomas and graduate certificates* of the University, together with the publication in which the conditions for the award appear.

Higher Degrees

For the list of graduate degrees by research and course work, arranged in faculty order, see **Table of Courses (by faculty): Graduate Study** in the Calendar.

Title	Abbreviation	Calendar/Handbook
Higher Degrees		
Doctor of Science	DSc	Calendar
Doctor of Letters	DLitt	Calendar
Doctor of Laws	LLD	Calendar
Doctor of Education	EdD	Professional Studies
Doctor of Medicine	MD	Medicine
Doctor of Philosophy	PhD	Calendar and all handbooks
Master of Applied Science	MAppSc	Applied Science
Master of Architectural Design	MArchDes	Architecture
Master of Architecture	MArch	Architecture
Master of Archives Administration	MArchivAdmin	Professional Studies
Master of Art	MArt	College of Fine Arts
Master of Arts Administration	MArtAdmin	College of Fine Arts
Master of Art Education	MArtEd	College of Fine Arts
Master of Arts	MA	Arts and Social Sciences University College
Master of Art Theory	MArtTh	College of Fine Arts
Master of Biomedical Engineering	MBiomedE	Engineering
Master of Building	MBuild	Architecture
Master of the Built Environment	MBEnv	Architecture
Master of the Built Environment (Building Conservation)	MBEnv	Architecture

Title	Abbreviation	Calendar/Handbook
Higher Degrees (continued)		
Master of Business Administration	MBA	AGSM
Master of Business and Technology	MBT	Engineering
Master of Chemistry	MChem	Science*
Master of Clinical Education	MClinEd	Medicine
Master of Cognitive Science	MCogSc	Engineering
Master of Commerce (Honours)	MCom(Hons)	Commerce and Economics
Master of Commerce	MCom	Commerce and Economics
Master of Community Health	MCH	Medicine
Master of Computer Science	MCompSc	Engineering
Master of Construction Management	MConstMgt	Architecture
Master of Education	MEd	Professional Studies
Master of Education in Creative Arts	MEdCA	Professional Studies
Master of Educational Administration	MEdAdmin	Professional Studies
Master of Engineering	ME	Applied Science Engineering University College
Master of Engineering *without supervision*	ME	Applied Science Engineering
Master of Engineering Science	MEngSc	Engineering Applied Science University College
Master of Environmental Studies	MEnvStudies	Applied Science
Master of Fine Arts	MFA	College of Fine Arts
Master of Health Administration	MHA	Professional Studies
Master of Health Personnel Education	MHPEd	Medicine
Master of Health Planning	MHP	Professional Studies
Master of Higher Education	MHEd	Professional Studies
Master of Industrial Design	MID	Architecture
Master of Information Science	MInfSc	Engineering
Master of Landscape Architecture	MLArch	Architecture
Master of Landscape Planning	MLP	Architecture
Master of Laws	LLM	Law
Master of Librarianship	MLib	Professional Studies
Master of Management Economics	MMgtEc	University College
Master of Mathematics	MMath	Science*
Master of Music	MMus	Arts and Social Sciences
Master of Nursing Administration	MNA	Professional Studies
Master of Optometry	MOptom	Science*
Master of Paediatrics	MPaed	Medicine
Master of Policy Studies	MPS	Arts and Social Sciences
Master of Physics	MPhysics	Science*
Master of Project Management	MPM	Architecture
Master of Public Health	MPH	Medicine Professional Studies
Master of Psychological Medicine	MPM	Medicine
Master of Psychology (Applied)	MPsychol	Science†
Master of Psychology (Clinical)	MPsychol	Science†
Master of Psychotherapy	MPsychotherapy	Medicine
Master of Safety Science	MSafetySc	Applied Science
Master of Science	MSc	Applied Science Architecture Engineering Medicine Science*† University College
Master of Science *without supervision*	MSc	Applied Science Architecture Engineering
Master of Science (Acoustics)	MSc(Acoustics)	Architecture

Title	Abbreviation	Calendar/Handbook
Higher Degrees (continued)		
Master of Science (Industrial Design)	MSc(IndDes)	Architecture
Master of Science and Society	MScSoc	Arts and Social Sciences
Master of Social Work	MSW	Professional Studies
Master of Sports Science	MSpSc	Professional Studies
Master of Statistics	MStats	Science*
Master of Surgery	MS	Medicine
Master of Surveying	MSurv	Engineering
Master of Surveying *without supervision*	MSurv	Engineering
Master of Surveying Science	MSurvSc	Engineering
Master of Town Planning	MTP	Architecture
Graduate Diplomas		
Graduate Diploma	GradDip	AGSM Applied Science Architecture Arts and Social Sciences Engineering Science*†
	GradDipHPEd	Medicine
	GradDipClinEd	Medicine
	GradDipPaed	Medicine
	GradDipHEd	Professional Studies
	DipEd	Professional Studies
	DipIM-ArchivAdmin	Professional Studies
	DipIM-Lib	Professional Studies
	DipFDA	Science*
Graduate Certificates		
	GradCertPhilT	Arts and Social Sciences
	GradCertHEd	Professional Studies

**Faculty of Science.*

†Faculty of Biological and Behavioural Sciences.

Doctor of Philosophy (PhD)

1.The degree of Doctor of Philosophy may be awarded by the Council on the recommendation of the Higher Degree Committee of the appropriate faculty or board (hereinafter referred to as the Committee) to a candidate who has made an original and significant contribution to knowledge.

Qualifications

2.(1)A candidate for the degree shall have been awarded an appropriate degree of Bachelor with Honours from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.

(2)In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3)If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment as a candidate for the degree.

Enrolment

3.(1)An application to enrol as a candidate for the degree shall be lodged with the Registrar at least one month prior to the date at which enrolment is to begin.

(2)In every case before making the offer of a place the Committee shall be satisfied that initial agreement has been reached between the School* and the applicant on the topic area, supervision arrangements, provision of adequate facilities and any coursework to be prescribed and that these are in accordance with the provisions of the guidelines for promoting postgraduate study within the University.

(3)The candidate shall be enrolled either as a full-time or a part-time student.

(4)A full-time candidate will present the thesis for examination no earlier than three years and no later than five years from the date of enrolment and a part-time candidate will present the thesis for examination no earlier than four years and no later than six years from the date of enrolment, except with the approval of the Committee.

(5)The candidate may undertake the research as an internal student i.e. at a campus, teaching hospital, or other research facility with which the University is associated, or as an external student not in attendance at the University except for periods as may be prescribed by the Committee.

(6)An internal candidate will normally carry out the research on a campus or at a teaching or research facility of the University except that the Committee may permit a candidate to spend a period in the field, within another institution or elsewhere away from the University provided that the work can be supervised in a manner satisfactory to the Committee. In such instances the Committee shall be satisfied that the location and period of time away from the University are necessary to the research program.

(7)The research shall be supervised by a supervisor and where possible a co-supervisor who are members of the academic staff of the School or under other appropriate supervision arrangements approved by the Committee. Normally an external candidate within another organisation or institution will have a co-supervisor at that institution.

Progression

4.The progress of the candidate shall be considered by the Committee following report from the School in accordance with the procedures established within the School and previously noted by the Committee.

(i)The research proposal will be reviewed as soon as feasible after enrolment. For a full-time student this will normally be during the first year of study, or immediately following a period of prescribed coursework. This review will focus on the viability of the research proposal.

(ii)Progress in the course will be reviewed within twelve months of the first review. As a result of either review the Committee may cancel enrolment or take such other action as it considers appropriate. Thereafter, the progress of the candidate will be reviewed annually.

Thesis

5.(1)On completing the program of study a candidate shall submit a thesis embodying the results of the investigation.

(2)The candidate shall give in writing to the Registrar two months notice of intention to submit the thesis.

(3)The thesis shall comply with the following requirements:

(a)it must be an original and significant contribution to knowledge of the subject;

(b)the greater proportion of the work described must have been completed subsequent to enrolment for the degree;

(c)it must be written in English except that a candidate in the Faculty of Arts and Social Sciences may be required by the Committee to write a thesis in an appropriate foreign language;

(d)it must reach a satisfactory standard of expression and presentation;

(e)it must consist of an account of the candidate's own research but in special cases work done conjointly with other persons may be accepted provided the Committee is satisfied about the extent of the candidate's part in the joint research.

**'School' is used here and elsewhere in these conditions to mean any teaching unit authorised to enrol research students and includes a department where that department is not within a school, a centre given approval by the Academic Board to enrol students, and an interdisciplinary unit within a faculty and under the control of the Dean of the Faculty. Enrolment is permitted in more than one such teaching unit.*

(4)The candidate may not submit as the main content of the thesis any work or material which has previously been submitted for a university degree or other similar award but may submit any work previously published whether or not such work is related to the thesis.

(5)Four copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of theses for higher degrees.

(6)It shall be understood that the University retains the four copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

Examination

6.(1)There shall be not fewer than three examiners of the thesis, appointed by the Committee, at least two of whom shall be external to the University.

(2)At the conclusion of the examination each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that one of the following:

(a)The thesis merits the award of the degree.

(b)The thesis merits the award of the degree subject to minor corrections as listed being made to the satisfaction of the head of school.

(c)The thesis requires further work on matters detailed in my report. Should performance in this further work be to the satisfaction of the higher degree Committee, the thesis would merit the award of the degree.

(d)The thesis does not merit the award of the degree in its present form and further work as described in my report is required. The revised thesis should be subject to re-examination.

(e)The thesis does not merit the award of the degree and does not demonstrate that resubmission would be likely to achieve that merit.

(3)If the performance at the further work recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.

(4)The Committee shall, after consideration of the examiners' reports and the results of any further work, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate be permitted to resubmit the thesis after a further period of study and/or research.

Fees

7.A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Architectural Design (MArchDes)

(No new candidates will be enrolled in this course from Session Two, 1992)

1. The degree of Master of Architectural Design by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

Qualifications

2. (1) A candidate for the degree shall:

(a)have been awarded the degree of Bachelor of Architecture with Honours from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Architecture (hereinafter referred to as the Committee), and

(b) have had at least one year's professional practice subsequent to graduation of a kind acceptable to the Committee.

(2) In exceptional cases an applicant who submits evidence of such academic and/or professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1)An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the degree until the lapse of two academic sessions from the date of enrolment in the case of full-time candidate or three sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and six sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Fees

4. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Architecture (MArch), Master of Building (MBuilding), Master of the Built Environment (MBEnv), Master of Landscape Architecture (MLArch) and Master of Town Planning (MTP)

1. The degree of Master of Architecture or Master of Building or Master of the Built Environment or Master of Landscape Architecture or Master of Town Planning by research may be awarded by the Council on the recommendation of the Higher Degree Committee of the Faculty of Architecture (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation or design.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor of four full-time years duration (or the part-time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.

(2) In exceptional cases an applicant who submits evidence of such academic and/or professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) When the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant, before being permitted to enrol, to undergo such examination or carry out such work as the Committee may prescribe.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.

(2) In every case, before permitting a candidate to enrol, the head of the school* in which the candidate intends to enrol shall be satisfied that adequate supervision and facilities are available.

**Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department.*

(3) An approved candidate shall be enrolled in one of the following categories:

(a) full-time attendance at the University;

(b) part-time attendance at the University;

(c) external – not in regular attendance at the University and using research facilities external to the University.

(4) A candidate shall be required to undertake an original investigation or design on an approved topic. The candidate may also be required to undergo such examination and perform such other work as may be prescribed by the Committee.

(5) The work shall be carried out under the direction of a supervisor appointed from the full-time members of the University staff.

(6)The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school in which the candidate is enrolled and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.

(7) No candidate shall be granted the degree until the lapse of three academic sessions in the case of a full-time candidate or four academic sessions in the case of a part-time or external candidate from the date of enrolment. In the case of a candidate who has been awarded the degree of Bachelor with Honours or who has had previous research experience the Committee may approve remission of up to one session for a full-time candidate and two sessions for a part-time or external candidate.

(8) A full-time candidate for the degree shall present for examination not later than six academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.

Thesis

4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the original investigation or design.

(2) The candidate shall give in writing two months notice of intention to submit the thesis.

(3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the committee is satisfied about the extent of the candidate's part in the joint research.

(4) The candidate may also submit any work previously published whether or not such work is related to the thesis.

(5) Three copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of higher degree thesis.

(6) It shall be understood that the University retains the three copies of the thesis submitted for examination is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this in not practicable.

(2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the merits of the thesis and shall recommend to the Committee that:

(a) the candidate be awarded the degree without further examination; or

(b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school; or

(c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or

(d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or

(e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.

(3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the

same thesis and submit to a further oral, practical or written examination within a period specified by it but not exceeding eighteen months.

(4) The Committee shall, after consideration of the examiners' reports and the reports of any oral or written or practical examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Project Management (MPM)

1. The degree of Master of Project Management by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study. The degree shall be awarded at Pass or Honours level.

Qualifications

2. (1) A candidate for the degrees shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Architecture (hereinafter referred to as the Committee).

(2) In exceptional cases of an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as it may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the degree at Pass level until the lapse of four academic sessions from the date of enrolment for a candidate undertaking the program at Pass level and eight sessions for a candidate undertaking the program at Honours level. In special cases an extension of these times may be granted by the Committee.

Project Report

4. (1) A candidate who obtains a grade average of Credit or better in the formal subjects in 3. (2) may undertake a project on an approved topic.

(2) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff.

(3) The candidate shall given in writing to the Registrar two months notice of intention to submit a report on the project.

(4) Three copies of the project report shall be presented in a form which complies with the requirements of the University for the preparation and submission of project reports for higher degrees.

(5) It shall be understood that the University retains the three copies of the project report submitted for examination and is free to allow the project report to be consulted or borrowed. Subject to

the provisions of the Copyright Act, 1968, the University may issue the project report in whole or in part, in microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the project report, appointed by the Committee.

(2) Arrangements shall be made for oral presentation and defence of the project report as part of the examination.

(3) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the project report and shall recommend to the Committee that:

(a) the project report be noted as satisfactory; or

(b) the project report be noted as satisfactory subject to minor corrections being made to the satisfaction of the head of the school; or

(c) the project report be noted as unsatisfactory but that the candidate be permitted to resubmit it in a revised form after a further period of study and/or research; or

(d) the project report be noted as unsatisfactory and that the candidate be not permitted to resubmit it.

(4) The Committee shall, after considering the examiners' reports and the candidate's results of assessment in the prescribed formal subjects, recommend that the csandidate be awarded the degree at Pass or Honours level.. If it is decided that the project report is unsatisfactory the Committee shall determine whether or not the candidate may resubmit it after a further period of study and/or research,

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Construction Management (MConstMgt)

1. The degree of Master of Construction Management by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

Qualifications

2. (1) A candidate for the degrees shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Architecture (hereinafter referred to as the Committee).

(2) In exceptional cases of an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as it may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) An approved candidate shall be enrolled in full-time attendance at the University.

(3) A candidate for the degree shall be required to undertake formal subjects, industry training, prepare a report to be assessed by two internal examiners and pass such assessment as prescribed.

(4) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the committee may cancel enrolment or take such other action as it considers appropriate.

(5) No candidate shall be awarded the degree at Pass level until the lapse of two academic sessions from the date of enrolment.

Fees

5. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of the Built Environment (Building Conservation)(MBenv), Master of Industrial Design (MID), Master of Science (Acoustics) (MSc(Acoustics), and Master of Science (Industrial Design) (MSc(IndDes)

1. The degree of Master of the Built Environment (Building Conservation) or Master of Industrial Design or Master of Science (Acoustics) or Master of Science (Building) or Master of Science (Industrial Design) may be awarded by the Council to a candidate who has completed a program of advanced study.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor of four full time years duration (or the part time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Architecture (hereinafter referred to as the Committee).

(2) In exceptional cases an applicant who submits evidence of such academic and/or professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

((3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the degree until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date

of enrolment for a full-time candidate and eight sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Project Report

4. (1) A candidate shall also be required to undertake a project on an approved topic.

(2) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff.

(3) The candidate shall give in writing to the Registrar two months notice of intention to submit a report on the project.

(4) Three copies of the project report shall be presented in a form which complies with the requirements of the University for the preparation and submission of project reports for higher degrees.

(5) It shall be understood that the University retains the three copies of the project report submitted for examination and is free to allow the project report to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the project report in whole or in part, in microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the project report, appointed by the Committee.

(2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the project report and shall recommend to the Committee that:

(a) the project report be noted as satisfactory; or

(b) the project report be noted as satisfactory subject to minor corrections being made to the satisfaction of the head of the school; or

(c) the project report be noted as unsatisfactory but that the candidate be permitted to resubmit it in a revised form after a further period of study and/or research; or

(d) the project report be noted as unsatisfactory and that the candidate be not permitted to resubmit it.

(3) The Committee shall, after considering the examiners' reports and the candidate's results of assessment in the prescribed formal subjects, recommend whether or not the candidate may be awarded the degree. If it is decided that the project report is unsatisfactory the Committee shall determine whether or not the candidate may resubmit it after a further period of study and/or research.

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Engineering (ME) and Master of Science (MSc)

1. The degree of Master of Engineering or Master of Science by research may be awarded by the Council on the recommendation of the Higher degree Committee of the appropriate faculty (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.

(2) An applicant who submits evidence of such other academic or professional attainments as may be approved by the Committee may be permitted to enrol for the degree.

(3) When the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant, before being permitted to enrol, to undergo such examination or carry out such work as the Committee may prescribe.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.

(2) In every case, before permitting a candidate to enrol, the head of the school* in which the candidate intends to enrol shall be satisfied that adequate supervision and facilities are available.

(3) An approved candidate shall be enrolled in one of the following categories:

(a) full-time attendance at the University;

(b) part-time attendance at the University;

(c) external – not in regular attendance at the University and using research facilities external to the University.

(4) A candidate shall be required to undertake an original investigation on an approved topic. The candidate may also be required to undergo such examination and perform such other work as may be prescribed by the Committee.

(5) The work shall be carried out under the direction of a supervisor appointed from the full-time members of the University staff.

(6) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school* in which the candidate is enrolled and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.

(7) No candidate shall be granted the degree until the lapse of three academic sessions in the case of a full-time candidate or four academic sessions in the case of a part-time of external candidate from the date of enrolment. In the case of a candidate who has been awarded the degree of Bachelor with Honours or who has had previous research experience the Committee may approve remission of up to one session for a full-time candidate and two sessions for a part-time or external candidate.

(8) A full-time candidate for the degree shall present for examination not later than six academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.

Thesis

4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the original investigation.

(2) The candidate shall give in writing two months notice of intention to submit the thesis.

(3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extent of the candidate's part in the joint research.

(4) The candidate may also submit any work previously published whether or not such work is related to the thesis.

(5) Three copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of higher degree theses.

(6) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this is not practicable.

(2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the merits of the thesis and shall recommend to the Committee that:

(a) the candidate be awarded the degree without further examination; or

(b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school*; or

(c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or

* **Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department.*

(d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or

(e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.

(3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to a further oral, practical or written examination within a period specified by it but not exceeding eighteen months.

(4) The Committee shall, after consideration of the examiners' reports and the reports of any oral or written or practical examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Engineering (ME), Master of Science (MSc) and Master of Surveying (MSurv) *without supervision*

1. The degree of Master of Engineering or Master of Science or Master of Surveying without supervision may be awarded by the Council on the recommendation of the Higher Degree Committee of the apropriate faculty (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation.

Qualifications

2. A candidate for the degree shall have been awarded an appropriate degree of Bachelor from the University of New South Wales with at least three years relevant standing in the case of Honours graduates and four years relevant standing in the case of Pass graduates, and at a level acceptable to the Committee.

Enrolment and Progression

3. An application to enrol as a candidate for the degree without supervision shall be made on the prescribed form which shall be lodged with the Registrar not less than six months before the intended date of submission of the thesis. A graduate who intends to apply in this way should, in his or her own interest, seek at an early stage the advice of the appropriate head of school (or department) with regard to the adequacy of the subject matter and its presentation for the degree. A synopsis of the work should be available.

Thesis

4. (1) A candidate shall submit a thesis embodying the results of the investigation.

(2) The candidate shall give in writing to the Registrar two months notice of intention to submit the thesis.

(3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extent of the candidate's part in the joint research.

(4) The candidate may also submit any work previously published whether or not such work is related to the thesis.

(5) Three copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of theses for higher degrees.

(6) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this is not practicable.

(2) Before the thesis is submitted to the examiners the head of the school* in which the candidate is enrolled shall certify that it is prima facie worthy of examination.

(3) At the conclusion of the examination each examiners shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that:

(a) the candidate be awarded the degree without further examination; or

(b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school*; or

(c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or

(d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or

(e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.

(4) If the performance at the further examination recommended under (3)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.

(5) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.

Fees

6. A candidates shall pay such fees as may be determined from time to time by the Council.

Master of Landscape Planning (MLP)

1. The degree of Master of Landscape Planning by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

Qualifications

2. (1) A candidate for the degrees shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Architecture (hereinafter referred to as the Committee).

(2) In exceptional cases of an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as it may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the degree until the lapse of three academic sessions from the date of enrolment.

Project Report

4. (1) All candidates must complete 36 credit points, including either an 18 credit landscape research project or a 9 credit landscape project.

(2) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff.

(3) The candidate shall give in writing to the Registrar two months notice of intention to submit a landscape research project report.

(4) Three copies of the project report shall be presented in a form which complies with the requirements of the University for the preparation and submission of project reports for higher degrees.

(5) It shall be understood that the University retains the three copies of the project report submitted for examination and is free to allow the project report to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the project report in whole or in part, in microfilm or other copying medium.raduate Diploma may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

Examination

5. (1) There shall be not fewer than two examiners of the landscape project report, appointed by the Committee, at least one of whom shall be external to the University.

(2) Arrangements shall be made for oral presentation and defence of the project report as part of the examination.

(3) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the project report and shall recommend to the Committee that:

(a) the project report be noted as satisfactory; or

(b) the project report be noted as satisfactory subject to minor corrections being made to the satisfaction of the head of the school; or

(c) the project report be noted as unsatisfactory but that the candidate be permitted to resubmit it in a revised form after a further period of study and/or research; or

(d) the project report be noted as unsatisfactory and that the candidate be not permitted to resubmit it.

(4) The Committee shall, after considering the examiners' reports and the candidate's results of assessment in the prescribed formal subjects, recommend that the csandidate be awarded the degree at Pass or Honours level.. If it is decided that the project report is unsatisfactory the Committee shall determine whether or not the candidate may resubmit it after a further period of study and/or research,

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

Graduate Diploma (Grad Dip)

1. A Graduate Diploma may be awarded by the concil to a candidate who has satisfactorily completed a program of advanced study.

Qualifications

2. (1)A candidate for the diploma shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the appropriate faculty (hereinafter referred to as the Committee).

(2) An applicant who submits evidence of such other academic or professional attainments as may be approved by the Committee may be permitted to enrol for the diploma.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the diploma shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the diploma shall be required to undertake such formal subjects and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the diploma until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and six sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Fees

4. A candidate shall pay such fees as may be determined from time to time by the Council.

Scholarships and Prizes

The scholarships and prizes listed below are available to students whose courses are listed in this book. Each faculty handbook contains in its **Scholarships and Prizes** section the scholarships and prizes available with that faculty. The **General Information** section of the Calendar contains a comprehensive list of scholarships and prizes offered throughout the University. Applicants should note that the awards and conditions are subject to review.

Key: **V** Value **T** Year/s of Tenure **C** Conditions

Scholarships

Undergraduate Scholarships

Listed below is an outline in summary form of undergraduate scholarships available to students. Full information may be obtained from the Student Centre located on the Lower Ground Floor of the Chancellery.

Unless otherwise indicated in footnotes, applications for the following scholarships should be made to the Registrar and Deputy Principal by 14 January each year. Please note that not all of these awards are available every year.

General

John Crawford Scholarship Scheme

V Tuition fees. Some students maybe eligible for airfares and a stipend.

T Determined by normal course duration

C Information should be obtained from Australian Diplomatic Posts. Conditions and entitlements vary depending on the home country. The closing date is normally early in the year before the year of study.

Sam Cracknell Memorial

V Up to $1500 pa payable in fortnightly instalments

T 1 year

C Prior completion of at least 2 years of a degree or diploma course and enrolment in a full-time course during the year of application; academic merit; participation in sport both directly and administratively; and financial need.

Girls Realm Guild

V Up to $1500 pa

T 1 year with the prospect of renewal subject to satisfactory progress and continued demonstration of need

C Available only to female students under 35 years of age who are permanent residents of Australia enrolling in any year of a full-time undergraduate course on the basis of academic merit and financial need.

W.S. and L.B. Robinson

V Up to $6500 pa

T 1 year renewable for the duration of the course subject to satisfactory progress

C Available only to students who have completed their schooling in Broken Hill or whose parents reside in Broken Hill; for a course related to the mining industry. Includes courses in mining engineering, geology,

electrical and mechanical engineering, metallurgical process engineering, chemical engineering and science. Applications close 30 September each year. Apply directly to PO Box 460 Broken Hill NSW 2880

Alumni Association

V Up to $1500 pa

T 1 year with the possibility of renewal

C Available to students enrolled in any year of a full-time course. Candidates must be the children of Alumni of the University of NSW and may be either permanent residents of Australia or international students.

Sporting Scholarships

V $2000 pa

T 1 year with possibility of renewal

C Available to students who are accepted into a course of at least two years duration. Prospective applicants should have an outstanding ability in a particular sport and are expected to be an active member of a UNSW Sports Club. Apply directly to Sport and Recreation Section, PO Box 1, Kensington 2033.

Architecture

Building

WT Partnership

V Up to $2000 pa

T 1 year

Permanent residence in Australia for a Year 3 student enrolled in the degree course in Building

Graduate Scholarships

Listed below is an outline in summary form of Graduate Scholarships available to students. Application forms and further information are available from the Scholarships Unit and Student Centre, located on the Ground Floor of the Chancellery, unless an alternative contact address is provided. Normally applications become available four to six weeks before the closing date. Information is also available on additional scholarships which may become available from time to time, mainly from funds provided by organizations sponsoring research projects.

The following publications may also be of assistance: 1. *Awards for Postgraduate Study in Australia and Awards for Postgraduate Study Overseas*, published by the Graduate Careers Council of Australia. PO Box 28, Parkville, Victoria 3052;* 2. *Study Abroad*, published by UNESCO;*

Details of overseas awards and exchanges administered by the Department of Employment, Education and Training can be obtained from: Awards and Exchanges Section, Department of Employment, Education and Training, PO Box 826, Woden, ACT 2606.

Where possible, the scholarships are listed in order of faculty. Applicants should note that the awards and conditions are subject to review.

**Available for reference in the University Library.*

General

University Postgraduate Research Scholarships

T 1-2 years for a Masters and 3-4 years for a PhD degree

V Living allowance of $14,260 pa. Other allowances may also be paid. Tax free.

C Applicants must be honours graduates or equivalent in the Medicine or Commerce faculties, or the University College, Australian Defence Force Academy. A limited number of scholarships are offered subject to the availbility of funds. Information should be obtained from the Faculty office.

Australian Postgraduate Research Awards

T 1-2 years for a Masters and 3-4 years for a PhD degree

V $14,260 to $18,403

C Applicants must be honours graduates or equivalent or scholars who will graduate with honours in current academic year, and who are domiciled in Australia. Applications to Registrar by 31 October.

Australian Postgraduate Course Awards

V Living allowance of $11,214 pa. Other allowances may also be paid. Tax free.

T 1-2 years; minimum duration of course

C Applicants must be graduates or scholars who will graduate in current academic year, and who have not previously held a Commonwealth Postgraduate Award. Applicants must be domiciled in Australia. Preference

is given to applicants with employment experience. Applications to the Registrar by 30 September.

John Crawford Scholarship Scheme

V Tuition fees. Some students may be eligible for air fares and a stipend.

T Determined by normal course duration

C Information should be obtained from Australian Diplomatic Posts. Conditions and entitlements vary depending on the home country.

Overseas Postgraduate Research Scholarships

V Tuition fees only

T 2 years for a Masters and 3 years for a PhD degree

C Eligibility is confined to postgraduate research students who are citizens of countries other than Australia or New Zealand. Applications to the Registrar by 30 September.

Australian American Educational Foundation Fulbright Award

V Travel expenses and $A2000 as establishment allowance

T 1 year, renewable

C Applicants must be graduates who are domiciled in Australia and wish to undertake research or study for a higher degree in America. Applications close 30 September with The Secretary, DEET, AAEF Travel Grants, PO Box 826, Woden, ACT 2606. Application forms are available from the Associate Registrar, University of Sydney, NSW 2006, telephone (02) 692 2222.

Australian Federation of University Women

V Amount varies, depending on award

T Up to 1 year

C Applicants must be female graduates who are members of the Australian Federation of University Women. Further enquiries may be directed to the Secretary of the Federation, (telephone (02) 232 5629.)

Commonwealth Scholarship and Fellowship Plan

V Varies for each country. Generally covers travel, living, tuition fees, books and equipment, approved medical expenses. Marriage allowance may be payable.

T Usually 2 years, sometimes 3

C Applicants must be graduates who are Australian citizens and who are not older than 35 years of age. Tenable in Commonwealth countries other than Australia. Applications close with the Registrar in early October.

The English-Speaking Union (NSW Branch)

V $7000

T 1 year

C Applicants must be residents of NSW or ACT. Awarded to young graduates to further their studies outside Australia. Applications close mid-April with The Secretary, Ground Floor, Sydney School of Arts, 275c Pitt Street, Sydney, NSW 2000.

Frank Knox Memorial Stipend of Fellowships

V $US7000 pa plus tuition fees

T 1, sometimes 2 years tenable at Harvard University

C Applicants must be British subjects and Australian citizens, who are graduates or near graduates of an Australian university. Applications close with the Academic Registrar mid October.

Robert Gordon Menzies Scholarship to Harvard

V Up to $US 15,000

T 1 year

C Tenable at Harvard University. Applicants must be Australian citizens and graduates of an Australian tertiary institution. Applications close 31 December with the Registrar, A.N.U., GPO Box 4, Canberra, ACT 2601

Gowrie Scholarship Trust Fund

V $6000 pa. Under special circumstances this may be increased.

T 2 years

C Applicants must be members of the Forces or children of members of the Forces who were on active service during the 1939-45 War. Applications close with the Academic Registrar by 31 October.

Harkness Fellowships of the Commonwealth Fund of New York

V Living and travel allowances, tuition and research expenses, health insurance, book and equipment and other allowances for travel and study in the USA

T 12 to 21 months

C Candidates must be Australian citizens and 1. Either members of the Commonwealth or a State Public Service or semi-government Authority. 2. Either staff or graduate students at an Australian university. 3. Individuals recommended for nomination by the Local Correspondents. The candidate will usually have an honours degree or equivalent, or an outstanding record of achievement, and be not more than 36 years of age. Applications close 29 August with the Academic Registrar. Forms available from Mr J Larkin, Bureau of Agriculture and Resource Economics, GPO Box 1563, Canberra, ACT 2601.

The Packer, Shell and Barclays Scholarships to Cambridge University

V Living and travel allowances, tuition expenses

T 1-3 years

C Applicants must be Australian citizens who are honours graduates or equivalent, and under 26 years of age. Applications are available from The Secretary, Cambridge Commonwealth Trust, PO Box 252, Cambridge CB2 ITZ, England. The scholarship closes on 15 October.

The Rhodes Scholarship to Oxford University

V Approximately £4862 stg pa

T 2 years, may be extended for a third year.

C Unmarried Australian citizens aged between 19 and 25 who have an honours degree or equivalent. Applications close in August each year with The Secretary, University of Sydney, NSW 2006.

Architecture

The Associated Hardware Manufacturers Scholarship

V $1500 pa or such other amount as the Dean may determine

T 1 year. Where a recipient is enrolled in a higher degree program and is making satisfa progress the scholarship may be extended subject to the availability of funds.

C Applicants shall have qualified for the degree of Bachelor of Architecture with honours or Bachelor of Building with honours at the University of New South Wales and such graduates shall be of not more than five 5 years standing at the time of taking up the scholarship. Tenable at any approved institution overseas or in Australia. Applications to the Registrar by 31 October.

The Lindsay Robertson Memorial Travel Award

V A maximum of $1500

T 1 year

C Candidates should be Landscape Architecture graduates of the University of New South Wales. The award is to undertake full-time graduate study or research in Landscape Architecture at an approved institution overseas or in Australia. Applications close 30 May with the Registrar.

Wightman University Scholarship

V $2000 pa

T 1 year

C Awarded to an Architecture student proceeding to graduate study. Applications close 30 September with the Registrar.

Prizes

Undergraduate University Prizes

The following information summarizes undergraduate prizes awarded by the University. Prizes which are not specific to any School are listed under General. All other prizes are listed under the Faculty or Schools in which they are awarded.

Information regarding the establishment of new prizes may be obtained from the Examinations Section located on the Ground Floor of the Chancellery.

General

The Sydney Technical College Union Award

V $400.00 and Bronze Medal

C Leadership in student affairs combined with marked academic proficiency by a graduand

The University of New South Wales Alumni

V Statuette Association Prize

C Achievement for community benefit by a student in the final or graduating year

School of Architecture

The Board of Architects of NSW Prize

V $350.00

C Outstanding graduand in the School of Architecture

The Connell Wagner Award for Excellence in Architectural Structures

V $600.00 and silver medal

C The best study on a structural topic in Architectural Research 1,2 or 3 by a student who is enrolled in, has completed, or has been given exemption from, at least one of
- ARCH5620 Conceptual Structural Design
- ARCH5621 Advanced Structural Design
- ARCH5622 Lightweight Structural Design

The Eric Daniels Prize in Residential Design

V $500.00

C The best performance in design for Residential Accommodation by a student in the Bachelor of Architecture degree course

The Frank Fox Memorial Prize

V $150.00

C The best performance in Historical Research C by a student in the Bachelor of Architecture degree course

The Frank W. Peplow Prize

V $100.00

C The best performance in Church Architecture or Design by a student in the Bachelor of Architecture degree course

The James Hardie & Coy. Pty Ltd Prize

V $150.00

C Outstanding performance in Year 1 of the Bachelor of Science (Design Studies)/ Bachelor of Architecture degree course

The Morton Herman Memorial Prize

V $100.00

C The best performance in Studies of Historic Structures in the Bachelor of Architecture degree course

The Royal Australian Institute of Architects Prize

V $250.00

C Outstanding performance in Architectural Design and related studies in the final two years of the Bachelor of Architecture degree course

School of Building

The Institute of Wood Science (Australian Branch) Timber in Building Prize

V Membership of the Institute, Journal and Digest, Certificate

C The best performance in BLDG4114 Building Science 4 (Timber) by a student in the Bachelor of Building degree course

The James Hardie & Coy Pty Ltd Prize

V $100.00

C The best performance in Year 1 of the Bachelor of Building degree course

The Master Builders' Association of NSW Prize in Construction Management

V $350.00

C Outstanding performance in the Bachelor of Building degree course

The Multiplex Constructions Prize

V $1500.00

C The best performance in the major Building Construction subjects Construction 1 to 5 in the Bachelor of Building degree course

The Reed Constructions Prize

V $1000.00

C The most outstanding performance by a student in the Bachelor of Building degree course

School of Landscape Architecture

The Lindsay Robertson Memorial Prize

V $300.00

C The best performance in LAND2270 Landscape Design 2 in the Bachelor of Landscape Architecture degree course

School of Town Planning

The John Shaw Memorial Prize

V $400.00

C The best thesis in the Bachelor of Town Planning degree course

The New South Wales Department of Planning Prize

V $500.00

C The best performance in Year 5 of the Bachelor of Town Planning degree course

The New South Wales Local Government

V $150.00 Association of Planners Prize

C The best thesis related to Local Government planning in the final year of the Bachelor of Town planning course

The Royal Australian Planning Institute (NSW Division) Prize

V $150.00

C The best performance by a student in Year 3 of the Bachelor of Town Planning degree course

Graduate University Prizes

The following information summarizes graduate prizes awarded by the University.

School of Building

The Alex Rigby Prize

V $250.00

C The best overall performance in the Master of Project Management degree course

The Master Builders Association of New South Wales Prize

V $1,000.00

C The best performance in the Master of Construction Management degree course

The T.W. Crow Associates Prize

V $300.00

C The best performance by a student in Year 2 of the Master of Project Management degree course

NOTES

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The University of New South Wales, Kensington Campus

Theatres

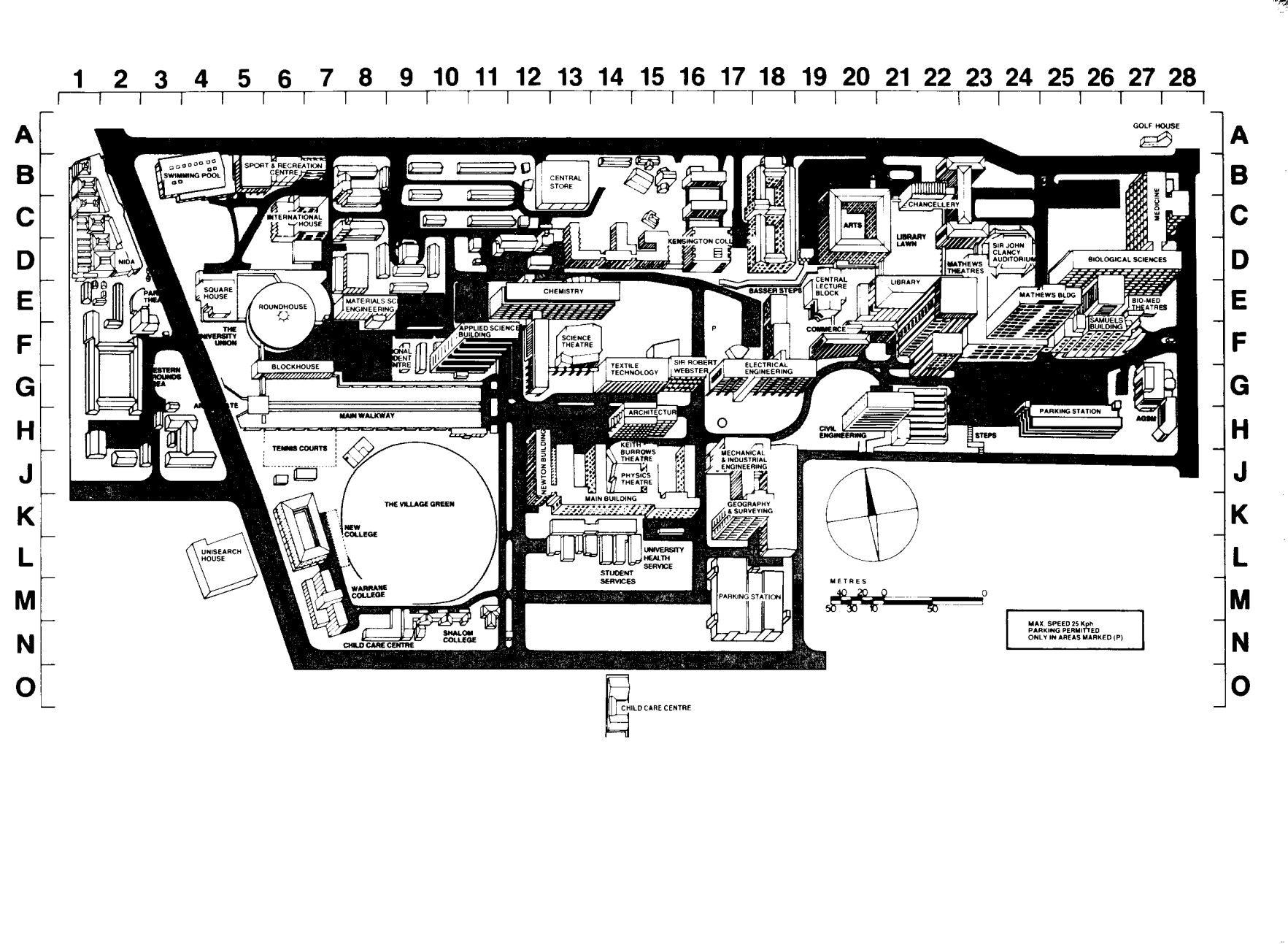
Biomedical Theatres E27
Central Lecture Block E19
Chemistry Theatres *(Dwyer, Mellor, Murphy, Nyholm, Smith)* E12
Classroom Block *(Western Grounds)* H3
Fig Tree Theatre B14
Io Myers Studio D9
Keith Burrows Theatre J14
Mathews Theatres D23
Parade Theatre E3
Physics Theatre *(Main Building)* K14
Rex Vowels Theatre F17
Science Theatre F13
Sir John Clancy Auditorium C24

Buildings

Applied Science F10
Barker Street Gatehouse N11
Basser College *(Kensington)* C18
Central Store B13
Chancellery C22
Dalton *(Chemistry)* F12
Goldstein College *(Kensington)* D16
Golf House A27
Gymnasium B5
International House C6
John Goodsell *(Commerce and Economics)* F20
Kensington Colleges *(Office)* C17
Library *(University)* E21
Link B6
Maintenance Workshop B13
Mathews F23
Menzies Library E21
Morven Brown *(Arts)* C20
New College L6
Newton J12
NIDA D2
Parking Station H25
Philip Baxter College *(Kensington)* D14
Robert Heffron *(Chemistry)* E12
Sam Cracknell Pavilion H8
Samuels Building F26
Shalom College N9
Sir Robert Webster G14
Unisearch House L5
University Regiment J2
University Union *(Roundhouse)* E6
University Union *(Blockhouse)* G6
University Union *(Squarehouse)* E4
Wallace Wurth School of Medicine C27
Warrane College M7

General

Aboriginal Student Centre:
47 Botany St, Randwick
Accommodation *(off-campus)* F15
Accounting F20
Admissions C22
Adviser for Prospective Students C22
Anatomy C27
Applied Bioscience D26
Applied Economic Research G14
Applied Geology F10
Applied Science *(Faculty Office)* F10
Architecture *(Faculty Office)* H14
Archives, University E21
Arts and Social Sciences *(Faculty Office)* C20
Asia-Australia Institute:
34 Botany St, Randwick
Audio Visual Unit F20
Australian Graduate School of Management G27
Banking and Finance F20
Biochemistry and Molecular Genetics D26
Biological and Behavioural Sciences *(Faculty Office)* D26
Biomedical Engineering F26
Biomedical Library F23
Biotechnology F26
Cashier's Office C22
Chaplains L12 & L13
Chemical Engineering and Industrial Chemistry F10
Chemistry E12
Civil Engineering H20
Co-op Bookshop G17
Commerce and Economics *(Faculty Office)* F20
Communications Law Centre C15
Community Medicine D26
Computer Science and Engineering G17
Computing Services Department F26
Cornea and Contact Lens Research Unit:
22-32 King St, Randwick
Economics F20
Education Studies G2
Educational Testing Centre K14
Electrical Engineering G17
Energy Research, Development & Information Centre F10
Engineering *(Faculty Office)* K17
English C20
Examinations C22
Fees Office C22
Fibre Science and Technology G14
Food Science and Technology B8
French C20
Geography K17
German and Russian Studies C20
Graduate Office and Alumni Centre E4
Graduate School of the Built Environment H14
Groundwater Management and Hydrogeology F10
Health Service, University L14b
Health Services Management C22
History C20
House at Pooh Corner *(Child Care)* N8
Industrial Design G15
Industrial Relations and Organizational Behaviour F20
Information Systems F20
Institute of Languages:
14 Francis St, Randwick
International Student Centre F16
IPACE Institute F23
Japanese Economic and Management Studies F20
Kanga's House *(Child Care)* O14
Landscape Architecture K15
Law *(Faculty Office)* F21
Law Library F21
Legal Studies & Taxation F20
Liberal and General Studies C20
Librarianship F23
Lost Property C22
Marine Science D26
Marketing F20
Materials Science and Engineering E8
Mathematics F23
Mechanical and Manufacturing Engineering J17
Medical Education C27
Medicine *(Faculty Office)* B27
Membrane and Separation Technology F10
Microbiology and Immunology D26
Mines K15
Minor Works and Maintenance B14A
Music B11
News Service C22
New South Wales University Press:
22-32 King St, Randwick
Optometry J12
Pathology C27
Patrol and Cleaning Services C22
Performing Arts B10
Petroleum Engineering D12
Philosophy C20
Physics K15
Physiology and Pharmacology C27
Political Science C20
Printing Section C22
Professional Development Centre K13
Professional Studies *(Faculty Office)* G2
Property and Works C22
Psychology F23
Publications Section C22
Remote Sensing K17
Safety Science:
32 Botany Street, Randwick
Science *(Faculty Office)* F23
Science and Technology Studies C20
Social Science and Policy C20
Social Policy Research Centre F26
Social Work G2
Sociology C20
Spanish and Latin American Studies C20
Sport and Recreation Centre B6
Squash Courts B7
Staff Office C22
Student Centre *(off Library Lawn)* C22
Students' Union E4, C21
Student Services:
Careers, Loans, Accommodation etc L14
Counselling L13
Students' Union E4, C21
Surveying K17
Swimming Pool B4
Textile Technology G14
Theatre and Film Studies B10
Town Planning K15
WHO Regional Training Centre C27
Wool and Animal Sciences G14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A B C D E F G H J K L M N O
GOLF HOUSE
SWIMMING POOL
SPORT & RECREATION CENTRE
INTERNATIONAL HOUSE
CENTRAL STORE
KENSINGTON COLLEGE
ARTS
CHANCELLERY
LIBRARY LAWN
MEDICINE
SIR JOHN CLANCY AUDITORIUM
MATHEWS THEATRES
BIOLOGICAL SCIENCES
NIDA
SQUARE HOUSE
ROUNDHOUSE
MATERIALS SCIENCE ENGINEERING
CHEMISTRY
BASSER STEPS
CENTRAL LECTURE BLOCK
LIBRARY
MATHEWS BLDG
BIO-MED THEATRES
THE UNIVERSITY UNION
APPLIED SCIENCE BUILDING
SCIENCE THEATRE
COMMERCE
SAMUELS BUILDING
BLOCKHOUSE
TEXTILE TECHNOLOGY
SIR ROBERT WEBSTER
ELECTRICAL ENGINEERING
MAIN WALKWAY
ARCHITECTURE
PARKING STATION
AGSM
CIVIL ENGINEERING
STEPS
TENNIS COURTS
NEWTON BUILDING
KEITH BURROWS THEATRE
PHYSICS THEATRE
MECHANICAL & INDUSTRIAL ENGINEERING
THE VILLAGE GREEN
MAIN BUILDING
GEOGRAPHY & SURVEYING
NEW COLLEGE
UNISEARCH HOUSE
UNIVERSITY HEALTH SERVICE
STUDENT SERVICES
PARKING STATION
METRES
40 20 0 0
50 30 10 50
WARRANE COLLEGE
SHALOM COLLEGE
CHILD CARE CENTRE
MAX. SPEED 25 Kph
PARKING PERMITTED ONLY IN AREAS MARKED (P)
CHILD CARE CENTRE

This Handbook has been specifically designed as a source of detailed reference information for first year and re-enrolling undergraduate and postgraduate students. Separate handbooks are published for Applied Science, Arts and Social Sciences, Commerce and Economics, Engineering, Law, Medicine, Professional Studies, Science, the Australian Graduate School of Management, College of Fine Arts, University College (Australian Defence Force Academy) and the Centre for Liberal and General Studies.

For fuller details about the University – its organization, staff members, description of disciplines, scholarships and prizes and so on, consult the University *Calendar (Summary Volume)*. For further information on student matters consult the University *Student Guide*.