

SW LIBRARY

51

S H L

378.94405/NEW/9

HELF

21

THE UNIVERSITY OF  
NEW SOUTH WALES



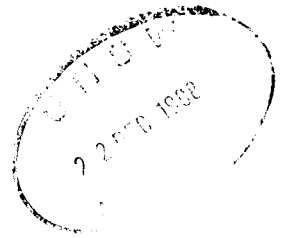
*Faculty of  
the Built  
Environment*

# HANDBOOK

1998



THE UNIVERSITY OF  
NEW SOUTH WALES



*Faculty of  
the Built  
Environment*

# HANDBOOK

1998

**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 1 November 1997, but may be amended without notice by the University Council.**

## **CREDIT POINTS – IMPORTANT NOTE**

From 1996, UNSW introduced a university wide credit point system for all subjects offered to both undergraduate and postgraduate students. The system means that a subject will have the same credit point value irrespective of which faculty's course it is counting towards. Students are able to determine the value of subjects taken from other faculties when planning their programs of study. The student load for a subject is calculated by dividing the credit point value of a subject by the total credit points required for the program for that year of the course. Student load is used to determine both HECS and overseas student fees. Students who take more than the standard load for that year of a course will pay more HECS.

Old subject measures have been replaced by new university credit points. Every effort has been made to ensure the accuracy of the credit point values shown for all subjects. However, if any inconsistencies between old and new credit point measures cause concern, students are advised to check with their faculty office for clarification before making 1998 subject selections based on the credit points shown in this handbook.

© The University of New South Wales

**The address of the University of New South Wales is:**

**The University of New South Wales  
SYDNEY 2052 AUSTRALIA**

**Telephone: (02) 93851000**

**Facsimile: (02) 9385 2000**

**Email: [Records.Admin@unsw.edu.au](mailto:Records.Admin@unsw.edu.au)**

**Telegraph: UNITECH, SYDNEY**

**Telex: AA26054**

**<http://www.unsw.edu.au>**

Designed and published by the Publications Section, Administrative Services Department,  
The University of New South Wales

Printed by PLT Print Solutions

**ISSN 1323-7861**



---

<b>Introduction</b>	<b>1</b>
---------------------	----------

---

<b>Calendar of Dates</b>	<b>3</b>
--------------------------	----------

---

<b>Staff</b>	<b>5</b>
--------------	----------

---

<b>Handbook Guide</b>	<b>9</b>
-----------------------	----------

---

<b>Faculty Information</b>	<b>11</b>
Some People Who Can Help You .....	11
Faculty of the Built Environment Enrolment Procedures .....	11
Rules for Progression .....	11
Library Facilities .....	11
The Physical Sciences Library .....	11
Undergraduate Services .....	11
Faculty of the Built Environment Studio Collection Library .....	11
Faculty Laboratories .....	12
Research Laboratories .....	12
Computing Facilities Laboratory .....	12
Faculty World Wide Web Site .....	12
Student Ownership of Personal Computers .....	13
Computing at UNSW .....	13
Student Clubs and Societies .....	13
Students With Disabilities .....	13
Equal Opportunity in Education Policy Statement .....	13
University Commitment to Equal Opportunity in Education .....	13
Special Admissions Schemes .....	13
Support of Disadvantaged Students .....	14
Course Content, Curriculum Design, Teaching and Assessment, and Printed Material .....	14
Equal Opportunity Adviser Scheme .....	14
Harassment Policy .....	14
Student Equity .....	14
Complaint/Disputes .....	14
Advocacy and Support .....	14
Faculty of Built Environment General Education Rules .....	14
Students who commenced their courses prior to 1996 .....	15
Exemption from part of or all of the General Education program .....	15
Special Student Exemptions .....	15
Substitution .....	15
Prerequisites, co-requisites, and exclusions .....	15
Enquiries .....	15

---

<b>Undergraduate Study</b>	<b>17</b>
<b>Architecture Program</b>	<b>17</b>
3260 Bachelor of Architecture Course	17
3265 Bachelor of Science (Architecture) Course	20
General Description of the Course	20
General Education Requirement	20
Honours	20
Schedule of Subjects	20
<b>Interior Architecture Program</b>	<b>21</b>
3255 Bachelor of Interior Architecture Course	21
General Description of the Course	21
General Education Requirement	21
Honours	21
Professional Recognition	21
Schedule of Subjects	21
<b>Building Construction Management Program</b>	<b>22</b>
3331 Bachelor of Building Construction Management	22
Prerequisites for the Course	22
General Description of the Course	22
General Education Requirements	22
Progress through the Course	23
Practical Experience	23
Elective Subjects	23
Award of the Degree at Honours Level	23
Professional Recognition	23
Schedule of Subjects	23
<b>Industrial Design Program</b>	<b>24</b>
3385 Industrial Design Degree Course	25
Coop Education Mode	25
General Education Requirement	25
Honours	25
Schedule of Subjects	25
<b>Landscape Architecture Program</b>	<b>27</b>
3380 Landscape Architecture Course	27
General Description of the Course	27
General Education Requirement	27
Practical Experience	27
Honours	27
Professional Recognition	27
Course Structure	28
Schedule of Subjects	28
<b>Planning and Urban Development Program</b>	<b>29</b>
3360 Town Planning Course	29
General Description of the Course	29
General Education Requirement	29
Practical Experience	29
Honours	29
Professional Recognition	29
Schedule of Subjects	29

<b>Subject Descriptions .....</b>	<b>31</b>
Bachelor of Architecture .....	31
Bachelor of Interior Architecture .....	44
Bachelor of Science (Architecture) .....	45
Bachelor of Building Construction Management .....	48
Bachelor of Industrial Design .....	55
Bachelor of Landscape Architecture .....	60
Bachelor of Planning and Urban Development .....	64
 <b>Postgraduate Study .....</b>	 <b>69</b>
Faculty of the Built Environment Graduate Enrolment Procedures .....	69
Higher Degrees – Research .....	69
Higher Degrees – Coursework .....	69
Duration .....	69
 <b>Research Degrees .....</b>	 <b>70</b>
1120 Doctor of Philosophy .....	70
2200 Master of Architecture .....	70
2206 Master of Science .....	70
2210 Master of Building .....	70
2220 Master of Landscape Architecture .....	70
2230 Master of Town Planning .....	70
2240 Master of the Built Environment .....	70
 <b>Coursework Degrees .....</b>	 <b>71</b>
8125 Master of Construction Management .....	71
8128 Master of Real Estate .....	71
8130 Master of the Built Environment (Building Conservation) Course .....	72
8131 Master of Urban Development and Design Course .....	73
8132 Master of the Built Environment (Sustainable Development) .....	75
5132 Graduate Diploma in Built Environment (Sustainable Development) .....	75
7332 Graduate Certificate in Built Environment (Sustainable Development) .....	75
 <b>Pattern of Study for Completion Over Two Sessions .....</b>	 <b>77</b>
 <b>Recommended Pattern of Study for Completion over Four Sessions .....</b>	 <b>77</b>
Recommended Electives .....	77
Advanced Standing .....	77
Upgrading and Articulation .....	77
8142 Master of Architecture (by coursework) .....	77
Typical Patterns of Study .....	78
Architectural Design Program .....	78
Architectural Computing and History and Theory of Architecture Programs .....	79
Master of Architecture Architectural Design Program .....	79
Master of Architecture Architectural Computing Program .....	79
Master of Architecture History and Theory of Architecture Program .....	79
8135 Master of Landscape Planning .....	79
8145 Master of Industrial Design Course .....	80
8146 Master of Science (Industrial Design) Course .....	80
5200 Housing and Neighbourhood Planning Graduate Diploma Course .....	81
5205 Town Planning Graduate Diploma .....	82
 <b>Subject Descriptions .....</b>	 <b>83</b>
Faculty of the Built Environment Subjects .....	83
Core Subjects Offered by Other Faculties .....	97

<b>Conditions for the Award of Degrees</b>	<b>99</b>
First Degrees .....	99
Higher Degrees .....	99
Doctor of Philosophy (PhD) .....	102
Master of Architecture by Research (MArch), Master of Building (MBuilding), Master of the Built Environment (MBEnv), Master of Landscape Architecture (MLArch), Master of Town Planning (MTP) .....	105
Master of Architecture (MArch) .....	106
Master of Project Management (MPM) .....	108
Master of Construction Management (MConstMgt) .....	109
Master of the Built Environment (Building Conservation)(MBEnv), Master of Industrial Design (MID), and Master of Science (Industrial Design) (MSc(IndDes)) .....	110
Master of the Built Environment (Sustainable Development) (MBEnv(SustDev)) .....	112
Master of Engineering or Master of Science by research .....	112
Master of Engineering (ME), Master of Science (MSc) and Master of Surveying (MSurv) without supervision .....	114
Master of Landscape Planning (MLP) .....	116
Master of Real Estate (MRE) .....	117
Master of Urban Development and Design (MUDD) .....	119
Graduate Diploma (GradDip) .....	119
Graduate Diploma in Built Environment (Sustainable Development) (GradDipBEnv) ..	120
Graduate Diploma of Valuation (GradDipVal) .....	121
Graduate Certificate in Sustainable Development (GradCertBEnv) .....	122
<b>Scholarships</b>	<b>125</b>
Undergraduate Scholarships .....	126
Postgraduate Scholarships .....	137
<b>Prizes</b>	<b>153</b>
Undergraduate Prizes .....	153
Undergraduate and Postgraduate Prizes .....	155
Postgraduate Prizes .....	155

---

# Introduction

This Faculty includes disciplines that deal with the built environment at a variety of levels. Our range of interests includes the micro level, such as the chair that a person uses and it extends to encompass the building in which a person is housed, the environmental and urban design issues that relate to the overall placement of the building, the urban setting and the urban region in which that setting is located. As potential custodians of the built environment, our students are expected to be conversant with the range of important issues.

From 1998, the Faculty of the Built Environment has a new structure aimed at encouraging synergy among the disciplines in the Faculty and providing flexibility for students. We expect our students to gain expertise in their chosen disciplines but we also expect that they will take the opportunities to become familiar with the concepts and ideas of the other disciplines in the Faculty. The world in which our graduates will pursue their chosen profession is one where interdisciplinary teams of professionals work together to achieve the best results for the built environment. We believe that the earlier the student is introduced to the range of ideas and concepts that the disciplines in the built environment represent, the more complete a professional he or she will become.

The Faculty has also streamlined the services provided to the student through the establishment of a Faculty Student Centre, which is the place of first call for students and potential students. All routine matters dealing with general inquiries, enrolment, subject changes and other related matters should be first directed to the Faculty Student Centre. Where a referral is necessary, the FSC staff will make the arrangements. This Handbook contains the detailed information on all the courses and programs of the Faculty as well as descriptions of available subjects and research areas. The same information is also available on the university web page. The information contained in this Handbook is important for you to understand the structure of the courses, the subjects in the courses and the requirement of each of the courses. Study it and use it well.

Chung-Tong Wu  
Dean





---

# Calendar of Dates

The academic year is divided into two sessions, each containing 14 weeks for teaching. Between the two sessions there is a break of approximately six weeks, which includes a one-week study period, two weeks for examinations, and three weeks recess. There is also a short recess of one week within each session.

Session 1 commences on the Monday nearest 1 March.

## Faculties other than Medicine, AGSM and University College, ADFA

	1998	1999
<b>Session 1</b>		
(14 weeks)	2 March to 9 April 20 April to 12 June	1 March to 1 April 12 April to 11 June
<b>Mid-session recess</b>	10 April to 19 April	2 April to 11 April
Study period	13 June to 18 June	12 June to 17 June
Examinations	19 June to 7 July	18 June to 6 July
<b>Mid-year recess</b>	8 July to 26 July	7 July to 25 July
<b>Session 2</b>		
(14 weeks)	27 July to 25 September 6 October to 6 November	26 July to 24 September 5 October to 5 November
<b>Mid-session recess</b>	26 September to 5 October	25 September to 4 October
Study period	7 November to 12 November	6 November to 11 November
Examinations	13 November to 1 December	12 November to 30 November

---

## Important dates for 1998

### January 1998

Th 1	New Year's Day – Public Holiday
M 12	Medicine IV – Term 1 begins
Th 15	Medicine V – Term 1 begins
M 26	Australia Day – Public Holiday

### February 1998

M 9	AGSM EMBA GMQ and GDM programs – Session 1 begins
M 23	Medicine VI – Term 2 begins AGSM MBA Program – Year 1 classes – Term 1 begins

### March 1998

M 2	Session 1 begins – for Faculties other than Medicine and AGSM ADFA – Session 1 begins AGSM MBA program – Year 2 classes – Term 1 begins
F 13	Last day applications are accepted from students to enrol in Session 1 or whole year subjects
Su 15	Medicine IV – Term 1 ends
M 16	Medicine IV – Term 2 begins
Su 22	Medicine V – Term 1 ends
M 30	Medicine V – Term 2 begins
T 31	Last day for students to discontinue without failure subjects which extend over Session 1 only HECS Census Date for Session 1

**April 1998**

Th 9	Medicine VI – Term 2 ends
F 10	Medicine VI – Recess begins Mid session recess begins – for Faculties other than Medicine, AGSM and ADFA Good Friday – Public Holiday
S 11	Easter Saturday
Su 12	Easter Sunday
M 13	Easter Monday
Su 19	Medicine VI – Recess ends Mid-session recess ends – for Faculties other than Medicine, AGSM and ADFA
M 20	Medicine VI – Term 3 begins
S 25	Anzac Day – Public Holiday
Su 26	Medicine IV – Term 2 ends
M 27	Medicine IV – Recess begins

**May 1998**

S 2	ADFA – Mid-session recess begins
Su 3	Medicine IV – Recess ends
M 4	Medicine IV – Term 3 begins
F 8	AGSM MBA program – all classes – Term 1 ends
M 11	AGSM MBA program – all classes – Examinations begin
T 12	Publication of provisional timetable for June examinations
F 15	AGSM MBA program – all classes – Examinations end
Su 17	ADFA – Mid-session recess ends
M 18	AGSM EMBA GDM programs – Session 1 ends
S 23	AGSM EMBA GDM program – Examination
M 25	AGSM EMBA GMQ program – Session 1 ends
S 30	AGSM EMBA GMQ – Examination
Su 31	Medicine V – Term 2 ends Medicine VI – Term 3 ends

**June 1998**

M 1	Medicine VI – Term 4 begins AGSM MBA program – all classes – Term 2 begins
T 2	Publication of timetable for June examinations
M 8	Queen's Birthday – Public Holiday
T 9	Medicine V – Term 3 begins
F 12	Session 1 ends – for Faculties other than Medicine, AGSM and ADFA
S 13	Study period begins – for Faculties other than Medicine, AGSM and ADFA
Su 14	Medicine IV – Term 3 ends
M 15	Medicine IV – Term 4 begins
Th 18	Study period ends – for Faculties other than Medicine, AGSM and ADFA
F 19	Examinations begin – for Faculties other than Medicine, AGSM and ADFA ADFA – Session 1 ends
M 22	ADFA – Examinations begin

**July 1998**

S 4	ADFA – Examinations end
Su 5	ADFA – Mid year recess begins
T 7	Examinations end – for Faculties other than Medicine, AGSM and ADFA
W 8	Mid-year recess begins – for Faculties other than Medicine, AGSM and ADFA
M 13	AGSM EMBA GMQ and GDM programs – Session 2 begins
Su 19	ADFA – Mid-year recess ends
M 20	ADFA – Session 2 begins
F 24	Medicine VI – Term 4 ends
S 25	Medicine VI – Recess begins
Su 26	Mid-year recess ends – for Faculties other than Medicine, AGSM and ADFA
M 27	Session 2 begins – for Faculties other than Medicine, AGSM and ADFA

**August 1998**

Su 2	Medicine VI – Recess ends
M 3	Medicine VI – Term 5 begins
F 7	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. AGSM MBA program – all classes – Term 2 ends
Su 9	Medicine IV – Term 4 ends Medicine V – Term 3 ends
M 10	Medicine IV – Recess begins AGSM MBA program – all classes – Examinations begin
F 14	AGSM MBA program – all classes – Examinations end
Su 16	Medicine IV – Recess ends
M 17	Medicine IV – Term 5 begins Medicine V – Term 4 begins
M 31	Last day for students to discontinue without failure subjects which extend over Session 2 only HECS Census Date for Session 2 AGSM MBA program – all classes – Term 3 begins

**September 1998**

S 5	Courses and Careers Day
Su 13	Medicine VI – Term 5 ends
M 14	Medicine VI – Term 6 begins
F 25	Closing date for applications to the Universities Admission Centre
S 26	Mid-session recess begins – for Faculties other than Medicine, AGSM and ADFA ADFA – Mid-session recess begins
Su 27	Medicine IV – Term 5 ends
M 28	Medicine IV – Term 6 begins

**October 1998**

M 5	Labour Day – Public Holiday Mid-session recess ends – for Faculties other than Medicine, AGSM and ADFA ADFA – Mid-session recess ends
T 6	Publication of provisional timetable for the November examinations
W 14	Last day for students to advise of examination clashes
Su 18	Medicine V – Term 4 ends
M 19	AGSM EMBA GDM program – Session 2 ends
F 23	ADFA – Session 2 ends
S 24	AGSM EMBA GDM program – Examination
Su 25	Medicine VI – Term 6 ends
M 26	AGSM EMBA GMQ program – Session 2 ends ADFA – Examinations begin
T 27	Publication of timetable for November examinations
S 31	AGSM EMBA GMQ program – Examination

**November 1998**

F 6	Session 2 ends – for Faculties other than Medicine, AGSM and ADFA AGSM MBA program – all classes – Term 3 ends
S 7	Study period begins – for Faculties other than Medicine, AGSM and ADFA
Su 8	Medicine IV – Term 6 ends
M 9	AGSM MBA program – all classes – Examinations begin
Th 12	Study period ends – for Faculties other than Medicine, AGSM and ADFA
F 13	Examinations begin – for Faculties other than Medicine, AGSM and ADFA ADFA – Examinations end AGSM MBA program – all classes – Examinations end

**December 1998**

T 1	Examinations end – for Faculties other than Medicine, AGSM and ADFA
F 25	Christmas Day – Public Holiday
S 26	Boxing Day – Public Holiday

Comprises School of the Built Environment with Programs of Architecture, Building and Construction Management, Landscape Architecture, Planning and Urban Development, Industrial Design and Interior Architecture.

**Dean**

Professor Chung-Tong Wu, BArch *Calif. Berkeley*, PhD *Calif. Los Angeles*, MSc *Col.*, MRAP

**Presiding Member**

Stephen Harris, BTP *UNSW*, FRAP

**Associate Dean (Research) Head of School**

Professor Jon Lang, BArch *Witw.*, MRP PhD *Cornell*

**Associate Dean (Postgraduate Studies)**

Professor Alexander Rankine Cuthbert, DipArch DipTP MSc *Heriot Watt*, PhD *Lond.*, MRIBA, MRTPI, MHKIP

**Associate Dean (Undergraduate Studies)**

James David Plume, BArch MArch *Syd.*

**Research Student Coordinator**

Bruce Herbert Judd, BArch PhD *Syd.*, ARAIA

**Executive Officer**

Brian John Newell, BCom *UNSW*

**Administrative Assistant to the Dean**

Patricia Anne Poynting

---

## Architecture Program

**Head of Program**

Desley Olwyn Luscombe, BSc(Arch) BArch MArch *UNSW*

**Professor of Architecture**

Jon Lang, BArch *Witw.*, MRP PhD *Cornell*

**Visiting Professors**

Philip Cox, AO, BArch DipTCP *Syd.*, FRAIA  
Russell Callum Jack, MArch *UNSW*, ASTC, FRAIA  
Laszlo Peter Kollar, MArch PhD *UNSW*, ASTC

**Adjunct Professor**

Peter Thompson, DIC, MIEAust, FIStructE

**Associate Professors**

Deo Prasad, BArch *Auck.*, MArch MSc PhD *UNSW*, FRAIA  
Peter Reginald Proudfoot, BArch *Syd.*, MArch *Penn.*,  
PhD *UNSW*, Rome Scholar, ARAIA  
Vinzenc Franz Josef Sedlak, DiplIngArch *T.U. Graz.*,  
MPhil *Sur.*

**Adjunct Associate Professor**

Victor Martin Berk, BArch DipAdmin *UNSW*

**Senior Lecturers**

John Richard Cooke, BArch PhD *Syd.*, LLB MSc(Build) *UNSW*, FRAIA, AIArBA

Catherine Mary DeLorenzo, BSc(Arch) BA DipEd PhD *Syd.*

Stephen Hamilton Frith, BSc(Arch) BArch MBEnv *UNSW*, MSc MPhil *Col.*, PhD *Camb.*

Paul Alan Johnson, BArch *Syd.*, DipCD PhD *UNSW*, FRAIA

Steven King, BArch DipBdgSc *Syd.*, ARAIA

Peter Kohane, MArch *Melb.*, MSc PhD *Penn.*

William Richard Lawson, BSc PhD *UNSW*, MAPS, MAIHR

Robert Samuels, BA *Witw.*, MURP *UCT*, MSc *Sur.*, PhD *R'dg.*

Michael Charles Tawa, BSc(Arch) BArch PhD *UNSW*

**Adjunct Senior Lecturer**

Leon Jacob, BSc(Eng) *Kerala*, MEngSc *Syd.*, MBA *Macq.*, MIEAust, MSoc *AE(U.S.A.)*

**Lecturers**

Dijana Alic, BArch *Sarajevo*, MArch *UNSW*

Peter Murray, BArch *UNSW*, MTCP *Syd.*, DipEnvStud *Macq.*, MHed *UNSW*

Stephen Peter, BArch DipArchComp *Syd.*

Ann Maree Quinlan, BSc(Arch) BArch *UNSW*, ARAIA

**Honorary Visiting Fellows**

Robert Charles Lewis Irving, MArch *UNSW*, ARMTTC, FRAIA

Peter Leggett Reynolds, BArch PhD *UNSW*

**Visiting Research Fellow**

Anthony Pollard, BArch MSc *UNSW*, GradDipBusComp *Nepean C.A.E.*

---

## Building Construction Management Program

**Head of Program**

Paul Kingsley Marsden, ASTC, MSc *UNSW*, GradDip *Syd. Teachers' Coll.*, AAIQS

**Professor of Building**

Vacant

**Associate Professors**

Marton Marosszeky, BE *N'cle.(N.S.W.)*, MEngSc *UNSW*, MIEAust, MAIB

Roger Mark Anthony Miller, BBuild *UNSW*, SM CE *M.I.T.*, FAIB

Thomas Edward Uher, BBuild MSc(Build) PhD *UNSW*, FAIB, MAIPM

**Senior Lecturers**

Philip John Davenport, LLB *Syd.*

Martin Loosemore, BSc(QS) PhD *Reading*

Karl Goran Runeson, BA MBuild *UNSW*, PhD *QUT*

**Lecturers**

Perry Forsythe, BBuild *UNSW*

Ojars Indulis Greste, BE ME *UNSW*, DEng *Calif.*

Jinu Kim, BSc(Eng) Seoul *N.U.*, MPM *UNSW*, MAIPM,

AVLE(Econ), PhD *UNSW*

Yong Tu, BSc(Comp) MSc(Econ&Stat) *Nankai*, PhD *Napier*

**Emeritus Professor**

Arthur Raymond Toakley, BCE BA MEngSc *Melb.*, PhD *Manc.*, CPEng, LMus, FIEAust, FAIB

**Adjunct Professors**

Ngee Huat Seek, BSc(EstateMgt) *NUS*,

MSc(BusinessAdmin) *British Columbia*, PhD *A.N.U.*

WG Mick Ryan, BE *Syd.*, ME(HighwayEng) *UNSW*,

FIEAust, MICT(UK), MACI(USA), FIQAust, FAIMAust, FAATSE

---

## Industrial Design Program

**Head of Program**

Lance Green, BE *N.S.W.I.T.*, MDes *U.T.S.*, GradDipHEd *UNSW*, CPEng, FIEAust, MDIA, FRSA

**Lecturer**

Rina Bernabei, BD(ID) *U.T.S.*

Johnathon Talbot, BSc(IndArts) DipEd *UNSW*

**Adjunct Senior Lecturers**

Adam Laws, BAppScIndDes *UC*, IDSA

Mark Armstrong, DipArt(ID) *R.M.I.T.*, MDIA

**Honorary Visiting Professor**

John Redmond, BA DipIDEng, MA *RCA*, FRSA, MESA, AADM, FDIA

**Technical Officer**

Antony Yarham, DipEd *U.T.S.*

---

## Interior Architecture Program

**Head of Program**

Harry Anthony Stephens, BArch DipLD *UNSW*, FRAIA

---

## Landscape Architecture Program

### Head of Program

Elizabeth Mossop, BLArch *UNSW*, MUrbPlan *Macq.*, AAILA

### Professor of Landscape Architecture

James Weirick, MLA *Harv.*

---

## Planning and Urban Development Program

### Head of Program

Stephen Harris, BTP *UNSW*, FRAPI

### Professor of Town Planning

Alexander Rankine Cuthbert, DipArch DipTP MSc *Heriot Watt*, PhD *Lond.*, MRIBA, MRTPI, MHKIP

### Associate Professors

Robert Gordon Freestone, BSc *UNSW*, MA *Minn.*, PhD *Macq.*, MRAPI

Peter Ashton Murphy, BA *Syd.*, PhD *Macq.*

Robert Bolles Zehner, BA *Amherst*, MA PhD *Mich.*, MASA, MRAPI

### Lecturers

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

Peter John Williams, BSc *UNSW*, MEnvPlan *Macq.*, MPubPol *N.E.*

---

## Postgraduate Coursework Programs

### Associate Dean (Postgraduate)

Professor Alexander Cuthbert

### Adjunct Professor

Sonya Svetlana Lyneham, BA MTCP *Syd.*, FRAPI

### Architecture

#### Program Coordinator

Dr Paul-Alan Johnson

### Building Conservation

#### Program Coordinator

To be advised

## Construction Management

### Program Coordinator

Associate Professor Tom Uher

## Industrial Design

### Program Coordinator

Lance Green

## Landscape Planning

### Program Coordinator

Elizabeth Mossop

## Real Estate

### Program Coordinator

Dr Jinu Kim

## Sustainable Development

### Program Coordinator

Associate Professor Deo Prasad

## Urban Development and Design

### Program Coordinator

Prof A Cuthbert

---

## Postgraduate Research Programs

### Associate Dean (Research)

Professor Jon Lang

### Research Student Coordinator

Dr Bruce Judd

---

## Faculty Computing Unit

### Manager

Graham Hannah

### Support Staff

Jizelle Dabaghi

Marco Furschke

---

### Faculty Finance and Facilities Unit

**Administrative Officer**

Harry Chambers

**Administrative Assistant**

Annabel Sutherland

---

### Faculty Administrative Staff

Kathleen Bradburn

Ruth Buntman

Julia Hauman

Wendy Hoggard

Margaret McInnes

Joan Terlecky

Tony Voroshine

Eddy Ward

Julian Wong

Tulika Yadav

Sheling Zhang



---

# Handbook Guide

This Handbook is divided into two main sections comprising undergraduate study and postgraduate study. Initially, course outlines are presented in each section, providing a guide to the degrees within organisational units. Read the opening sections of the handbook first, and then read the information contained under Course Outlines (Undergraduate or Postgraduate as appropriate). Detailed information on each subject can then be found under Subject Descriptions which provides full details of subject content, contacts and session/prerequisite details. Rules for progression through offered courses follow the subject description entries.

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:

---

CP	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 organisational unit offering subjects to students in the Faculty of the Built Environment follow.

---

Prefix	Organisational Unit	Faculty/Board
ACCT	School of Accounting	Commerce and Economics
ARCH	Architecture Program	Built Environment
BLDG	Building Program	Built Environment
COMP	School of Computer Science and Engineering	Engineering
GEOG	School of Geography	Science and Technology
GSBE	Graduate	Built Environment
IDES	Industrial Design Program	Built Environment

Prefix	Organisational Unit	Faculty/Board
LAND	Landscape Architecture Program	Built Environment
PHYS	School of Physics	Science and Technology
PLAN	Planning and Urban Development Program	Built Environment
SURV	School of Geomatic Engineering	Engineering

---

# Faculty Information

---

## Some People Who Can Help You

If you require advice about enrolment, degree requirements, progression within courses, information and advice about subject content and requirements contact the Faculty Student Centre, 3rd Floor, Science Precinct Building.

It is University and Faculty policy to promote equal opportunity in education (refer to EOE Policy Statement, University of New South Wales Calendar and the Guide for Students 1995).

---

## Faculty of the Built Environment Enrolment Procedures

All students re-enrolling in the Faculty will receive pre-enrolment forms containing information concerning their 1998 enrolment.

---

## Rules for Progression

Progression in courses offered in the Faculty of the Built Environment 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 Program 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 the Built Environment are served mainly by the Physical Sciences Library and the Studio Collection housed in the Faculty of the Built Environment.

## The Physical Sciences Library

The Physical Sciences Library, located on levels 5, 6 and 7 of the Library Building, provides information for students and staff from the Faculties of Science, Engineering, the Built Environment and Applied Science.

During the academic year, the Library is open from 8.00am to 10.00pm Monday to Thursday, 8.00am to 6.00pm on Friday and 12.00pm to 5.00pm Saturday and Sunday. During vacations, Library hours of opening will vary.

Staff assisted service is available after 10.00am including help with catalogue, CD-Roms, interlibrary loans, maps and online searching. An information skills program is in place with emphasis on developing basic information access and management skills for first years and advanced skills for final year and postgraduate students.

The Library's catalogue and selected CD-Rom databases are available over the Campus Wide Network.

Physical Sciences Librarian: Rhonda 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 of the Built Environment Studio Collection Library

The Studio Collection is located on the Ground floor of the Science Precinct Building. It is an undergraduate reference collection, with no lending facilities. It serves the day to day needs of staff and students in the Faculty. It includes monographs, a small selection of current serials and

standards, these being duplicated in the Central Library. Unique materials held consist of donations, undergraduate theses, trade catalogues and an open reserve collection of specific materials left by lecturers to supplement course work. Access to holding information of the Central Library and the Studio Collection is through the Central Library's On-Line Catalogue. The Studio also provides CD-Rom and photocopying facilities. Assistance in using the Library and orientation tours are given by the staff. In addition a printed guide on how to use the Library facilities is available.

---

## Faculty Laboratories

### Research Laboratories

The Faculty controls research laboratories situated on campus at Kensington, at the University of New South Wales Research Station, King Street, Randwick and the Little Bay Campus. 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 structural modelling facility and a structural testing bay. 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 located in the King St. laboratories and offers additional services to the building industry.

The Faculty has recently completed a new field testing and research facility at its Little Bay Campus (1408 Anzac Parade). This facility has accredited testing of thermal performance of building components, energy evaluation, renewable energy integration in buildings and other energy – environmental testing and research facilities. State-of-the-art hot box, double hot box and solar calorimeters are part of the equipment. In addition spectrophotometric studios on materials including degradation studies are also undertaken. Industry specific professional development programs are also being conducted through this facility. Other energy and environmental activities of the SOLARCH Group can be accessed through this facility as well.

## Computing Facilities Laboratory

The Faculty has four major computing laboratories containing around 100 personal computers available for general use by students in the Faculty. These laboratories are used for teaching formal classes, as well as providing general network and computing access for students. They are generally Intel-based computers, Pentium-based CAD workstations. Included in this count are several SUN workstations, the bulk of them being used in a small network of CAD workstations, and the Digital Media Laboratory, supporting student use of multimedia as a presentation and communication tool.

The above facilities are generally for use by undergraduates. For postgraduate students, there are a total of around 30 dedicated computers within the Faculty, all provided by each separate School for their own students, and ranging from low-end wordprocessing devices to high-end graphics and multimedia computers to support postgraduate research work.

All these computers are connected to the Campus Wide Network, providing secure on-line file storage, access for students to the information resources supported by the Faculty and the University generally, as well as the international resources of the Internet.

Active research is underway in the following areas:

The use of computer graphics and multimedia 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 land-use planning and design.

Use of computers in transportation and strategic planning, social analysis and census data interpretation.

## Faculty World Wide Web Site

The Internet or the Information Superhighway as it's sometimes known has seen enormous growth over the last two years. In 1994 the Faculty established a World Wide Web site, the primary purpose of which is to disseminate information about the Faculty and the work carried out here. It now provides a vital resource for students and staff in the Faculty as well as being an internationally acclaimed WWW site in the Built Environment field. The address is <http://www.fbe.unsw.edu.au>

The server provides detailed information about academic units within the Faculty; information about the staff of the Faculty; and exhibitions of student work. A significant feature of the site is the reference and tutorial material relating to AutoCAD which is read by up to 2000 people each week.

## Student Ownership of Personal Computers

The Faculty encourages all students to consider the purchase of a personal computer to support their studies. The prevailing policy is that the Faculty endeavours to provide for the high-end computing needs of students, in the belief that many students are able to meet their own needs for more basic applications. To that end, the Faculty publishes a document which is available from the Faculty Student Centre, providing advice to students regarding the purchase of personal computers.

---

## Computing at UNSW

The Division of Information Services (DIS) encompasses information technology and the University Library at UNSW.

Specific University information which is frequently updated is available on the World Wide Web (WWW) in the UNSW home page at <http://www.unsw.edu.au/> which has an index to its contents which includes URLs <http://www.acsu.unsw.edu.au/> and <http://www.misu.unsw.edu.au/>. You can access this information from your workstation and in any computing laboratory with access to WWW through Mosaic or Netscape.

The information provided on the WWW includes more details about DIS information technology units such as points of contact for particular areas of responsibility and services provided.

---

## 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. Within the Faculty are a number of student societies. These include TAC (The Architecture Club), BUGS (Building Undergraduate Society), IDSOC (Industrial Design Society), SOLA (Society of Landscape Architects) and OOPS (Organisation of Planning Students).

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; specialised 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 3855418 or at Student Services, Quadrangle Building.

---

## Equal Opportunity in Education Policy Statement

Under the Federal Racial Discrimination Act (1975), Sex Discrimination Act (1984), Disability Discrimination Act (1992) and the New South Wales Anti-Discrimination Act (1977), the University is required not to discriminate against students or prospective students on the grounds of sex, marital status, pregnancy, race, nationality, national or ethnic origin, colour, homosexuality or disability. Under the University of New South Wales Act (1989), the University declares that it will not discriminate on the grounds of religious or political affiliations, views or beliefs.

## University Commitment to Equal Opportunity in Education

As well as recognising its statutory obligations as listed, the University will eliminate discrimination on any other grounds which it deems to constitute disadvantage. The University is committed to providing a place to study free from harassment and discrimination, and one in which every student is encouraged to work towards her/his maximum potential. The University further commits itself to course design, curriculum content, classroom environment, assessment procedures and other aspects of campus life which will provide equality of educational opportunity to all students.

## Special Admissions Schemes

The University will encourage the enrolment of students who belong to disadvantaged groups through programs such as the University Preparation Program and the ACCESS Scheme. Where members of disadvantaged

groups are particularly under-represented in certain disciplines, the responsible faculties will actively encourage their enrolment.

## Support of Disadvantaged Students

The University will provide support to assist the successful completion of studies by disadvantaged group members through such means as the Aboriginal Education Program, the Supportive English Program and the Learning Centre. It will work towards the provision of other resources, such as access for students with impaired mobility, assistance to students with other disabilities, the provision of a parents' room on the upper campus, and increased assistance with English language and communication.

## Course Content, Curriculum Design, Teaching and Assessment, and Printed Material

Schools and faculties will monitor course content (including titles), teaching methods, assessment procedures, written material (including study guides and handbook and Calendar entries) and audiovisual material to ensure that they are not discriminatory or offensive and that they encourage and facilitate full participation in education by disadvantaged people.

## Equal Opportunity Adviser Scheme

The University will continue its Equal Opportunity Adviser Scheme for students who feel that they have been harassed or who consider they have been disadvantaged in their education by practices and procedures within the University.

## Harassment Policy

The University is committed to ensuring freedom from harassment for all people working or studying within the institution. It will continue to take action, including disciplinary action, to ensure that freedom from harassment is achieved.

## Student Equity

The University of New South Wales is committed to providing an educational environment that is free from discrimination and harassment. Both commonwealth and state anti-discrimination law requires the University not to discriminate against students or prospective students on the following grounds: sex, race/ethnicity, age, disability, sexual harassment, racial harassment, disability harassment, marital status, pregnancy, sexual preference, HIV/AIDS. Also included are acts of vilification on the grounds of: race and HIV/AIDS.

## Complaint/Disputes

The University has internal dispute handling procedures to deal with complaints against staff or other students. The Discrimination and Harassment Grievance Procedures are handled by the Student Equity Unit of the Equal Employment Opportunity Unit. Complaints that largely concern academic matters are usually handled through the Head of Program.

## Advocacy and Support

Students can seek assistance getting disputes resolved, either in relation to discrimination or academic matters. Assistance can be sought from various areas in the University including:

Student Equity Unit; Student Guild Advocacy Service; Student Counselling; Equal Employment Opportunity Unit; Course Co-ordinators; Senior Academic Staff; Heads of Programs.

Students may be confident that their interests will be protected by the University if a complaint is lodged. This means that students should not be disadvantaged or victimised because they have, in good faith, sought to assert their rights to equal opportunity in education.

---

## Faculty of Built Environment General Education Rules

The University undertook a major review of the General Education program in 1994, the results of which laid the ground rules for the present program, introduced in 1996.

Every undergraduate student (who is not otherwise exempt – see below) must take 30 credit points of General Education, and a further 10 credit points in a subject which fosters acceptance of professional and environmental ethical action and social responsibility.

The objectives of General Education, and details of the subjects offered across the university, are published in the General Education Handbook, which is distributed free each year from Faculty Student Centre.

Certain restrictions apply to students' choices:

- Students cannot take General Education subjects offered by the Faculty of the Built Environment. Do not therefore select subjects in the range GENR0001 to GENR0020
- Students should not take General Education subjects (which are judged by the Faculty's General Education Committee or course authority as being) in discipline areas similar to the major discipline area(s) of the student's course.

Students' first choices cannot be guaranteed, as students in later course stages will be given preference over those in earlier stages; quotas may be set for different Faculties,



and subjects. Subjects with insufficient enrolments will be cancelled by 31 January (for Session 1 subjects) and 27 June (for Session 2 subjects).

### Students who commenced their courses prior to 1996

These students were governed by the pre-1996 GE rules. The general principle that will be applied is that no such student is to be disadvantaged by the change. This principle is interpreted by the Faculty as follows:

- Such students must satisfy the rules which applied in 1995 regarding the number of credit points of General Education to be undertaken.
- Previously, these requirements had to be split between General Education "Categories" in prescribed ways. This is no longer the case, and such students will be permitted to choose any General Education subjects for which they possess the prerequisites, and from which they are not excluded. Subjects taken prior to 1996 will be aggregated with those taken subsequently, with hours converted to credit points at the rate of 28 hours = 7.5 credit points.

### Exemption from part of or all of the General Education program

There will be no general exemptions for students enrolled in single degree courses.

### Special Student Exemptions

Students transferring to the Faculty from another Faculty at UNSW, or from another higher education/tertiary institution, who believe that their prior learning and/or qualification satisfies the University's General Education objectives are eligible to seek exemption from all, or part of the UNSW General Education requirements (4 subjects or 30CP).

Applicants for exemption must supply full written justification for their request, plus appropriate documentation, showing how they have satisfied the GE objectives (see General Education Handbook). Applications will be considered on a case by case, and subject by subject basis by the Faculty's General Education Committee, which will make a determination and notify the student accordingly. The Committee's yardsticks will be:

- the extent to which the subjects nominated for exemption satisfy sufficient GE objectives (ie cooperative interaction with students in other disciplines, most importantly: skills/competencies complementary to the major discipline area; social and ethical responsibility and development; empowerment to challenge traditional knowledge/paradigms);

- the extent to which the previous course is different in paradigm and content to that in which the student is presently enrolled;
- the length of previous study undertaken, where, in principle, 1 year might qualify for exemption from one GE subject (7.5 credit points), 2 years from 15CP, 3 years from 22.5CP and 4 years from 30CP.

In all cases, the onus is on the student to present a written justification.

Note:

Life experience and/or mature age entry are not grounds for exemption.

Practical experience/industry placement or a UPP GE subject are not grounds for exemption.

### Substitution

Students may apply to the Faculty's General Education Committee for approval to substitute any subject(s) from other Faculties, for which they have the prerequisites, for General Education subjects up to a total maximum of 22.5 credit points of General Education. Substitution requests must state how the proposed subjects will, together with the remainder of the student's GE program, satisfy the GE objectives. The Committee will approve the request if satisfied that the substitution(s) will indeed allow this to occur.

Students may substitute the study of Language Other Than English (LOTES) within their General Education program. English is excluded, remedial or otherwise; students are not to have any previous skill in the language chosen; a maximum of 2 language subjects/sessions can be substituted for General Education subjects.

- If students substitute a mainstream subject for a General Education subject they will be charged the HECS fee for the mainstream subject.
- Irrespective of the amount of Credit Points associated with a mainstream subject, students can only count 7.5 CPs towards the General Education Requirement.
- Students should ensure that the substitute subject has a seminar component. It is unlikely that the Faculty General Education Committee will accept it otherwise.

### Prerequisites, co-requisites, and exclusions

The General Education Committee will determine prerequisites, co-requisites and exclusions as and when necessary.

Honours calculations: Include General Education subjects.

### Enquiries

Any General Education enquiries should be directed in the first instance to The Faculty Student Centre, Science Precinct Building.



---

# Undergraduate Study

The Faculty of the Built Environment runs the following undergraduate programs: – BArch, BSc(Arch), BBCM, BIndDes, BLArch, BTP. These programs conduct undergraduate courses in the fields of architecture, industrial design, building, quantity surveying, interior architecture, 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.

---

## Architecture Program

### Head of Program

Desley Luscombe

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 and 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, documentation and supervision of building construction.

#### 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. Environment
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 prerequisite 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.

### General Education Requirement

General Education subjects totalling 40 credit points must be taken. The Social Responsibility requirement of the General Education Program is satisfied as follows:

1. The 28 hour subject GSBE0002 is taken in Stage 5;
2. The following subjects include Social Responsibility issues: ARCH6135, ARCH6145, ARCH6302, ARCH6501 and ARCH6816.

### Practical Experience

Each student is required to undertake 24 weeks of off-campus activity in the pursuit of architectural practice experience; the preferred activity being to work for a single period of 24 weeks under the supervision of a registered architect; although other activities may be allowed after written approval has been granted.

Assessment is only within the terms of the subject ARCH6904 Practical Experience in the Bachelor of Architecture degree course 3260. The School of Built Environment 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. Full details are given in the subject description.

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 recognised 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

<b>Year 1</b>		<b>CP</b>
<i>Sessions 1 and 2</i>		
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	Environment 1	9
<b>Design Stage 1</b>		
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	Environment Seminar 1	6
<b>Total</b>		<b>120</b>
<b>Year 2</b>		
<i>Sessions 1 and 2</i>		
ARCH6302	Theory of Architecture 2	6
ARCH6402	History of Architecture 2	12
ARCH6502	Architectural Construction 2	12
ARCH6602	Architectural Structures 2	6
ARCH6702	Environment 2	12
General Education Elective/s		15
<b>Design Stage 2</b>		
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	Environment Seminar 2	6
<b>Total</b>		<b>135</b>

Year 3		CP	*Elective Subjects		
<i>Sessions 1 and 2</i>			A range of electives will be offered each year selected from the list below. 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.		
ARCH6303	Theory of Architecture 3	6			
ARCH6403	History of Architecture 3	12			
ARCH6503	Architectural Construction 3	12			
ARCH6603	Architectural Structures 3	6			
ARCH6703	Environment 3	12			
General Education Elective/s		15			
<b>Design Stage 3</b>					<b>CP</b>
ARCH6103	Design Studio 3	30	ARCH5200	Computer Graphics Programming	10
ARCH6213	Communication Seminar 3	12	ARCH5201	Computer Applications 1	10
ARCH6313	Theory Seminar 3	9	ARCH5202	Computer Applications 2	10
ARCH6513	Construction Seminar 3	9	ARCH5203	Computer Applications 3	10
ARCH6613	Structures Seminar 3	6	ARCH5204	Architectural Computing Seminar	10
ARCH6713	Environment Seminar 3	6	ARCH5205	Theory of Architectural Computing	10
<b>Total</b>		<b>135</b>	ARCH5206	Information Technology for Architects	10
<b>Stage 4</b>			ARCH5207	CAD Management for Architects	10
ARCH6214	Architectural Computing 2	10	ARCH5208	Advanced Graphics	10
ARCH6924	Research Methodology	10	ARCH5209	Drawing	10
Elective Subject*		10	ARCH5210	Painting	10
<b>Design Stage 4</b>			ARCH5211	Pottery and Ceramics	10
ARCH6134	Design Studio 4	20	ARCH5212	Rendering	10
ARCH6144	Design Seminar 1	5	ARCH5300	Theory of Form	10
ARCH6544	Technology Seminar 1	5	ARCH5301	Criticism and Evaluation	10
<b>Total</b>		<b>60</b>	ARCH5302	Imagination	10
<b>Stage 5</b>			ARCH5303	Spirit in Architecture	10
ARCH6815	Architectural Practice A	10	ARCH5304	Spatial Construction Studies	10
2 Elective Subjects*/Dissertation		20	ARCH5400	Recent Australian Architects	10
General Education: GSBE0002 Social Responsibility and Environmental Ethics		10	ARCH5401	Great Architects	10
<b>Design Stage 5</b>			ARCH5402	The City Sydney	10
ARCH6135	Design Studio 5	20	ARCH5403	Urban Design	10
ARCH6145	Design Seminar 2	5	ARCH5404	Landscape Design	10
ARCH6545	Technology Seminar 2	5	ARCH5405	The Modern Movement in Architecture	10
<b>Total</b>		<b>70</b>	ARCH5406	Post Modernism in Architecture	10
<b>Stage 6</b>			ARCH5407	Architecture and Culture	10
ARCH6816	Architectural Practice B	10	ARCH5408	Japanese Architecture	10
2 Elective Subjects*/Dissertation		20	ARCH5409	Public Art	10
<b>Design Stage 6</b>			ARCH5410	Readings in Architecture	10
ARCH6136	Design Studio 6	20	ARCH5411	Building Conservation 1	10
ARCH6146	Design Seminar 3	5	ARCH5412	Building Conservation 2	10
ARCH6546	Technology Seminar 3	5	ARCH5413	Conservation Technology	10
<b>Total</b>		<b>60</b>	ARCH5414	Conservation Management	10
<b>Stage 7</b>			ARCH5500	Advanced Building Materials (Ceramics)	10
3 Elective Subjects*		30	ARCH5501	Advanced Construction Systems	10
and			ARCH5502	Construction Planning and Management	10
<b>Design Stage 7</b>			ARCH5503	Advanced Building Materials (Organics)	10
ARCH6137	Design Studio 7	20	ARCH5504	Advanced Building Materials (Metals)	10
ARCH6147	Design Seminar 4	5	ARCH5600	Conceptual Structural Design	10
ARCH6547	Technology Seminar 4	5	ARCH5601	Advanced Structural Design	10
or			ARCH5602	Lightweight Structural Design	10
ARCH6127	Major Design Project	30	ARCH5700	Design for Energy Efficiency	10
or			ARCH5701	Design of Lighting	10
ARCH6907	Major Research Project	30	ARCH5702	Acoustics Studies	10
<b>Total</b>		<b>60</b>	ARCH5703	Applied Environmental Psychology	10
			ARCH5800	Building Economics & Development	10
			ARCH5801	Project Management	10
			ARCH5802	The Architect and the Law	10

		CP
ARCH5803	Quality Management Concepts and Practice	10
ARCH5900	Architectural Studies 1	10
ARCH5901	Architectural Studies 2	10
ARCH5902	Architectural Studies 3	10
ARCH6900	Dissertation	20

**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 and coursework program is undertaken followed by a research project in the final session. A selection of subjects is taken from those offered within the Architecture Program with the option of subjects totalling up to forty credit points from outside the Program. Specialisations are provided in the fields of architectural computing and architectural technology.

**General Education Requirement**

General Education subjects totalling 40 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.

**Schedule of Subjects**

Year 1		CP
<i>Sessions 1 and 2</i>		
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	Environment 1	9

Design Stage 1		CP
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	Environment Seminar 1	6
<b>Total</b>		<b>120</b>

**Year 2***Session 1*

ARCH6924	Research Methodology	10
ARCH5914	Special Research Programme 1	15
ARCH5930	Science Seminar 1	6
Choice of BArch subjects		30
General Education Elective		7.5
<b>Total</b>		<b>68.5</b>

**Year 2***Session 2*

ARCH5915	Special Research Programme 2	15
ARCH5930	Science Seminar 1	6
Choice of BArch subjects		30
General Education Elective		7.5
<b>Total</b>		<b>58.5</b>

**Year 3***Session 1*

ARCH5916	Special Research Programme 3	15
ARCH5931	Science Seminar 2	3
Choice of BArch subjects		40
General Education Elective		7.5
<b>Total</b>		<b>65.5</b>

**Year 3***Session 2*

ARCH5917	Research Project	24
ARCH5931	Science Seminar 2	3
Choice of BArch subjects		30
General Education Elective		7.5
General Education Requirement: GSBE0002 Social Responsibility and Environmental Ethics		10
<b>Total</b>		<b>74.5</b>

**Year 4***Session 1 (Optional Honours year)*

ARCH5918	Honours Project 1	60
<b>Total</b>		<b>60</b>

**Year 4***Session 2*

ARCH5919	Honours Project 2	60
<b>Total</b>		<b>60</b>

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, BIA 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.



# Interior Architecture Program

## Head of Program

Harry Stephens

3255

## Bachelor of Interior Architecture Course

### Bachelor of Interior Architecture

#### BIA

Interior architecture is that specialist area of professional involvement in the built environment concerned with the internal arrangement, fitting out and finishing of buildings of all sizes and types. As the name implies it differs from interior design in so far as it is more closely allied with architecture.

This course is structured to meet the needs of the individual seeking the appropriate theoretical and practical education to take a fully professional role in this field as an interior designer. (It should be noted that, unlike in Europe, use of the title 'Interior Architect' in Australia is not permitted under current Australian legislation).

### General Description of the Course

A four year full-time course, it is centred on design and built to a large extent upon a range of subjects from the Bachelor of Architecture course with 196 of the necessary course total of 540 credit points being allocated to special interior architecture subjects. The subjects fall into six categories:

1. Design
2. History
3. Theory
4. Technology
5. Communication
6. Professional Practice.

all of which have a theoretical and practical component and all of which are focussed on the Design Studio.

The first year of the course is a common year with the Bachelor of Architecture degree course. In the second, third and fourth years the course consists of increasingly more specialised interior architecture subjects. The second session of the fourth year is undertaken as a practical experience component under the guidance of an approved practitioner in consultation with staff of the Program and is devoted to the production of a graduation project wherein the student must fully research, design, document and present an approved project to a high level of professional skill.

## General Education Requirement

General Education subjects totalling 40 credit points must be taken during the course.

## Honours

The Bachelor of Interior 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 registered with the International Federation of Interior Architects and is structured to provide the educational prerequisites for graduates to seek membership of this body. Students enrolled in the course are eligible to apply for Student membership of the Design Institute of Australia and full Licentiate membership upon graduation.

## Schedule of Subjects

		CP
<b>Year 1</b>		
<i>Session 2</i>		
ARCH6201	Architectural Computing 1	6
<b>Year 1</b>		
<i>Sessions 1 and 2</i>		
ARCH6101	Design Studio 1	24
ARCH6301	Theory of Architecture 1	6
ARCH6401	History of Architecture 1	9
ARCH6501	Architectural Construction 1	9
ARCH6601	Architectural Structures 1	6
ARCH6701	Environment 1	9
ARCH6211	Communication Seminar 1	18
ARCH6311	Theory Seminar 1	9
ARCH6511	Construction Seminar 1	12
ARCH6611	Structures Seminar 1	6
ARCH6711	Environment Seminar 1	6
<b>Total</b>		<b>120</b>
<b>Year 2</b>		
<i>Session 1</i>		
ARCH5428	History of Art and Design 1	6
ARCH6815	Architectural Practice A	10
General Education Elective		7.5
<b>Year 2</b>		
<i>Session 2</i>		
ARCH6214	Architectural Computing 2	10
ARCH5525	Furniture Design 1	6
General Education Elective		7.5
<b>Year 2</b>		
<i>Sessions 1 and 2</i>		
ARCH5970	Interior Design Studio 1	30
ARCH6212	Communication Seminar 2	12
ARCH6302	Theory of Architecture 2	6
ARCH6312	Theory Seminar 2	9
ARCH6502	Architectural Construction 2	12
ARCH6512	Construction Seminar 2	9

ARCH6702	Environment 2	CP 12	<b>Year 3</b>		<b>CP</b>
ARCH6712	Environment Seminar 2	6	<i>Sessions 1 and 2</i>		
<b>Total</b>		<b>143</b>	ARCH5961	Interior Design Studio 2	36
<b>Year 3</b>			ARCH6703	Environment 3	12
<i>Session 1</i>			ARCH6713	Environment Seminar 3	6
ARCH5429	History of Art and Design 2	6	<b>Total</b>		<b>137</b>
ARCH5526	Furniture Design 2	6	<b>Year 4</b>		
ARCH5530	Interior Materials and Finishes	10	<i>Session 1</i>		
ARCH6816	Architectural Practice B	10	ARCH5962	Interior Design Studio 3	18
ARCH5202	Computer Applications 2	10	ARCH5203	Computer Applications 3	10
General Education Elective		7.5	ARCH5801	Project Management	10
<b>Year 3</b>			ARCH5963	Interior Design Research Project	12
<i>Session 2</i>			General Education Elective: GSBE0002 Social Responsibility and Environmental Ethics		10
ARCH5529	Fabric Design	6	Choice of BArch and Elective Subjects		20
ARCH5201	Computer Applications 1	10	<b>Year 4</b>		
ARCH5800	Building Economics and Development	10	<i>Session 2</i>		
General Education Elective		7.5	ARCH5964	Interior Design Graduation Project	60
			<b>Total</b>		<b>140</b>

## Building Construction Management Program

### Head of Program

Paul Kingsley Marsden

### 3331

### Bachelor of Building Construction Management BBCM

The Bachelor of Building Construction Management is a four year full-time course which allows students to specialise 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 construction management 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.

### Prerequisites for the Course

While there are no prerequisite subjects to enter the Bachelor of Building Construction Management course, it is strongly recommended that students have completed at least 2 unit Mathematics and 2 unit General English.

### General Description of the Course

The course is offered on a session basis. Students are required to complete a minimum of eight sessions. The course leads to the award of the degree of Bachelor of Building Construction Management (BBCM).

The eight sessions of the course are structured as follows:

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

In a normal session program, this usually results in six to seven subjects requiring 18 class hours/week.

To qualify for a Bachelor of Building Construction Management degree a student must complete a total of 500 credit points as follows:

All compulsory subjects	390 credit points
Elective subjects	80 credit points
General Education subjects	30 credit points
Industry Program	26 weeks

### General Education Requirements

All students are required to satisfy the University's General Education requirements by completing 112 (CP30) hours of General Education subjects taken outside the Faculty of the Built Environment.

In addition all students must complete the Faculty based general education subject GSBE0002 Social Responsibility and Environmental Ethics.

## 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 Program;
- the total number of subjects taken at any time does not exceed 8 including General Education; and
- the total contact hours do not exceed 20 per week.

## Practical Experience

Prior to commencing their final year, students are required to have gained a minimum of 80 days practical experience by appropriate employment in the building industry.

The Australian Institute of Quantity Surveyors requires the full 6 months experience to be completed before the start of the final year of the course.

The proposal for employment must be submitted to the Head of the Building Program for approval prior to starting work. 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 Building Industry Program or in BLDG9998 Quantity Surveying Industry Program in Session 1 of final year.

## 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 Construction Management is recognised 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:

BLDG4016	Construction 6
BLDG4275	Dispute Avoidance and Resolution
BLDG4303	Quantity Surveying 3
BLDG4314	Building Economics 3
BLDG9998	Quantity Surveying Industry Program to be taken as 6 months employment with a Quantity Surveying firm, and to be completed before the start of the final year of the course.

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

BLDG4016	Construction 6
BLDG4275	Dispute Avoidance and Resolution
BLDG4303	Quantity Surveying 3
BLDG4314	Building Economics 3
BLDG9998	Quantity Surveying Industry Program to be taken as 6 months employment with a Quantity Surveying firm, and to be completed before the start of the final year of the course.

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

BLDG4267	Management 7
BLDG4273	Law for Builders 3
BLDG4314	Building Economics 3
BLDG4492	Property Development and Valuation
BLDG4391	Land Economics
BLDG4493	Property Management

and selection of a thesis topic on Land Economics.

## Schedule of Subjects

Year 1 (All subjects compulsory)		CP
<i>Session 1</i>		
BLDG1010	Communications and Resource Usage	5
BLDG1091	Built Environment 1	5
BLDG1111	Building Science 1 (Materials)	15
BLDG1201	Construction 1 (Domestic Construction)	15
BLDG1210	Construction Mathematics	5
BLDG1261	Management 1 (Management Principles)	10
General Education Elective		7.5
<i>Session 2</i>		
BLDG1002	Construction 2 (Low Rise Residential)	15
BLDG1051	Structures 1	10
BLDG1271	Law for Builders 1	5
BLDG1411	Building Economics 1 (Micro Economics)	10
BLDG2281	Introduction to Computing	5
PHYS1938	Physics 1 (Building)	7
General Education Elective		7.5

**Year 2 (All subjects compulsory)****CP***Session 3*

ACCT9001	Introduction to Accounting A	8
BLDG1151	Building Services 1 (Hydraulics)	5
BLDG2003	Construction 3 (Framed Buildings)	15
BLDG2261	Management 2 (Planning and Control)	10
BLDG2400	Research Methods	5
BLDG2411	Building Economics 2 (Macro Economics)	10
GMAT0411	Surveying in Building and Construction	7
General Education Elective		7.5

*Session 4*

ACCT9002	Introduction to Accounting B	8
BLDG2112	Building Science 2 (Concrete and Metals)	15
BLDG2152	Building Services 2 (Mechanical)	5
BLDG2264	Management 3 (Contracts)	10
BLDG2301	Quantity Surveying 1	15
BLDG2500	Construction Management Project 1	5
General Education Elective		7.5

**Year 3 (All subjects compulsory)***Session 5*

BLDG3004	Construction 4 (High Rise Buildings)	15
BLDG3052	Structures 2	10
BLDG3266	Management 4 (People Management)	10
BLDG3272	Law for Builders 2	5
BLDG3282	Computer Applications in Building	5
BLDG3303	Quantity Surveying 2	10
GSBE0002	Social Responsibility and Environmental Ethics	10

*Session 6*

BLDG3005	Construction 5 (Techniques)	15
BLDG3060	International Housing Practice	5
BLDG3070	Geotechnical Engineering for Building	10
BLDG3275	Management 5 (Construction and Quality Management)	10
BLDG3280	Occupational Psychology, Health and Safety	5
BLDG3321	Estimating 1	5
BLDG3500	Construction Management Project 2	10

**Year 4****CP**

(Students must take a total of 80 elective credit points. Up to 20 credit points of electives may be taken outside the Program with the approval of the Head of Program.)

*Session 7*

Compulsory Subject	
BLDG4500	Thesis
	40

(Students may enrol for Thesis twice, in Session 7 and Session 8)

*Elective Subjects*

BLDG4001	Project Management and Design Process	10
BLDG4002	Organisational Behaviour	10
BLDG4016	Construction 6 (Industrialisation and Technological Change)	10
BLDG4267	Management 7 (Marketing)	10
BLDG4273	Law for Builders 3	10
BLDG4314	Building Economics 3	10
BLDG4422	Estimating 2	10

*Session 8**Compulsory Subjects*

(Refer to practical experience information on page 17)

BLDG9999	Building Industry Program	
or		
BLDG9998	Quantity Surveying Industry Program	

*Elective Subjects*

BLDG4017	Advanced Materials	10
BLDG4275	Dispute Avoidance and Resolution	10
BLDG4284	Building Information Systems	10
BLDG4303	Quantity Surveying 3	10
BLDG4366	Management 6 (Corporate Strategy and Small Business)	10
BLDG4391	Land Economics	10
BLDG4492	Property Development and Valuation	10
BLDG4493	Property Management	10

---

## Industrial Design Program

**Head of Program**

Lance Green

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 cooperative 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 Program. 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 Program. 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.

### Coop Education Mode

The course is operated in a coop 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

All students are required to satisfy the University's General Education requirements by completing (30CP) of General Education subjects taken outside the Faculty of the Built Environment.

In addition all students must complete the Faculty based general education subject GSBE0002 Social Responsibility and Environmental Ethics.

1. The 28 hour subject GSBE0002 is taken in Year 4;
2. The following subjects include GSBE0002 issues: IDES1073, IDES2091, IDES2161, IDES2151, IDES2193, IDES3221, 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.

### Schedule of Subjects

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 Program.

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: HSC exam score range required: 2 unit Mathematics (60-100) or 2 and 3 unit Mathematics (1-150) or 3 and 4 unit Mathematics subject.

Note: It does not refer to the subjects Mathematics in Society or Mathematics in Practice.

#### Year 1

##### Session 1

IDES1021	Basic Design
IDES1041	Visual Thinking and Drawing
IDES1051	Geometrical and Mechanical Drawing
IDES1061	History of Art, Architecture and Design
IDES1011	Workshop Technology
MATH1011	General Mathematics 1B
General Education Program	

##### Session 2

IDES1073	Principles of Ergonomics
IDES1031	Design Studio 1
IDES1082	Engineering Design Mechanics
IDES2121	Introduction to Computing
MATH1021	General Mathematics 1C
PHYS1937	Physics

**Year 2***Session 1*

ACCT9001	Introduction to Accounting A
IDES2091	Design Methodology
IDES2101	Perspective and Rendering Techniques
IDES2161	Industrial Design Studio 2
IDES2132	Introduction to Materials Science
IDES2151	Product Studies Seminar
IDES2193	Applied Ergonomics
MATH2819	Statistics SA

*Session 2*

ACCT9002	Introduction to Accounting B
IDES2142	Mechanics of Solids for Industrial Design
IDES2151	Product Studies Seminar
IDES2161	Industrial Design Studio 2
IDES2171	Computer Aided Design
IDES2182	Materials and Manufacturing Processes for Industrial Design A
MATH2819	Statistics SA
General Education Program	

**Year 3***Session 1*

IDES2151	Product Studies Seminar
IDES3202	Materials and 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
IDES3221	Industrial Design Studio 3
IDES3252	Electrical Engineering Applications in Industrial Design

IDES3262	Production Design and Technology for Industrial Design
IDES3271	Form Theory
IDES3281	Photography
IDES4331	History of Consumer Products
IDES4341	History of Industrial Design
MARK2042	Consumer Behaviour B
MARK2052	Marketing Research
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 and Interior Design for Industrial Designers
MARK3073	Brand Management
GSBE0002	General Education Program

*Session 2*

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

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

# Landscape Architecture Program

**Head of Program**  
Elizabeth Mossop

---

## 3380 Landscape Architecture 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 principal 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 are 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 Landscape Architecture Program. However, contact with the students and staff of other Schools is assured by the inclusion of subjects from the Schools of Geography, Planning and Urban Development, Biological Science, the

Department of Applied Geology and the University's General Studies program.

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

All students are required to satisfy the University's General Education requirements by completing (30CP) of General Education subjects taken outside the Faculty of the Built Environment.

In addition all students must complete the Faculty based general education subject GSBE0002 Social Responsibility and Environmental Ethics.

### 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 recognised 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.

## Course Structure

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 the Program 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 Program.

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

## Schedule of Subjects

Year 1		CP
<i>Session 1</i>		
*LAND1110	Landscape Analysis	15
LAND1130	Landscape Graphics	10
LAND1131	Introduction to Computer Applications	10
LAND1132	Introduction to Landscape Architecture	5
LAND1170	Design 1	10
BIOS3004	Botany for Landscape Architects	12.5
	General Education Program	7.5
<b>Total</b>		<b>70</b>

*\*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.*

<b>Session 2</b>		
GEOG1721	Planet Earth	15
GEOL5110	Geology for Landscape Architects	5
LAND1211	Horticulture for Landscape Architects	10
LAND1230	Landscape Graphics 2	10
LAND1270	Design 2	10
LAND1292	Landscape Technology 1	10
	General Education Program	7.5
<b>Total</b>		<b>67.5</b>

<b>Year 2</b>		<b>CP</b>
<i>Session 1</i>		
LAND2110	Environmental Sociology for Landscape Architects	10
LAND2171	History of Landscape Architecture	10
LAND2170	Landscape Design 1	25
LAND2192	Landscape Technology 2	10
	General Education Program	7.5
<b>Total</b>		<b>62.5</b>

<b>Session 2</b>		
LAND2270	Landscape Design 2	25
LAND2271	Planting Design	10
LAND2292	Landscape Technology 3	10
LAND2291	Professional Practice A	10
	General Education Program	7.5
<b>Total</b>		<b>62.5</b>

<b>Year 3</b>		
<i>Session 1</i>		
GSBE0002	Social Responsibility and Environmental Ethics	10
	Research Methods	5
LAND3130		
LAND3151	Landscape Management 1	10
LAND3170	Landscape Design 3	25
LAND3190	Landscape Engineering A	10
PLAN1093	Planning Perspectives	10
<b>Total</b>		<b>70</b>

<i>Session 2</i>		
LAND3252	Landscape Management 2	10
LAND3270	Landscape Design 4	25
LAND3290	Landscape Engineering B	10
LAND3291	Professional Practice B	10
<b>Total</b>		<b>55</b>

<b>Year 4</b>		
<i>Session 1</i>		
LAND4031	Landscape Thesis A	30
LAND4032	Landscape Thesis B	15
LAND4170	Landscape Design 5	15
<b>Total</b>		<b>60</b>

<b>Session 2</b>		
LAND4272	Urban Landscape Design	30
LAND4270	Landscape Design 6	30
	Four months practical experience	
<b>Total</b>		<b>60</b>

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



# Planning and Urban Development Program

**Head of Program**  
Stephen Harris

## 3360 Town Planning Course

### Bachelor of Town Planning BTP

Town Planning has as its focus the urban and rural development process; 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 organisations 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 four years' duration with an additional mandatory year of practical experience after the first session in Year 3. The course leads to the award of the degree of Bachelor of Town Planning (BTP).

### General Education Requirement

All students are required to satisfy the University's General Education requirements by completing 112 hours (30CP) of General Education subjects taken outside the Faculty of the Built Environment.

In addition all students must complete the Faculty based general education subject GSBE0002 Social Responsibility and Environmental Ethics.

1. In Year 4 the subject GSBE0002 is taken;
2. A number of compulsory subjects include GSBE0002 issues. These are: PLAN1021, PLAN1022, PLAN1042,

PLAN2011, PLAN2051, PLAN2022, PLAN2032, PLAN3011, PLAN3021, PLAN3031, PLAN3041, PLAN3051, PLAN3012, PLAN3032, PLAN4011, PLAN4021.

### Practical Experience

During the course, students must undertake twelve months approved employment related to the course: for example, in private development companies or with planning consultants, in government planning and housing authorities, in local councils preparing or implementing Local Environment Plans. This is normally undertaken in the twelve months following Session 2 of Year 3. The type of employment proposed must be submitted to the Head of the Program 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 recognised 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		CP
<i>Session 1</i>		
PLAN1011	Urban Society and Sociology	10
PLAN1021	Environmental Studies	10
PLAN1022	The Development Process	10
PLAN1041	The Language of Planning	10
PLAN1051	Graphic Communication	10
PLAN1061	Computer Literacy	10
<b>Total</b>		<b>60</b>
<i>Session 2</i>		
PLAN1012	Principles of Political Economy	10
PLAN1042	Planning Processes	10
PLAN1052	Quantitative Methods	10
PLAN1062	Communication Techniques	10
<b>Total</b>		<b>40</b>

**Year 2***Session 1*

PLAN2011	Economy of Cities and Regions	10
PLAN2021	History of Urban Development	10
PLAN2022	Urban Infrastructure	10
PLAN2041	Critical Research Seminars	10
PLAN2061	Geographic Information Systems	10

**Total** **50**

*Session 2*

PLAN2012	Spatial Development Planning	10
PLAN2032	Generic Planning Project 1 – Spatial Typologies	20
PLAN2042	History of Urban Planning	10
PLAN2051	Environmental Economics and Resource Management	10
PLAN2052	Advanced Data Analysis	10

**Total** **60**

**Year 3***Session 1*

PLAN3011	Critical Urban Studies	10
PLAN3021	Heritage and Conservation	10
PLAN3031	Generic Planning Project 2 – Existing Areas	20
PLAN3041	Planning Law and Administration	10
PLAN3051	Development Control	10

**Total** **60**

After successfully completing Session 3.1 all students undertake an additional mandatory year of practical experience (PLAN0080 Practical Experience)

**CP***Session 2*

GENR0000	General Education Elective (56 hours)	7.5
PLAN3012	Cultural Studies	10
PLAN3032	Generic Planning Project 3 – Release Areas	20
PLAN3042	Environmental Law and Dispute Resolution	10
PLAN3052	Qualitative Methods	10

**Total** **57.5**

**Year 4***Session 1*

GENR0000	General Education Elective (56 hours)	7.5
GSBE0002	Social Responsibility and Environmental Ethics	10
PLAN4011	Politics, Power and Policy	10
PLAN4021	Metropolitan Policy	10
PLAN4031	Thesis Proposal	10
PLAN4071	Planning Elective*	10

**Total** **57.5**

*Session 2*

PLAN4032	Thesis	40
PLAN4042	Professional Practice	10
PLAN4072	Planning Elective*	10

**Total** **60**

\*Students are required to complete two Planning Electives. A selection of electives will be offered, depending on demand and staff availability, as Session 1, Session 2 or Full Year subjects.

**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

## 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: Faculty Student Centre Office*  
CP24

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: Faculty Student Centre Office*  
CP30

*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: Faculty Student Centre Office*  
CP30

*Prerequisites:* ARCH6102, ARCH6502, ARCH6602, ARCH6702, four from ARCH6212, ARCH6312, ARCH6512, ARCH6612, ARCH6712

The design of residential and 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 reuse.

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

##### ARCH6134

##### Design Studio 4

*Staff Contact: Faculty Student Centre Office*  
CP20

*Prerequisites:* ARCH6103, ARCH6503, ARCH6603, ARCH6703, four from ARCH6213, ARCH6313, ARCH6513, ARCH6613, ARCH6713

The design of a relatively complex and large scale development, 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. The design of a relatively complex and large scale development, 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.

##### ARCH6135

##### Design Studio 5

*Staff Contact: Faculty Student Centre Office*  
CP20

*Prerequisites:* ARCH6134, ARCH6144, ARCH6544

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

##### ARCH6136

##### Design Studio 6

*Staff Contact: Faculty Student Centre Office*  
CP20

*Prerequisites:* ARCH6135, ARCH6145, ARCH6545, ARCH6904

Exploration and resolution of relatively complex human activities not necessarily of a familiar pattern, with emphasis

on integration of structure, construction, services and environmental controls at an advanced level and contemporary technology.

### **ARCH6137**

#### **Design Studio 7**

*Staff Contact: Faculty Student Centre Office*

CP20

*Prerequisites:* ARCH6136, ARCH6146, ARCH6546, ARCH6900

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.

### **ARCH6127**

#### **Major Design Project**

*Staff Contact: Faculty Student Centre Office*

CP30

*Prerequisite:* By approval

Carried out under supervision of an individual member of staff, with a supportive package of Electives (C20) 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 Department Committee set up to oversee these projects at least one session before enrolment in this subject. Much of the preliminary information gathering, site information, and associated research will have been done in the seminars and architectural research project during the preceding session.

The end result of this Major Design Project would be the design of 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: Faculty Student Centre Office*

CP6

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. Emphasis is on the modelling of graphics information, including an introduction

to CAD concepts and techniques. Basic principles of computer technology and programming are explained. Students engage in hands-on computer exercises to consolidate the knowledge gained in the lectures.

### **ARCH6214**

#### **Architectural Computing 2**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6201

Advanced course in the techniques and processes of 2D and 3D computer-aided drafting for the production of architectural drawings and models. Hands-on experience: staged tutorial exercises and self-directed documentation tasks.

### **ARCH6211**

#### **Communication Seminar 1**

*Staff Contact: Faculty Student Centre Office*

CP18

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: Faculty Student Centre Office*

CP12

*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; visualisation and perspective. Hands-on tutorial exercises linked to Studio design work. (3 cp segment of whole.)

### **ARCH6213**

#### **Communication Seminar 3**

*Staff Contact: Faculty Student Centre Office*

CP12

*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 provide a theoretical overview of the discipline of architecture and to explain the basis for and the limitations of its concepts, themes and practices.

### ARCH6301

#### Theory of Architecture 1

*Staff Contact: Faculty Student Centre Office*  
CP6

The role of theory; theoretical terms and concepts used in architecture and design; designing as process; human constructs in architecture.

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

### ARCH6302

#### Theory of Architecture 2

*Staff Contact: Faculty Student Centre Office*  
CP6

*Prerequisite:* ARCH6301

Formulations of the way architects conceive and design; social and behavioural considerations; selected architectural beliefs and values; relational and ordering systems in architecture.

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

### ARCH6303

#### Theory of Architecture 3

*Staff Contact: Faculty Student Centre Office*  
CP6

*Prerequisite:* ARCH6302

Architectural positions and movements; aesthetic and symbolic aspects of architecture; urban and contextual issues; ethical considerations; criticism and evaluation.

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

### ARCH6311

#### Theory Seminar 1

*Staff Contact: Faculty Student Centre Office*  
CP9

Discussion of and exercises embracing the concepts, themes and practices raised in ARCH6301 Theory of Architecture 1 related to projects in Design Studio 1.

### ARCH6312

#### Theory Seminar 2

*Staff Contact: Faculty Student Centre Office*  
CP9

*Prerequisites:* ARCH6101, ARCH6501, ARCH6601, ARCH6701, four from ARCH6211, ARCH6311, ARCH6511, ARCH6611, ARCH6711

Discussion of and exercises embracing the concepts, themes and practices raised in ARCH6302 Theory of Architecture 2 related to projects in Design Studio 2.

### ARCH6313

#### Theory Seminar 3

*Staff Contact: Faculty Student Centre Office*  
CP9

*Prerequisites:* ARCH6102, ARCH6502, ARCH6602, ARCH6702, four from ARCH6212, ARCH6312, ARCH6512, ARCH6612, ARCH6712

Discussion of and exercises embracing the concepts, themes and practices raised in ARCH6103 Theory of Architecture 3 related to projects in Design Studio 3.

### ARCH6144

#### Design Seminar 1

*Staff Contact: Faculty Student Centre Office*  
CP5

*Prerequisites:* ARCH6103, ARCH6503, ARCH6603, ARCH6703, four from ARCH6213, ARCH6313, ARCH6513, ARCH6613, ARCH6713

Development and presentation of design and theory issues related to design projects in Design Studio 4.

### ARCH6145

#### Design Seminar 2

*Staff Contact: Faculty Student Centre Office*  
CP5

*Prerequisites:* ARCH6134, ARCH6144, ARCH6544

Development and presentation of design and theory issues related to design projects in Design Studio 5.

### ARCH6146

#### Design Seminar 3

*Staff Contact: Faculty Student Centre Office*  
CP5

*Prerequisites:* ARCH6135, ARCH6145, ARCH6545, ARCH6904

Development and presentation of design and theory issues related to design projects in Design Studio 6.

### ARCH6147

#### Design Seminar 4

*Staff Contact: Faculty Student Centre Office*  
CP5

*Prerequisites:* ARCH6136, ARCH6146, ARCH6546, ARCH6900

Development and presentation of design and theory issues related to design projects in Design Studio 7.

## 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: Faculty Student Centre Office*  
CP9

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: Faculty Student Centre Office*  
CP12

*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; Concepts of the Modern, Postmodernism and Deconstruction.

### ARCH6403

#### History of Architecture 3

*Staff Contact: Faculty Student Centre Office*  
CP12

*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.

## 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: Faculty Student Centre Office*  
CP9

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: Faculty Student Centre Office*  
CP12

*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: Faculty Student Centre Office*  
CP12

*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: Faculty Student Centre Office*  
CP12

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 co-ordination and construction drawing related where possible to Design Studio 1 communication and design projects.

### **ARCH6512**

#### **Construction Seminar 2**

*Staff Contact: Faculty Student Centre Office*  
CP9

*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 co-ordination and construction drawing practice related where possible to Design Studio 2 design projects.

### **ARCH6513**

#### **Construction Seminar 3**

*Staff Contact: Faculty Student Centre Office*  
CP9

*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.

### **ARCH6544**

#### **Technology Seminar 1**

*Staff Contact: Faculty Student Centre Office*  
CP5

*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.

### **ARCH6545**

#### **Technology Seminar 2**

*Staff Contact: Faculty Student Centre Office*  
CP5

*Prerequisites:* ARCH6134, ARCH6144, ARCH6544

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.

### **ARCH6546**

#### **Technology Seminar 3**

*Staff Contact: Faculty Student Centre Office*  
CP5

*Prerequisites:* ARCH6135, ARCH6145, ARCH6545, ARCH6904

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.

### **ARCH6547**

#### **Technology Seminar 4**

*Staff Contact: Faculty Student Centre Office*  
CP5

*Prerequisites:* ARCH6136, ARCH6146, ARCH6546, ARCH6900

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: Faculty Student Centre Office*  
CP6

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: Faculty Student Centre Office*  
CP6

*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: Faculty Student Centre Office*  
CP6

*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: Faculty Student Centre Office*  
CP6

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: Faculty Student Centre Office*  
CP6

*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: Faculty Student Centre Office*  
CP6

*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.

**Environment**

**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****Environment 1**

*Staff Contact: Faculty Student Centre Office*  
CP9

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****Environment 2**

*Staff Contact: Faculty Student Centre Office*  
CP12

*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****Environment 3**

*Staff Contact: Faculty Student Centre Office*  
CP12

*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**

#### **Environment Seminar 1**

*Staff Contact: Faculty Student Centre Office*  
CP6

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**

#### **Environment Seminar 2**

*Staff Contact: Faculty Student Centre Office*  
CP6

*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**

#### **Environment Seminar 3**

*Staff Contact: Faculty Student Centre Office*  
CP6

*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.

### **ARCH6815**

#### **Architectural Practice A**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite:* ARCH6103

Introduction to the legal system. Aspects of the law of contract, torts, agency, trade practices, property and agency. Contract documentation and specification writing techniques. Estimating, cost planning, bills of quantities and budgeting.

### **ARCH6816**

#### **Architectural Practice B**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite:* ARCH6815

Legal implications of architectural practice. Liabilities of architects. The architect/client agreement. Types of building contract and methods of building procurement. Tendering and negotiating. Contract administration procedures. 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 practice.

## **Other Required Studies**

### **ARCH6904**

#### **Practical Experience**

*Staff Contact: Faculty Student Centre Office*  
CP0

*Prerequisite:* ARCH6101

Each student is required to take 24 weeks of off-campus activity in the pursuit of architectural practice experience; the preferred activity being to work for a single period of 24 weeks under the supervision of a registered architect. This activity may be started after the successful completion of Year 1 studies and completed before enrolling in Studio 6 of the Bachelor of Architecture course. The minimum single period of approved activity shall be eight weeks which must be taken outside of session such as during the summer breaks. Students undertaking this activity during session shall not be enrolled in any other subjects.

It is strongly recommended that all students plan to undertake at least one full semester of full time employment with a registered architect. It is also further strongly recommended that each student spend some time undertaking an architectural study tour overseas for at least a semester during the course of their studies.

Students shall have the option of providing evidence of working under the supervision of a registered architect using the accepted form of log book provided by the professional bodies (RAIA or its equivalent in other countries) or other suitable documentation of approved activities such as an annotated and or illustrated diary in accordance with the guidelines issued by the Head of Program.

Where students wish to undertake other activities such as an architectural study tour or employment on construction projects or other architecturally related activity, approval must be obtained from the subject authority. The Faculty reserves the right to disallow any activities as meeting the requirements of this subject, for which prior approval has not been sought and obtained in writing.

Where students choose to undertake practical experience with a registered architect, the Faculty takes no responsibility for any assessment or consideration for

registration with the Board of Architects of NSW or membership of the Royal Australian Institute of Architects or any other like body overseas.

### **ARCH6900**

#### **Dissertation**

*Staff Contact: Faculty Student Centre Office*

CP20

*Prerequisite: ARCH6924*

A dissertation is a formal and scholarly piece of writing demonstrating a student's ability to thoroughly investigate a selected topic of interest to the student. In order to achieve a high standard, students are encouraged to thoroughly investigate a concise topic: broad surveys tend to result in superficial generalities. At an undergraduate level it is not a requirement to undertake new research, although students wishing to do so will be given encouragement and assistance by the staff. All students will need to develop a bibliography and demonstrate an ability to critically evaluate the data and the interpretive arguments presented. Some may wish to undertake empirical and/or field research into a feasible aspect of the topic, present and analyse the data using some form of statistical analysis, then draw some conclusions. Opportunities occasionally occur for students to work closely with a member of staff on a major research project. In these instances staff will seek out interested students and/or students can approach staff members. The staff member will closely supervise research while expecting some independent contribution from the student, and will guarantee to acknowledge all satisfactory student contributions when tabling and publishing the results.

All work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, include only relevant and properly referenced illustrations, include good graphic presentation of relevant data, and be word processed in A4 format. Submissions will normally be about 10,000 words.

### **ARCH6907**

#### **Major Research Project**

*Staff Contact: Faculty Student Centre Office*

CP30

*Prerequisite: By approval*

Under supervision of an individual member of staff, with a supportive package of Electives (C20) 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 Department Committee set up to oversee these projects at least one session before enrolment in this subject. Much of the preliminary information gathering will have been done in the seminars and architectural research project during the preceding session.

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.

### **ARCH6924**

#### **Research Methodology**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

A core subject which introduces students to the basic empirical and interpretive research methods, explains some research tools and referencing requirements, and presents a range of research fields currently undertaken within the Department. Classes are normally by lecture and small group teaching. Assignments are designed to lead students through the processes of research, and to encourage a self-critical evaluation of the appropriateness of methodologies used and the value of the conclusions to be drawn. Work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, and be word processed in A4 format.

### **Elective Subjects**

#### **ARCH5200**

##### **Computer Graphics Programming**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

Introduction to the fundamentals of interactive computer graphics programming. Advanced techniques including mouse-based input, menu-based interfaces and colour manipulation. Assessment will be through the development of an interactive computer graphics application.

#### **ARCH5201**

##### **Computer Applications 1**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6214*

Computer modelling and rendering. This subject introduces the concepts and practices of modelling building spaces, including surface textures, lighting and animation. Students will produce a model of an interior space (of a specified type).

#### **ARCH5202**

##### **Computer Applications 2**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6201*

This subject explores the use of an industry-standard multimedia authoring tool to develop design presentations. Students will develop skills in the integration of media objects such as: edited scanned images, rendered images (produced using CAD technology), line drawings, animations (also produced using CAD), video (captured

off VHS) and sound. Students will be expected to apply these skills in the production of one major design presentation.

### **ARCH5203**

#### **Computer Applications 3**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite: ARCH6201*

Introduction to the theory and practice of World Wide Web based multimedia and other computer technologies relating to the presentation of designs and/or other information. Assessment will be through the development of a series of Web pages.

### **ARCH5204**

#### **Architectural Computing Seminar**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite: ARCH6214*

Hands-on implementation and application of computing theory. Students are engaged in a selfdirected 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.

### **ARCH5205**

#### **Theory of Architectural Computing**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite: ARCH6201*

A study of the body of knowledge that underlies the application of computers to the theory and practice of architecture. This subject looks initially at traditional approaches to architectural computing including space planning, facilities management, building performance analysis, information systems and operations research. It then extends that understanding to knowledge-based systems and knowledge representation techniques, shape grammars, expert systems and design information systems. Assessment is by means of essays and the preparation and presentation of a seminar paper.

### **ARCH5206**

#### **Information Technology for Architects**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite: ARCH6103*

This subject introduces the issues, problems and solutions relating to the creation and distribution of information within architectural practices. 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.

### **ARCH5207**

#### **CAD Management for Architects**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite: ARCH6201*

This subject raises the issues relating to the implementation and management of CAD systems in architectural practices. Topics will include: CAD system selection and installation; cost issues (purchase, maintenance, upgrades); political implications within practices; software customisation; resource management; office standards; and training. Assessment is by means of projects and student seminars.

### **ARCH5208**

#### **Advanced Graphics**

*Staff Contact: Faculty Student Centre Office*  
CP10

*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.

### **ARCH5209**

#### **Drawing**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite: ARCH6103*

Investigation of the basic aesthetic, technical and conceptual aspects of drawing. The subject is studio-based incorporating lectures and modified lectures with an emphasis on direct experience with the various media of drawing. Subject matter will include portrait, still life, landscape and the human figure. Media instruction will include pencil, conte, charcoal, ink, pen, wash, etc. Gallery visits and field trips will be incorporated.

### **ARCH5210**

#### **Painting**

*Staff Contact: Faculty Student Centre Office*  
CP10

*Prerequisite: ARCH6103*

Investigation into colour theory; the history of painting; technique and media as well as the various disciplines of still life, landscape, portraiture and figure painting. The subject is studio-based with lectures, discussions and demonstrations. Gallery visits and field trips will be incorporated.

### **ARCH5211**

#### **Pottery and Ceramics**

*Staff Contact: Faculty Student Centre Office*  
CP10

*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.

### **ARCH5212**

#### **Rendering**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

Advanced architectural rendering.

### **ARCH5300**

#### **Theory of Form**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

The ontological basis and the antinomial qualities of form in the causal sense, reflected in nature, art and architecture. Practical investigation of the antinomial 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.

### **ARCH5301**

#### **Criticism and Evaluation**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

Architectural criticism is as much about a discourse of ideas as it is about the attempt to clarify for the writer and reader the successes and failures of a particular building/built environment. The purpose of this subject is to encourage students to think critically about the nature of criticism, particularly as it is affected by broader cultural criteria. Can criticisms give us useful information about a building's functional and symbolic achievements and its capacity to enhance the environment? What might a built environment and a critique of it tell us about our society, about the values endorsed by the critic, and about our own criteria for excellence? How have visual artists engaged in critiques about the built environment?

It seems that no two critics agree on the criteria for evaluating the built environment and it is anticipated that in the classroom evaluative criteria will be equally contested. For an informed discussion to take place it is necessary to know the current literature and debates. A bibliography has been prepared from which approximately two items have been selected as recommended reading for each class. All students are expected to have read something for each class and to substantiate their claims by keeping a 'critical diary' of all items read. Classes will be in the form of seminars in which all students are expected to participate actively.

### **ARCH5302**

#### **Imagination**

*Staff Contact: Faculty Student Centre Office*

CP10

*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.

### **ARCH5303**

#### **Spirit in Architecture**

*Staff Contact: Faculty Student Centre Office*

CP10

*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.

### **ARCH5304**

#### **Spatial Construction Studies**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

A rigorous and disciplined examination of skilfully, that is artfully, designed works of art. The subject will require students to investigate the physical – spatial and constructional – orders of two buildings with the aim of interpreting/understanding what these orders are and why they are the way they are. The investigations will be based on drawings and models of the chosen buildings (to be made by the students), on appropriate texts and on lectures given during the session. The selection of buildings will be partly based on the availability of good documentation and critical writings. These are necessary in order to achieve the desired level of rigour.

Students will be divided into two groups, each group focusing on one of the buildings. A comparison of the two buildings is an important means of initiating discussion and will be one of the aims of the investigation.

### **ARCH5400**

#### **Recent Australian Architects**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

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

### **ARCH5401**

#### **Great Architects**

*Staff Contact: Faculty Student Centre Office*

CP10

*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.

**ARCH5402****The City Sydney***Staff Contact: Faculty Student Centre Office*

CP10

*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.

**ARCH5403****Urban Design***Staff Contact: Faculty Student Centre Office*

CP10

*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.

**ARCH5404****Landscape Design***Staff Contact: Faculty Student Centre Office*

CP10

*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.

**ARCH5405****The Modern Movement in Architecture***Staff Contact: Faculty Student Centre Office*

CP10

*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.

**ARCH5406****Post Modernism in Architecture***Staff Contact: Faculty Student Centre Office*

CP10

*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 to 1991.

**ARCH5407****Architecture and Culture***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

Many architects and architectural theorists today are engaged in a critical questioning of widely held yet

inadequate beliefs and processes, including unrestrained progress, instrumental reason and social control. These driving social forces have brought about a devaluing of human work and nature that courts ecological disaster and a degrading of our physical environment. Architects may formulate a resistance through careful reflection on: the role of the human faculties of imagination and memory in design and construction; the significance of decorum, of public and private realms and of boundaries in our buildings and cities; and the limits of the architectural profession's intrusion into all dimensions of life.

The subject will focus on several 'cultural' critics, both writers and architects, assessing the value and limitation of their contributions. Investigation will be guided by a vigorous tradition of thought (extending through the nineteenth century to the present) which has defined the word 'culture' as an idea of a whole way of life (and conflict) for individuals in a community. This is formulated as a challenge to the dominant values of 'society'.

**ARCH5408****Japanese Architecture***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

An exploration of contemporary and contrasting styles. Katsura Detached Palace and the Nikko Tōshō-gū were both started in the first half of the seventeenth century. They present two very different design attitudes and together incorporate influences from almost all major forms of earlier Japanese architecture. This subject uses the two buildings as starting points for analysing and assessing the religious, social, and artistic factors which produce a 'Japanese aesthetic' including not only buildings but a total environment.

There will be one examination which will take the form of a simple model with explanatory notes.

**ARCH5409****Public Art***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

This elective will examine recent Australian and overseas art that addresses ideas of place and context and that is situated in the public domain. Public art can be an individualistic exercise but more often it results from professional collaboration between artists, designers of the built environment, and the community. Art in public places provides opportunities for design professionals to grapple with historical, social, cultural, environmental and other issues in the creative process. Increasingly state and local governments are developing policies to encourage public art: in some overseas countries a fixed percentage of the costs of a public building must be spent on providing site/place-specific art.

This elective has two objectives. One is to examine aspects of the current theoretical discourse on public art, and to debate these ideas in student-led seminars. The second

objective is to enable students to conduct research into local recent public art and to write a critical appraisal of a particular work. It is hoped that the research will be incorporated (and acknowledged) in a wider Department-based project on public art, architecture and urban design in Sydney.

#### **ARCH5410**

##### **Readings in Architecture**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6103

Readings will be selected related to various twentieth century architects. They will include works of criticism as well as explanatory texts. One architect will be studied each week and readings will address one particular issue relevant to the architect's theoretical position.

#### **ARCH5411**

##### **Building Conservation 1**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6103

The need to conserve elements of the past. The nature of conservation and the emergence of the conservation movement. The conceptual system of conservation policy and practice. The Burra Charter of Australia ICOMOS and the processes of preservation, restoration, reconstruction and adaptation. The New South Wales Heritage Act. The meaning of cultural significance and its assessment. The historical method and its application to contextual analysis and the assessment of cultural significance. The analysis of fabric including the understanding of the traditional building technology and materials. Practical and field procedures involved in fabric analysis.

#### **ARCH5412**

##### **Building Conservation 2**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH5411

The conservation of the built environment. Individual buildings structures precincts and urban areas. Local environment plans and regional environment plans. The range of building stock available for conservation. The concepts of regaining and retaining significance. The conservation plan, its preparation and implementation. The concepts of constraints, opportunities and issues pertaining to a place. The analysis and critical appraisal of conservation plans prepared for a range of buildings. The practical preparation of a conservation plan for a item of the environment heritage.

#### **ARCH5413**

##### **Conservation Technology**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6103

The range nature and significance of building structures and relics of the past. The development of technology/

Sydney. The development of the shipping, rail and road transport systems: the development of hydraulic power, electricity generation and gas production and their extent remains. The assessment of items of environmental heritage. The nature of materials used in a range of structures. Causes of decay and corrosion in a wide spectrum of materials, their prevention and cure.

#### **ARCH5414**

##### **Conservation Management**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6103

The conservation and maintenance of heritage assets, including building structures, relics and systems. The Environmental Protection and Assessment Act. The interpretation of heritage assets. The problems associated with visitation, including restricted and unrestricted access. The issues of public safety, indemnity insurance, acceptable decrease in significance and community expectations and participation. The role of museums and museum societies in conservation and interpretation of items of the environmental heritage.

#### **ARCH5500**

##### **Advanced Building Materials (Ceramics)**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6103

Ceramic materials; the nature of cements, concrete and glass. Building products and techniques using these materials and their implications including construction, maintenance and deterioration. Examination of the environmental impacts and life cycle analyses of these materials. Industrial and site visits.

#### **ARCH5501**

##### **Advanced Construction Systems**

*Staff Contact: Faculty Student Centre Office*

CP10

*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.

#### **ARCH5502**

##### **Construction Planning and Management**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6103

The role of the architect in construction planning and management. Preplanning 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.

**ARCH5503****Advanced Building Materials (Organics)***Staff Contact: Faculty Student Centre Office*

CP10

*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. Examination of the environmental impacts and life cycle analyses of these materials. Industrial and site visits.

**ARCH5504****Advanced Building Materials (Metals)***Staff Contact: Faculty Student Centre Office*

CP10

*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. Examination of the environmental impacts and life cycle analyses of these materials. Industrial and site visits.

**ARCH5600****Conceptual Structural Design***Staff Contact: Faculty Student Centre Office*

CP10

*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.

**ARCH5601****Advanced Structural Design***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH5600*

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.

**ARCH5602****Lightweight Structural Design***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisites: ARCH6503, ARCH6603, ARCH6134*

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.

**ARCH5700****Design for Energy Efficiency***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

The design of environmentally sustainable and energy efficient buildings. The use of technologies and their innovative integration in buildings to assist energy use minimisation. Demand side energy issues and energy supply options, especially renewable energy technologies. The use of computer simulation to study energy performance of buildings.

**ARCH5701****Design of Lighting***Staff Contact: Faculty Student Centre Office*

CP10

*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.

**ARCH5702****Acoustics Studies***Staff Contact: Faculty Student Centre Office*

CP10

*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.

**ARCH5703****Applied Environmental Psychology***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6103*

Applied environmental psychology is intended to provide students with some understanding of the complex sets of *interactions* of individuals and their socio-physical environments. The focus is on the users or potential users of places: their expectations, experiences and evaluations and design consequences. Multi-methodological post-occupancy evaluations of buildings are proposed as an appropriate strategy for designer-user interaction. A POE field project gives students an opportunity to experience the strengths and weaknesses of the various methods firsthand.

**ARCH5800****Building Economics and Development***Staff Contact: Faculty Student Centre Office*

CP10

*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.

#### **ARCH5801**

##### **Project Management**

*Staff Contact: Faculty Student Centre Office*

CP10

*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.

#### **ARCH5802**

##### **The Architect and the Law**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6103

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

#### **ARCH5803**

##### **Quality Management Concepts and Practice**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6816

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

#### **ARCH5900**

##### **Architectural Studies 1**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH6924

An elective designed for students wishing to pursue an independent course of study in a field of architecture not falling within the domain of any existing elective. It requires the gathering of data, analysis of that material and reaching a conclusion. Descriptive summaries of published material are not an acceptable alternative to a well argued critical essay. Students are required to present a detailed program

of study for approval by the Head of Department by the Friday of the first week of the session in which it is intended to enrol in this elective. For special conditions consult the Head of Department. The work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, include only relevant and properly referenced illustrations, and be word processed in A4 format. Submissions will normally be about 5,000 words and be submitted by Friday of Week 13.

#### **ARCH5901**

##### **Architectural Studies 2**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH5900

The intellectual and procedural requirements for this subject are as described in ARCH5900. The work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, include only relevant and properly referenced illustrations, and be word processed in A4 format. Submissions will normally be about 5,000.

#### **ARCH5902**

##### **Architectural Studies 3**

*Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite:* ARCH5901

The intellectual and procedural requirements for this subject are as described in ARCH5900. The work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, include only relevant and properly referenced illustrations, and be word processed in A4 format. Submissions will normally be about 5,000.

---

## **Bachelor of Interior Architecture**

### **Core subjects**

The following subject descriptions are for those core subjects specific to the Bachelor of Interior Architecture. For descriptions of all Architecture subjects which make up the rest of the core of this course refer to the Bachelor of Architecture subject descriptions.

#### **ARCH5970**

##### **Interior Design Studio 1**

*Staff Contact: Faculty Student Centre Office*

CP30

*Prerequisite:* ARCH6101

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***Staff Contact: Faculty Student Centre Office*

CP36

*Prerequisite: ARCH5970*

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***Staff Contact: Faculty Student Centre Office*

CP18

*Prerequisite: ARCH5961*

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***Staff Contact: Faculty Student Centre Office*

CP12

*Prerequisite: ARCH5961*

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***Staff Contact: Faculty Student Centre Office*

CP60

*Prerequisite: ARCH5963*

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.

**ARCH5428****History of Art and Design 1***Staff Contact: Faculty Student Centre Office*

CP6

*Prerequisite: ARCH6401*

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***Staff Contact: Faculty Student Centre Office*

CP6

*Prerequisite: ARCH5428*

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***Staff Contact: Faculty Student Centre Office*

CP6

*Prerequisite: ARCH6101*

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

**ARCH5526****Furniture Design 2***Staff Contact: Faculty Student Centre Office*

CP6

*Prerequisite: ARCH5525*

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.

**ARCH5529****Fabric Design***Staff Contact: Faculty Student Centre Office*

CP6

*Prerequisite: ARCH6101*

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.

**ARCH5530****Interior Materials and Finishes***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6101*

A series of talks and seminars based on set research projects focusing on the manufacture, properties, characteristics and uses of a range of materials and finishes used in interiors. Students will be required to investigate materials and finishes in a wide spectrum of categories and present their findings in the seminars. Excursions to factories, buildings and showrooms.

## Bachelor of Science (Architecture)

### Core Subjects

**ARCH6924****Research Methodology***Staff Contact: Faculty Student Centre Office*

CP10

*Prerequisite: ARCH6101*

A core subject which introduces students to the basic empirical and interpretive research methods, explains some research tools and referencing requirements, and presents a range of research fields currently undertaken within the Faculty. Classes are normally by lecture and small group teaching. Assignments are designed to lead students

through the processes of research, and to encourage a self-critical evaluation of the appropriateness of methodologies used and the value of the conclusions to be drawn. Work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, and be word processed in A4 format.

#### **ARCH5914**

##### **Special Research Programme 1**

*Staff Contact: Faculty Student Centre Office*  
CP15

*Prerequisite:* Head of Program'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 Department 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: Faculty Student Centre Office*  
CP15

*Prerequisites:* ARCH5914 or equivalent, Head of Program's approval

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

#### **ARCH5916**

##### **Special Research Programme 3**

*Staff Contact: Faculty Student Centre Office*  
CP15

*Prerequisites:* ARCH5915 or equivalent, Head of Program's approval

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

#### **ARCH5917**

##### **Research Project**

*Staff Contact: Faculty Student Centre Office*  
CP24

*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 1**

*Staff Contact: Faculty Student Centre Office*  
CP60

*Prerequisite:* ARCH5917 or equivalent

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

#### **ARCH5919**

##### **Honours Project 2**

*Staff Contact: Faculty Student Centre Office*  
CP60

*Prerequisite:* ARCH5918

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

#### **ARCH5930**

##### **Science Seminar 1**

*Staff Contact: Faculty Student Centre Office*  
CP12

*Prerequisite:* ARCH6101

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

#### **ARCH5931**

##### **Science Seminar 2**

*Staff Contact: Faculty Student Centre Office*  
CP6

*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.

### **Elective Subjects**

Students should select subjects from those offered under the Department's BArch course as electives, with the option of subjects totalling up to forty credit points being selected from courses outside the Program.

### **Summer Term Subjects**

The following subjects are offered only in Summer Term. Not all subjects may be offered in any year.

#### **ARCH6140**

##### **Design 'A'**

*Staff Contact: Faculty Student Centre Office*  
CP30

Architectural synthesis is the central function of the design studio. The vehicles for study are projects and exercises of increasing complexity and depth 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 studio provides continuing opportunities to consider the environmental, social, historic, aesthetic, technical and professional factors affecting architecture and the architect's role in the community. Design 'A' is concerned with 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 structural, constructional, servicing and environmental control concepts. Development

of the design process. Individual work on a series of design projects of varying complexity and length.

### **ARCH6340**

#### **Theory of Architecture 'A'**

*Staff Contact: Faculty Student Centre Office*  
CP15

The object of the subject is to lead to an understanding and application of the principles of design, in particular architectural design. The fundamental purpose of architectural design, the enhancement of life-events by spatial arrangements is illuminated by the logic of the process of designation – aim, possibilities, idea, acts and fulfilment. The exploration of the design process embraces both the physical and non-physical requirements and influences; the measure of the human body and of the collective events of many bodies; the mental and cultural influences operating in such events; the meaning of spatial extensions, directions, closure and order, especially geometric order.

The importance of the relationship between human behaviour and the built environment is introduced with an emphasis upon personal space, community and privacy, and the various characteristics of the public domain. Composition, especially the theory of wholes and parts is examined in the light of unity and multiplicity, continuity and change: principles and conditions applicable either to a single building or, in a much wider context, to the task of fitting a building into its physical and cultural environment.

### **ARCH6440**

#### **History of World Architecture 'A'**

*Staff Contact: Faculty Student Centre Office*  
CP15

The role of architectural history. An account of world architecture from the earliest times to the present day, generally but not exclusively following a chronological format, covering such topics as: nomadic lifestyles and the beginnings of civilisation; ancient and mediaeval civilisations in Europe, the Middle East, Asia and the Americas; the growth of Christianity, Islam and the other major religions; the Renaissance and its effects around the world; the Industrial Revolution in Europe and North America; European Imperialism; the architecture of the twentieth century; Australian architecture. Visits to sites in and around Sydney. Seminars and project work.

### **ARCH5926**

#### **Architectural Studies 4**

*Staff Contact: Faculty Student Centre Office*  
CP15

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 other elective. Students wishing to undertake a number of these research subjects are encouraged to think of these subjects as following on from each other and that, together, they form a larger package of academic study.

### **ARCH5927**

#### **Architectural Studies 5**

*Staff Contact: Faculty Student Centre Office*  
CP15

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 other elective. Students wishing to undertake a number of these research subjects are encouraged to think of these subjects as following on from each other and that, together, they form a larger package of academic study.

### **ARCH5928**

#### **Architectural Studies 6**

*Staff Contact: Faculty Student Centre Office*  
CP15

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 other elective. Students wishing to undertake a number of these research subjects are encouraged to think of these subjects as following on from each other and that, together, they form a larger package of academic study.

### **ARCH5540**

#### **Technological Design Development**

*Staff Contact: Faculty Student Centre Office*  
CP15

*Prerequisite: ARCH6105*

This subject will investigate in detail the technological requirements of technology – intensive buildings. Methodology; owners' and managers' requirements. Site, access and foundation constraints; constructional processes; structural systems and materials; cladding and enclosure; finishing materials and fittings; services (environmental control, lighting, acoustics, transportation and communication); fire and egress constraints; security and building management, etc. The application of the above considerations to aspects of the design development of a schematic proposal for a suitable building. The major vehicle for both teaching and assessment will be a design project that has already been taken to a schematic stage; it will be the student's task to develop this project to the stage where all building systems have been selected, and where potential conflicts between systems have been resolved to the point where satisfactory details can be prepared. The student brief would contain a statement of user-needs, and a proposed schematic solution; the student would be required to work within the confines of the given proposal, and would not be permitted to re-design the schematic. Site visits.

### **ARCH5741**

#### **Design for Environmental Efficiency**

*Staff Contact: Faculty Student Centre Office*  
CP15

This subject aims to bring together the basic knowledge of environmental science gained in the junior years of the Bachelor of Architecture course and develop it in a structured manner which would make it applicable to real design situations. In any balanced design solution there is an equal

interplay of the built environment, the natural environment and human participation. An imbalance of any of these factors will result in architectural failure. This subject will investigate real problems in the built environment as we attempt to address the issues of a sustainable environment. Class contact times will include visiting speakers, workshops for sustainable ideas, site visits and debates. Assessment will be based on involvement, participation and the submission of a report related to an area of study.

---

## Bachelor of Building Construction Management

### Year 1

#### Session 1

##### BLDG1010

##### Communications and Resource Usage

*Staff Contact: Dr J Kim*

CP5 S1 HPW2

**Note/s:** Compulsory.

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

##### BLDG1091

##### Built Environment 1

*Staff Contact: Faculty Student Centre Office*

CP5 S1 HPW2

**Note/s:** 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'.

##### BLDG1111

##### Building Science 1 (Materials)

*Staff Contact: A/Prof M Marosszeky*

CP15 S1 HPW4

**Note/s:** 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.

##### BLDG1201

##### Construction 1 (Domestic Construction)

*Staff Contact: Mr P Forsythe*

CP15 S1 HPW4

**Note/s:** 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.

##### BLDG1210

##### Construction Mathematics

*Staff Contact: Faculty Student Centre Office*

CP5 S1 HPW2

**Note/s:** 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.

##### BLDG1261

##### Management 1 (Management Principles)

*Staff Contact: Dr M Loosemore*

CP10 S1 HPW2

**Note/s:** Compulsory.

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

#### Session 2

##### BLDG1002

##### Construction 2 (Low Rise Domestic)

*Staff Contact: Mr P Forsythe*

CP15 S2 HPW4

Prerequisites: BLDG1201, BLDG1111

**Note/s:** Compulsory.

Small multistorey 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, onsite observation and report on home unit building.

##### BLDG1051

##### Structures 1

*Staff Contact: Dr O Greste*

CP10 S2 HPW3

**Note/s:** Compulsory.

Loads on structures; external and internal forces; free body diagrams; conditions of force and moment equilibrium. Analysis of statically determinate structures; member

forces in pin-jointed trusses. Beam section properties: bending moment, shear force and deflection diagrams for beams; beam stresses in bending and shear, qualitative structural behaviour of frame, arch, cable, membrane, plate and shell structures in supporting vertical and lateral loads.

#### **BLDG1271**

##### **Law for Builders 1**

*Staff Contact: Faculty Student Centre Office*

CP5 S2 HPW2

**Note/s:** 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.

#### **BLDG1411**

##### **Building Economics 1 (Micro Economics)**

*Staff Contact: Dr G Runeson*

CP10 S2 HPW2

**Note/s:** Compulsory

The theory of prices and allocation of goods and services; An introduction to welfare economics. The economic structure and function of the building and construction industry, illustrated with examples. An introduction to investment analysis.

#### **BLDG2281**

##### **Introduction to Computing**

*Staff Contact: Dr O Greste*

CP5 S2 HPW2

**Note/s:** Compulsory

Practical use of word processor, spreadsheet, data base, presentation software in PC laboratory. Overview of computer hardware and generic applications software. Introduction to programming; introduction to computer networks and communications. Awareness of computer use in society and its societal impact.

#### **PHYS1938**

##### **Physics 1 (Building)**

*Staff Contact: Dr P Spark, School of Physics*

CP7.5 S2 L2T1

Energy transfer: concepts of temperature and heat; calorimetry; gas laws; phase changes and humidity; heat transmission; refrigeration. Electrostatics and electromagnetism: electric and magnetic fields; DC circuits; electromagnetic induction. Properties of matter: atomic bond types and their relation to elasticity, plasticity and fracture; pressure in stationary and moving fluids.

## **Year 2**

### **Session 3**

#### **ACCT9001**

##### **Introduction to Accounting A**

*Staff Contact: Mr B Booth, School of Accounting*

CP7.5 S1 L2

**Note/s:** Architecture – 2 credit points compulsory for BCM degree course students.

Introduces non-commerce students to the nature, purpose and conceptual foundation of accounting; information systems including accounting applications, and analysis and use of accounting reports.

#### **BLDG1151**

##### **Building Services 1 (Hydraulics)**

*Staff Contact: Faculty Student Centre Office*

CP5 S3 HPW2

**Note/s:** 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.

#### **BLDG2003**

##### **Construction 3 (Framed Building)**

*Staff Contact: Faculty Student Centre Office*

CP15 S3 HPW4

Prerequisites: BLDG1002, BLDG1051

**Note/s:** 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.

#### **BLDG2261**

##### **Management 2 (Planning and Control)**

*Staff Contact: A/Prof T Uher*

CP10 S3 HPW2

Prerequisite: BLDG1261

**Note/s:** Compulsory.

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

#### **BLDG2400**

##### **Research Methods**

*Staff Contact: Dr G Runeson*

CP5 S3 HPW2

**Note/s:** Compulsory.

An introduction to research methods, analytical techniques and presentation. Theories and philosophies of science and research. Research topics; collecting, generating and evaluating information. Structuring the study and presenting results.

**BLDG2411****Building Economics 2 (Macro Economics)***Staff Contact: Dr G Runeson*

CP10 S3 HPW2

Prerequisites: BLDG1411

**Note/s:** Compulsory.

The function of the national economy and the role economic policies and their impact on the building and construction industry. The national finance system. The role of the Australian economy in the world. Investment analysis.

**GMAT0411****Surveying in Building and Construction***Staff Contact: Mr A Stolz, School of Geomatic Engineering*

CP7.5 S3 HPW4

**Note/s:** Compulsory.

Overview of services provided by Geomatic Engineers. Linear and angular measurement. Setting out. Levelling; laser levelling. Electronic tacheometry. Earthworks surveys. High-rise building surveys; quality assurance. Basic land law and cadastral systems. Subdivision surveys.

**Session 4****ACCT9002****Introduction to Accounting B***Staff Contact: Mr B Booth, School of Accounting*

CP7.5 S4 HPW2

Prerequisite: ACCT9001

**Note/s:** 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.

**BLDG2112****Building Science 2 (Concrete and Metals)***Staff Contact: Dr B Gleeson, School of Materials Science and Engineering*

CP15 S4 HPW4

**Note/s:** Compulsory.

Concrete technology: cement, aggregates, water and admixtures; properties of fresh concrete; strength considerations; durability, shrinkage and creep; special concretes; nondestructive testing; mix design. Metals in building: structural ferrous alloys; structural and architectural nonferrous 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: Faculty Student Centre Office*

CP5 S4 HPW2

Prerequisites: PHYS1938, BLDG1151

**Note/s:** Compulsory.

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

**BLDG2264****Management 3 (Contracts)***Staff Contact: A/Prof T Uher, Mr P Davenport*

CP10 S4 HPW2

Prerequisites: BLDG2261

**Note/s:** Compulsory.

Introduction to Contracts management. Project life cycle. Options for project delivery and contract price. Competitive tendering. Analysis of standard forms of contract. Contract disputes, litigation, arbitration and mediation. Contract Insurance.

**BLDG2301****Quantity Surveying 1***Staff Contact: Mr P Marsden, Dr M Loosemore*

CP15 S4 HPW4

**Note/s:** 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.

**BLDG2500****Construction Management Project 1***Staff Contact: Faculty Student Centre Office*

CP5 S4 HPW2

Prerequisites: All Stage 1 and Stage 2 Session 1 subjects

**Note/s:** Compulsory.

An integrated individual or team project that draws together material covered in all subjects of the first three semesters of the course. Simulation of construction conditions including technical, management, business and social aspects that have to be considered by the construction professional.

## Year 3

### Session 5

#### BLDG3004

##### Construction 4 (Highrise Buildings)

Staff Contact: A/Prof R Miller

CP15 S5 HPW4

Prerequisites: BLDG2003, BLDG1051

**Note/s:** Compulsory.

Functional requirements and building techniques of highrise buildings and major building projects; structural systems, enclosure systems and environmental control systems and their interrelation from a construction 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.; principles of fire protection in highrise 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.

#### BLDG3052

##### Structures 2

Staff Contact: Dr O Greste

Prerequisites: BLDG1051

CP10 S5 HPW3

**Note/s:** Compulsory.

Principles of structural design for strength, stability and serviceability. Load carrying mechanisms in various structure types. Failure modes in beams and columns: bending, shear, local crushing, lateral buckling. Design of beams and columns in steel. Bolted joints in steel structures. Plastic design. Ultimate strength design for reinforced concrete. Design of concrete beams and one way slabs for bending, shear, deflection. Bond and anchorage; durability and concrete cover; column behaviour; two way slabs; footings and other elements; reinforcement detailing.

#### BLDG3266

##### Management 4 (People Management)

Staff Contact: Dr M Loosemore

CP10 S5 HPW2

Prerequisites: BLDG2264

**Note/s:** Compulsory.

Definition of Personnel Management and Human Resources Management. Stages in the development of human resources management. The leadership/management dialectic. Inter-personnel skill development. Team building. Performance management and continuous improvement.

#### BLDG3272

##### Law for Builders 2

Staff Contact: Mr P Davenport

CP5 S5 HPW2

Prerequisite: BLDG1271

**Note/s:** Compulsory.

Commercial law; Corporations; Trade practices; Consumer protection; Torts; Remedies; Succession; Local government; Real property; Administrative law.

#### BLDG3282

##### Computer Applications in Building

Staff Contact: Dr O Greste

CP5 S5 HPW2

Prerequisites: BLDG2281

**Note/s:** Compulsory.

Practical use of spreadsheet programs for developing applications related to building construction and management. Practical use of CPM software for project planning and special purpose programs for estimating and cost management. Practical use of electronic mail and communication networks. Introduction to relational data base programs and computer aided drafting and design. Demonstrations of various software for quantity surveying, estimating and construction management.

#### BLDG3303

##### Quantity Surveying 2

Staff Contact: Mr P Marsden

CP10 S5 HPW4

Prerequisites: BLDG2301

**Note/s:** Compulsory.

Advanced billing and measurement of substructure, structure and services and preliminaries in accordance with the Australian Standard Method of Measurement. Introduction to computerised measurement and billing. Introduction to elemental cost planning.

## Session 6

#### BLDG3005

##### Construction 5 (Techniques)

Staff Contact: A/Prof R Miller

CP15 S6 HPW4

Prerequisite: BLDG3004

**Note/s:** Compulsory.

Specialised 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 onsite studies. Emphasis on method of construction rather than the attributes of the finished product.

#### BLDG3060

##### International Housing Practice

Staff Contact: Mr P Forsythe

CP5 S6 HPW2

Prerequisites: BLDG1002 GMAT0411

**Note/s:** Compulsory.

High, medium and low density housing development in terms of the entire procurement and production process.

Factors directly involved in the process and other issues that impact on it including government housing policy, regulatory instruments, the commercial and social environment, land subdivision, property titling, urban planning, construction, financing and marketing. Current practices and future trends in various countries. International approaches to housing procurement. Quality in housing.

### **BLDG3070**

#### **Geotechnical Engineering for Building**

*Staff Contact: A/Prof B Shackel, School of Civil Engineering*

CP5 S6 HPW2

**Note/s:** Compulsory.

Knowledge for Construction Management graduates of geotechnical matters relating to investigations, design and construction of buildings enabling them to discuss and brief civil and geotechnical engineers to do the work; supervise personnel carrying out construction quality control; understand the advantages and limitations of types of foundations systems; design footings and simple retaining walls for temporary construction.

### **BLDG3275**

#### **Management 5 (Construction and Quality Management)**

*Staff Contact: A/Prof M Marosszeky, Dr J Kim*

CP10 S6 HPW2

Prerequisite: BLDG3266

**Note/s:** Compulsory.

Construction project management, concept and application. Role and functions of the project manager; management of all phases of construction projects. Construction strategy, planning and control.

Project quality management; quality management in design and construction including QC, QA and TQM. Application of ITP based tools. Benchmarking.

### **BLDG3280**

#### **Occupational Psychology, Health and Safety**

*Staff Contact: A/Prof R Miller*

CP5 S6 HPW2

Prerequisite: BLDG3266

**Note/s:** Compulsory.

History of Industrial Relations in Australia. Enterprise agreements. Restructuring Federal and New South Wales Government policies. State and Federal awards. EEO and OH&S. Proactive site safety management. Statutory safety requirements.

### **BLDG3321**

#### **Estimating 1**

*Staff Contact: Mr P Marsden*

CP5 S6 HPW2

Prerequisite: BLDG2301

**Note/s:** 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.

### **BLDG3500**

#### **Construction Management Project 2**

*Staff Contact: Dr M Loosemore*

CP10 S6 HPW4

Prerequisite: All Stage 1 and 2 and Stage 3 Session 1 subjects.

**Note/s:** Compulsory.

An integrated individual or team project that draws together material covered in all subjects of the first five semesters of the course.

Simulation of construction conditions including technical, management, business and social aspects that have to be considered by the construction professional.

## **Year 4**

### **Session 7**

### **BLDG4001**

#### **Project Management and the Design Process**

*Staff Contact: Faculty Student Centre Office*

CP10 S7 HPW3

Prerequisite: BLDG3275

**Note/s:** Elective.

The nature of projects. Definition of project phases. The impact of procurement process on project outcomes. Project risk analysis and project organisational design. Client needs determination and managing the design process. Scope management.

### **BLDG4002**

#### **Organisational Behaviour**

*Staff Contact: Dr M Loosemore*

CP10 S7 HPW3

Prerequisite: BLDG3266

**Note/s:** Elective.

Organisational design. Types of organisations and fitting organisational structure to environment. Leadership. Reward processes. Expectancy Theory. Organisational change.

### **BLDG4016**

#### **Construction 6 (Industrialisation and Technological Change)**

*Staff Contact: A/Prof M Marosszeky*

CP10 S7 HPW3

Prerequisite: BLDG3005

**Note/s:** Elective.

Concept of industrialisation; historical trends. International experience. Effect of demand on construction technology. Tolerance in building; quality management, modular coordination. New technologies in manufacture and construction. Government policy. Internationalisation and future trends.



**BLDG4267****Management 7 (Marketing)***Staff Contact: Faculty Student Centre Office*

CP10 S7 HPW3

Prerequisite: BLDG3275

**Note/s:** 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: Faculty Student Centre Office*

CP10 S7 HPW3

Prerequisite: BLDG3272

**Note/s:** 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.

**BLDG4314****Building Economics 3***Staff Contact: Faculty Student Centre Office*

CP10 S7 HPW3

Prerequisite: ACCT9002

**Note/s:** Elective.

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.

**BLDG4422****Estimating 2***Staff Contact: Mr P Marsden*

CP10 S7 HPW3

Prerequisite: BLDG3321

**Note/s:** Elective.

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

**Session 8****BLDG4017****Advanced Materials***Staff Contact: A/Prof M Marosszeky*

CP10 S8 HPW3

Prerequisite: BLDG3005

**Note/s:** Elective.

Polymer materials in sealants, membranes, adhesives and paints. Composite materials including fibre reinforced concretes, fibre reinforced plastics, composite engineered timber products. High performance concrete, ceramics and glass building stones. The focus is on properties that effect performance from a mechanical, serviceability and durability point of view.

**BLDG4275****Dispute Avoidance and Resolution***Staff Contact: Faculty Student Centre Office*

CP10 S8 HPW3

Prerequisite: BLDG2264

**Note/s:** Elective.

Nature of claims, remedies, alternative dispute resolution, mediation, expert appraisal, litigation, moot arbitration.

**BLDG4284****Building Information Systems***Staff Contact: Dr O Greste, A/Prof R Miller*

CP10 S8 HPW3

Prerequisite: BLDG3282

**Note/s:** Elective.

The specification, development and use of computer based information systems in the management of building companies. Information system components, attributes and lifecycle. 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 a microcomputer database package.

**BLDG4303****Quantity Surveying 3***Staff Contact: Mr P Marsden*

CP10 S8 HPW3

Prerequisite: BLDG3303

**Note/s:** Elective.

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

**BLDG4366****Management 6 (Corporate Strategy and Small Business)***Staff Contact: Faculty Student Centre Office*

CP10 S8 HPW3

Prerequisite: BLDG4314

**Note/s:** Elective.

Corporate strategy and the overall general management of an enterprise in the construction and development industry, derivation of policy by top management together with planning of policy implementation; tax planning. Small business management including uncertainty, entrepreneurship, risk and trading structures. Contrasting small business operations with the strategy, management and marketing etc. of large businesses in the Construction and Property industries.

### **BLDG4391**

#### **Land Economics**

*Staff Contact: Faculty Student Centre Office*

CP10 S8 HPW3

Prerequisite: BLDG4314

**Note/s:** 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.

### **BLDG4492**

#### **Property Development and Valuation**

*Staff Contact: Dr Y Tu*

CP10 S8 HPW3

Prerequisite: BLDG2411

**Note/s:** 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. General principles of valuation. Judicial valuation, legal precedent, land titles and rights. Depreciation assessment. Building maintenance cycles. Time value of money and equivalence. Methods and philosophies of determining market valuations. Preparation of development applications cost value analysis, value management LCC and services integration.

### **BLDG4493**

#### **Property Management**

*Staff Contact: Dr J Kim*

CP10 S8 HPW3

**Note/s:** 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**

### **BLDG4500**

#### **Thesis**

*Staff Contact: A/Prof R Miller*

CP40 S7 and S8

Prerequisite: All Year 1 to 3 subjects

**Note/s:** Compulsory.

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

Project: for Pass Degree. An in depth structured study or state of the art study of a technical topic. It should rely strongly on recent authoritative information and should synthesise the knowledge embodied in the technical literature in a well structured manner seeking to address a significant technical question with vigour.

### **BLDG9998**

#### **Quantity Surveying Industry Program**

*Staff Contact: A/Prof RMA Miller*

S2-6

**Note/s:** Compulsory.

Students proposing to apply for membership in the Australian Institute of Quantity Surveyors after graduation should enrol in this subject rather than BLDG9999. It must be completed before the start of the final year of the course.

The Industry Program is to be taken as a six months continuous employment with a professional Quantity Surveying firm or with a firm or building company where quantity surveying activities are undertaken. Students should be under the direct supervision of a corporate member of the Australian Institute of Quantity Surveyors or, where this is not possible, under the guidance of a mentor appointed by the Institute. Submission requirements are a daily diary, report and a completed form from the employer.

### **BLDG9999**

#### **Building Industry Program**

*Staff Contact: A/Prof RMA Miller*

S1- 8

**Note/s:** Compulsory.

Eighty days of approved building industry experience at any time to the start of the final year of the course. Submission requirements are a weekly diary, report and a completed form from the employer.

# Bachelor of Industrial Design

## Design Studios

### IDES1021

#### Basic Design

*Staff Contact: Ms R Bernabei*

CP10 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: Faculty Student Centre Office*

CP12.5 S2 L1 T3

*Corequisites:* IDES1021, IDES1041

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

### IDES2161

#### Industrial Design Studio 2

*Staff Contact: Faculty Student Centre Office*

CP25 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: Faculty Student Centre Office*

CP25 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: Faculty Student Centre Office*

CP12 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: Mr J Talbot*

CP10 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.

### IDES4311

#### Graphic Design for Industrial Designers

*Staff Contact: Faculty Student Centre Office*

CP7.5 S1 L1 T2

*Prerequisite:* IDES1031

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

### IDES4321

#### Environmental and Interior Design for Industrial Designers

*Staff Contact: Faculty Student Centre Office*

CP5 S1 L1 T1

*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: Mr J Talbot*

CP30 S2 L1 T11

*Prerequisite:* IDES3221

*Corequisites:* 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: Mr J Talbot*

S7.5 L0.5 T2

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 and Drawing

*Staff Contact: Faculty Student Centre Office*

CP10 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 and Mechanical Drawing***Staff Contact: Mr L Green*

CP10 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 and Rendering Techniques***Staff Contact: Faculty Student Centre Office*

CP10 S1 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: Faculty Student Centre Office*

CP7.5 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: Faculty Student Centre Office*

CP10 S2 L2 T2

*Prerequisite:* IDES2121

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

**IDES3231****Computer Graphic Applications***Staff Contact: Faculty Student Centre Office*

CP10 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: Faculty Student Centre Office*

CP5 S2 L1 T1

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.

**Design Theory****IDES1061****History of Art/Architecture/Design***Staff Contact: Faculty Student Centre Office*

CP2.5 S1 L1

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

**IDES2091****Design Methodology***Staff Contact: Mr L Green*

CP4.5 S1 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: Faculty Student Centre Office*

CP3 S3 T2

*Prerequisite:* IDES1031*Corequisites:* 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: Faculty Student Centre Office*

CP2.5 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: Faculty Student Centre Office*

CP1.3 L0.5

*Prerequisite:* IDES1061*Corequisites:* 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: Faculty Student Centre Office*

CP1.3 L0.5

*Prerequisite:* IDES1061*Corequisites:* IDES4331

This subject is normally taken in conjunction with IDES4331 and is a chronological study of the emergence and development of industrial design from 1850 to the present day.

**IDES4361****Professional Practice***Staff Contact: Faculty Student Centre Office*

CP2.5 S2 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: Mr L Green*

C2.5 S2 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: Mr J Talbot*

CP5 S2 L2

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

**IDES2193****Applied Ergonomics***Staff Contact: Mr J Talbot*

CP7.5 S1 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: Mr J Talbot*

CP0 S2

*Prerequisite:* IDES2161*Corequisite:* IDES3221

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: Mr L Green*

CP10 S2 L2 T2

*Prerequisites:* MATH1021 and PHYS1937

Equilibrium, Friction Systems of multibody members, coplanar. Mass centre; centroid. Fluid statics. Plane particle kinematics: rectilinear, motion. Plane particle kinetics: equations motion; work, power, energy; impulse, momentum, impact.

**IDES2132****Introduction to Materials Science***Staff Contact: Faculty Student Centre Office*

CP2.5 S1 L1

*Prerequisite:* PHYS1937

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: Mr L Green*

CP7.5 S2 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: Faculty Student Centre Office*

CP7.5 S2 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: Mr L Green*

CP7.5 S1 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: Mr J Talbot*

CP5 S1 L1.5 T0.5

*Prerequisite: PHYS1937*

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: Mr J Talbot*

CP5 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: Mr L Green*

CP7 S2 L1.5 T0.5

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: Mr L Green*

CP5 S2 L1.5 T0.5

*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, interrelationships 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*  
CP15 S1 HPW6

*Prerequisites:* HSC mark range required: 2 unit Mathematics (60-100) or 2 and 3 unit Mathematics (1-150) 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.)

**Note/s:** Excluded MATH1032, MATH1042, MATH1131, MATH1141, ECON2200, ECON2201, ECON2202, ECON1202, ECON2290, ECON2291.

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*  
CP15 S2 HPW6*Prerequisite: MATH1011*

**Note/s:** Excluded MATH1032, MATH1042, MATH1231, MATH1241, ECON2200, ECON2201, ECON2202, ECON1202, ECON2290, ECON2291.

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 of Mathematics Office*

CP10 F HPW2

*Prerequisite: MATH1021 or MATH1231 or MATH1241*

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.

**PHYS1937****Physics 1 (Industrial Design)***Staff Contact: First Year Director, School of Physics*

Energy transfer: concepts of temperature and heat; calorimetry; 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 of Accounting Office*

S1 L1.5

**Note/s:** Architecture – 2 credit points compulsory for BBuild degree course students.

Introduces non-commerce students to the nature, purpose and conceptual foundation of accounting: information systems including accounting applications, and analysis and use of accounting reports.

### ACCT9002

#### Introduction to Accounting B

*Staff Contact: School of Accounting Office*

S2 L1.5

*Prerequisite:* ACCT9001

Introduces 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 of Marketing Office*

S1 L2 T2

*Prerequisites:* ACCT1511, ECON1102, ECON1203

*Corequisite:* MARK2032

This subject provides a conceptual framework for developing and understanding of marketing including the marketing process, marketing environment and marketing planning. It covers product, service, consumer, industrial, global and social aspects of marketing and introduces the marketing mix, market segmentation, positioning and product differentiation.

### MARK2032

#### Consumer Behaviour A

*Staff Contact: School of Marketing Office*

S1 L2 T2

*Prerequisites:* ACCT1511, ECON1102, ECON1203

*Corequisite:* MARK2012

This subject studies in details 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 C

*Staff Contact: School of Marketing Office*

S2 L2 T2

*Prerequisites:* MARK2012, MARK2032

This subject 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 of Marketing Office*

S2 L2 T2

*Prerequisite:* MARK2012, MARK2032

This subject examines the sources and types of marketing information relevant to marketing management. Topics include: 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; the use of continuous research; and new developments in market research.

### MARK3073

#### Brand Management

*Staff Contact: School of Marketing Office*

S1 L2 T2

*Prerequisite:* MARK2012, MARK2042

This subject provides 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 of Marketing Office*

S2 L2 T2

*Prerequisite:* MARK3073

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

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

## Bachelor of Landscape Architecture

### LAND1130

#### Landscape Graphics 1

*Staff Contact: Ms E Mossop*

CP10 S1 L1 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: Mr Doug Crawford*

CP10 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: Prof J Weirick*

CP5 S1 L1

Introduction to the principles of design education. Overview of landscape architecture as a practice, as a profession and as an academic discipline. Study of contemporary landscape architecture as a design field and as a creative component of the environmental movement. Introduction to the art and technique of reading the landscape.

### LAND1170

#### Design 1

*Staff Contact: Faculty Student Centre Office*

CP10 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.

### LAND1110

#### Landscape Analysis

*Staff Contact: Mr Doug Crawford*

CP15 S1 L2 T4

Corerequisite: GEOG3211

**Note/s:** 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 Doug Crawford*

CP10 S1 L1 T1

Prerequisite: LAND1110, LAND2110, BIOS3004, GEOL5110

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 Doug Crawford*

CP10 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: Faculty Student Centre Office*

CP10 S2 L1 T1

Corerequisite: BIOS3004

Prerequisite: LAND1110

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*

CP10 S2 L1 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: Faculty Student Centre Office*

CP10 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.

**LAND1292****Landscape Technology 1***Staff Contact: Faculty Student Centre Office*

CP10 S2 L1 T2

Site surveying and mapping techniques. Land surface manipulation including contour planning and basic earthworks. Field work exercises.

**LAND2110****Environmental Sociology for Landscape Architects***Staff Contact: Faculty Student Centre Office*

CP10 S2 L2

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*

CP25 S1 L2 T8

Prerequisite: LAND1110, LAND1270, LAND1292

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: Prof J Weirick*

CP10 S1 L2

Critical analysis of cultural landscapes through the investigation of philosophical, aesthetic and social aspects of landscape architecture and garden art in Eastern and Western traditions.

**LAND2192****Landscape Technology 2***Staff Contact: Faculty Student Centre Office*

CP10 S1 L1 T2

Prerequisite: LAND1292

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. Technical aspects of plant selection and documentation.

**LAND2270****Landscape Design 2***Staff Contact: Ms E Mossop*

CP25 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: Prof James Weirick*

CP10 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. Critical analysis of existing landscape schemes. Overview of planting traditions in Australian landscape architecture.

**LAND2292****Landscape Technology 3***Staff Contact: Head of Department*

CP10 S2 L1 T2

Prerequisite: LAND2192

Landscape construction methods, including documentation of grading, drainage, earthworks and structures. Application of materials in detailed design development.

**LAND2291****Professional Practice A***Staff Contact: Ms E Mossop*

CP10 S2 L2

Prerequisites: LAND2170, LAND2192

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.

**LAND3130****Research Methods***Staff Contact: Prof J Weirick*

CP5 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 E Mossop*

CP25 S1 L2 T6

Prerequisites: LAND2270, LAND2110, LAND2292

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 Sydney Region. Projects are of a large scale and further emphasis is directed towards the relationship between landscape design, architecture and public art.

**LAND3190****Landscape Engineering A***Staff Contact: Student Faculty Centre Office*

CP10 S1 L2 T1

Prerequisite: LAND2292, 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.

**LAND3270****Landscape Design 4***Staff Contact: Ms E Mossop*

CP25 S2 L2 T6

Prerequisite: LAND3170

Experience of dealing with medium to large scale projects of specific land uses such as schools and residential subdivisions, 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: Faculty Student Centre Office*

CP10 S2 L1 T2

Prerequisites: 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 E Mossop*

CP10 S2 L2

Prerequisites: LAND2291, 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. Postcontract activities, maintenance manuals, appraisal of design and construction, and retention of records.

**LAND4031****Landscape Thesis A***Staff Contact: Professor James Weirick*

CP30 S1 or S2

Prerequisite: LAND3130, LAND3270

A specialised 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 Program prior to enrolment in Landscape Thesis A.

**LAND4032****Landscape Thesis B***Staff Contact: Professor James Weirick*

CP15 S2 or S1

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 Faculty Student Centre Office 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: Prof J Weirick*

CP15 S1 L1 T2

Prerequisite: LAND3270

Investigation of the relationship of the relationship between design and contemporary landscape theory through a series of critical design projects at site planning scale.

**LAND4272****Urban Landscape Design***Staff Contact: Prof J Weirick*

CP30 S2 L2 S8

Prerequisites: LAND3252, LAND4170

Corequisite: LAND4270

An exploration of the relationship between urban ecology and design through advanced study of sustainable developments, context and history, informed by critical studies and contemporary theory. Design studios, lectures and seminars.

**LAND4270****Landscape Design 6***Staff Contact: Ms E Mossop*

CP30 S2 L1 T5

Prerequisites: LAND4170, Four months approved practical experience

Corequisite: LAND4172

Students are called upon to employ all the knowledge, skill and understanding they have gained in previous years. 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 Faculty Student Centre Office before finalising their program. Credit point values specifically refer to students of Architecture enrolled in courses 3260 or 3265.

**LAND0001****Landscape Architecture***Staff Contact: Faculty Student Centre Office*

CP10 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.

**LAND0002****Site Planning Elective***Staff Contact: Prof J Weirick*

CP10 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: Prof J Weirick*

CP10 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: Prof J Weirick*

CP10 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: Prof J Weirick*

CP10 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.

## **Servicing Subjects**

### **Biological Sciences**

**BIOS3004****Botany for Landscape Architects***Staff Contact: School of Biological Sciences School**Office*

CP12.5 S1 L1 T1

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.

### **Applied Geology**

**GEOL5110****Geology for Landscape Architecture***Staff Contact: A/Prof AD Albani*

CP5 S2 L2 T1

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**

**GEOG1721****Planet earth: Environment in Crisis***Staff Contact: Mr. D.Edwards. Dr S Mooney*

CP15 S2 L3 T1

An introduction to the role of environmental processes in shaping the patterns of the physical environment. The operation of global environmental systems. Emphasis on the interaction of humans with their environment and the causes of environmental crises. Topics include water resources, circulation of the atmosphere and oceans, weather and climate, the formation of the Earth, fluvial and coastal landforms, land degradation, the biosphere and ecosystems, Australian biotic patterns, human impact on natural systems.

---

## Bachelor of Town Planning

### PLAN 1011

#### Urban Society and Sociology

*Staff Contact: A/Prof R Zehner*

CP10 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. Sociological views of the planner's role in contemporary urban society.

### PLAN 1021

#### Environmental Studies

*Staff Contact: Faculty Student Centre Office*

CP10 S1

Elements of the biophysical 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 urbanisation on the environment; environmental issues in general; skills in map interpretation.

### PLAN 1041

#### The Language of Planning

*Staff Contact: Mr S Harris*

CP10 S1

This subject aims to introduce students, commencing their planning studies, to the forms and languages used by planning: the vocabulary used by professionals, its explicit and implicit meanings and implications. Specifically, the aims are to ensure students understand the generalities and some detail of the relationship between politics, government and society; the forms and structures of Australian politics and government; the relationships between planning, politics and government; planning systems in theory and practice; the operation of development control systems; land ownership and titling; land uses and activities, and their definitions; density definition and its planning implications; planning

associations and organisations and their significance; the language of urban design; methods of describing society and its structures.

### PLAN 1051

#### Graphic Communication

*Staff Contact: Faculty Student Centre Office*

CP10 S1

Graphics as an effective communication medium for town planners. Technical information and studio experience to teach the essential skills for creative graphics as a functional tool for communicating factual information to peers and clients. Exercises in basic drawing, drafting and lettering. Photography and visual presentation techniques for brochures and displays are also covered.

### PLAN 1061

#### Computer Literacy

*Staff Contact: Faculty Student Centre Office*

CP10 S1

Computer use in the planning professions. Exercises using integrated software including data bases, spreadsheets, graphics and word processing. Planning information systems: applications, establishment, maintenance.

### PLAN 1012

#### Principles of Political Economy

*Staff Contact: Faculty Student Centre Office*

CP10 S2

This subject is an introduction to political economy for non-economists. It establishes a foundation of concepts and viewpoints which are utilised in a number of subjects. Topics include: the forms of capital; modes of production; global economic change and the new international division of labour; relationship between economy and state; politics and ideology; class structure; elementary price theory; factors influencing economic growth; the distribution of welfare.

### PLAN 1022

#### The Development Process

*Staff Contact: Faculty Student Centre Office*

CP10 S1

An introduction to real property law, the statutory requirements of the NSW planning system, environmental laws and land taxation. Also covered are small building construction issues, the nature of the housing market, commercial and industrial property markets, the funding of infrastructure and the roles of government agencies involved in the property market. Assignments are prepared in the form of consultant reports.

### PLAN 1042

#### Planning Processes

*Staff Contact: Dr S Thompson*

CP10 S2

*Prerequisites:* PLAN1041, PLAN1061, PLAN1011

The course covers planning methodologies, with a focus on the strategic choice approach. A planning exercise is used as a case study to demonstrate the use of the method in practice. Applications are critically assessed. The

emphasis is on cooperative work within the planning process framework.

#### **PLAN 1052**

##### **Quantitative Methods**

*Staff Contact: A/Prof R Zehner*

CP10 S2

Lectures, discussions and assignments concerning the use of quantitative research in the planning process. Social science research methods: study design, survey sampling techniques, questionnaire design, data collection, data analysis using packaged computer programs.

#### **PLAN 1062**

##### **Communication Techniques**

*Staff Contact: Mr S Harris*

CP10 S2

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

#### **PLAN 2011**

##### **The Economy of Cities and Regions**

*Staff Contact: A/Prof P Murphy*

CP10 S1

*Prerequisites:* PLAN1012, PLAN1052

This subject introduces how economic processes influence (1) the structure and performance of the economies of regions and urban centres; and (2) the structure and patterns of changes in land uses within urban centres, with specific reference to large urbanised regions. Topics covered include: factors driving regional and urban economic performance; urban hierarchies and inter-urban competition; economics of urban size; land rent, land uses, land prices; regional population densities; employment and service location. The basic theory is taught using Australian case studies.

#### **PLAN 2021**

##### **History of Urban Development**

*Staff Contact: Dr R Freestone*

CP10 S1

Introduction to patterns and processes of urbanisation and urban development at global, national, regional and local scales canvassing theoretical, conceptual and empirical issues. Surveys evolution of urban space in a societal context from the pre-modern to the post-modern eras with emphasis on understanding the form and evolution of the late twentieth century Australian city. The course involves lectures, presentations, fieldwork and applied research projects.

#### **PLAN 2041**

##### **Critical Research Seminars**

*Staff Contact: A/Prof R Zehner*

CP10 S1

A series of student-led seminars on topics of importance to planning (e.g., measuring environmental quality, social

mix, environmental ethics, community design and crime, participant observation) which are designed to draw on a variety of viewpoints and types of data.

#### **PLAN 2051**

##### **Environmental Economics and Resource Management**

*Staff Contact: A/Prof P Murphy*

CP10 S1

This subject introduces basic concepts and methods from resource economics. The aim is both to extend economic literacy and to cast the management of land use within a conceptually sound economic framework. Topics covered include: market failure; types of resources; valuation of resources; economic tools for resource management; principles of cost benefit analysis and its relationship to environmental impact assessment; and the precautionary principle for resource management. Contemporary Australian case studies are used.

#### **PLAN 2061**

##### **GIS Geography Information Systems**

*Staff Contact: Mr D Crawford, Landscape Architecture*

CP10 S1

This subject will present a broad overview of geographic information systems (GIS) used in urban and regional planning. It will emphasize the use of GIS as both the intellectual framework and the tool to manipulate planning information in a spatial system. It will teach general concepts of GIS; sources of land data; techniques of data storage, analysis, modelling and display; and examine an existing operational GIS in local government. 'Hands on' GIS projects will involve simple environmental and sociological modelling.

#### **PLAN2012**

##### **Spatial Development Planning**

*Staff Contact: A/Prof P Murphy*

CP10 S2

*Prerequisites:* PLAN2011, PLAN1012

This subject aims to show how, at the levels of both theory and practice, the planning system interlocks with socio-political pressures, the effects of which are to influence the shape and direction of development. Bodies of theory on planning and development are introduced and the relationship between them analysed. Planning is presented as a socio-political process the form of which shifts over space and time. The myth of rational, value free planning is exposed. The role of the state and the local state in managing conflicts intrinsic to a capitalist space economy is emphasised.

#### **PLAN2022**

##### **Urban Infrastructure**

*Staff Contact: Faculty Student Centre Office*

C10 S1

*Prerequisites:* PLAN1041, PLAN1021, PLAN1022

This subject provides students with an introduction to the physical components of urban infrastructure. The following areas are covered: hydraulic services – water, sewerage

and drainage, energy provision – electricity and gas, telecommunications, and transport. The transport component of the course will emphasise the need for the integration of land use and transport planning, from the strategic level of local implementation. The pivotal role of transport in shaping our cities is explored.

#### **PLAN2032**

##### **Generic Planning Project 1 – Spatial Typologies**

*Staff Contact: Prof A Cuthbert*  
CP20 S1

The built environment is constituted in specific, identifiable forms of buildings and spaces as well as their interrelationships. Furthermore, these typologies are not arbitrary. They reflect the historical progression of economy, society and culture. While the design and architectural merits of individual buildings remain important, the subject is concerned with commonality rather than difference. It is focussed on the social organisation of urban space and its adopted physical envelopes. The design organisation of the built environment is explored via lectures, seminars and a series of small scale practical projects.

#### **PLAN2042**

##### **History of Urban Planning**

*Staff Contact: Dr R Freestone*  
CP10 S2

Emphasis on the evolution of metropolitan planning theories and practices in the late 19th and 20th century with special reference to the Australian experience. The material is covered through lectures, projects, seminars and fieldwork.

#### **PLAN2052**

##### **Advanced Data Analysis**

*Staff Contact: A/Prof R Zehner*  
CP10 S2  
*Prerequisite: PLAN1052*

The emphasis in this subject is the use of multivariate techniques to analyse recent survey-based data sets. The specific techniques covered in a given year depend in part on the data sets available for analysis, but include factor analysis, regression and multiple regression, as well as approaches to the analysis of non-linear relationships.

#### **PLAN3011**

##### **Critical Urban Studies**

*Staff Contact: Faculty Student Centre Office*  
CP10 S1

The subject provides an opportunity to consider developments in social theory and sociology relating to Town Planning in relation to contemporary urban problems and developments. In general, the theoretical material in the subject is drawn from sociology and social philosophy, particularly as these disciplines relate to the urban and spatial aspects of social life.

The subject is structured along an epistemological progression culminating in the debate on postmodernity and a critical consideration of theoretical propositions underlying professions such as Town Planning which attempt to operationalise social theory in their practice.

#### **PLAN3013**

##### **Planning in Developing Countries 1**

*Staff Contact: Faculty Student Centre Office*  
CP10 F or SS

Issues in the planning of cities and regions in developing countries. Seminars, lectures and independent study.

#### **PLAN3021**

##### **Heritage and Conservation Planning**

*Staff Contact: Mr S Harris*  
CP10 S1

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 studies of selecting and planning a heritage and/or conservation area.

#### **PLAN3022**

##### **Planning in Developing Countries 2**

*Staff Contact: Faculty Student Centre Office*  
CP10 F or SS

Supervised independent research on issues in the planning of cities and regions in developing countries.

#### **PLAN3031**

##### **Generic Planning Project 2**

*Staff Contact: Dr R Freestone*  
CP20 S1

An applied focus on selected planning issues in an established urban area. Introduces the concept of the study brief and the role of the consultant planner. The course integrates group skills and knowledge to address multifaceted planning issues typical of central city, inner urban, suburban or regional centre environments. Examples would include environmental, town centre, open space, urban design, transportation, redevelopment, or heritage studies. The emphasis is on individual and team research, analysis, technical report production, and presentations, with a significant fieldwork component.

#### **PLAN3041**

##### **Planning Law and Administration**

*Staff Contact: Mr P Williams*  
CP10 S1  
*Corequisite: PLAN3051*

The subject comprises three parts. Planning Law, Planning Administration and Land Valuation. Planning Law: historical, 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. 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 the 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 practices of land valuation in Australia. Definitions of value, methods of valuation, the role of the valuer, compensation and betterment.

### **PLAN3051**

#### **Development Control**

*Staff Contact: Mr P Williams*

CP10 S1

*Corequisites: PLAN3041*

This subject introduces students to the implementation of planning objectives in the NSW Planning System via this State's statutory development control system. Various development control systems are examined, based on common law, statute and policy. Strategic planning at state and local government levels are examined in detail, as is the statutory planning (i.e., development application) process. Emphasis in this subject is placed on familiarising students with the skills required by a professional planner in undertaking various planning tasks.

### **PLAN3012**

#### **Cultural Studies**

*Staff Contact: Dr S Thompson*

CP10 S2

*Prerequisites: PLAN3011*

This subject explores contemporary issues facing the professional planner working in an increasingly diverse and complex society. Various cultural, social and environmental issues that challenge ethnic communities, children, the aged, women, Aborigines and homeless people are examined. Students are encouraged to question their own prejudices and values as they develop better understandings of the needs of these groups. The ability of the planning system to respond is explored, as are creative and inter-disciplinary approaches that can be facilitated by urban planners.

### **PLAN3032**

#### **Generic Planning Project 3: Release Areas**

*Staff Contact: Mr S Harris*

CP20 S2

*Prerequisites: PLAN3041, PLAN2032, PLAN1022*

To demonstrate the process of planning as applied to an area undergoing urban development and give students the experience of carrying out such planning; to ensure that students can work competently as planners in urbanising areas; to show the inter-relationships between the planner and other professionals in release area planning.

### **PLAN3042**

#### **Environmental Law and Dispute Resolution**

*Staff Contact: Mr P Williams*

CP10 S2

*Prerequisites: PLAN3041, PLAN 3051*

This subject builds on the prerequisite subjects by examining in depth selected aspects of the NSW Planning System – namely, environmental and natural resources law. It also examines recent statutory and administrative changes to the planning system, in general, in NSW. Finally this subject seeks to provide guidance on the operation of the NSW Land and Environment Court, the significance of the court and the role of planners at court. Other means for the resolution and environmental dispute are also examined.

### **PLAN3052**

#### **Qualitative Methods**

*Staff Contact: Dr S Thompson*

CP10 S2

*Prerequisites: PLAN 3011*

This subject will cover the nature of qualitative research, its philosophical bases and applications in planning contexts. Basic instruction will be given in research methods, analysis and reporting findings. Students will undertake their own qualitative research projects, reflecting on and sharing experiences of their process.

### **PLAN4011**

#### **Politics, Power and Policy**

*Staff Contact: Mr P Williams*

CP10 S1

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 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.

### **PLAN4021**

#### **Metropolitan Policy**

*Staff Contact: A/Prof P Murphy*

CP10 S1

*Prerequisites: PLAN2011, PLAN2012, PLAN2022, PLAN2051, PLAN3041*

This subject examines preoccupations in the management of large urbanised regions and the range of public policy measures available to influence structure and process. It is assumed that metropolitan policy provides a framework within which local government decisions on land use, and the work of agencies which supply urban infrastructure, is framed. Topics include: population densities; commercial centres; industrial land uses; transportation; environmental quality; tools for management of metropolitan growth and change; political and administrative systems and issues.

The focus will be on Australian cities – especially Sydney – but some cross-national material will be used.

### **PLAN4031**

#### **Thesis Proposal**

*Staff Contact: Prof A Cuthbert*

CP10 S1

*Prerequisites:* All subjects of years 1 3

A written thesis is the culminating exercise in the Bachelor of Town Planning Degree. In order to adequately prepare students for this task, this course sets out an appropriate conceptual, methodological and technical base for the construction of the thesis. It guides the student in the formation of a summary statement which integrates these principles within a topic of the student's choice. Seminar / workshops are held which guide the student to a worked out thesis proposal and plan of study. In addition, the course provides insight into the world of advanced research and publication.

### **PLAN4071/4072**

#### **Planning Elective**

*Staff Contact: Faculty Student Centre Office*

CP10 S1 S2 or F

During each session, various planning electives are offered which allow students to pursue a topic of their interest in depth. Electives are not standardised each year and are subject to the availability of individual staff members. In the past topics have included heritage and conservation, transport and environment, urban design, regional economic analysis, rural planning, cultural studies and post-modernist thought. A list of electives are proposed at the beginning of each session.

### **PLAN4032**

#### **Thesis**

*Staff Contact: Supervisor*

CP40 F

*Prerequisite:* PLAN4031

A specialised 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. A thesis proposal is developed in PLAN4031 for the approval of the Head of the Program. The completed thesis is submitted for examination towards the end of Session 2.

Students are expected to participate in regular discussions with supervisors during this session to present progress reports on their theses. The subject is not complete until a bound copy has been submitted.

### **PLAN4042**

#### **Professional Practice**

*Staff Contact: Faculty Student Centre Office*

CP10 S2

A final year subject addressing key aspects of environmental management in practice. The focus is upon basic topics such as professional ethics, negligence, preparing / responding to a consultant's brief, preparing for Court work and appearing as a professional witness. Such hands-on skills are discussed in the broader context of philosophical positions, 'professionalism' and the social, political and industrial environment.

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

### **Subjects Offered to Other Departments**

### **PLAN1093**

#### **Planning Perspectives**

*Staff Contact: Dr S Thompson*

CP10 S1

Introduction to the purpose, scope, and application of planning. What is Town Planning and how does it impinge on the related professions of building, surveying and landscape architecture? The course will cover basic planning law and administration, urban processes, housing policy, social planning, environmental protection and heritage preservation. The future of cities, housing and transportation will also be canvassed.

### **Servicing Subjects**

### **Geography**

### **GEOG3671**

#### **Transport and Land Use**

*Staff Contact: Dr B Parolin*

CP15 S2 L2 T2

*Prerequisite:* GEOG2092 or GEOG2621 or GEOG2611 or PLAN1011

**Note/s:** Excluded GEOG2071 and GEOG3181

Introduction to the complex interactions between transport, land use, and the environment in urban areas. Special focus on the long term environmental consequences of transport decisions. Introduction to the various methods used to analyse and predict the consequences of policy changes. Australian cities as case studies.



---

## Faculty of the Built Environment Graduate Enrolment Procedures

All students enrolling in graduate courses should obtain a copy of the free booklet *Enrolment Procedures 1998* available from Faculty Student Centre and the University 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
2. Master of Architecture
3. Master of Building
4. Master of the Built Environment
5. Master of Landscape Architecture
6. Master of Town Planning
7. Master of Science

For details concerning these degrees see *Conditions for the Award of Higher Degrees* later in this handbook or write to The Associate Dean - Research.

---

## 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 Architecture
2. Master of the Built Environment (Building Conservation)
3. Master of the Built Environment (Sustainable Development)
4. Master of Construction Management
5. Master of Industrial Design
6. Master of Landscape Planning
7. Master of Project Management\*
8. Master of Real Estate
9. Master of Science (Industrial Design)
10. Master of Urban Development and Design
11. Graduate Diploma in Built Environment (Sustainable Development)
12. Graduate Diploma in Housing and Neighbourhood Planning\*\*.
13. Graduate Diploma in Landscape Planning
14. Graduate Diploma in Real Estate
15. Graduate Diploma in Town Planning
16. Graduate Diploma in Valuation
17. Graduate Certificate in Built Environment (Sustainable Development)

## Duration

Most courses are programmed over one year full-time or two years part-time study, are located on the Kensington campus of the University, and may require evening and/or daytime attendance (refer to course descriptions for details). The Master of Landscape Planning is programmed over one and a half years full time or three years part time. The Master of Urban Development and Design is programmed over one calendar year including a summer term.

*\* No new enrolments from 1998*

*\*\* The Diploma of Housing and Neighbourhood Planning is under review, and no new enrolments are currently being accepted.*

## Research Degrees

The School of the Built Environment offers facilities for research and welcomes enquiries from students who wish to pursue programs for research as detailed below. Prospective students should consult the Associate Dean - Research to discuss their research interests prior to making a formal application.

**Associate Dean - Research**  
Professor Jon Lang

---

### 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.

---

### 2200 Master of Architecture

#### Master of Architecture MArch

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

---

### 2206 Master of Science

#### Master of Science MSc

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

---

### 2210 Master of Building

#### Master of Building MBuild

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation.

---

### 2220 Master of Landscape Architecture

#### Master of Landscape Architecture MLArch

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

---

### 2230 Master of Town Planning

#### Master of Town Planning MTP

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation.

---

### 2240 Master of the Built Environment

#### Master of the Built Environment MBEnv

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

## Coursework Degrees

The School of the Built Environment offers facilities welcomes enquiries from students who wish to pursue graduate coursework programs as detailed below. Prospective students should consult the Associate Dean – Postgraduate Studies to discuss their interests prior to making a formal application.

**Associate Dean – Postgraduate Studies**  
Professor Sandy Cuthbert

### 8125 Master of Construction Management

#### Master of Construction Management MConstMgt

**Course Co-ordinator:** A/Professor Thomas E Uher

Construction Management comprises all the modern management methodologies directed at the control of time, cost and quality across different phases of the project development cycle.

This one year full-time or part-time full-fee course has been designed to provide opportunities for advanced study in construction, 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. This is a full fee paying course. Contact the office of the Associate Dean – Postgraduate Studies for details.

#### Course Structure

The Master of Construction Management course is a formal one year full-time or part-time full-fee degree course comprising two sessions of academic study. Entry into the course is possible in either session. To qualify for a degree, candidates are required to complete six (6) compulsory and four (4) elective subjects to accumulate a total of 100 credit points.

## Course Program

### Compulsory Subjects

BLDG6158	Principles and Practice of Management
BLDG5212	Human Resources Management
BLDG6155	Computers in Construction Management
BLDG6253	Construction Planning and Control
BLDG6255	Contracts Management and Law
BLDG6259	Project Management

### Elective Subjects

BLDG6154	Economics in Construction
BLDG6257	Quantitative Methods in Management
BLDG6157	Property Management
BLDG6251	International Construction Practice
BLDG6256	Cost Planning and Analysis
BLDG6258	Construction Management Applications
BLDG5211	Project Finance
BLDG5314	Project Quality Management
ARCH7202	Computer Graphics Programming
ARCH7222	Architectural CAD Management
PLAN1543	Planning Law and Administration
PLAN2522	Urban Infrastructure
CIVL9710	Engineering Risk Management
CIVL9714	Special Topic in Engineering Management
CIVL9724	Construction Engineering and Technology
CIVL9717	Marketing in Technology and Engineering

Note: Not all elective subjects are available in any one year.

### 8128 Master of Real Estate

#### Master of Real Estate MRE

**Course Co-ordinator:** Dr Jinu Kim

This four-session part-time and two-session full-time course has been designed to provide opportunities for advanced study in Real Estate. It allows for study in five interrelated areas:

1. Valuation of property to an advanced level including rural to specialist valuations.
2. Law with special attention to contracts, consumer protection, land, environment and arbitration.
3. Agency studies, including trust accounting, marketing, property management, finance and tax.
4. Property studies and development including forecasting, investment analysis and development of complex projects.
5. Property economics involving urban economics, planning and land policy.

The course aims at attracting the qualified practitioner who wishes to widen his/her knowledge and understanding of valuation and real property economics.

## Admission Requirements

The general conditions governing registration as a candidate for the degree of Master of Real Estate 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 Building Construction Management, BSc Arch (Hons), Town Planning, Landscape Architecture, Quantity Surveying or Engineering in the University of New South Wales or an equivalent degree in another approved university and have appropriate industrial experience.
2. University graduates from non-construction disciplines who have appropriate experience in property 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 laid down by the Associate Dean – Postgraduate Studies whose decision will be influenced by the education and experience of each applicant.

Graduate experience and involvement in the property industry is considered an advantage in the selection of candidates.

## Fees

This is a full fee paying course. Contact the office of the Associate Dean – Postgraduate Studies for details.

## Course Structure

The Master of Real Estate is a formal four session part-time or two session full-time degree course comprising 20 subjects. (The course is presently under review.) The subject program comprises studies in valuation, law, agency studies, property studies and development and property economics. Students with a grade average of Credit or better in their course may choose to write a thesis to qualify for the degree with honours.

## Course Program

Subjects are offered on a four-session cycle. Subjects are normally timetabled on four evenings 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 1

BLDG7101	Valuation 1 (Introduction)
BLDG7102	Real Estate Marketing
BLDG7103	Market Forecasting
BLDG7105	Agency and Trust Accounting
PLAN7204	Land and Environment Law

### Session 2

BLDG7104	Contracts, Agency and Consumer Protection
BLDG7201	Valuation 2 (Valuation Theory)
BLDG7202	Strata Management

BLDG7203	Property Management
PLAN7205	Planning and Land Policy

### Session 3

BLDG7301	Valuation 3 (Valuation Theory and Practice)
BLDG7302	Valuation 5 (Specialist Valuations)
BLDG7303	Property Development 1
BLDG7304	Arbitration and Litigation
BLDG7405	Organisation, Finance and Tax

### Session 4

BLDG7305	Urban Economics
BLDG7401	Valuation 6 (Rural Utilisation and Valuation)
BLDG7402	Property Development 2
BLDG7403	Property Investment Analysis
BLDG7404	Valuation 4 (Advanced Theory and Practice)

## 8130

## Master of the Built Environment (Building Conservation) Course

### Master of the Built Environment (Building Conservation)

#### MBEnv

#### Course Co-ordinator: Mr S Harris

This course consists of graduate work in the major areas of heritage assessment and building conservation. It is designed for graduates who wish to specialise in the conservation of the built environment and who typically will be government or private-sector conservation architects, planners or other heritage specialists. Training is provided for the preparation and critical examination of conservation policies, heritage assessments and management plans for a wide spectrum of heritage precincts, buildings, structures and relics.

## 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 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 the Built Environment, whose decision is influenced by the education and experience of each applicant.

## Course Structure

The course is designed to be taken over a minimum of two sessions of full-time study or over four sessions of part-

time study. It comprises 120 credit points with each credit point representing approximately 4 hours class contact. Full-time study requires 18 contact hours per week, while part-time study requires 9 hours per week.

A full-time course of study will be offered only if demand is sufficient.

The course is divided into four basic subject groupings plus the Graduate Project. One of the four subject groups is offered in each session for part-time candidates while two are offered in each session for full-time candidates. The Graduate Project, which has a loading of 20 credit points, is commenced in the early part of the course with the majority of work being completed in the latter stages. Both full-time and part-time candidates are to produce two progress reports and participate in one colloquium before the graduate project is submitted. The reports and the colloquium participation will be assessed and are rated at 5 credit points.

Integrated with the subjects in all subject groups there will be a series of site visits and excursions. These will normally take place in scheduled class hours.

Course Subject Areas	CP
Contextual Studies	25
History of the Built Environment	25
Conservation Practice	25
Conservation Management	10
Graduate Project and Research	35
<b>Total</b>	<b>120</b>

### Typical Study Pattern for Full-time Candidates

The following table shows the subjects (and their credit points) which would normally be taken by full-time candidates.

<i>Session 1</i>		
GSBE0001	Conservation Policy and Practice	5
LAND9010	Environmental Heritage Studies	10
GSBE0004	Cultural Significance	5
GSBE0503	Postgraduate Research Design and Methodology	10
GSBE0008	Conservation Technology	10
GSBE0009	Conservation Research	10
GSBE0011	Conservation Processes	5
GSBE0014	Graduate Project (Report Colloquium)	5
<b>Total</b>		<b>60</b>
<i>Session 2</i>		
GSBE0020	Heritage Legislation	5
GSBE0005	Historical Processes I – The Built Environment	10
GSBE0006	Historical Processes II – Technology	5
GSBE0007	Traditional Building Materials and Technologies	10
GSBE0012	Adaption, Recycling and Conservation Management	10
GSBE0021	Graduate Project	20
<b>Total</b>		<b>60</b>

### Typical Study Pattern for Part-time Candidates

		CP
<i>Session 1</i>		
GSBE0001	Conservation Policy and Practice	5
LAND9010	Environmental Heritage Studies	10
GSBE0004	Cultural Significance	5
GSBE0503	Postgraduate Research Design and Methodology	10
<b>Total</b>		<b>30</b>
<i>Session 2</i>		
GSBE0020	Heritage Legislation	5
GSBE0005	Historical Processes I – The Built Environment	10
GSBE0006	Historical Processes II – Technology	5
GSBE0007	Traditional Building Materials and Technologies	10
<b>Total</b>		<b>30</b>
<i>Session 3</i>		
GSBE0008	Conservation Technology	10
GSBE0009	Conservation Research	10
GSBE0011	Conservation Processes	5
GSBE0014	Graduate Project (Report Colloquium)	5
<b>Total</b>		<b>30</b>
<i>Session 4</i>		
GSBE0012	Adaption, Recycling and Conservation Management	10
GSBE0021	Graduate Project	20
<b>Total</b>		<b>30</b>

## 8131

### Master of Urban Development and Design Course

#### Master of Urban Development and Design MUDD

**Program Head:** Professor A Cuthbert

A one year full-time or two year part-time multi-disciplinary coursework program for a wide range of graduates from both design and non-design based disciplines. An advanced study program examines the crucial relationship between urban development and design from an international perspective, but with particular reference to the rapidly developing Asia-Pacific region. The intensive one calendar year program involves two academic sessions of study plus a summer term and includes a compulsory field project based in a major South East Asian city. Graduates of the program from a planning-related background are eligible for membership of the Royal Australian Planning Institute (RAPI). Students from a non-planning-related background may elect to take an additional 60 credit points of approved planning subjects to become eligible for RAPI membership.

## Admission Requirements

Admission to the course is available to a wide range of graduates in both design and non-design based disciplines. The minimum requirement is a four year undergraduate degree in an appropriate field such as architecture, landscape architecture, urban planning, urban studies, real estate economics, property development, or another appropriate discipline. In exceptional cases students may be admitted on the basis of professional experience. Applicants who do not meet these requirements may be permitted to gain admission via a qualifying program.

## Fees

This is a full-fee paying course for both local and international students. The S E Asian Field Project costs are in addition to fees. Contact the office of the Associate Dean – Postgraduate Studies for Details.

## Course Structure

The content of the course is progressive, stressing theoretical knowledge of economic, social, environmental and physical design determinants at the beginning, and moving into more applied skills and applications toward the end of the year. Students will be allocated to one of two streams in (a) Design or (b) Development depending upon their background discipline and interest. The nature of contribution to studio-based design projects will be determined accordingly.

The course comprises nine core and two elective subjects. The compulsory core includes five lecture/seminar based subjects, three project based studio subjects, and a case study subject. The typical pattern for core and elective subjects will be a two hour lecture/seminar format over 12 weeks, ie a total of 24 hours per session. The remaining two weeks per session will normally be reserved for visiting lectures and other special activities.

Students are encouraged to select electives from those recommended hereunder which have been specifically developed for the program or selected from those offered by other schools in the faculty. However students may be permitted, with the approval of the Associate Dean – Postgraduate Studies, to select electives from other subjects offered within the faculty or other faculties of the University.

The final Summer Term will include case studies of major urban projects, the South East Asian field project, and the preparation of an exhibition and publication of the years work.

Students from a non-planning-related background may elect to take an additional 60 credit points of approved planning subjects to become eligible for RAPI membership.

## Program of Study for Full-Time Candidates

### Core Subjects

#### Session 1

GSBE2001	History of Urban Development	10
GSBE2002	Urban and Environmental Law	10

CP

GSBE2003	Real Estate Development	10
GSBE2004	Urban Design Studio 1	20
Elective Subject		10
<b>Total</b>		<b>60</b>
<i>Session 2</i>		
GSBE2005	Critical Urban Theory	10
GSBE2006	Urban Landscape	10
GSBE2007	Urban Design Studio 2	30
Elective Subject		10
<b>Total</b>		<b>60</b>
<i>Summer Term</i>		
GSBE2008	Case Studies in Urban Development and Design	20
GSBE2009	Urban Design Studio 3 (including S.E. Asian field project)	40
<b>Total</b>		<b>60</b>

## Recommended Program of Study for Part-Time Candidates

### Core Subjects

#### Year 1, Session 1

GSBE2001	History of Urban Development	10
GSBE2002	Urban and Environmental Law	10
GSBE2003	Real Estate Development	10
<b>Total</b>		<b>30</b>

#### Year 1, Session 2

GSBE2005	Critical Urban Theory	10
GSBE2006	Urban Landscape	10
Elective Subject		10
<b>Total</b>		<b>30</b>

#### Year 2, Session 1

GSBE2004	Urban Design Studio 1	20
Elective Subject		10
<b>Total</b>		<b>30</b>

#### Year 2, Session 2

GSBE2007	Urban Design Studio 2	30
<b>Total</b>		<b>30</b>

#### Year 2, Summer Term

GSBE2008	Case Studies in Urban Development and Design	20
GSBE2009	Urban Design Studio 3 (including S.E. Asian field project)	40
<b>Total</b>		<b>60</b>

**Total Credit Points for Course 180**

### Recommended Elective Subjects

ARCH7220	Computer-aided Architectural Drafting	10
ARCH7221	Computer Modelling and Rendering	10
ARCH7301	Architecture and the City	10
ARCH7322	People and Urban Space	10
BLDG5212	Human Resources Management	10
BLDG5314	Project Quality Management	10
BLDG6158	Principles and Practice of Management	10
BLDG6259	Project Management	10

**CP**

GSBE3001	Sustainable Development and the Urban Environment	10
GSBE3002	Resources, Materials and Sustainability	10
GSBE3003	Energy and the Built Environment	10
GSBE3004	Human Factors, Sustainability and Habitability	10
LAND9010	Environmental Heritage Studies	10
PLAN2051	Environmental Economics and Resource Management	10
PLAN2511	The Economy of Cities and Regions	10
PLAN2522	Urban Infrastructure	10

Note: Most subjects are offered in only one session per year. Some subjects may not be offered every year. Students are advised to contact the Course Coordinator prior to enrolment for information about the availability of subjects in a particular session.

**8132****Master of the Built Environment (Sustainable Development)****Master of the Built Environment (Sustainable Development)****MBEnv(Sust.Dev)****5132****Graduate Diploma in Built Environment (Sustainable Development)****Graduate Diploma in Built Environment (Sustainable Development)****GradDipBEnv****7332****Graduate Certificate in Built Environment (Sustainable Development)****Graduate Certificate in Built Environment (Sustainable Development)****GradCertBEnv****Course Coordinator:** Associate Professor Deo Prasad

Buildings and urban environments represent a major source of human impact on natural ecosystems and sustainable development has now become a major concern of urban

policy and development. There is an increased demand for built environment and related professionals to develop knowledge and skills appropriate to sustainable development, and an expansion of specialised career opportunities in both the public and private sector.

The courses are advanced interdisciplinary coursework programs which provide opportunities for graduates from a wide range of backgrounds (eg: architecture, landscape architecture, urban planning, building, property development, civil engineering, etc.) to improve their knowledge and skills in the application of the principles of sustainable development to the planning, design, construction and management of buildings and the urban environment. While approached from an international perspective, the program places special emphasis on the rapidly developing South East Asian region.

The programs are available to suitably qualified local and international students and provide opportunities for full-time or a part-time study. Full-time masters or students must commence the program in Session 1. Grad Dip, Grad Cert and Part-time masters students may commence either Session 1 or 2.

**Admission Requirements**

MBEnv(SustDev): A minimum four year bachelor degree or equivalent in an appropriate discipline. Where an applicant's qualifications are not considered adequate, admission may be permitted to the Graduate Diploma or Graduate Certificate with the possibility of upgrading to the Masters, subject to satisfactory performance.

GradDipBEnv and GradCertBEnv: A bachelor degree or equivalent in an appropriate discipline.

In exceptional circumstances other academic or professional qualifications may also be considered.

**Fees**

These are full-fee paying programs for both local and international students.

**Course Structure**

The Masters program is comprised of seven core subjects, two electives and a graduate project for a minimum of 120 credit points required to complete the program. The Graduate Diploma is comprised of five core subjects and three electives for a minimum of 90 credit points. The Graduate Certificate is comprised of four core subjects for a total of 40 credit points.

Pattern of Study for Completion Over Two Sessions				
Subjects	Credit Points	MBEnv	Grad Dip	Grad Cert
<b>Session 1</b>				
SCTS5315 Society, Environmental Policy and Sustainability	20	•	•	
GSBE3001 Sustainable Development and the Urban Environment	10	•	•	•
GSBE3002 Resources, Materials and Sustainability	10	•	•	•
GSBE0503 Postgraduate Research Design and Methodology	10	•		
Elective Subject (see list below)	10*	•	•	
Elective Subject (see list below)	10*		•	
<b>Session 2</b>				
GSBE3003 Energy and the Built Environment	10	•	•	•
GSBE3004 Human Factors, Sustainability and Habitability	10	•	•	•
GSBE3005 Graduate Project	30	•		
Elective Subject (see list below)	10*	•	•	
<b>Total credit points (minimum)</b>		<b>120*</b>	<b>90*</b>	<b>40</b>

\* Minimum credit points – subject to variation depending on selection of elective subjects.

Recommended Pattern of Study for Completion over Four Sessions				
Subjects	Credit Points	MBEnv	Grad Dip	Grad Cert
<b>Session 1, Year 1</b>				
SCTS5315 Society, Environmental Policy and Sustainability	20	•	•	
GSBE3001 Sustainable Development and the Urban Environment	10	•	•	•
<b>Session 2, Year 1</b>				
GSBE3003 Energy and the Built Environment	10	•	•	•
GSBE3004 Human Factors, Sustainability and Habitability	10	•	•	
Elective Subject (see list below)	10*	•		
<b>Session 1, Year 2</b>				
GSBE3002 Resources, Materials and Sustainability	10	•	•	•
GSBE0503 Postgraduate Research Design and Methodology	10	•		
Elective Subject (see list below)	10*	•	•	
<b>Session 2, Year 2</b>				
GSBE3004 Human Factors and Sustainability	10			•
GSBE3005 Graduate Project	30	•		
Elective Subject (see list below)	10*		•	
Elective Subject (see list below)	10*		•	
<b>Total credit points (minimum)</b>		<b>120*</b>	<b>90*</b>	<b>40</b>

\*minimum credit points – subject to variation depending on selection of elective subjects.



## Recommended Electives

AGSM304	Resource Markets and Management	10
ARCH7203	Information Technology in Architecture	10
ARCH7322	People and Urban Space	10
BLDG5212	Human Resources Management	10
BLDG5314	Project Quality Management	10
BLDG6158	Principles and Practice of Management	10
BLDG6259	Project Management	10
GSBE2001	History of Urban Development	10
GSBE2002	Urban and Environmental Law	10
GSBE2005	Critical Urban Theory	10
LAND9213	Land Systems and Management	10
SCTS5312	Technology and Power in the Asia-Pacific	20*
SCTS5316	Environmental and Technological Risk Controversies	20*
GEOG9042	Environmental Impact Assessment	12
GEOG9240	Principles of Geographic Information Systems	12
GEOG1031	Environmental Processes	12
GEOG9230	Population, Health and the Environment	12
CIVL9402	Transport, Environment, Community	24*
CIVL9405	Urban Transport Planning Practice	12
CIVL9855	Water and Wastewater Analysis and Quality Requirements	12
CIVL9881	Hazardous Waste Management	12
CIVL9889	Environmental Economics and Law	12

\* Electives of 20 or more credit points are regarded as equivalent to two 10 credit point subjects.

Note: 1. Some electives may not be offered every year.

Additional fees will apply for subjects with more than the minimum required credit points.

## Advanced Standing

Where applicants have undertaken external subjects equivalent to core subjects, advanced standing may be permitted up to the following:

GradCert:	10 credit points
GradDip:	20 credit points
MBEnv:	30 credit points

## Upgrading and Articulation

Upgrading from GradCertBEnv to GradDipBEnv or MBEnv(SustDev), or from GradDipBEnv to MBEnv(SustDev) may be permitted where a program is completed but the Degree has not been awarded. Students upgrading to the MBEnv(SustDev) will be required to complete a minimum of 20 additional credit points of coursework. When upgrading, additional credit for advanced standing will not be permitted.

Where a GradDipBEnv or GradCertBEnv has been awarded, the maximum credit permitted toward a degree at a higher level will be as follows:

GradCert: 20 credit points towards GradDip or MBEnv.

GradDip: 30 credit points towards MBEnv.

For core or elective subjects previously completed in a GradDipBEnv or GradCertBEnv, additional electives of at least equivalent credit point value are required to be completed.

## 8142

### Master of Architecture (by coursework)

with programs of study in:

#### Architectural Design

(Course co-ordinator: To be advised)

#### Architectural Computing

(Course co-ordinator: To be advised)

#### History and Theory of Architecture

(Course co-ordinator: Dr P Kohane)

### Master of Architecture

#### MArch

This Course provides for graduate study and research in one of several specialised aspects of the discipline of architecture. At the present time, three programs of study are offered to prospective candidates: Architectural Design; History and Theory of Architecture; and Architectural Computing. The School may, from time to time, adjust the specialist programs 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 the Built Environment (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 program as determined by the Committee.

Those applicants wishing to pursue the Architectural Design Program of the Course are required to hold a Bachelor of Architecture degree, preferably 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 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.

## Course Structure

Students undertaking the Course 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. Two Programs (Architectural Computing, History and Theory of Architecture), 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. The Architectural Design Program is centred around two compulsory design studios which represent 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 advised 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 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 equally spread over two sessions of study, with the presentation of a graduate seminar at the conclusion of the first session introducing the topic of the project, outlining current work in the area from the literature and indicating the research strategy.

Candidates wishing to undertake the Architectural Design Program 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 Program. Notwithstanding, candidates may, with the approval of the Associate Dean – Postgraduate Studies, 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 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 Co-ordinators. 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 Program.

## Fees

This is a fee paying program for both local and international students. Contact the office of the Associate Dean – Postgraduate Studies for details.

## Typical Patterns of Study

### Architectural Design Program

Full-time	CP	
	S1	S2
Architectural Design Project	40	40
Elective Subjects	20	20
<b>Total</b>	<b>60</b>	<b>60</b>
Part-time		
	Year 1	
Architectural Design Project	40	
Elective Subjects		20
Year 2		
	Year 2	
Architectural Design Project		40
Elective Subjects	20	
<b>Total</b>	<b>60</b>	<b>60</b>

## Architectural Computing and History and Theory of Architecture Programs

Full-time		CP
Core and Elective Subjects	20	30
Research Design and Methodology	10	
Graduate Research Project	30	30
<b>Total</b>	<b>60</b>	<b>60</b>
Part-time		
<i>Year 1</i>		
Core and Elective Subjects	20	30
Research Design and Methodology	10	
<b>Total</b>	<b>30</b>	<b>30</b>
<i>Year 2</i>		
Graduate Research Project	30	30
<b>Total</b>	<b>30</b>	<b>30</b>

The following sections detail the prescribed academic program for each of the specialisation strands available at the present time.

### Master of Architecture Architectural Design Program

#### Prescribed Academic Program

ARCH7101	Architectural Design Project 1	40
ARCH7102	Architectural Design Project 2	40
Electives		40
<b>Total</b>		<b>120</b>

#### Recommended Electives:

ARCH7301	Architecture and the City	10
ARCH7302	Theories in History	10
ARCH7303	Theory and Contemporary Architectural Practice	10
ARCH7322	People and Urban Space	10
ARCH7220	Computer-aided Architectural Drafting	10
ARCH7221	Computer Modelling and Rendering	10
ARCH9711	Special Program (Multimedia on the Web)	10
ARCH9714	Special Program (Multimedia in Design)	10
GSBE2001	History of Urban Development	10
GSBE2005	Critical Urban Theory	10
GSBE2006	Urban Landscape	10
GSBE3001	Sustainable Development and the Urban Environment	10
GSBE3002	Resources, Materials and Sustainability	10
GSBE3003	Energy and the Built Environment	10
GSBE3004	Human Factors, Sustainability and Habitability	10

Note: Most subjects are offered in only one session each year. Some subjects may not be offered every year. Students are advised to contact the Course Coordinator prior to enrolment for information about the availability of subjects in a particular session.

## Master of Architecture Architectural Computing Program

Required Academic Program:		CP
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
<b>Total</b>		<b>120</b>
Recommended Electives		
ARCH7222	Architectural CAD Management	10
ARCH9711	Special Program (Multimedia on the Web)	10
ARCH9714	Special Program (Multimedia in Design)	10

### Master of Architecture History and Theory of Architecture Program

#### Required Academic Program

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 and Contemporary Architectural Practice	10
Electives		20
<b>Total</b>		<b>120</b>

#### Recommended Electives

ARCH7322	People and Urban Space	10
LAND9010	Environmental Heritage Studies	10
COFA8591	Postgraduate Seminars	10
GSBE2001	History of Urban Development	10
GSBE2005	Critical Urban Theory	10
GSBE2006	Urban Landscape	10
GSBE3001	Sustainable Development and the Built Environment	10
GSBE3004	Human Factors, Sustainability and Habitability	10

Note: Most subjects are offered in only one session per year. Some subjects may not be offered every year. Students are advised to contact the Course Coordinator prior to enrolment for further details.

## 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, geo-graphy 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 120 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 180 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 Department.

### Course Program

#### Core Subjects

	CP
LAND9010 Environmental Heritage Studies	15
SAFE9273 Environment and the Law	15
LAND9111 Landscape Planning	15
LAND9212 Landscape Planning Methods	15
LAND9213 Land Systems and Management	15
LAND9214 Visual Landscape Assessment	15
LAND9215 GIS in Landscape Architecture	15
GSBE0503 Postgraduate Research Design and Methodology	15

#### Electives

SCTS5315 Society, Environmental Policy and Sustainability	15
GEOG9150 Remote Sensing Applications	15
GEOG9210 Computer Mapping and Data Display	15
GEOG9300 Vegetation Management	15
GEOG9310 River Management	15
GEOG9320 Soil Degradation and Conservation	15

SURV9604	Land Information Systems Project	CP
GSBE2006	Urban Landscape	15
LAND9001	Landscape Project	30
LAND9002	Landscape Research Project	60
LAND9301	Landscape Planning Exercise	30

## 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 specialise 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 specialisation.

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 nondesign 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 specialised 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 Associate Dean – Postgraduate Studies and the approval of the Higher Degree Committee of the Faculty of the Built Environment.

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 and the University's resources at that time.

The MID degree course comprises 140 credit points. The MSc(IndDes) degree course comprises 120 credit points. 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

IDES5131	Industrial Design
SAFE 9224	Principles of Ergonomics
MARK5902	Elements of Marketing
IDES4331	History of Consumer Products
IDES4341	History of Industrial Design
IDES3271	Form Theory
SAFE9424	Applied Ergonomics
IDES2151	Product Studies Seminar
IDES5152	Manufacturing Technology
IDES5051	Plastics, materials and processes
IDES4371	Managing Product Innovation
IDES5111	Visual Thinking

### MID only

IDES6081	Graduate Project (MID)
GSBE0503	Research Methods
SAFE9426	Ergonomics and new technology
Approved Electives*	

### MSc(IndDes) only

IDES5091	Perspective and Rendering
IDES6181	Graduate Project (MSc(IndDes))
Approved electives*	

\*Approved electives may be taken from subjects offered in other academic units of the University of New South Wales, subject to the approval of the Associate Dean – Postgraduate Studies.

MID electives may be chosen to increase specialist knowledge relevant to the student's theory studies, project report or planned career activities.

MSc(IndDes) electives are taken in approved subjects directly related to the development of the student's industrial design knowledge and skill.

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 the Built Environment and the Associate Dean – Postgraduate Studies. Where the credit points of subjects is increased by substitution of subjects from other academic units, the requirement for the stated number of credits in elective subjects is correspondingly reduced.

## 5200

### Housing and Neighbourhood Planning Graduate Diploma Course

#### Graduate Diploma GradDip

This course is currently under review and no new admissions will be made in 1998.

5205  
Town Planning Graduate Diploma

Graduate Diploma  
GradDip

This course is designed as a qualifying program in order to provide training for graduates who wish to pursue a higher research degree (PhD or Masters by research). The content of the Graduate Diploma is tailored to meet the objectives of individual students. It is normally taken as a one year full-time program (or two years part-time) and includes a core of postgraduate coursework, together with an additional study program to meet the needs of particular students. Performance in the course is 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 the Built Environment

Course Structure

The course includes three compulsory core subjects. The remaining content is designed to provide a foundation for postgraduate research in the field, and may include additional coursework and/or programs of independent study,

Core subjects

GSBE0503	Postgraduate Research Design and Methodology
GSBE0504	Quantitative Methods for Built Environment Research
PLAN1531/ PLAN1532	Research Seminar

Individual programs are defined in consultation with the academic staff of the School and are subject to approval by the Associate Dean – Postgraduate Studies. 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

### Faculty of the Built Environment Subjects

#### ARCH7001

##### Graduate Research Project

*Staff Contact: Program Co-ordinator*

CP60

*Corequisites:* GSBE0503 (unless exempt by Associate Dean – Postgraduate Studies)

A research project relating to the theory or practice of architecture selected by the student and approved by the Associate Dean – Postgraduate Studies. 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-half of the work and involves the presentation of a graduate seminar on 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 half 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: Faculty Student Centre Office*

CP40 S1

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.

#### ARCH7102

##### Architectural Design Project 2

*Staff Contact: Faculty Student Centre Office*

CP40 S2

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.

#### ARCH7201

##### Computational Design

*Staff Contact: Mr J Plume*

CP10 S1

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: Mr S Peter*

CP10

**Note/s:** Not offered in 1997.

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: Mr J Plume*

CP10 S2

*Excluded:* ARCH5206 or equivalent

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: Mr J Plume*

CP10 S1 & S2

*Excluded:* ARCH6214, ARCH5202 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: Mr S Peter*

CP10 S1 & S2

*Excluded:* ARCH5201 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.

#### **ARCH7222**

##### **Architectural CAD Management**

*Staff Contact: Mr S Peter*

CP10 S2

*Excluded:* ARCH5207 or equivalent

This subject is concerned with the practical implementation and management of CAD systems in the context of architectural practice. Topics will include: CAD system selection and installation; cost issues (purchase, maintenance, upgrades); political implications within practices; software customisation; resource management; office standards; and training. Assessment is by means of projects and student seminars.

#### **ARCH7301**

##### **Architecture and the City**

*Staff Contact: Dr P Kohane*

CP10 S2

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: Dr P Kohane*

CP10 S1

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: Dr P-A Johnson*

CP10 S1

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.

#### **ARCH7322**

##### **People and Urban Space**

*Staff Contact: Prof J Lang*

CP10 S2

Urban design is concerned with improving the quality of the public realms of human settlements. As a basis for designing guidelines for the achievement of a high quality environment it is important to understand how different patterns of urban space are associated with specific behaviours and aesthetic effects within different cultures. The lectures/seminars focus on the empirical research on people (designers and users) and urban space uses and meanings.

#### **BLDG5211**

##### **Project Finance**

*Staff Contact: Dr G Runeson*

S2 L3

Techniques of investment analysis, mainly using the discounted cash flow method. Quantitative methods applying statistical and regression analysis techniques for the purpose of forecasting time series and investigating other data series.

#### **BLDG5212**

##### **Human Resources Management**

*Staff Contact: Dr M Loosemore*

S2 L2 T1

Job design, specialisation and decentralisation, basis of grouping, span of control and liaison devices. Self-directing work groups and flexible manufacture. Reward policies, motivation and commitment. Personal development and group skills. Parties to industrial relations in Australia. History of industrial relations in the building industry. Statutory responsibilities of employers. Restructuring and reform in Australian industrial relations. Development and management of conflict.

#### **BLDG5314**

##### **Project Quality Management**

*Staff Contact: A/Prof M Marosszeky, Dr J Kim*

S1 L2 T1

T.Q.M. theories and application, alternative approaches to quality management, quality management plans, quantifying quality management and control.



**BLDG6154****Economics in Construction***Staff Contact: Dr G Runeson*

S1 L2 T1

Economics of the construction industry; its interrelationship with national and transnational economics.

**BLDG6155****Computers in Construction Management***Staff Contact: Dr O Greste*

S1 L2 T1

Overview of computer hardware and software; operating systems; 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: Dr J Kim, Dr Y Tu*

S2 L2 T1

Property development process: Evaluation, feasibility study; Preparation, life cycle cost in building; Disposal, marketing; Property investment analysis.

Building management: Tenancy management; Building maintenance; Obsolescence; Economics of refurbishment; Commercial property management; Strata title management: Taxation in property management.

**BLDG6158****Principles and Practice of Management***Staff Contact: Dr J Kim*

S1 L2 T1

Introduces the general principles of management: Basic management functions; planning process, organising; control of time, cost and quality. Organisation structure; concepts of management communication; motivation; delegation; team building.

**BLDG6251****International Construction Practice***Staff Contact: Dr Y Tu*

S2 L2 T1

A comparison of construction practices in various nations. The impact of local economic, labour and technical parameters on construction management; Staffing for international projects.

**BLDG6253****Construction Planning and Control***Staff Contact: A/Prof 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 risk management.

**BLDG6255****Contracts Management and Law***Staff Contact: A/Prof 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; subcontracting; analysis of selected 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

Construction estimating, elemental cost planning, design variables, cost control procedures; feasibility studies.

**BLDG6257****Quantitative Methods in Management***Staff Contact: Dr G Runeson*

S1 L2 T1

Statistical analysis and modelling methods in construction management.

**BLDG6258****Construction Management Applications***Staff Contact: Dr M Loosemore*

S2 L2 T1

The objective of the subject is to expose students to the realities of involvement with a large construction project. Detailed analysis of each stage of the project case study: Feasibility, Design and Documentation, PreConstruction, Construction and Commissioning.

**BLDG6259****Project Management***Staff Contact: Dr J Kim, Dr M Loosemore*

S2 L2 T1

Introduction to the concept of project management; Project delivery strategies; Organisation of projects from design to commissioning; Project planning strategies; Quality management; Management of information.

**BLDG7101****Valuation 1 (Introduction)***Staff Contact: Faculty Student Centre Office*

S1 L2

Qualities of the different main investments – classes compared.

Investment opportunities. Property investment and the underlying factors of the market.

Value; Reasons for valuation; Legal interests in properties.

Features of property and the property market. The role of the valuer. Rates of interest and yields (capitalisation rates) Methods of valuation. The role of the valuer, including social and ethical responsibilities to the public.

### **BLDG7102**

#### **Real Estate Marketing**

*Staff Contact: Faculty Student Centre Office*  
S1 L2

Auctioneers & Agents Act & Regulations, documentation, agency agreements, 'code of ethics', conjunction, source of listings, vendor/buyer qualification, listing procedures, pricing, promotion, presenting marketing plans, advertising, enquiries, finance and staffing, negotiating.

Rural property – map reading aerial photography, land titles 'restricted' title, leasing Agricultural Holdings Act.

Auctions – procedures & practice. Tender, sale of plant, franchising, electronic marketing.

Consumer rights and protection, impact of the consumer protection and Free Trade Acts.

### **BLDG7103**

#### **Market Forecasting**

*Staff Contact: Dr Y Tu*  
S1 L1

The marketing mix: The relationship between a marketing system and the environment; Marketing tactics and strategy; market segmentation and the buyer decision process; Listing, selling and the auction process; International marketing; The underlying economic fundamentals of forecasting; Forecasting the economy; Forecasting the property market; Analysing demand and supply patterns of property; Social responsibilities.

### **BLDG7104**

#### **Contracts, Agency and Consumer Protection**

*Staff Contact: Faculty Student Centre Office*  
S2 L2

Contract law, agency and delegation, professional negligence, misrepresentation, damages, restitution, equitable remedies, Trade Practices Act, Fair Trading Act, consumer protection.

Current and social issues; the consumer's point of view.

### **BLDG7105**

#### **Agency and Trust Accounting**

*Staff Contact: Faculty Student Centre Office*  
S1 L2

Revision of the role of information systems, accounting systems as information systems, financial management accounting, statements of activity, position and flow, accounting principles, components of accounting systems, assets, liabilities, proprietorship, expenses, revenue, data accumulation, recording, classification, source documents, accounts of prime entry, ledger accounts, trial balances, generation of financial statements, statutory accounts.

The need for analysis, ratio analysis, debit/equity. Trust accounting and trustee obligations. Accounting procedures

for the administration of an estate policy. Role of data processing in the administration of a real estate practice. Ethics, duty of care to public, social responsibility.

### **BLDG7201**

#### **Valuation 2 (Valuation Theory)**

*Staff Contact: Faculty Student Centre Office*  
S2 L2

Pre-requisite: Valuation 1

Investment – rates of interest, yields, risk. Yields and property investment. Methods of valuation – comparison, summation, hypothetical development, profits, capitalisation, mortgage/equity. Valuation mathematics and valuation tables; Application of the tables. Terminable income flows; Freehold interests and terminable incomes. Freehold interests and terminable incomes; Simple leasehold valuation. Analysis of simple leasehold valuations; Effect of tax on property income; Valuation of residential properties.

### **BLDG7202**

#### **Strata Management**

*Staff Contact: Faculty Student Centre Office*  
S2 L1

Duties and responsibilities of the licensed strata managing agent to his principal, his customers and the public.

Strata schemes, the body corporate, the developer, managing agents.

Strata meetings – during initial period, the first annual general meeting, annual general meetings, extraordinary general meetings, council meetings.

The Council, the strata roll insurances, related matters. By-laws, disputes procedures. Responsibility to the public, ethical considerations, social relationships.

### **BLDG7203**

#### **Property Management**

*Staff Contact: Dr J Kim*  
S2 L2

The duties and responsibilities of the licensed real estate agent to this principal, his customers and the public; relevant legislation.

The Landlord and Tenant (Amendment) Act; The Auctioneers & Agents Act and Regulations; Residential Tenancies Tribunal Act; Land & Tenant (Rental Bonds) Act; Management of residential, industrial, commercial, retail property and shopping centres; Lease agreements; Rent reviews; Maintenance, repairs, plant and equipment; Obsolescence, redevelopment; Computer programs; Office management.

Role and impact of resident action groups, customers and the public.

### **BLDG7301**

#### **Valuation 3 (Valuation Theory and Practice)**

*Staff Contact: Faculty Student Centre Office*  
S3 L2

Prerequisite: Valuation 2

Ground rents; Adjustment of rents to net income. Premiums and the calculation of the same. Surrender and renewal of

leases. Life interests. Shortcomings of sinking fund theory. Double sinking fund, sinking fund methods etc. Discounted cash flow approach and valuation. The valuation of rural properties.

### **BLDG7302**

#### **Valuation 5 (Specialist Valuation)**

*Staff Contact: Faculty Student Centre Office*

S3 L1

*Prerequisites:* Valuation 1 & 2

*Corequisite:* Valuation 3

Petrol filling stations; Hotels and restaurants. Licensed premises; Business valuations. Leisure and recreation properties; Cinemas and theatres. Plant and machinery; Basements; Valuations for insurance. Valuations for mortgages etc; Extractive industries. Ethical, social and environmental aspects of all types of specialist valuations.

### **BLDG7303**

#### **Property Development 1**

*Staff Contact: Dr Y Tu*

S3 L2

A total approach to the building process through the four stages of predesign, 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 and building process, utilisation of construction and management consultants.

Development control during construction and in completion, tenant fitouts and handing over to clients of the completed project. Social responsibilities of developers.

### **BLDG7304**

#### **Arbitration and Litigation**

*Staff Contact: Faculty Student Centre Office*

S3 L2

Compensation on acquisition or resumption: Rating and taxing; Professional responsibility; Court procedure and evidence; Role of valuer as expert witness; Arbitration and expert determination; Specific performance. Liability, ethics, self-regulation.

### **BLDG7305**

#### **Urban Economics**

*Staff Contact: Dr Y Tu*

S4 L2

Political economics; Economic advantages and disadvantages of urbanisation; Issues in applying economic theory to urban land; Methods for analysing the economic base in urban areas; Elementary rent models; Rent and transport costs; Business location -access/space model; Residential location – factors other than central access; Tuning of the models of the development process; Intra-urban industrial location; Office location; Density and land value gradients; Inter-urban location; Urban population

growth and its effects on urban development; systems of settlements and the emergence of cities as central places.

### **BLDG7401**

#### **Valuation 6 (Rural Utilisation and Valuation)**

*Staff Contact: Dr Y Tu*

S4 L1

*Prerequisites:* Valuation 1 & 2

*Corequisite:* Valuation 3

Land settlement in Australia; Climatic regions; Soils, derivation, classification, improvement and management. Pastures; Crops and marketing systems; Livestock and management. Water and irrigation; Farm costs; Specialised rural enterprises. Rural land tenures; Mapping and aerial photography; Property specifications. Basic units of value; Rural land sales analysis; Improvements – depreciation. Methods of valuation. Landcare total catchment management environmental impacts. Ethics and social responsibilities.

### **BLDG7402**

#### **Property Development 2**

*Staff Contact: Faculty Student Centre Office*

S4 L2

*Prerequisite:* Property Development 1

Redevelopment, refurbishment, change in use; Special projects including leisure, hotels, restaurants, petrol stations, one-stop convenience stores, cinemas, theatres, canal developments, rural, mines. Land subdivision.

Revenue and costs; Risk and uncertainty; Supply and demand of subdividable land and development sites; Site assessment and assembly; Development and betterment; The impact of Acts, Regulations, By-laws and planning policies.

Analysing computer programs on the market; Statements of environmental effects; Rectification of contaminated sites.

Environmental sustainability, environmental impact statements.

### **BLDG7403**

#### **Property Investment Analysis**

*Staff Contact: Faculty Student Centre Office*

S4 L2

*Prerequisites:* Valuation 1 & 2

Capital investment analysis; Advanced investment evaluation; Financial management and analysis; Growth and development; The financial market; Analysing property investments and portfolios.

Public and private investment; Social issues and directions.

### **BLDG7404**

#### **Valuation 4 (Advanced Theory and Practice)**

*Staff Contact: Faculty Student Centre Office*

S4 L2

Cash flow analysis and sensitivity analysis. Advanced quantitative methods; Investment analysis. Application of computer programs to the valuation process. Analysis of the property market utilising computer programs.

Development appraisals. Valuation of commercial, retail and industrial properties including specific reference to ethical and social aspects.

#### **BLDG7405**

##### **Organisation, Finance and Tax**

*Staff Contact: Faculty Student Centre Office*  
S3 L2

The property institutes and RESC, professionals (eg. planners, builders, lawyers, engineers, accountants, quantity surveyors, architects etc). The developer, the project manager and the property investor. Capital gains; Land; Income; Fringe benefits tax.

Nature of real estate as an investment; Principles of money and capital markets; Comparison of characteristics of government bonds, shares and real estate, technical aspects of these markets such as yield curves and the concept of market efficiency, and the effect of business cycles.

Characteristics of real estate lenders and alternative fund sources; Analysis of leverage in real estate; Concepts of risk and portfolio analysis; Measuring returns from real estate – the BOMA index.

Code(s) of ethics, efficiency of capital markets, social injustice, negatives of the capitalist societies.

#### **GSBE0001**

##### **Conservation Policy and Practice**

*Staff Contact: Faculty Student Centre Office*  
CP5 S1

The contextual system of the heritage and conservation movement. The history of the conservation movement worldwide with special reference to Australia. The place of building conservation, urban conservation and conservation management in the existing cultural milieu. The importance of conserving physical aspects of the past.

#### **GSBE002**

##### **Heritage Legislation**

*Staff Contact: Faculty Student Centre Office*  
CP5 S1

The role of the various professional and voluntary bodies in the conservation movement in Australia, the Heritage Council of NSW, the Heritage Commission of Australia and other bodies, the responsibilities of government authorities pursuant to the Heritage Act of 1977. An examination of legislation at local, state and Federal Government levels aimed at protecting items of cultural heritage. Problems associated with enforcing legislation at all levels.

#### **GSBE0004**

##### **Cultural Significance**

*Staff Contact: Faculty Student Centre Office*  
CP5 S1

The concept of cultural significance in Australia and other nations. The variation in the concept of cultural significance between nations and within the same nation. Established methodologies for assessing cultural significance. The Venice Charter and the Burra Charter. Principles and

processes in the Burra Charter. The development and impact of the State Heritage Inventory Project.

#### **GSBE0005**

##### **Historical Processes I / The Built Environment**

*Staff Contact: Faculty Student Centre Office*  
CP10 S2

The major architectural movements in Australia and the principal architects associated with them. The work of the Government Architects from colonisation to the present and their building legacy. The great Australian architects and their impact on the styles of Australian architecture. The underlying social, economic, historic and technological forces which shaped Australian architecture.

#### **GSBE0006**

##### **Historical Processes II / Technology**

*Staff Contact: Faculty Student Centre Office*  
CP10 S2

The development of the early technologies for forming wood, stone, earth, brick and metal in Australia. An overview of the properties of the early building, materials, methods of working and their effect on architectural form and designs. Effect of the development of steam and electric power on materials-processing technology. The emergence of the age of gas and its impact on lighting, heating and ventilation, the effects of the introduction of hydraulic power, electricity and transport technology and the growth of the city.

#### **GSBE0007**

##### **Traditional Building Materials and Technologies**

*Staff Contact: Faculty Student Centre Office*  
CP10 S2

A detailed study of the properties of building materials and their use from colonisation to the second world war. Methods of field and laboratory examination of a wide range of materials. The construction associated with rude timber work, carpentry, joinery and cabinet making. The properties and uses of the ferrous and non-ferrous metals including wrought iron, cast iron, galvanised sheet steel, copper, brass, bronze and aluminium. The techniques of masonry construction and the shaping of stone using manual and power tools. The development of paints and painting technology from the early oil and water based paints to the early plastic paints. Glazing, lead lighting and stained glass manufacture.

#### **GSBE0008**

##### **Conservation Technology**

*Staff Contact: Faculty Student Centre Office*  
CP10 S1

The analysis of the causes of the deterioration of a wide range of building materials. Damage caused to masonry, plaster and render by weathering, rising damp and falling damp, and techniques of control. The principal causes of deterioration in timber including insect and fungal attack, methods of inspection and techniques of control. Metal corrosion, its causes and methods of reduction. Techniques used in the repair of damaged metal elements.

**GSBE0009****Conservation Research**

*Staff Contact: Faculty Student Centre Office*  
CP10 S1

The archaeology of buildings, structures and precincts. The analysis of extant fabric. The systematic field recording of extant fabric by notes, sketches and photography. The use of photogrammetry in recording buildings and structures, and in monitoring decay. Principles of architectural drafting. Presentation of drawings. The use of photographs, working drawings and sketches in Conservation Plans.

**GSBE0011****Conservation Processes**

*Staff Contact: Faculty Student Centre Office*  
CP5 S1

Methodologies appropriate to the preparation of conservation policies and conservation plans. The principle of preservation, restoration, reconstruction and adaption. The concepts of retaining significance and regaining significance. The structure of conservation policies and conservation plans. The appreciation of conflict in the conservation process; conflict resolution and the place of compromise.

**GSBE0012****Adaption, Recycling and Conservation Management**

*Staff Contact: Faculty Student Centre Office*  
CP10 S2

The economics of recycling buildings, structures, precincts and complexes. Building codes which effect recycling. The ethics and politics of the conservation process in recycling. The problems associated with services in traditional buildings and the replacement of significant fabric in meeting building codes and local council requirements. The implementation of conservation policies. Environmental psychology and the role of individuals and interest groups in the conservation process. Social, economic and environmental considerations in the conservation of precincts, buildings, structures and relics. Cultural tourism and its ramifications.

**GSBE0014****Graduate Project (Report Colloquium)**

*Staff Contact: Faculty Student Centre Office*  
CP5

The problems involved in selection of an appropriate topic for research. The presentation of a seminar paper outlining the research design and data collection and analysis sections of the graduate project.

**GSBE0021****Graduate Project**

*Staff Contact: Faculty Student Centre Office*  
CP20

An appropriate conservation topic from an associated field including such areas as historical archaeology, documentation, legalisation, economics, technology or a specific building restoration project. The topic of the

graduate project is to be chosen in conjunction with the course convenor. Conditions governing the submission of the Graduate Project appear in the Calendar.

**GSBE0503****Postgraduate Research Design and Methodology**

*Staff Contact: Prof J Lang*  
CP10 S1

An introduction to the nature and purpose of research and its role in problem solving and theory in the built environment disciplines. Discussions of various approaches to research. Reliability, validity and other principles of research. A review of the principle research methods and examples of their use. Topic definition, research design, research planning and time management, literature review, data collection and analysis, thesis structure, writing, presentation of research seminars and research papers.

**GSBE0504****Quantitative Methods in Built Environment Research**

*Staff Contact: Dr M Durvasula*  
CP10 S1

Deals extensively with the methodology of survey research and applications of basic and multi-variate statistical techniques in the analysis of data. Instruction in the uses of the Statistical Package for Social Sciences (SPSS), which aids students in the analysis of data, is also included.

**GSBE2001****History of Urban Development**

*Staff Contact: Prof AR Cuthbert*  
CP10 S1

The History of Urban Development is designed to give the student an overview of the entire process of urbanisation from prehistory until today, in both Western and Asian contexts. It adopts the position that while a history of urban development and design is ideological – ie., there is no coherent development of urban development products in relation to each other – there is a coherent history of development in terms of economy and society. Urban design originates primarily in these conditions, although there is an arbitrary aesthetic continuity to some of the chosen details. The course therefore theorises the economic forces and social conditions driving development as a method of explaining how urban form comes about. It seeks to explain some of the fundamental differences between the forces – economic, physical, socio-cultural and environmental – that influence urban societies of Asian and European origin.

**GSBE2002****Urban and Environmental Law**

*Staff Contact: Mr PJ Williams*  
CP10 S1

The subject comprises three parts: Planning Law, Planning Administration and Land Valuation. It deals with the theory and practice of techniques and administrative procedures needed to transform policies and details of urban development and design proposals into documents which

have legal effect. While the concentration is upon the implementation of projects, these are set within a concern for the conceptual and theoretical nature of the law, and its relation to justice, equity and environmental concerns within the social formation.

### **GSBE2003**

#### **Real Estate Development**

*Staff Contact: Faculty Student Centre Office*  
CP10 S1

A major keystone of Western Civilisation is the private ownership of property. Within this context, the commodification of social space in the form of building is critical to the economic development of all nations. Central to this process is what is termed the real estate industry, professional intervention focussing primarily on the exchange process in contradiction to urban planning whose prime purpose is organisation and control of land development. Within this context the capital investment strategies which shape urban development are of primary importance. This course will explore the operation of the real estate industry in terms of its political, economic and organisational functions and environmental effects within society.

### **GSBE2004**

#### **Urban Design Studio 1: Urban Space**

*Staff Contact: Prof J Lang*  
CP20 S1

In the first session, the lecture quota is higher in relation to studio projects. The object of this studio is to 'kick start' the program by establishing a knowledge base upon which skills can be developed. Therefore studio projects will be limited to a series of smaller projects which investigate the concept of typologies – of streets, arcades, squares, religious precincts, parks and other elements in the urban landscape. On this basis a vocabulary will be generated, a language of urban space, upon which the larger projects in session 2 and the summer term can be built.

### **GSBE2005**

#### **Critical Urban Theory**

*Staff Contact: Faculty Student Centre Office*  
CP10 S2

Critical urban theory has undergone a revolution in the last twenty years, where one dominant characteristic has been the abandonment of certainty implied in structuralist modes of thought congruent with the analysis of capital. Fundamental to this change has been the acceptance of space and its creation. As Isard has noted, social processes do not occur "in a wonderland of no dimension". Post structuralist theory, in deconstructing modernist concepts of place now look to the fragmented discourses of gender, culture, ethnicity, community, language, and other phenomena. These interpretations take place within an increasing consciousness of the environment and environmental management, which must be considered in order to derive satisfactory explanations of the organisation of space in contemporary urban society.

### **GSBE2006**

#### **Urban Landscape**

*Staff Contact: Prof J Weirick*  
CP10 S2

This course attempts to integrate the concept of landscape within the built environment. While it distinguishes between nature and artifice (something created from human labour) it recognises that the earth is now both commodified and urbanised, and that concepts of landscape must accept this fact. Therefore a fundamental knowledge of the relationship between development impacts and environmental sustainability is critical to an understanding of contemporary urbanisation. The course therefore explores the urban landscape in terms of historical, modernist and post modernist ideas, showing how theoretical constructs within the discipline have changed with the changing landscapes of production and consumption which now characterise the modern city.

### **GSBE2007**

#### **Urban Design Studio 2: The Residential Environment**

*Staff Contact: Prof P Reid*  
CP30 S2

Here we adopt the philosophy that to isolate housing from other aspects of life is to undermine the actual organisation of the life process and to degrade the quality of life in cities. While the project focuses on housing, it begins with a study of the historically changing relationship between the trilogy of work, home life and recreation. This will form the brief for a major housing project in one of Sydney's major development areas. It will involve the integration of a variety of housing types at medium to high density, along with their integration into the urban fabric by means of other urban functions – commercial and community facilities, open space, transport, etc. The emphasis will be on creating a socially responsible, environmentally sustainable and commercially feasible residential environment with reference to current urban design priorities such as urban consolidation and ecologically sound principles.

### **GSBE2008**

#### **Case Studies in Urban Development and Design**

*Staff Contact: Dr B Judd*  
CP20 S3

Generic examples of urban development and design assembled from both Australia and the S.E. Asian region are presented and analysed in order to assess the validity of the objectives, the effectiveness of the process, and the costs and benefits of the results in improving the city and the welfare of its citizens. The object is to demonstrate through practical examples how major developments (eg Singapore's Bugis street, Hong Kong's international airport, Sydney's Circular Quay, the Ultimo-Pyrmont Peninsula and the Homebush Bay Olympic Site) are conceived, financed, designed and built. Those projects now operational will also be assessed as to their relative success or failure as urban projects on social, economic and environmental grounds.

**GSBE2009****Urban Design Studio 3: The Central Business District***Staff Contact: Prof AR Cuthbert*

Studio 3 will be devoted to the study of the central urban area. It will contrast a project in a major South East Asia city with a similar project in a major city in Australia. This may include developments for financial and commercial centres, tourism and recreation development, inner area housing and their implications for transport, services, communications, and environmental management. Because of the complexity of the inner city, projects will invariably contain aspects of all of these functions. The South East Asian field trip will be incorporated into this studio.

**GSBE3001****Sustainable Development and the Urban Environment***Staff Contact: Prof J Weirick*

CP10 S1

A review of innovative approaches to the planning, design and management of the 'sustainable city', with an emphasis on techniques which seek to maintain and/or improve air quality, water quality and biodiversity. Topics include principles of urban ecology and sustainable development, the ecological 'footprint' of the metropolis, water cycle management, urban design and transportation issues, urban forestry, parks systems and greenways, use of tools for assessment/evaluation. The subject will be based on lectures, seminars and case studies.

**GSBE3002****Resources, Materials and Sustainability***Staff Contact: Dr W Lawson*

CP10 S1

The life cycle of building materials from the availability and acquisition of the raw materials, through processing and manufacture to on-site construction and use, maintenance and refurbishment, and eventual demolition and reuse/recycling or disposal. Consideration of environmental impacts at each stage of the life cycle, such as embodied energy, wastes generated and their disposal, and ways in which design may minimise or eliminate such impacts. Economics and management of sustainable buildings.

**GSBE3003****Energy and the Built Environment***Staff Contact: A/Prof D Prasad*

CP 10 S2

Energy - definitions and terminology. Energy flows, balance, options, demand and supply solutions in the context of the Built Environment. Urban energy infrastructure impact, energy in transportation, global warming and environmental impact assessment. Use of tools for assessment/evaluation (performance simulation and benchmarking). Future technologies, architectural impact and regional development implications.

**GSBE3004****Human Factors, Sustainability and Habitability***Staff Contact: Dr R Samuels*

CP10 S2

The impact of buildings and urban environments on quality of life or habitability, and of values and preferences on sustainability or quality of the environment, concentrating on five fundamental human factors: environmental responsibility, health and wellbeing, comfort and amenity, security, and equity. Responsibility focuses on practitioner and community environmental ethics. Health evaluations include sick building syndromes, light quality and performance, indoor air quality, and urban thermal- and air-pollution. Comfort and amenity concentrate on the influence of user knowledge and preference on energy use and environmental impact. Security evaluates the role of environmental design and territoriality in the experience of security in buildings and urban domains. Equity aspects include affordability, accessibility, and community participation in environmental design and management.

**GSBE3005****Graduate Project***Staff Contact: A/Prof D Prasad*

CP30 S2

A supervised research or design project from a selected field of interest will be identified in consultation with the Course Coordinator. A research topic may extend to areas of interest in related disciplines if suitable arrangements can be made with the course co-ordinator. Where a research project is undertaken, the project report should normally not exceed 20,000 words.

**IDES1021****Basic Design***Staff Contact: Faculty Student Centre Office*

CP10 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.

**IDES2151****Product Studies Seminars***Staff Contact: Faculty Student Centre Office*

CP3 S3 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.

**IDES3271****Form Theory***Staff Contact: Faculty Student Centre Office*

CP2.5 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: Faculty Student Centre Office*

CP1.3 S2 L0.5

*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: Faculty Student Centre Office*

CP1.3 S2 L0.5

*Prerequisite:* IDES1061*Corequisite:* IDES4331

This subject is normally taken in conjunction with IDES4331 and is a chronological study of the emergency and development of industrial design from 1850 to the present day.

**IDES4371****Managing Product Innovation and Development***Staff Contact: Mr L Green*

C2.5 S2 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.

**IDES5051****Plastics, Materials and Processes***Staff Contact: Mr L Green*

CP7.5 S1 L3

Describes plastics materials and their specification in design. Plastics manufacturing processes such as injection moulding, blow moulding, extrusion and rotational moulding are covered. Also describes costing techniques for plastic assemblies and components.

**IDES5071****Industrial Design Studies***Staff Contact: Faculty Student Centre Office*

CP5 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****Perspective and Rendering***Staff Contact: Faculty Student Centre Office*

CP5 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 decisionmaking 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.

**IDES5111****Visual Thinking***Staff Contact: Faculty Student Centre Office*

CP5 S1 HPW2

Note/s: 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.

**IDES5131****Industrial Design***Staff Contact: Faculty Student Centre Office*

CP10 S2 HPW4

*Corequisites:* 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: Faculty Student Centre Office*

CP15 S1 HPW4

*Corequisites:* 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: Faculty Student Centre Office*  
CP5 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: Faculty Student Centre Office*  
CP35 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**

*Staff Contact: Faculty Student Centre Office*  
CP10 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: Faculty Student Centre Office*  
CP15 F S2 HPW4  
*Corequisites:* 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: Faculty Student Centre Office*  
CP5  
*Prerequisite:* Enrolment in one of the degrees

A four week period of approved industrial experience undertaken by full-time students in the midyear recess and by part-time students in either the midyear 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: Faculty Student Centre Office*  
CP20 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.

**LAND9001****Landscape Project**

*Staff Contact: Faculty Student Centre Office*  
CP30 F

A project relating to the practice of landscape architecture selected by the student and approved by the academic staff of the Department. 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: Faculty Student Centre Office*  
CP60 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 Department. 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 specialised 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.

**LAND9010****Environmental Heritage Studies**

*Staff Contact: Faculty Student Centre Office*  
CP15

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*

CP15 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*

CP15 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.

**LAND9213****Land Systems and Management***Staff Contact: Mr D Crawford*

CP15 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.

**LAND9214****Visual Landscape Assessment***Staff Contact: Faculty Student Centre Office*

CP15 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.

**LAND9215****GIS in Landscape Architecture***Staff Contact: Mr D Crawford*

CP15 S1 L2 T1

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*

CP30 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.

**PLAN0811****Planning (Special Subject)***Staff Contact: Office of Associate Dean Postgraduate Studies*

CP10 SS

Students have the opportunity to pursue a subject of special interest related to planning, depending on staffing resources.

**PLAN0812****Planning (Special Subject)***Staff Contact: Office of Associate Dean Postgraduate Studies*

CP10 SS

Students have the opportunity to pursue a subject of special interest related to planning, depending on staffing resources.

**PLAN1511****Urban Society and Sociology***Staff Contact: A/Prof R Zehner*

CP10 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. Sociological views of the planner's role in contemporary urban society.

**PLAN1513****Cultural Studies***Staff Contact: Dr S Thompson*

CP10 S2

This subject explores contemporary issues facing the professional planner working in an increasingly diverse and complex society. Various cultural, social and environmental issues that challenge ethnic communities, children, the aged, women, Aborigines and homeless people are examined. Students are encouraged to question their own prejudices and values as they develop better understandings of the needs of these groups. The ability of the planning system to respond is explored, as are creative and inter-disciplinary approaches that can be facilitated by urban planners.

**PLAN1514****Principles of Political Economy**

*Staff Contact: Office of Associate Dean Postgraduate Studies*  
CP10 S2

This subject is an introduction to political economy for non-economists. It establishes a foundation of concepts and viewpoints which are utilised in a number of subjects. Topics include: the forms of capital; modes of production; global economic change and the new international division of labour; relationship between economy and state; politics and ideology; class structure; elementary price theory; factors influencing economic growth; the distribution of welfare.

**PLAN1531****Research Seminar 1**

F or SS

**PLAN1532****Research Seminar 2**

F or SS

**Note/s:** 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.

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.

**PLAN1533****Thesis Proposal**

*Staff Contact: Prof A Cuthbert*  
CP10 S1

**Prerequisites:** All subjects of previous years  
**Corequisites:** PLAN4110, PLAN4150, PLAN4170, ARCH0002

A written thesis is the culminating exercise in the Bachelor of Town Planning Degree. In order to adequately prepare students for this task, this course sets out an appropriate conceptual, methodological and technical base for the construction of the thesis. It guides the student in the formation of a summary statement which integrates these principles within a topic of the student's choice. Seminar / workshops are held which guide the student to a worked out thesis proposal and plan of study. In addition, the course provides insight into the world of advanced research and publication.

**PLAN1541****The Language of Planning**

*Staff Contact: Mr S Harris*  
CP10 S1

This subject aims to introduce students, commencing their planning studies, with the forms and languages used by planning: the jargon of the profession and its explicit and implicit meanings and implications. Specifically, the aims are to ensure students understand the generalities and some detail of the relationship between politics, government and society; the forms and structures of Australian politics and government; the relationships between planning, politics and government; planning systems in theory and practice; the operation of development control systems; land ownership and titling; land uses and activities, and their definitions; density definition and its planning implications; planning associations and organisations and their significance; the language of urban design; methods of describing society and its structures.

**PLAN1542****Planning Processes**

*Staff Contact: Dr S Thompson*  
CP10 S2

The subject covers planning methodologies, with a focus on the strategic choice approach. A planning exercise is used as a case study to demonstrate the use of the method in practice. Applications are critically assessed. The emphasis is on cooperative work within the planning process framework.

**PLAN1543****Planning Law and Administration**

*Staff Contact: Mr P Williams*  
CP10 S1

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. 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 the 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 practices of land valuation in Australia. Definitions of value, methods of valuation, the role of the valuer, compensation and betterment.

**PLAN1544****Planning Perspectives***Staff Contact: Dr S Thompson*

CP10 S1

Introduction to the purpose, scope, and application of planning. What is Town Planning and how does it impinge on the related professions of building, surveying and landscape architecture? The course will cover basic planning law and administration, urban processes, housing policy, social planning, environmental protection and heritage preservation. The future of cities, housing and transportation will also be canvassed.

**PLAN1551****Graphic Communication***Staff Contact: Office of Associate Dean Postgraduate Studies*

CP10 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. Photography and visual presentation techniques for brochures and displays are also covered.

**PLAN1552****Development Control***Staff Contact: Mr P Williams*

CP10 S1

This subject introduces students to the implementation of planning objectives in the NSW Planning System via this State's Statutory Development Control system. Various Development Control Systems are examined, based on common law, statute and policy. Strategic planning at state and local government levels are examined in detail, as is the statutory planning (i.e., development application) process. Emphasis in this subject is placed on familiarising students with the skills required by a professional planner in undertaking various planning tasks.

**PLAN2511****The Economy of Cities and Regions***Staff Contact: A/Prof P Murphy*

CP10 S1

This subject introduces how economic processes influence (1) the structure and performance of the economies of regions and urban centres; and (2) the structure and patterns of changes in land uses within urban centres, with specific reference to large urbanised regions. Topics covered include: factors driving regional and urban economic performance; urban hierarchies and inter-urban competition; economics of urban size; land rent, land uses, land prices; regional population densities; employment and service location. The basic theory will be taught using Australian case studies.

**PLAN2512****Cultural Studies***Staff Contact: Dr S Thompson*

CP10 S2

This subject explores temporary issues facing the professional planner working in an increasingly diverse and complex society. Various cultural, social and environmental issues that challenge ethnic communities, children, the aged, women, Aborigines and homeless people are examined. Students are encouraged to question their own prejudices and values as they develop better understandings of the needs of these groups. The ability of the planning system to respond is explored, as are creative and inter-disciplinary approaches that can be facilitated by urban planners.

**PLAN2513****Politics, Power and Policy***Staff Contact: Mr P Williams*

CP10 S1

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.

**PLAN2521****Metropolitan Policy***Staff Contact: A/Prof P Murphy*

CP10 S1

This subject examines preoccupations in the management of large urbanised regions and the range of public policy measures available to influence structure and process. It is assumed that metropolitan policy provides a framework within which local government decisions on land use, and the work of agencies which supply urban infrastructure, is framed. Topics include: population densities; commercial centres; industrial land uses; transportation; environmental quality; tools for management of metropolitan growth and change; political and administrative systems and issues. The focus will be on Australian cities – especially Sydney – but some cross-national material will be used.

**PLAN2522****Urban Infrastructure***Staff Contact: Office of Associate Dean Postgraduate Studies*

CP10 S2

An understanding of the role of urban infrastructure in the functioning of our towns and cities is essential for town planners.

This course provides students with an introduction to the physical components of urban infrastructure. The following areas are covered: hydraulic services – water, sewerage and drainage, energy provision – electricity and gas,

telecommunications, and transport. The transport component of the course will emphasise the need for the integration of landuse and transport planning, from the strategic level of local implementation. The pivotal role of transport in shaping our cities is explored.

#### **PLAN2542**

##### **Environmental Law and Dispute Resolution**

*Staff Contact: Mr P Williams*

CP10 S2

This subject examines in depth selected aspects of the NSW Planning System – namely, environmental and natural resources law. It also examines recent statutory and administrative changes to the planning system, in general, in NSW. Finally this subject seeks to provide guidance on the operation of the NSW Land and Environment Court, the significance of the court and the role of planners at court. Other means for the resolution and environmental dispute are also examined.

#### **PLAN7204**

##### **Land and Environment Law**

*Staff Contact: Mr P Williams*

S1 L2

Planning, Planning legislation, Environmental planning instruments, Environment – common law – statute – role of public and pressure groups, environmental planning control, environment assessment, heritage legislation.

Land law – public and private, Estates and tenures, Co-ownership, Leases, Easements, Restrictive covenants, Licences, Residential tenancies tribunal.

Old system title, Possessory title, Torrens title, Land Titles Office practice, Sale of land, Other methods of transferring land, Crown land tenures, Strata title, Community title.

Alternative models including other countries, Critical perspective, Heritage Law.

#### **PLAN7205**

##### **Planning and Land Policy**

*Staff Contact: Mr P Williams, Department of Planning and Urban Design*

S2 L2

The objectives of planning; The history of land use planning in Australia; The achievement of planning objectives; Planning authorities; Planning codes and development plans; Statutory powers of planning authorities; Planning procedures; Control of the development process; Retail development; Commercial development; Industrial and warehouse development; Special development; Environmental impact assessment.

Government intervention in land use matters: Public finance and planning; Political considerations and planning and development; Government control and speculation – laissez-faire or public control; Planning and housing policy; Urban decay and renewal; The problems of the urban fringe; Conservation, preservation, redevelopment.

## **Core Subjects Offered by Other Faculties**

#### **CIVL9710**

##### **Engineering Risk ManagementI**

*Staff Contact: Mr G Nawar, School of Civil Engineering*  
SS

**Note/s:** This subject is not offered every year.

Introduction to the concept of risk and decision making under conditions of uncertainty; project objectives and planning, risk/factors affecting project performance; risk identification in engineering processes; human error, natural hazards and unforeseen risks; risk evaluation and quantification methods; relevant statistical techniques; risk avoidance and minimisation; financial risk, portfolio theory, risk sharing and financing; ambient and acceptable risk levels; insurances.

#### **CIVL9714**

##### **Special Topic in Engineering Management**

*Staff Contact: Prof D G Carmichael, School of Civil Engineering*  
SS

**Note/s:** This subject is not offered every year.

A series of lectures from industry experts or visiting specialists in current and advanced engineering management. This subject is only given when an appropriate specialist is available, and is not offered every year.

#### **CIVL9724**

##### **Construction Engineering and Technology**

*Staff Contact: Mr J B O'Brien, School of Civil Engineering*  
SS

**Note/s:** This subject is not offered every year.

Structure of the construction industry; construction engineering theory, construction processes: methods engineering, automation and mechanization concepts; modelling, design and analysis: problem solving; task analysis; adaptive systems and control concepts; experimental studies of construction processes. Construction technologies; construction robotics, applications of expert and knowledge based systems. Case studies.

#### **CIVL9717**

##### **Marketing in Technology and Engineering**

*Staff Contact: School of Civil Engineering Office*  
S1

The interface of technology and engineering with marketing. Marketing of professional consultant services; promotion; advertising; pricing of services. Client management; briefs. Marketing for contractors; competition, competitive bidding; tendering and proposals. Winning and securing work and commissions. Entrepreneurship. Marketing research; environment; products; distribution; strategies.

**MARK5901****Issues in Consumer Analysis***Staff Contact: School of Marketing Office*

CP20 S2 L3

*Prerequisites:* MARK5902 and MARK5911

More detailed treatment of material covered in MARK5911. Greater stresses laid on the environment of decision making. This covers historical antecedents to consumer behaviour and their impact on the culture of consumption concepts of environmental and their influence on individual decision making, the social psychology of consumption, the ecology of learning and perception, the role of emotion in choice and the ways in which these considerations impact on marketing strategy, eg. Product formulations, mass communication.

**MARK5902****Elements of Marketing***Staff Contact: School of Marketing Office*

CP20 S1 L3

The course is a blend of theory and practical application. The central theme running throughout the teaching program is that marketing is not a fragmented assortment of actions and functions taking place among disconnected institutions operating in isolation. Rather it is a total system of business action. The task of managing a marketing operation involves strategic and tactical decision making. It also demands an understanding of the structure of the marketing system, the various institutions that make up that system, and the role of each institutions that make up that system, and the role of each institution within the system.

**MARK5911****Consumer Analysis***Staff Contact: School of Marketing Office*

CP20 S1 L3

*Prerequisites:* One core unit

Major concepts and theories from the social and behavioural sciences provide a background to the study of why people buy. Behavioural topics include perception, attitude and decision-making processes, and the psychology of purchases. Social science topics include values and life-styles, mass communication and advertising, and buyer-seller relationships.

**MARK5913****Marketing Management***Staff Contact: School of Marketing Office*

CP20

*Prerequisites:* MARK5902 and MARK5911**SAFE9224****Principles of Ergonomics***Staff Contact: Department of Safety Science Office*

CP12 S1 HPW2

The subject will give an introduction to ergonomics, emphasising the principles of designing user-centred, human-machine-environment systems. Topics include: definition of and justification for ergonomics, design and

human error, human capabilities and limitations, controls and displays, design of human-machine-environment systems, job design and work organisation, introduction to anthropometry, design of workplaces, introduction to manual handling and the physical environment, and, introduction to product design and human-computer interaction.

**SAFE9424****Applied Ergonomics***Staff Contact: Department of Safety Science Office*

CP12 S2 HPW2

*Prerequisite:* SAFE9224 or equivalent

Decision making, vigilance, effects of workload and stress, applications to screen-based equipment. Human error in relation to human/system interaction. Work systems: the systems approach, practical evaluation and redesign of work systems. Experimental methodology, experimental design in ergonomics, critical evaluation of the literature.

**SAFE9426****Ergonomics and New Technology***Staff Contact: Department of Safety Science Office*

CP12 S1 HPW2

*Assumed knowledge:* Principles of ergonomics

The focus of this subject is on ergonomic issues related to the design and implementation of new technology. Cognitive aspects of human-computer interaction, human error and software design, usability and its assessment, user interface design, evaluation techniques, guidelines and standards, and the introduction of new systems into organisations.

**SCTS5315****Society, Environmental Policy and Sustainability***Staff Contact: A/Prof G McDonnell (School of Science and Technology Studies)*

CP20 S1

Examines the principles of sustainable development in the social, historical and political context within which they've been devised, and their application in different spheres and programs of government, industry, institutions, and community groups. Students will engage with the social and historical context of modern environmentalism, science and the environment, the precautionary approach, sustainability and the built environment, and the international agreements and national commitments to ecologically sustainable development. As an outcome, participants will gain practical insights into key environmental issues and the capacity to apply this knowledge to policy making and management problems, and to problems arising in planning 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 *UNSW Courses (by faculty)* in the *Calendar*.

Title	Abbreviation	Calendar/Handbook
<b>Higher Degrees</b>		
Doctor of Science	DSc	Calendar
Doctor of Letters	DLitt	Calendar
Doctor of Laws	LLD	Calendar
Doctor of Education	EdD	Arts and Social Sciences
Doctor of Juridical Science	SJD	Law
Doctor of Medicine	MD	Medicine
Doctor of Philosophy	PhD	Calendar
Master of Applied Science	MAppSc	and all handbooks Engineering Science
Master of Architecture	MArch	Built Environment
Master of Archives Administration	MArchivAdmin	Commerce and Economics
Master of Art	MArt	College of Fine Arts
Master of Art Administration	MArtAdmin	College of Fine Arts

Title	Abbreviation	Calendar/Handbook
Master of Art and Design Education	MArtDesEd	College of Fine Arts
Master of Art Education(Honours)	MArtEd(Hons)	College of Fine Arts
Master of Arts	MA	Arts and Social Sciences University College
Master of Arts (Honours)	MA(Hons)	Arts and Social Sciences
Master of Art Theory	MArtTh	College of Fine Arts
Master of Biomedical Engineering	MBiomedE	Engineering
Master of Building	MBuild	Built Environment
Master of the Built Environment	MBEnv	Built Environment
Master of the Built Environment (Building Conservation)	MBEnv	Built Environment
Master of the Built Environment (Sustainable Development)	MBEnv(SustDev)	Built Environment
Master of Business Administration	MBA	AGSM
Master of Business Administration (Executive)	MBA(Exec)	AGSM
Master of Business and Technology	MBT	Engineering
Master of Chemistry	MChem	Science*
Master of Clinical Education	MClinEd	Medicine
Master of Commerce (Honours)	MCom(Hons)	Commerce and Economics
Master of Commerce	MCom	Commerce and Economics
Master of Community Health	MCH	Medicine
Master of Community Paediatrics	MCommPaed	Medicine
Master of Computational Science	MComputationalSc	Science*
Master of Computer Science	MCompSc	Engineering
Master of Construction Management	MConstMgt	Built Environment
Master of Couple and Family Therapy	MCFT	Arts and Social Sciences
Master of Defence Studies	MDefStud	University College
Master of Design(Honours)	MDes(Hons)	College of Fine Arts
Master of Education	MEd	Arts and Social Sciences
Master of Educational Administration	MEdAdmin	Arts and Social Sciences
Master of Engineering	ME	Science* Engineering University College
Master of Engineering <i>without supervision</i>	ME	Science* Engineering
Master of Engineering Science	MEngSc	Engineering Science* University College
Master of Environmental Engineering Science	MEngEnvSc	Engineering
Master of Environmental Studies	MEngStudies	Applied Science
Master of Equity & Social Administration	MEqSocAdmin	Arts and Social Sciences
Master of Fine Arts	MFA	College of Fine Arts
Master of Health Administration	MHA	Medicine
Master of Health Personnel Education	MHPed	Medicine
Master of Health Planning	MHP	Medicine
Master of Higher Education	MHEd	Professional Studies
Master of Housing Studies	MHS	Arts and Social Sciences
Master of Industrial Design	MID	Built Environment
Master of Information Management	MIM	Commerce and Economics
Master of Information Science	MInfSc	Engineering
Master of Information Studies	MInfStud	Commerce and Economics
Master of International Social Development	MIntSocDev	Arts and Social Sciences
Master of Medicine	MMed	Medicine
Master of Landscape Architecture	MLArch	Built Environment
Master of Landscape Planning	MLP	Built Environment



Title	Abbreviation	Calendar/Handbook
Master of Laws	LLM	Law
Master of Management Economics	MMgtEc	University College
Master of Mathematics	MMath	Science*
Master of Marine Science	MMarineSc	Science†
Master of Medicine	MMed	Medicine
Master of Mining Management	MMinMgmt	Engineering
Master of Music	MMus	Arts and Social Sciences
Master of Music (Honours)	MMus(Hons)	Arts and Social Sciences
Master of Music Education (Honours)	MMusEd(Hons)	Arts and Social Sciences
Master of Optometry	MOptom	Science*
Master of Policy Studies	MPS	Arts and Social Sciences
Master of Project Management	MProjMgt	Built Environment
Master of Public Health	MPH	Medicine
Master of Psychological Medicine	MPM	Medicine
Master of Psychology (Applied)	MPsychol	Science†
Master of Psychology (Clinical)	MPsychol	Science†
Master of Real Estate	MRE	Built Environment
Master of Real Property	MRProp	Built Environment
Master of Safety Science	MSafetySc	Science
Master of Science	MSc	Built Environment Engineering Medicine Science*† University College
Master of Science <i>without supervision</i>	MSc	Science* Built Environment Engineering
Master of Science (Industrial Design)	MSc(IndDes)	Built Environment
Master of Science and Society	MScSoc(Hons)	Arts and Social Sciences
Master of Social Work	MSW	Arts and Social Sciences
Master of Sports Medicine	MSpMed	Medicine
Master of Statistics	MStats	Science*
Master of Surgery	MS	Medicine
Master of Taxation	MTax	ATAX
Master of Technology Management	MTM	Science* Commerce and Economics Engineering
Master of Town Planning	MTP	Built Environment
Master of Urban Development and Design	MUDD	Built Environment

## Graduate Diplomas

Graduate Diploma	GradDip	AGSM Built Environment Arts and Social Sciences Commerce and Economics Engineering Medicine Science*†
Advanced Taxation	GradDipAdvTax	ATAX
Arts	GradDipArts	Arts and Social Sciences
Couple and Family Therapy	GradDipC/F Therapy	Arts and Social Sciences
Clinical Education	GradDipClinEd	Medicine
Community Paediatrics	GradDipCommPaed	Medicine
Defence Studies	GradDipDefStud	University College
Design	GradDipDes	College of Fine Arts

Title	Abbreviation	Calendar/Handbook
Education	DipEd	Arts and Social Sciences
Environmental Studies	GradDipEnvironStud	Science
Equity and Social Administration	GradDipEq&SocAdmin	
Higher Education	GradDipHEd	Arts and Social Sciences
Health Personnel Education	GradDipHPed	Professional Studies
Information Management – Archives/Records	GradDipIM-Archiv/Rec	Medicine
Information Management – Librarianship		Commerce and Economics
Industrial Management	GradDipIM-Lib	Commerce and Economics
International Social Development	GradDipIndMgt	Engineering
Land Administration	GradDipIntSocDev	Commerce and Economics
Music	GradDipLandAdmin	Engineering
Paediatrics	GradDipMus	Arts and Social Sciences
Pharmaceutical Sciences	GradDipPaed	Medicine
Real Estate	GradDipPharmSc	Medicine
Sports Medicine	GradDipRE	Built Environment
Taxation Studies	GradDipSpMed	Medicine
Valuation	GradDipTaxStud	ATAX
	GradDipVal	Built Environment

### Graduate Certificates

Arts	GradCertArts	Arts and Social Sciences
Built Environment	GradCertBEnv	Built Environment
Commerce	GradCertCom	Commerce and Economics
Design	GradCertDes	College of Fine Arts
Health Administration	GradCertHealthAdmin	
		Medicine
Higher Education	GradCertHEd	Professional Studies
Management Studies	GradCertMgtStud	University College
Music	GradCertMus	Arts and Social Sciences
Pharmaceutical Sciences	GradCertPharmSc	Medicine
Safety Science	GradCertSafetySc	Science

\*Faculty of Science and Technology.

†Faculty of Life 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.

*\*'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.*

(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.
- (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 in the further work recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to submit the thesis for re-examination as determined by the Committee within a period determined by it but not exceeding eighteen months.
- (4) After consideration of the examiners' reports and the results of any further examination of the thesis, the Committee may require the candidate to submit to written or oral examination before recommending whether or not the candidate 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 Architecture by Research (MArch), Master of Building (MBuilding), Master of the Built Environment (MBEnv), Master of Landscape Architecture (MLArch), 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 Real Property 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 the Built Environment (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.

(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.

*\*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.*

### **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 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
  - (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 represent 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 Architecture (MArch)**

1. The degree of Master of Architecture may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced research and study in a selected area of specialisation.

## Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor of minimum 4 years 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 the Built Environment (hereinafter referred to as the Committee).

(2) Further to (1), candidates wishing to pursue a specialisation in architectural design are required to hold such Bachelors degree in Architecture at Honours level and have had at least one year's professional practice of a kind acceptable to the Committee subsequent to graduation. In addition, in order to gain admission to the program, all such candidates are required to submit and have approved a portfolio which demonstrates the nature and quality of their past architectural design work.

(3) 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.

(4) If the Committee is not wholly satisfied with the qualifications held by an applicant, taking due notice of the intended area of specialisation, 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) Along with that formal application, candidates are required to submit a proposed Program of Study, identifying the selected area of specialisation and the proposed sequence of subjects to be taken.

(3) A candidate for the degree shall be required to undertake such formal subjects 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 until the lapse of two academic sessions from the date of enrolment.

## Graduate Research Thesis

4. (1) In general, the Graduate Research Thesis would not be commenced until an adequate grounding in the candidate's area of specialisation has been established through the study of appropriate core and elective subjects.

(2) The work shall be carried out under the direction of a supervisor appointed from the fulltime academic members of the University staff.

(3) The candidate shall give in writing to the Registrar two months notice of intention to submit a Research Thesis.

(4) Three copies of the Research Thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of Research Theses for higher degrees.

(5) It shall be understood that the University reserves the right to retain the three copies of the Research Thesis submitted for examination and is free to allow it to be consulted or borrowed. Subject to the provisions of the Copyright Act 1968, the University may issue the Research Thesis in whole or in part, in microfilm or other copying medium.

### Examination

5. (1) There shall be not fewer than two examiners of the Research Thesis, appointed by the Committee.
- (2) Arrangements may be made by the School for oral presentation and defence of the Research Thesis as part of the examination.
- (3) At the conclusion of the examination, each examiner shall submit to the Committee a concise report on the Research Thesis and shall make one of the following recommendations:
  - (a) the Research Thesis be noted as satisfactory; or
  - (b) the Research Thesis be noted as satisfactory subject to minor corrections being made to the satisfaction of the Head of School; or
  - (c) the Research Thesis be noted as unsatisfactory and the candidate permitted to resubmit it in a revised form after a further period of study and/or research; or
  - (d) the Research Thesis be noted as unsatisfactory and the candidate be not permitted to resubmit it.
- (4) The Committee shall, after considering the examiners' reports, the candidate's results of assessment in the prescribed formal subjects, and their performance in Graduate Seminars, recommend (or otherwise) that the candidate be awarded the degree. If it is decided that the Research Thesis 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 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 the Built Environment (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 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) 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 candidate 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 the Built Environment (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

4. 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), 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 the Built Environment (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 the Built Environment (Sustainable Development) (MBEnv(SustDev))

1. The degree of Master of the Built Environment (Sustainable Development) may be awarded by the Council to a candidate who has completed an approved program of advanced study.

### Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor of minimum four 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 the Built Environment (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.

### Fees

4. 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)

## Master of Engineering or Master of Science by research

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 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.

(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.

*Note: \*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.*

### 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
  - (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 represent 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.

*\* Or a 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.*

## 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 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. 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 represent 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 the Built Environment (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 candidate 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 Real Estate (MRE)**

1. The degree of Master of Real Estate 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 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 Higher Degree Committee of the Faculty of The Built Environment (hereinafter referred to as the Committee). Candidates will be required to show that they have had adequate training in building construction and computers to cope with the course.

(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 who undertakes the course parttime 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 six sessions for a candidate undertaking the

program at Honours level. Those students who undertake the course full-time may complete at the Pass level in two sessions and at the Honours level in three sessions.

### **MRE (Hons)**

4. (1) A candidate who obtains a grade average of Credit or better in the formal subjects in 3(2) may undertake a thesis on a approved topic, to be considered for the award of the MRE with Honours.

(2) The work shall be carried out under the direction of a supervisor appointed from the fulltime academic members of the University staff. The supervision will be vigorous. Candidates will be required to conduct at least one seminar on their work and have at least one paper published prior to the submission of their thesis. Candidates will be expected to participate in the academic life of the Faculty of The Built Environment.

(3) The candidate shall give in writing to the Registrar two months notice of intention to submit the thesis.

(4) 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 project reports for higher degrees.

(5) 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 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 thesis, appointed by the Committee.

(2) Arrangements shall be made for oral presentation and defence of the thesis 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 thesis be noted as satisfactory, or

(b) the thesis be noted as satisfactory subject to minor corrections being made to the satisfaction of the head of the school, or

(c) the thesis 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 thesis 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 candidate be awarded the degree at Pass or Honours level. If it is decided that the thesis 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 Urban Development and Design (MUDD)

1. The degree of Master of Urban Development and 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 the Built Environment (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 four calendar months before the commencement of the session in which the enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessments as prescribed.

(3) The progress of a candidate shall be reviewed at the end of each academic session/term of the program and 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 and one summer term from the date of enrolment. The maximum period of enrolment shall be five academic sessions and two summer terms) from the date of enrolment. 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.

## Graduate Diploma (GradDip)

1. A Graduate Diploma 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 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.

## **Graduate Diploma in Built Environment (Sustainable Development) (GradDipBEnv)**

1. The Graduate Diploma in Built Environment (Sustainable Development) may be awarded by the council on the recommendation of the Higher Degree Committee of the Faculty of Built Environment (hereinafter referred to as the Committee) to a candidate who has satisfactorily completed a program of 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 Faculty of the Built Environment (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 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 eight sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

### **Fees**

5. A candidate shall pay such fees as may be determined from time to time by the Council. Graduate Diploma of Real Estate (GradDipRE)

1. The Graduate Diploma of Real Estate 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 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 Faculty of the Built Environment (hereinafter referred to as the Committee). Candidates will be required to show that they have had adequate training in building construction and computers to cope with the course.

(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 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 it 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) An approved candidate shall be enrolled in part or fulltime attendance at the University.

(3) A candidate for the degree shall be required to undertake such formal subjects 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 diploma until the lapse of two academic sessions, from the date of enrolment, for full-time students and four sessions for part-time students

### **Fees**

4. A candidate shall pay such fees as may be determined from time to time by the Council.

## **Graduate Diploma of Valuation (GradDipVal)**

1. The Graduate Diploma of Valuation 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 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 Faculty of the Built Environment (hereinafter referred to as the Committee). Candidates will be required to show that they have had adequate training in building construction and computers to cope with the course.

(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 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 it 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) An approved candidate shall be enrolled in part or fulltime attendance at the University.

(3) A candidate for the degree shall be required to undertake such formal subjects 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 diploma until the lapse of two academic sessions from the date of enrolment, for full-time students and four sessions for part-time students.

### **Fees**

4. A candidate shall pay such fees as may be determined from time to time by the Council.

## **Graduate Certificate in Sustainable Development (GradCertBEnv)**

1. The Graduate Certificate in Sustainable Development may be awarded by the council on the recommendation of the Higher Degree Committee of the Faculty of Built Environment (hereinafter referred to as the Committee) to a candidate who has satisfactorily completed a program of study.

### **Qualifications**

2. (1) A candidate for the Certificate shall have been awarded a degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution

(2) In exceptional cases an applicant who submits evidence of other such academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the Certificate.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to 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 Certificate shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before commencement of the session in which enrolment is to begin.

(2) A candidate for the Certificate 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 Certificate until the lapse of two academic sessions from the date of enrolment. The maximum period of candidature shall be six academic sessions from the date of enrolment. In special cases an extension of time 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.





The scholarships listed below are available to students whose courses are listed in this book. Each Faculty Handbook contains in its scholarships section the scholarships available for study in that Faculty. Travel scholarships are shown separately. Applicants should note that the scholarships and their conditions are subject to review and the closing dates for awards may vary from year to year.

Scholarship information is regularly included in the University publication 'Uniken/Focus' and updated on the UNSW Web site <http://www.unsw.edu.au/information>.

Students investigating study opportunities overseas should also consult Study Abroad which is published by UNESCO and is available in the University library. The British Council (02 9326 2365) may be of assistance for information about study in Britain. The Australian-American Education Foundation (02 6247 9331) or the U.S. Consulate General Educational Advising Centre (02 9373 9230) can provide information about study in America. Information may also be obtained from the embassy or consulate of the country in which the study is proposed and from the proposed overseas institution. Details of overseas awards and exchanges administered by the Department of Employment, Education, Training and Youth Affairs (DEETYA) can be obtained from the Awards and Exchanges Section, DEETYA, PO Box 826, Woden, ACT 2606.

## KEY

- L** Students with Australian Citizenship or Permanent Resident status can apply.
- I** International students can apply.

**Postgraduate scholarships for research or coursework are identified with the following codes:**

- R** Available for study by research (normally Masters by Research or PhD).
- C** Available for study by coursework (normally Masters by Coursework or Graduate Diploma).

The scholarship information is normally provided in the following format:

- Amount
- Duration
- Conditions

Unless otherwise stated, application forms are available from the Scholarships and Student Loans Unit, c/- the Student Centre (Lower Ground Floor, Chancellery). Applications normally become available four to six weeks before the closing date.

## Undergraduate Scholarships

Following are details of scholarships available to undergraduate students at UNSW. The scholarships are listed according to the year of study for which the scholarship is available (i.e. scholarships for first year students; scholarships for second or later year students; scholarships for Honours year students) or whether they are available to undertake travel, and then also by Faculty and course (e.g. scholarships in Science or Engineering). If students from more than one Faculty are able to apply the scholarship is listed in the General Scholarships section.

For further information contact:

**The Scholarships and Student Loans Unit  
The University of New South Wales  
Sydney 2052 Australia**

**Tel (02) 9385 3100/3101/1462**

**Fax (02) 9385 3732**

**Email: [scholarships@unsw.edu.au](mailto:scholarships@unsw.edu.au)**

## Scholarships for students entering the first year of an undergraduate course

### General First Year

#### The Alumni Association Scholarships (I,L)

- Up to \$1,500 pa
- 1 year, renewable subject to satisfactory progress

The scholarships are available to students enrolled in any year of a full-time undergraduate course. Candidates must be the children or grandchildren of alumni of the University of New South Wales. Applications close early January.

#### The Australian Development Co-operation Scholarship (ADCOS) (I)

- Tuition fees. Some students may be eligible for airfares and a stipend.
- Determined by normal course duration

This award is for international students from selected countries only. Information and application forms can only be obtained from the Australian Education Centre or Diplomatic Post in the home country. The award conditions and entitlements vary depending on the home country. The closing date is normally early in the year before the year of study.

#### The Australian Vietnam Veterans Trust Education Assistance Scheme (L)

- \$3,500 pa
- Duration of the course

Applicants must be children of a Vietnam veteran and under the age of 25 at the time of application. The award is subject to the same income test as AUSTUDY. Applicants can be undertaking any year of a Bachelor's course. Applications and further information are available from the Australian

Vietnam War Veterans Trust National Office, PO Box K978, Haymarket NSW 2000. Tel (02) 9281 7077. Applications close 31 October.

#### The Ben Lexcen Sports Scholarships (I,L)

- \$2,000 pa
- 1 year with possibility of renewal

The scholarships are 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. Applications close late January.

#### The Co-Op Program (L)

- \$10,400 pa and between 9 and 20 months industry training
- The duration of the course subject to satisfactory progress

The scholarships are offered by industry groups through the University for most disciplines in Applied Science, Commerce and Economics and Engineering. Scholars are selected by interview with emphasis placed on achievements in community and extra-curricular activities as well as communication and leadership skills. A minimum TER of around 90 is expected. The Co-Op application form is available from school Careers Advisers or the Co-op Office on (02) 9385 5116. Applications close September 30 with interviews held at the end of November and beginning of December.

#### The Girls Realm Guild Scholarships (L)

- Up to \$1,500 pa
- 1 year with the prospect of renewal subject to satisfactory progress and continued demonstration of need

The scholarships are available to female students under 35 years of age who are enrolling in any year of a full-time undergraduate course. Selection is based on academic merit and financial need. Applications close 25 March.

### **The Ian Somervaille Scholarships (I,L)**

- Up to \$3,000
- 1 year

The scholarships are available to immediate family members (i.e. children, parents, brothers or sisters) of UNSW staff members or their married or de facto partners. Applicants must be full-time students enrolling in any year of an undergraduate course leading to the degree of Bachelor at UNSW. Selection will be based on academic merit, aptitude and commitment to the proposed course. Consideration may be given in cases of hardship or disadvantage. Applications close 31 January.

### **The John Niland Scholarships (L)**

- \$5,000
- 1 year

The scholarship provides assistance to enhance the opportunity of students from country high schools in Australia to enrol in an undergraduate program of study at UNSW. Applicants will be students who complete the HSC (or its counterpart matriculation requirement) in the top five per cent of their state-wide cohort, having been enrolled at a country high school in Australia. Selection will be based on academic merit, potential to contribute to the wider life of the University and consideration of social and/or economic circumstances which might otherwise hinder successful transition to UNSW. Applications close 30 October.

### **The Malcolm Chaikin Scholarship (L)**

- \$15,000 pa
- Renewable for the duration of the course subject to satisfactory progress

The scholarship is available to students entering the first year of a Bachelor of Science or Engineering in the Faculties of Life Sciences, Science and Technology, or Engineering. Selection will take into account academic merit and interview performance. Applications close early January.

### **The National Health and Medical Research Council (NHMRC) Training Scholarship for Aboriginal Health Research (L,R)**

- \$15,637–\$23,257 pa (depending on qualifications)
- Up to 3 years

Applicants must be undertaking an undergraduate or postgraduate degree which includes, or leads to, research relevant to Aboriginal health. Applications will be assessed

in terms of previous qualifications and experience with particular weight given to prior knowledge and experience of Aboriginal culture and health. Applications close late July.

### **The New South Scholarships (L)**

- \$5,000 pa
- Up to 3 years subject to satisfactory progress

The scholarships are available to students commencing the first year of undergraduate study at UNSW. The Scholarships will be awarded taking into account academic achievement, including potential for study in a discipline of the University. No application form is required. As all students who attempt the HSC (or equivalent) will be automatically considered for the scholarship, no application is needed. The award is extremely competitive and it is expected that the successful applicant(s) will be in the top 2% of candidates.

### **The Ngunnagan Club Scholarship (L)**

- Up to \$2,000
- 1 year

The scholarship is available to students enrolled at an Australian country high school who complete the HSC (or its counterpart matriculation requirement) in the top five per cent of their state cohort. Applicants should complete an official application form by 31 October in the year prior to their intended enrolment at UNSW. Final performance in the HSC (or its counterpart matriculation) examination should be reported to the Scholarships and Student Loans Unit once known.

### **UNSW-HECS Equity Awards (L)**

- HECS liability
- Duration of the course, subject to satisfactory progress

In 1997, the scholarships were offered for full-time undergraduate study to applicants who achieved a TER of at least 90 in the HSC (or equivalent), and were in receipt of ABSTUDY or full AUSTUDY, and expected to be in receipt of these benefits while studying at UNSW. Applications from such students in 1997 closed in early December 1996. UNSW Access Scheme applicants were automatically considered. The conditions for the 1998 awards have not yet been determined. More information should be available in November 1997.

### **The Vice-Chancellor's Equity Scholarships (L)**

- \$1,500 pa
- 1 year

In 1997, over 40 scholarships were awarded for financially disadvantaged students commencing full-time undergraduate study. Applicants must have applied, and be deemed eligible, for the UNSW Access Scheme, with

financial disadvantage as one of the grounds for eligibility. Selection was also based on academic merit. The conditions for the 1998 awards have not yet been determined. More information should be available in November 1997.

### **The WS and LB Robinson Scholarship (L)**

- Up to \$6,500 pa
- 1 year renewable for the duration of the course subject to satisfactory progress

Applicants must have completed their schooling in Broken Hill or have parents who reside in Broken Hill. Applicants should be undertaking a course related to the mining industry, for example courses in mining engineering, geology, electrical and mechanical engineering, metallurgical process engineering, chemical engineering or science. A letter of application should be sent to Pasminco Mining, PO Box 460, Broken Hill, NSW 2880. Applications close 30 September each year.

---

## **Faculty First Year**

---

### **Faculty of the Built Environment**

#### **The Paul White/Concrete Constructions Scholarship (L)**

- At least \$1,000
- 1 year

The scholarship is available to students who complete the HSC (or its counterpart matriculation requirement) having been enrolled at a high school in Australia and are seeking to enrol in the Faculty of the Built Environment. Selection will be based on academic merit, potential to contribute to the wider life of the university and may consider financial circumstances. Applications close 31 October.

---

## **Scholarships for students in their second or later year of study**

---

### **General Second Year or Later**

#### **The Alumni Association Scholarships (I,L)**

- Up to \$1,500 pa
- 1 year, renewable subject to satisfactory progress

The scholarships are available to students enrolled in any year of a full-time undergraduate course. Candidates must be the children or grandchildren of alumni of the University of New South Wales. Applications close early January.

#### **The Australian Vietnam Veterans Trust Education Assistance Scheme (L)**

- \$3,500 pa
- Duration of the course

Applicants must be children of a Vietnam veteran and under the age of 25 at the time of application. The award is subject to the same income test as AUSTUDY. Applicants can be undertaking any year of a Bachelors course. Applications and further information are available from the Australian Vietnam War Veterans Trust National Office, PO Box K978, Haymarket NSW 2000. Tel (02) 9281 7077. Applications close 31 October.

#### **The Ben Lexcen Sports Scholarships (I,L)**

- \$2,000 pa
- 1 year with possibility of renewal

The scholarships are 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. Applications close late January.

#### **The Girls Realm Guild Scholarship (L)**

- Up to \$1,500 pa
- 1 year with the prospect of renewal subject to satisfactory progress and continued demonstration of need

The scholarships are available only to female students under 35 years of age who are enrolling in any year of a full-time undergraduate course. Selection is based on academic merit and financial need. Applications close 25 March.

#### **The Dried Fruits Research and Development Council (DFRDC) Studentships and Student Awards (I,L)**

- Up to \$3,000 for Studentships, up to \$1,000 for Student Awards

The Studentships assist students to undertake research projects in the final year studies of a Bachelors degree (applications close April 15), or to undertake a research project during the summer vacation (applications close October 15). The Student Awards are provided for excellence in student research projects related to the dried fruit industry. Further information and applications are available from the Executive Officer, Dried Fruits Research and Development Council, Box 1142, Mildura VIC 3502. Tel (050) 221515, Fax (050) 233321.

### **The Esso Australia Ltd Geosciences Scholarship (I,L)**

- Up to \$3,000
- 1 year

The scholarship is for a full-time student seeking to undertake study in the final year (Stage 4) of a Bachelor of Science degree in Applied Geology or an equivalent Honours year, majoring in geology or geophysics. The successful applicant is expected to have an interest in petroleum related studies i.e. sedimentology, biostratigraphy, seismic/magnetic/gravity geophysical studies, basin studies, palynology or palaeontology. Selection is based on academic merit, the benefit the student will gain by being awarded the scholarship and can include consideration of financial need. Applications close 30 November.

### **The Ian Somervaille Scholarships (I,L)**

- Up to \$3,000
- 1 year

The scholarships are available to immediate family members (i.e. children, parents, brothers or sisters) of UNSW staff members or their married or de facto partners. Applicants must be full-time students enrolling in any year of an undergraduate course leading to the degree of Bachelor at UNSW. Selection will be based on academic merit, aptitude and commitment to the proposed course. Consideration may be given in cases of hardship or disadvantage. Applications close 31 January.

### **The National Health and Medical Research Council (NHMRC) Training Scholarship for Aboriginal Health Research (L,R)**

- \$15,637–\$23,257 pa (depending on qualifications)
- Up to 3 years

Applicants must be undertaking an undergraduate or postgraduate degree which includes, or leads to, research relevant to Aboriginal health. Applications will be assessed in terms of previous qualifications and experience with particular weight given to prior knowledge and experience of Aboriginal culture and health. Applications close late July.

### **The Nicholas Catchlove Scholarship in Flying (L)**

- \$10,000 pa
- 1 year

The scholarship will be awarded to provide a final year student with the opportunity to undertake further flying training to prepare for a career in the aviation industry. Applicants must be proposing to undertake the final year of an appropriate course and hold a Commercial Pilot's Licence. Selection will be based on academic merit, reasons for undertaking the course, financial need, commitment to flying and to the course, demonstrated ability and leadership qualities, and interview performance. Applications close October.

### **The NSW Farmers Association EL O'Brien Scholarship (L)**

- Up to \$2,000 pa
- 1 year

The NSW Farmers Association is offering a scholarship for a student entering Year 4 of the Wool and Pastoral Sciences course. Applicants must be members, or children of members of the Association. Applications close early March.

### **The NSW Ministry for the Arts Scholarships (L,R,C)**

- \$5,000–\$25,000 (depending on the award)

The NSW Government offers a number of scholarships and awards to writers, artists and scholars living in NSW. Further information is available from the New South Wales Ministry for the Arts, GPO Box 5341, Sydney NSW 2000. Tel (02) 9228 3533, Fax (02) 9228 4722.

### **The RGC Scholarship in Economic Geology (L)**

- \$5,000
- 1 year

The scholarship is available to a student entering Stage 4 of the Applied Geology course or an Honours year in geology in the Science course, undertaking a field project relevant to economic geology. Letters of application and requests for information should be directed to RGC, Gold Fields House, 1 Alfred St, Sydney NSW 2000. Applications close 31 January.

### **The Sam Cracknell Memorial Scholarships (I,L)**

- Up to \$1,500 pa
- 1 year

Applicants should have already completed at least 2 years of a degree or diploma course and be enrolled in a full-time course during the year of application. Selection is based on academic merit, participation in sport both directly

and administratively and financial need. Applications close 31 March.

### **The Spruson and Ferguson (Patent Attorneys) Scholarship for Innovation (L)**

- At least \$1,000
- 1 year

The scholarship is available to students undertaking the final year of an undergraduate course in any school of the Faculty of Science and Technology or the Faculty of Engineering. Selection will be based on academic merit and the innovative nature of the proposed final year project. Applicants are required to submit an application and a 200 word outline of their proposed research topic. Applications close 7 March.

### **The Telstra Education Fellowships (L)**

- \$7,500
- 1 year

Applicants must be entering the final year of study in the disciplines of computer, electrical or electronic engineering, computer science or human factors. Students may also have the opportunity to undertake up to 12 weeks non-compulsory vacation employment. Further information is available from the Fellowship Applications Officer, Telstra Research Laboratories, Box 249, Rosebank MDC, Clayton Victoria 3169. Email: c.zaman@trl.telstra.com.au. Applications normally close at the end of July.

## **Honours Year Scholarships**

### **General Honours Year**

#### **The Alumni Association Scholarships (I,L)**

- Up to \$1,500 pa
- 1 year, renewable subject to satisfactory progress

The scholarships are available to students enrolled in any year of a full-time undergraduate course. Candidates must be the children or grandchildren of alumni of the University of New South Wales. Applications close early January.

#### **The Apex Foundation for Research into Intellectual Disability Studentships (I,L)**

- \$1,000

The studentships are available to students preparing a thesis related to intellectual disability. Applications should

### **The WS and LB Robinson Scholarship (L)**

- Up to \$6,500 pa
- 1 year renewable for the duration of the course subject to satisfactory progress

Applicants must have completed their schooling in Broken Hill or have parents who reside in Broken Hill. Applicants should be undertaking a course related to the mining industry, for example courses in mining engineering, geology, electrical and mechanical engineering, metallurgical process engineering, chemical engineering or science. A letter of application should be sent to Pasminco Mining, PO Box 460, Broken Hill, NSW 2880. Applications close 30 September each year.

## **Faculty Second Year or Later**

### **Faculty of the Built Environment**

#### **The Woods Bagot Scholarship (I,L)**

- \$1,000 pa
- 2 years

The scholarship may be awarded to a student undertaking full-time study in Year 4 of the Bachelor of Architecture program. The scholarship will be awarded on the basis of a number of factors including academic performance. Applications close early April.

be in the form of a letter which includes a curriculum-vitae and thesis plan and must be supported by a letter from the Head of School/Department. Applications should be sent to the Honorary Secretary, Apex Foundation Studentships, PO Box 311, Mt Evelyn Vic 3796. Applications close 31 May.

#### **The Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART) Student Award (I,L)**

- \$1,000 for attendance at the annual conference

Applicants can be Honours students from any discipline. The award provides assistance for a student to attend the annual conference. Applications are available from ANZCCART, PO Box 19 Glen Osmond, SA, 5064. Tel (08) 303 7325. Applications close July.

### **The Australian Vietnam Veterans Trust Education Assistance Scheme (L)**

- \$3,500 pa for the duration of the course

Applicants must be children of a Vietnam veteran and under the age of 25 at the time of application. The award is subject to the same income test as AUSTUDY. Applicants can be undertaking any year of a Bachelors course. Applications and further information are available from the Australian Vietnam War Veterans Trust National Office, PO Box K978, Haymarket NSW 2000. Tel (02) 9281 7077. Applications close 31 October.

### **The Ben Lexcen Sports Scholarships (I,L)**

- \$2,000 pa
- 1 year with the possibility of renewal

The scholarships are 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. Applications close late January.

### **The Esso Australia Ltd Geosciences Scholarship (I, L)**

- Up to \$3,000
- 1 year

The scholarship is for a full-time student seeking to undertake study in the final year (Stage 4) of a Bachelor of Science degree in Applied Geology or an equivalent Honours year, majoring in geology or geophysics. The successful applicant is expected to have an interest in petroleum related studies i.e. sedimentology, biostratigraphy, seismic/magnetic/gravity geophysical studies, basin studies, palynology or palaeontology. Selection is based on academic merit, the benefit the student will gain by being awarded the scholarship and can include consideration of financial need. Applications close 30 November.

### **The Girls Realm Guild Scholarships (L)**

- Up to \$1,500 pa
- 1 year with the prospect of renewal subject to satisfactory progress and continued demonstration of need

The scholarships are available only to female students under 35 years of age who are enrolling in any year of a full-time undergraduate course. Selection is based on academic merit and financial need. Applications close 25 March.

### **The Grains Research and Development Corporation (GRDC) Undergraduate Honours Scholarship (I,L)**

- \$6,000 (i.e. \$5,000 to the student and \$1,000 to the host School/Department).
- 1 year

Applicants must be undertaking a full-time Honours program. Study in an area of significance to the grains industry will be viewed favourably. A letter of application, including a curriculum-vitae, academic record, letter of support from the Head of School/Department and two referees' supporting statements, should be sent to GRDC Undergraduate Honours Scholarship, PO Box E6, Queen Victoria Terrace, Canberra ACT 2600. Tel (02) 62725528. Applications close late November.

### **The Great Barrier Reef Marine Park Authority Research Support (I,L)**

- \$1,500

Applicants must be undertaking a full-time Honours year or PhD research project that could contribute to the planning and managing work undertaken by the Great Barrier Reef Marine Park Authority. Applications and further information may be obtained from the Executive Officer, Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville QLD 4810. Tel (077) 818811. Applications close mid-December.

### **The Ian Somerville Scholarships (I,L)**

- Up to \$3,000
- 1 year

The scholarships are available to immediate family members (i.e. children, parents, brothers or sisters) of UNSW staff members or their married or de facto partners. Applicants must be full-time students enrolling in any year of an undergraduate course leading to the degree of Bachelor at UNSW. Selection will be based on academic merit, aptitude and commitment to the proposed course. Consideration may be given in cases of hardship or disadvantage. Applications close 31 January.

### **The National Health and Medical Research Council (NHMRC) Training Scholarship for Aboriginal Health Research (L,R)**

- \$15,637–\$23,257 pa (depending on qualifications)
- Up to 3 years

Applicants must be undertaking an undergraduate or postgraduate degree which includes, or leads to, research relevant to Aboriginal health. Applications will be assessed in terms of previous qualifications and experience with particular weight given to prior knowledge and experience of Aboriginal culture and health. Applications close late July.

### **The NSW Ministry for the Arts Scholarships (L,R,C)**

- \$5,000–\$25,000 (depending on the award)

The NSW Government offers a number of scholarships and awards to writers, artists and scholars living in NSW. Further information is available from the New South Wales Ministry for the Arts, GPO Box 5341, Sydney NSW 2000. Tel (02) 9228 3533, Fax (02) 9228 4722.

### **The RGC Scholarship in Economic Geology (L)**

- \$5,000
- 1 year

The scholarship is available to a student entering Stage 4 of the Applied Geology course or an Honours year in geology in the Science course and undertaking a field project relevant to economic geology. Letters of application and requests for information should be directed to RGC, Gold Fields House, 1 Alfred St, Sydney NSW 2000. Applications close 31 January.

### **The River Basin Management Society Ernest Jackson Memorial Research Grants (I,L)**

- Up to \$2,000

Grants are available to assist students undertaking research projects in any field of study allied to river basin management. Applications close April.

### **The RSPCA Alan White Scholarship (I,L)**

- \$2,500

Applicants should be undertaking original research to improve the understanding and welfare of animals. A letter of application should be sent to the Executive Officer, RSPCA Australia, PO Box E369, Queen Victoria Terrace, Canberra ACT 2600. Tel (02) 62311437. Applications close 31 March.

### **The Sam Cracknell Memorial Scholarship (I,L)**

- Up to \$1,500 pa
- 1 year

Applicants should be full-time students who have already completed at least 2 years of a degree or diploma course. Selection is based on academic merit, participation in sport both directly and administratively, and financial need. Applications close 31 March.

### **The University Honours Year Scholarships (I,L)**

- \$1,000
- 1 year

A number of scholarships will be awarded on the basis of academic merit for students entering an 'add-on' honours year, i.e. the honours year in a degree course which is normally a pass degree but which has the option of a further year of study at Honours level. Applications close 30 November.

### **The WS and LB Robinson Scholarship (L)**

- Up to \$6,500 pa
- 1 year renewable for the duration of the course subject to satisfactory progress

Applicants must have completed their schooling in Broken Hill or have parents who reside in Broken Hill. Applicants should be undertaking a course related to the mining industry, for example courses in mining engineering, geology, electrical and mechanical engineering, metallurgical process engineering, chemical engineering or science. A letter of application should be sent to Pasminco Mining, PO Box 460, Broken Hill, NSW 2880. Applications close 30 September each year.

---

## **Travel Scholarships**

---

### **General Travel**

#### **The Arthur Anderson Study Abroad Scholarship (L)**

- Up to \$2,500

The scholarship is to provide financial assistance to undergraduate students to undertake a period of study/research in Arthur Anderson offices in Singapore.

Applicants must be full-time students undertaking study in law, commerce, or economics. Applicants must normally be intending to undertake the final year of study and to complete the travel prior to completion of the final year. Applications are also open to students undertaking an official exchange program with relevant universities in Asia who are able to undertake research/study in the Singapore office of Arthur Anderson. Applications normally close 31 July in the year prior to the final year of study.



### **The Association of International Education Japan (AIEJ) Short-Term Student Exchange Promotion Program (Inbound) Peace and Friendship Scholarships (I,L)**

- 50,000 yen (settling-in allowance), 100,000 yen per month, plus airfare
- Ten months to one year

Applicants must be accepted by a Japanese university under a student exchange program agreement with UNSW. Students must initially apply directly to a Japanese university through the International Student Centre at UNSW. The Japanese host university will recommend candidates to AIEJ and students must apply as directed by the host university. Applications close February, May and September each year.

### **The Association of International Education Japan (AIEJ) Short-Term Student Exchange Promotion Program (Inbound) Scholarships (I,L)**

- 50,000 yen (settling-in allowance), 80,000 yen per month, plus airfare
- Six months to one year

Applicants must be accepted by a Japanese university under a student exchange program agreement with UNSW. Students must initially apply directly to a Japanese university through the International Student Centre at UNSW. The Japanese host university will recommend candidates to AIEJ and students must apply as directed by the host university. Applications close February, May and September each year.

### **The AT&T Leadership Award (I,L,R,C)**

- US\$5,000

The award is open to students who will be commencing full-time undergraduate or postgraduate study in the United States between January and September in the year of application. The scholarship is open to students from the following Asia/Pacific countries: Australia, China, Hong Kong, India, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand. Information and applications are available from the U.S. Consulate General, USIS, Level 59 MLC Centre, 19–20 Martin Place, Sydney NSW 2000. Tel (02) 9662 3016. Applications close 15 September.

### **The Australia-Korea Foundation/National Korean Studies Centre Exchange Scholarships (L)**

- Up to \$2,500

The Scholarships provide financial assistance to undergraduate students who have been accepted as exchange students by a Korean university. Information and

applications are available from the Programs Coordinator, National Korean Studies Centre, PO Box 218, Hawthorn Vic 3122. Email: nksc@swin.edu.au. Applications close early January.

### **The Australia-Korea Foundation Undergraduate Bursaries (L)**

- \$1,000
- 1 year

Bursaries are available for students commencing the first year of an undergraduate course intending to study Korean language. Information and applications are available from the Programs Coordinator, National Korean Studies Centre, PO Box 218, Hawthorn Vic 3122. Email: nksc@swin.edu.au. Applications close in December.

### **The Cambridge and Harvard Travel Scholarships (L)**

- \$15,000 contribution towards fees, travel and living expenses
- One-off payment

The scholarship will be awarded by the Vice-Chancellor on the basis of recommendations from the Deans of the Faculties. Candidates must have an impressive record, having completed at least 2 years full-time (or the part-time equivalent) of an undergraduate course at the University of New South Wales. Applications for travel to Harvard University are available from the Scholarships and Student Loans Unit. Applications close mid-November for travel the following year. Cambridge Travel Scholarships have not yet been finalised.

### **Churchill Fellowships (L)**

- Tuition, travel and living allowances

Churchill Fellowships provide financial support for Australian Citizens to undertake study, training or projects overseas that offer special advantage over those in Australia. Fellowships will not normally be awarded for higher academic or formal qualifications. Applicants must be over 18 years of age. Further information and applications are available from the Chief Executive Officer, The Winston Churchill Memorial Trust, 218 Northbourne Ave, Braddon ACT 2612. Tel (02) 6247 8333. Applications close late February.

### **DAAD – The German Academic Exchange Service Scholarships (L)**

Application forms for the following scholarships are available from the Consulate General of the Federal Republic of Germany, PO Box 204, Woollahra NSW 2025.

#### **One-Semester German Studies Scholarships**

- DM1,000 a month living allowance, travel assistance of DM2,500 and the health insurance contribution

- One semester

Applicants must be in their third year of German Studies. Applications close 1 July.

#### **Deutschlandkundlicher Winterkurs**

- DM3,500 to assist with travel and living expenses and course fees

Undergraduate and postgraduate students from all fields with at least two years University level German (with a better than B average) may apply for this scholarship. The students should be aged from 19 to 32 and proposing to undertake the 8 week German studies course (in German) at the University of Freiburg. The course provides language instruction and concentrates on historical and cultural aspects of contemporary Germany for students with some knowledge of German and a background in German Studies. Applications close 1 August.

#### **The International Exchange Travel Scholarships (L)**

- Up to \$1,500 pa
- 1 year

The scholarships were established to encourage UNSW students to participate in the University's formal international exchange programs. Students must be undergraduates embarking on a period of study overseas which will count toward their UNSW degree. Awards will be granted on the basis of academic merit. Further information is available from the International Student Centre. Tel (02) 9385 5333.

#### **The Japanese Government (Monbusho) Scholarships (L)**

Scholarships are available to Australian citizens for study in Japan in the following areas: Japanese Studies, In-Service Training for Teachers, Research, Undergraduates. Applicants must be willing to study the Japanese language and receive instruction in Japanese. Further information and applications are available from Monbusho Scholarships, Embassy of Japan, 112 Empire Circuit, Yarralumla ACT 2600. Tel (02) 6273 3244, Fax (02) 6273 1848. Applications close April (for Japanese Studies and Teacher Training) and July (for Research and Undergraduate scholarships).

#### **The Malcolm Chaikin Overseas Exchange Scholarship (L)**

- \$3,000
- 1 year

A scholarship is available for a third year student in a Science or Engineering degree program in the Faculty of Life Sciences, Science and Technology or Engineering. Applicants must be undertaking an overseas exchange program through the International Student Centre.

Applications close late June. It is expected that the first scholarship will be awarded in 1999.

#### **The Mitsui Education Foundation Scholarship (L)**

A one month scholarship to Japan is available to a young Australian national to help promote goodwill between the two countries. Candidates should be full-time undergraduate students aged between 20 and 24, and preferably in their third or fourth year. The successful student will travel to Japan during November and December. Application forms close mid-July.

#### **The NSW Travelling Art Scholarship (L)**

- \$25,000

The scholarship is available to an emerging visual artist to undertake a course of study or training overseas for one or two years. Guidelines and applications are available from the NSW Ministry for the Arts, GPO Box 5341, Sydney 2001. Tel (02) 9228 5533. Applications normally close in July.

#### **Queen's Trust Grants (L)**

- Up to \$15,000

The Queen's Trust provides grants to Australian Citizens aged 18-28 years, for the pursuit of excellence in their chosen fields. Projects are supported for the advancement of Australian youth, development of community leadership and/or other skills which will be of benefit to Australia. Information and applications may be obtained from the Queen's Trust. Tel 1800 033 625. Applications close late April.

#### **The RC Sutton/Jardine Matheson Scholarship (L)**

- Up to \$1,000

The scholarship is to provide financial assistance to undergraduate students to undertake a period of study/research in R.C. Sutton/ Jardine Matheson offices in Asia. Applicants must be full-time students undertaking study in law, commerce, or economics. Applicants must normally be intending to undertake the final year of study and to complete the travel prior to completion of the final year. Applications are also open to students undertaking an official exchange program with relevant universities in Asia who are able to undertake research/study in an Asian office of R.C. Sutton/ Jardine Matheson. Applications normally close 31 July in the year prior to the final year of study.

#### **The Rotary Foundation Ambassadorial Scholarships (I,L)**

The Rotary Foundation offers scholarships to study or train in another country where Rotary clubs are located. Applicants must have completed at least two years of a university or college course, or have completed high school

and have been employed for at least two years. Applicants must also be citizens of a country in which there is a Rotary club. Information regarding scholarship availability, closing dates and applications should be obtained from the applicant's local Rotary club.

### **The Sir Charles Mackerras/Australia–Britain Society Music Scholarship (L)**

- 8,000 pounds sterling

The scholarship is open to outstanding young conductors, composers and répétiteurs, aged between 21 and 30 who are likely to be influential leaders in the field of music, to undertake study in the United Kingdom or the Czech republic for at least six months. Applicants must be Australian Citizens or Permanent Residents. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027. Tel (02) 9326 2022, Fax (02) 9327 4868, Email: bcsydney@sprint.com.au. Applications close early November.

### **The STA Travel Grant (I,L)**

- Up to \$1,500 (in 1998) and up to \$3,000 from 1999

Applicants must be undertaking study leading to a degree or diploma of the University and be members of the University Union. The grant is awarded on the basis of significant contribution to the community life of the University involving a leadership role in student affairs and the University Union and the relevance and merit of the proposed travel to the student's academic program or University Union activities. Applications close mid-April.

### **The Swedish Institute Guest Scholarships (I, L)**

- SEK 7,000 per month living allowance
- 9 months (1 academic year)

The scholarships are open to students and researchers who wish to travel to Sweden for study or research which cannot equally well be pursued in countries other than Sweden. Applicants must establish contact with a Swedish University willing to accept the applicant for the proposed studies. Initial requests for application forms must be made in writing, and should include name and address, nationality, educational background, work experience, knowledge of any languages, statement of the purpose of the study or research in Sweden, and a copy of a letter of invitation from a Swedish University Department. Applications are available from the Swedish Institute, Department for Educational and Research Exchange, PO Box 7434, S-103 91, Stockholm, Sweden. Email: grantinfo@si.se. Requests for application forms must reach the Swedish Institute before 1 December.

### **The Swiss Confederation Scholarships (L)**

A scholarship may be available from The Swiss Confederation for art studies (for example, painting, graphic design, sculpture, music) for one academic year. The scholarship will be awarded on the basis of academic merit and the possibilities for study in Switzerland. Applicants must have been born after 1 January 1962. The scholarship can only be allocated after the candidate has been accepted by a Swiss art school or conservatory. Applicants will be required to pass a language test in German or French. Applications close 1 December.

### **The Yokohama Scholarship Awards (L)**

- JPY 120,000 per month undergraduate, JPY 150,000 per month for postgraduate students, tuition fees, airfare plus allowances
- Up to 4 years (undergraduate), 1 year for Japanese language study, 2 years Masters, 3 years PhD

Applicants must be Australian Citizens who have submitted their application to, or been accepted by a Japanese university and be able to communicate in Japanese (or be willing to undertake intensive study of the Japanese language). All disciplines are eligible except for subjects in medicine, veterinary science and dentistry. The scholarship will be granted subject to the applicant's final acceptance by the chosen Japanese university. Original application forms only will be accepted and are available from the Scholarships and Student Loans Unit or from the Yokohama Scholarship Foundation. Tel (07) 5588 0880, Fax (07) 5588 0842. Applications close with the Foundation in early October.

---

## **Faculty Travel**

---

### **Faculty of the Built Environment**

#### **The Ronald Lu Travelling Scholarship in Architecture (I,L)**

- At least \$3,000 for travel to Asia

Applicants must be undertaking Year 3 or 4 of the Bachelor of Architecture degree. Applicants will be assessed on the basis of academic merit coupled with a statement outlining the reasons for their proposed travel and study. The scholarship will normally close June 1 each year, for travel to Asia during the long vacation period.

## Vacation Scholarships

Some Schools may offer scholarships for the long vacation period from December to February each year. Students should contact the relevant School office for information.

---

### General Vacation

#### The Australian Kidney Foundation Vacation Scholarships (I,L)

- Up to \$800
- 6–8 weeks

The scholarships are open to undergraduate students currently in Medicine or other courses related to Biological Science, who will have completed at least one year of full-time study. Research projects undertaken must be related to the kidney and the urinary tract, and carried out at university departments during the summer vacation period. Applications close early September.

#### The CSIRO Division of Marine Research Vacation Scholarships (I,L)

- Up to \$450 per week plus travel expenses
- 8 weeks between December and February

Applicants must be full-time undergraduate students who have completed not less than three years of their course. Research projects will be undertaken with the CSIRO Division of Marine Research at either Hobart, Cleveland or Marmion. Applications close early September.

#### The Dried Fruits Research and Development Council (DFRDC) Studentships (I,L)

- Up to \$3,000 for Studentships, up to \$1,000 for Student Awards

The Studentships assist students to undertake research projects during the summer vacation. Further information and applications are available from the Executive Officer, Dried Fruits Research and Development Council, Box 1142, Mildura VIC 3502. Tel (050) 221515, Fax (050) 233321. Applications close 15 October.

#### The Heart Foundation Vacation Scholarships

Scholarships are available for tenure during the long vacation period for research projects related to cardiovascular function and disease. Applicants should normally have completed at least two years of an appropriate degree course in the biological sciences. Preference will be given to applicants who have had little or no laboratory experience. Application guidelines become available from the Scholarships and Student Loans Unit in late July. Applications close early September.

#### The National Multiple Sclerosis Society of Australia Summer Vacation Scholarships (L,R)

- \$200 per week
- 6–8 weeks between November and March

The scholarships are open to undergraduates students who will have completed three years of an Honours degree in medicine, science, biological or health sciences. Research projects undertaken must be relevant to multiple sclerosis and carried out at university departments during the summer vacation period. Applications close mid-August.

#### The Novo Nordisk Student Research Scholarship (I,L)

- Between \$1,000 and \$1,500
- 6–9 weeks over the vacation period

Scholarships are available for diabetes-related research, at the Department of Endocrinology, Prince of Wales Hospital. The scholarship is open to students enrolled at any tertiary institution in Australia, however preference will be given to students enrolled in an undergraduate degree in Science or Medicine at UNSW. Selection will be based on interest in research into diabetes mellitus and academic performance. Further information is available from A/ Professor Bernie Tuch, Prince of Wales Hospital, Tel (02) 9382 4814. Applications close 31 October.

## Postgraduate Scholarships

Following are details of scholarships available to postgraduate students at UNSW. The scholarships are listed by Faculty and course (e.g. scholarships in Science or Engineering) or whether they are available to undertake travel. If students from more than one Faculty are able to apply the scholarship is listed in the General Scholarships section.

For further information contact:

**The Scholarships and Student Loans Unit  
The University of New South Wales  
Sydney 2052 Australia**

**Tel (02) 9385 3100/3101/1462**

**Fax (02) 9385 3732**

**Email: [scholarships@unsw.edu.au](mailto:scholarships@unsw.edu.au)**

## General

### Main programs of assistance for postgraduate study

#### The Australian Postgraduate Awards (APA) (L,R)

- \$15,888 pa (1998 rate). Other allowances may also be paid.
- Up to 2 years for a Masters, 3 years for a PhD degree. PhD students may apply for up to 6 months extension in certain circumstances

Applicants must have graduated, or be proposing to graduate in the current academic year, with Honours 1 or equivalent. The scholarships are available to undertake a Masters by Research or PhD. Students with Permanent Resident status should normally have lived in Australia continuously for 12 months. Applications close late October.

#### The Australian Development Co-operation Scholarship (ADCOS) (I, R, C)

- Tuition fees. Some students may be eligible for air fares and a stipend
- Determined by normal course duration

This award is for international students from selected countries only. Information and applications can only be obtained from Australian Diplomatic Posts or Australian Education Centres in the home country. Conditions and entitlements vary depending on the home country.

#### The Overseas Postgraduate Research Scholarships (OPRS) (I,R)

- Tuition fees and medical cover only
- 2 years for a Masters by Research, 3 years for a PhD degree

Eligibility is confined to postgraduate students who are citizens of countries other than Australia or New Zealand, to undertake a research degree at UNSW. Applications close late September.

## Other General

#### The Anthony Rothe Scholarship (I,L,R)

- \$28,000 pa plus allowances
- Up to 3 years

Applications are open to postgraduate students eligible to undertake a PhD. The proposed research must be related to the causes, prevention, treatment or cure of leukaemia and allied blood disorders. Information and applications are available from The Secretary, Anthony Rothe Memorial Trust, c/- Brigden & Partners, GPO Box 2564, Sydney NSW 2001. Applications close late August.

#### The Apex Foundation for Research into Intellectual Disability Research Grants (I,L,R)

Grants may be awarded for new or existing research projects in any discipline concerned with the causes, diagnosis, prevention or treatment of intellectual disability and allied conditions. Applications can be obtained from the Hon. Secretary, Apex Foundation for Research into Intellectual Disability Limited, PO Box 311, Mount Evelyn VIC 3796. Applications close late July.

#### The Arthritis Foundation of Australia Rheumatology Research & Professional Education Awards (L,R)

- \$15,000–\$22,000 pa
- 1 year with a possible 2 year extension

Scholarships are available to support research projects into arthritis, osteoporosis and other musculoskeletal disorders. Applicants must be enrolled in studies leading to a Masters by Research or PhD. Further information and applications are available from The Arthritis Foundation of Australia, GPO Box 121, Sydney NSW 2001. Tel (02) 92212456, Fax (02) 92322538. Applications close early June.

### **The Asthma Foundation of New South Wales Research Scholarships (I,L,R)**

- To be determined
- 1–3 years

The scholarships are available for research into areas related to asthma including the basic medical services and clinical or psychological investigations. Further information is available from The Asthma Foundation of NSW, Suite 1 "Garden Mews", 82–86 Pacific Highway, St Leonards NSW 2065. Applications close early August.

### **The Australian Brewers Foundation Alcohol Related Medical Research Postgraduate Scholarships (I,L,R)**

- Similar to the NHMRC (see NHMRC entry)
- 1 year

Similar to the NHMRC. The scholarships are available to support research into the medical, social and public health aspects of moderate, hazardous or harmful alcohol consumption. Information and application are available from ABF – Medical Research Advisory Committee. Tel (02) 955 26688, Fax (02) 9552 1369. Applications close mid-September.

### **The Australian Coral Reef Society (ACRS) Inc Student Grants (I,L,R,C)**

- \$1,000 (plus \$1,500 Walker prize for the best proposal)

The grant is open to students at any Australian University who are enrolled in a PhD or MSc involving research on coral reefs. Recipients must be a member of, or be willing to join the ACRS. Applications normally close late November.

### **The Australian Federation of University Women (I,L,R,C)**

Each year the Federation offers to its members a number of awards for study in Australia and overseas. Details of awards are included in a booklet available from the Australian Federation of University Women Inc, 8th Floor, Dymocks Building, 428 George Street, Sydney NSW 2000. Tel (02) 9232 5629.

### **The Australian Institute of Nuclear Science and Engineering (AINSE) Postgraduate Research Awards (I,L,R)**

- \$7,500 supplement to an APA or equivalent scholarship and \$5,500 pa for facility costs plus allowances
- Up to 3 years

The Institute offers awards for postgraduate students whose research projects are associated with nuclear science or its applications. Applicants must be in receipt of an APA or equivalent scholarship and have completed (or expect to

complete) a Bachelor of Engineering or Bachelor of Science with Honours. At least one month per year must be spent at the Institute at Lucas Heights, NSW. Applications close early December.

### **The Australian Kidney Foundation Medical Research Scholarship (I,L,R)**

- Similar to the National Health and Medical Research Council research scholarships (see NHMRC entries under General)
- Up to 3 years

The scholarships are available to medical graduates proposing to undertake an MD or PhD with a research area related to the kidney and urinary tract. Information is available from Aust Kidney Foundation, GPO Box 9993, Deakin ACT 2600. Tel (02) 6282 2913, Fax (02) 6285 2060. Applications close 1 September.

### **The Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART) Student Award (I,L,R,C)**

- \$1000 for attendance at the annual conference

Applicants can be postgraduate students from any discipline. The award provides assistance for a student to attend the annual conference. Applications are available from ANZCCART, PO Box 19, Glen Osmond, SA, 5064. Tel (08) 303 7325. Applications close July.

### **The Australian Pain Relief Association and Australian Pain Society PhD Scholarship (L,R)**

- \$16,750 pa plus allowances
- Up to 3 years subject to satisfactory progress

Applicants must hold an Honours 1 degree and be proposing to undertake a PhD in the mechanism, diagnosis, treatment or epidemiological features of acute or chronic (including cancer) pain. Further information and applications are available from the Australian Pain Society Secretariat, PO Box 629, Willoughby NSW 2068. Tel (02) 9439 6744. The award is offered bi-annually. Applications close early November.

### **The Australian Society for Microbiology (L,R,C)**

The Australian Society for Microbiology (ASM) provides prizes and awards ranging from \$100 to \$10,000, for study, research and projects related to Microbiology. More information can be obtained from the ASM National Office, Unit 23/20 Commercial Rd, Melbourne VIC 3004. Tel (03) 9867 8699, Fax (03) 9867 8699.

### **The Australian Spinal Research Foundation Postgraduate Research Awards (I,L,R)**

- Equivalent to Australian Postgraduate Award (see APA entry under General)
- Up to 2 years for a Masters by Research or 3 years for a PhD degree

Applicants must be undertaking a Masters by Research or PhD in an area designed to contribute to an understanding of the anatomical and physiological mechanisms underlying chiropractic care or the clinical efficiency of chiropractic care and management procedures. Information and applications are available from Aust. Spinal Research Foundation, PO Box 1047, Springwood Qld 4127. Tel (07) 3808 4098, Fax (07) 3808 8109, Email: t.flack@qut.edu.au. Applications close mid October.

### **The Community Health and Anti-Tuberculosis Association – The Harry Windsor Biomedical and Medical Research Scholarship (L,R)**

- \$23,257 pa (Medical postgraduates), \$15,637–\$20,180 pa (Biomedical Science postgraduates) plus allowances
- Up to 3 years

Applicants must be proposing to undertake full-time postgraduate medical research in the areas of tuberculosis, respiratory disease (particularly community aspects) or the health of disadvantaged people. Only original application forms will be accepted and are available from The Executive Officer, Community Health and Anti-Tuberculosis Association, PO Box 84, Darlinghurst, NSW 2010. Fax (02) 9360 5520. Applications close 15 August.

### **The Cooperative Research Centre for Eye Research and Technology (CRCERT) Postgraduate Research Scholarship (I,L,R)**

- \$15,321–\$19,827 pa (depending on the type of research)
- 3 years

The scholarship is available for full-time PhD studies in subjects such as optometry, microbiology, biochemistry, optics, materials science, polymer chemistry and immunology. For information about application procedures applicants should initially contact Dr Mark Wilcox, CRCERT, University of New South Wales, Sydney 2052. Tel (02) 9385 0222.

### **The Clean Air Society of Australia and New Zealand Inc Postgraduate Research Award (I,L,R,C)**

- \$5,000 pa
- 1 year, with a possible 1 year extension

The scholarship is open to students enrolled in a Masters degree program with a significant research component connected with air quality. Applications close early February.

### **The CSIRO Division of Fisheries Supplementary PhD Awards (L,R)**

- \$10,000 pa
- Up to 3 years

This scholarship is a supplement to any primary scholarship (e.g. APA) for PhD study in marine studies, environmental studies, zoology, botany, broadly-based life sciences, economics and mathematics. Applications close early March.

### **The Dairy Research and Development Corporation (DRDC) Postgraduate Education Program (L,R)**

Awards to undertake full-time postgraduate research degrees are available in a wide range of disciplines including dairy manufacturing, farm research, economics and marketing, and agricultural extension. New and experienced applicants are welcome to apply. Guidelines and applications are available from the Scholarships and Student Loans Unit or DRDC, PO Box 8000, Glen Iris VIC 3146. Tel (03) 9889 0577. Applications close 31 October.

### **The Forest and Wood Products Research and Development Corporation (FWPRDC) Scholarships (L,R)**

- Up to \$25,000 pa
- Up to 3 years

The scholarships are open to students undertaking a postgraduate research degree at an Australian University. Selection is based on academic merit and the relevance of the project to FWPRDC Programs. Further information and applications are available from the Executive Director, FWPRDC, PO Box 157, Bond University Qld 4229. Fax (07) 5578 7911. Applications close early October.

### **The Garnett Passe and Rodney Williams Memorial Foundation Research Scholarships in Otolaryngology (I,L,R)**

- \$15,364 pa for science graduates, \$22,850 pa for medical graduates, plus allowances
- 3 years

The scholarships are available to medical or science graduates for research in Otolaryngology or in related fields of biomedical science. Applicants must be enrolled in a postgraduate degree in Australia or New Zealand. Information and applications are available from the Garnett Passe and Rodney Williams Memorial Foundation, Pelham House, 165 Bouverie St, Carlton VIC 3053. Tel (03) 9349 2622, Fax (03) 9349 2615. Applications normally close in August.

### **The Gerontology Foundation Grant-In-Aid (I,L,R,C)**

- Up to \$5,000 for a specific research project

A Grant-In-Aid is awarded to students who have not had their work published in a refereed journal and who have not won any research grants in open competition. The grant supports a proposed scientific investigation topic specified by the Foundation. Information and applications are available from The Executive Officer, Gerontology Foundation of Australia Inc, PO Box 199, Annandale NSW 2038. Applications normally close in late July.

### **The Gowrie Scholarship Trust Fund (L,R,C)**

- \$4,000 pa
- 2 years

Applicants must be members of the Forces or children (or grandchildren or lineal descendants) of members of the Forces who were on active service during the 1939–45 War. Tenable at tertiary institutions in Australia and overseas. Applications close early October.

### **The Grains Research and Development Corporation (GRDC) Junior Research Fellowship (L,R)**

- \$21,000 pa plus up to \$3,000 to the supporting institution, some conference/workshop attendance allowances
- Up to 3 years

Applicants must be undertaking full-time PhD studies in fields of high priority to the grains industry. Applications close mid-October.

### **The Great Barrier Reef Marine Park Authority Research Support (I,L,R)**

- \$1,500

Applicants must be undertaking a full-time PhD research project that could contribute to the planning and managing work undertaken by the Great Barrier Reef Marine Park Authority. Applications and further information may be obtained from the Executive Officer, Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville QLD 4810, Tel (077) 818811. Applications close mid-December.

### **The Harold G Conde Memorial Fellowship (L,R,C)**

- \$5,000 pa subject to the availability of funds
- Up to 3 years

Applicants should be honours graduates. The Fellowship is a supplementary award to be held in conjunction with another scholarship and is for postgraduate study or research in a field related to the electricity industry. Applications close early April.

### **The Julian Small Foundation Annual Research Grant (I,L,R)**

- Up to \$5,000

Applications are open to postgraduate students involved in the study of law, or industrial relations. Selection will be based on a research proposal which outlines how the research will advance the thinking and practice in the area of employment law and industrial relations in Australia. Applications close mid-August.

### **The June Opie Fellowship (I,L,R,C)**

- NZD\$10,000
- 1 year

The award is administered by the University of Auckland and is available to citizens and permanent residents of Australia, Canada and New Zealand, and is designed as an incentive for students of high academic achievement who have a severe disability. It is primarily intended for those who plan to undertake postgraduate study with a view to preparing themselves for a role in the professions, in politics or more particularly in university teaching and research and who have disability issues as a continuing interest. Applications close with the University of Auckland early October.

### **Land and Water Resources Research and Development Corporation (LWRRDC) Postgraduate Research Scholarships (I,L,R)**

- \$20,000 pa plus \$5,000 for operating expenses
- 2 years for Masters, 3 years for a PhD degree

General Research Scholarships are available for research that will lead to better management, sustainable use and conservation of land, water and vegetation resources in Australia. Irrigation Research Scholarships are specifically for research that will lead to better management, sustainable use and conservation of natural resources within the irrigation industries. Applications are available from the Scholarships and Student Loans Unit or LWRRDC, GPO Box 2182, Canberra ACT 2601. Tel (02) 62573379. Applications close early October.

### **The Lionel Murphy Postgraduate Scholarship (L,R,C)**

- \$15,000 pa for study in Australia, up to \$30,000 for study overseas
- 1 year

Applicants must be intending to undertake a postgraduate degree in Law, Science, Legal Studies or other appropriate discipline. Preference will be given to applicants who propose to study the law and legal system in a social context, science/law or international law. Information and application forms are available from the Lionel Murphy Foundation, GPO Box 4545, Sydney NSW 2001. Tel (02)



9223 5151, Fax (02) 9223 5267. Applications close mid-September.

### **The Meat Research Corporation (MRC) Studentships and Junior Research Fellowships (L,R,C)**

- \$14,961 pa for study in a Masters or Diploma, \$20,000 for a PhD in Australia or US\$17,500 for study overseas, plus airfares, insurance and allowances
- 2 years for Studentships (Masters or Diploma), 3 years for Junior Research Fellowships (PhD)

Applicants should be proposing to undertake research and training in 'off-farm' disciplines of practical value to the Australian beef, sheep meat, goat meat and buffalo industries. Applications normally close mid-August.

### **The Menzies Research Scholarship in Allied Health Sciences (L,R)**

- Up to \$24,000 pa
- 2 years

The scholarship is awarded to stimulate research in the non-medical allied health disciplines. Applicants should be full-time students, who have completed the first stage of a PhD program. Applications are available from The Menzies Foundation, 210 Clarendon St. East Melbourne VIC 3002, Fax (03) 9417 7049. Applications close late June.

### **The Minerals Council of Australia Student Research Award (I,L,R)**

- \$500 plus travel and accommodation for the Environmental Workshop

The award is open to scholars who have completed or are undertaking postgraduate studies, and is aimed at encouraging excellence in student research and communication in the field of environmental management related to mining. The award will be judged on a paper written for and presented at the Minerals Council of Australia's Environmental Workshop. Nominations close early May.

### **The National Drug Strategy (NDS) Postgraduate Research Scholarship (I,L,R)**

- \$23,204 pa
- 1 year, with a possible 2 year extension

Scholarships are available to students undertaking PhD studies and aim to develop expertise in researching and evaluating non-biomedical approaches to the prevention and treatment of drug misuse. Selection is based on academic merit, work experience and the potential of the project. Applications close mid-July.

### **The National Health and Medical Research Council (NHMRC) Training Scholarship for Aboriginal Health Research (L,R)**

- \$15,637–\$23,257 pa (depending on qualifications)
- Up to 3 years

Applicants must be undertaking an undergraduate or postgraduate degree which includes, or leads to, research relevant to Aboriginal health. Applications will be assessed in terms of previous qualifications and experience with particular weight given to prior knowledge and experience of Aboriginal culture and health. Applications close late July.

### **The National Health and Medical Research Council (NHMRC) Dora Lush Biomedical Postgraduate Scholarships (L,R)**

- \$15,637 pa, \$20,180 for HIV/AIDS research, \$17,637 for special initiative scholars, plus allowances
- Up to 3 years

Applicants must have completed a Science degree with Honours, or equivalent, at the time of submission of the application. Current APA holders or students enrolled in the final year of an Honours degree at the time of application are not eligible. Applications close late July.

### **The National Health and Medical Research Council (NHMRC) Medical and Dental Postgraduate Scholarships (L,R)**

- \$23,257 pa plus allowances
- Up to 3 years

The scholarships are open to medical and dental graduates to undertake full-time research. Applications are particularly encouraged for research in the following special initiative areas: Aboriginal health and disease, prostate cancer, alcohol and substance abuse, nursing and allied health services, dementia, schizophrenia, injury and HIV/AIDS. Applications close late July.

### **The National Health and Medical Research Council (NHMRC) Public Health Postgraduate Scholarships (L,R)**

- \$23,257 pa (medical/dental graduates), \$15,637 pa (other graduates), \$20,180 pa for HIV/AIDS research, plus allowances
- Up to 3 years

The scholarships are open to medical/dental or health related graduates to obtain training in public health research. Applications are particularly encouraged for research in the following special initiative areas: Aboriginal health and disease, prostate cancer, alcohol and substance abuse, nursing and allied health services, dementia, schizophrenia, injury and HIV/AIDS. Applications close late July.

### **The National Heart Foundation of Australia Postgraduate Medical and Science Research Scholarships (L,R)**

- \$17,637 pa (science), \$23,257 pa (medical) plus \$1,200 departmental allowance
- Up to 3 years subject to satisfactory progress

Scholarships are available to science or medical graduates for research in cardiovascular function, disease or related problems. Applicants must usually reside in Australia. Further information and applications are available from the Medical Director, National Heart Foundation, PO Box 2, Woden ACT 2606. Medical Applications close May and Science applications close October.

### **The National Tertiary Education Union (NTEU) Scholarship for the Study of Industrial Relations and Unionism in Australian Tertiary Education (I,L,R)**

- \$5,000 pa
- Up to 3 years

Applicants must have made or intend to make an application for candidacy for a Masters by Research or PhD in a topic which covers some aspect of industrial relations, policy issues and/or unionism related to Australian tertiary education. Further information is available from NTEU, PO Box 1323, South Melbourne VIC 3205. Tel (03) 9254 1910. Applications close early November.

### **The National Multiple Sclerosis Society of Australia Postgraduate Research Scholarships (L,R)**

- Same as NHMRC scholarship stipends for medical and biomedical graduates
- Up to 2 years

Scholarships are available to medical graduates (or to appropriately qualified science graduates or health professionals) enrolled in a postgraduate research degree. Applications close mid-July.

### **The NSW Ministry for the Arts Scholarships (L)**

- \$5,000–\$25,000 (depending on the award)

The NSW Government offers a number of scholarships and awards to writers, artists and scholars living in NSW. Further information is available from the New South Wales Ministry for the Arts, GPO Box 5341, Sydney NSW 2000. Tel (02) 9228 3533. Fax (02) 9228 4722.

### **The Pig Research and Development Corporation (PRDC) Postgraduate Top-Up Scholarships (L,R)**

- Up to a maximum of \$21,000 as a supplement to other scholarships, plus allowances

Applicants must be eligible for another scholarship and be undertaking research relevant to increasing the competitiveness of the Australian pig industry. Applications close mid-December.

### **The Postgraduate Equity Scholarships (L,C)**

- Substitution of HECS for tuition fees
- One session, renewable if eligibility criteria are satisfied

Postgraduate students enrolled in full-fee courses may be allowed to pay HECS rather than course fees. Students granted the concession are also required to pay Student Activity Fees. Students who have previously completed a postgraduate course at the same level are not eligible. Applications for Session One close 15 January and 15 July for Session Two.

#### ***Financial Need HECS Substitution Scholarships***

Applicants must be in receipt of a full allowance from the Department of Social Security (DSS), Department of Veteran Affairs, or AUSTUDY. Students granted the assistance must re-apply each session.

#### ***HECS Substitution for Scholarships for Women***

A limited number of scholarships will also be provided to women enrolling in a postgraduate course after a period of absence from study and/or employment who are seeking to extend their professional experience in order to re-enter the workforce. Preference will be given to women enrolling in courses which have a low female enrolment. Selection will take into account the applicant's academic merit, her personal statement, including details of a well-planned future career path, and referee's support. The scholarship is tenable for the duration of the course.

### **The Re-Entry Scholarship for Women (I,L,R,C)**

- \$15,888 pa (equivalent to the Australian Postgraduate Award)
- 1 year

Applicants must be women who have been out of full-time paid professional employment for a period of time and who wish to take up or resume a full-time research or coursework program of postgraduate study. Priority will be given to applicants wishing to update their research skills or to those who wish to gain further experience in order to return to employment in industry, business or education. Applicants must be able to demonstrate a well-planned career path. A letter of application and curriculum vitae should be forwarded to the Scholarships and Student Loans Unit, UNSW. Applications close 31 October.

### **The River Basin Management Society Ernest Jackson Memorial Research Grants (I,L,R)**

- Up to \$2,000

The scholarship assists PhD and Masters students undertaking research in the field of river basin management. Further information is available from RBMS, PO Box 113, Forest Hill Vic 3131. Tel (03) 9816 6896. Applications usually close May and November.

### **The Ronald Henderson Postgraduate Scholarships (L,R)**

- \$5,000 pa as a supplement to an APA
- Up to 2 years for Masters by Research, 3 years for a PhD

The scholarships are open to graduates who intend to commence Masters or PhD studies in social economics, and who obtain an APA or equivalent university postgraduate award. Applicants may be enrolled in qualifications in economics, commerce or arts. Information and applications are available from the Ronald Henderson Research Foundation, 5th Floor, 165 Flinders Lane, Melbourne VIC 3000. Tel (03) 9654 8299, Fax (03) 9650 7501, Email: lance@creativeaccess.com.au. Applications close late October.

### **The RSPCA Alan White Scholarship (I,L,R)**

- \$2,500

Applicants should be undertaking original research to improve the understanding and welfare of animals. Applicants must have a sound academic record and demonstrate a major commitment animal welfare issues. A letter of application including two referees and academic transcript, should be sent to the Executive Officer, RSPCA Australia, PO Box E369, Queen Victoria Terrace, Canberra ACT 2600. Tel (02) 62311437. Applications close mid-March.

### **The Rural Industries Research and Development Corporation (RIRDC) Postgraduate Scholarships (L,R)**

- \$21,500 pa plus \$3,500 to the host institution
- Up to 3 years

The scholarships are available for postgraduate study in rural research and development in areas of interest to the Corporation. Applicants must hold an Honours 1 or 2/1 degree in an appropriate discipline. Applications from mature age students with rural industry experience are particularly encouraged. Applications close early November.

### **The Shell Postgraduate Scholarship (L,R)**

- \$20,000 pa
- Up to 3 years

Applicants should be intending to undertake a PhD in science, engineering, economics/commerce, computer science, or a closely related discipline. Selection will be based on academic achievements, objectives of the proposed study and other personal qualities. Applications close late October.

### **The Social Policy Research Centre (SPRC) Postgraduate Research Scholarship (I,L,R)**

- \$15,888 pa (equivalent to the APA), plus allowances
- 3 years for a PhD

Applicants should have a Bachelors Degree with at least Honours 2/1 in any of the fields of study relevant to social policy. The successful candidate will be enrolled in a relevant School of the University but will undertake research at the Centre. Prospective applicants must contact the School in which they wish to enrol. Application packages are available from the SPRC Publications and Information Officer, Social Policy and Research Centre, UNSW. Tel (02) 385 3833. Applications close late October.

### **The State Librarian's Metcalfe Scholarship at UNSW (L,R,C)**

- At least \$2,000

The scholarship is open to suitably qualified librarian's to undertake a Masters degree in the areas of librarianship, marketing or technology. Selection will be based on academic merit, the outline for the proposed area of study and demonstrated interest in librarianship. Applications normally close 30 November.

### **The Sugar Research and Development Corporation (SRDC) Postgraduate Scholarships (L,R)**

- \$22,000 pa plus \$3,000 to the host institution
- Up to 3 years

The scholarships are available to foster research in disciplines compatible with the SRDC's research priorities. Applicants should hold an Honours degree or equivalent and have a strong motivation to make a professional career in the sugar industry. Further information and applications are available from the Executive Director, Sugar Research and Development Corporation, PO Box 12050, Brisbane Elizabeth St Qld 4002. Tel (07) 3210 0495, Fax (07) 3210 0506. Applications close mid-September.

### **The Telstra Research Laboratories Postgraduate Research Fellowship (L,R)**

University departments may apply for the Fellowships for one or more of their PhD students who are undertaking research relevant to the telecommunications industry in the fields of electrical engineering, computer science, science, psychology, social science or economics or other appropriate course. Further information is available from the Fellowship Applications Officer, Telstra Research Laboratories, Box 249, Rosebank MDC, Clayton Victoria 3169. Email: c.zaman@trl.telstra.com.au. Applications close late September.

### **VSDC Deafness Projects Fund (L)**

Tertiary Education Scholarships may be awarded to deaf students undertaking tertiary courses related to deafness, deaf education, or a fields which will advance the interests of deaf people. Applicants must be permanent residents of Australia. Further information is available from the VSDC-Services for Deaf Children, PO Box 6466, St Kilda Rd Central, Melbourne Vic 3004. Applications close mid-May.

### **The Wenkart Foundation Grants (I,L,R)**

- Up to \$22,000 pa
- 2 years with the possibility of renewal

Applicants must be undertaking full-time research in clinical, biomedical or health related clinical sciences. The grants will not be available again until the 1999 academic year. Applications close mid-May.

### **The Zonta International Amelia Earhart Awards (I,L,R)**

- US\$6,000
- 1 year

Applicants must be women who have completed one year graduate study in an aero-space related science or engineering degree. Further information and applications are available from Zonta International, 557 West Randolph St, Chicago, Illinois 60661-2206, USA. Tel +1 312 930 5848, Fax +1 312 930 0951. Applications close early November.

---

## **Faculty**

---

### **Faculty of the Built Environment**

#### **The Lindsay Robertson Memorial Travel Award (I,L,R,C)**

- A maximum of \$1,500
- 1 year

Candidates should be Landscape Architecture graduates of the University of New South Wales. The award is to undertake full-time postgraduate study or research in Landscape Architecture at an approved institution overseas or in Australia. Applications close mid-May.

#### **The Wightman Postgraduate Scholarship in Architecture (I,L,R,C)**

- Up to \$4,000
- 1 year with the possibility of renewal subject to satisfactory progress

The scholarship is open to graduates in architecture, or other related studies, for full-time postgraduate study in architecture at UNSW. Applications close late January.

---

## **Travel Scholarships**

Students in receipt of postgraduate scholarships not listed below may, if the scholarships conditions allow, spend a period of time overseas undertaking research relevant to their Australian qualification.

## General Travel

### AAUW Educational Foundation International Fellowships (I,L,R,C)

- US\$15,160
- 1 year

The American Association of University Women (AAUW) offers Fellowships for full-time postgraduate study or research in the United States for one academic year. Applicants must be females who have earned the equivalent of a United States Bachelor's degree and who are not US citizens or permanent residents. Preference will be given to women who show prior commitment to the advancement of women and girls through civic, community or professional work. Members of the Australian Federation of University Women (AFUW) may also be eligible for AAUW-IFUW awards for advanced training at any overseas institution. Application packs are available from the Scholarships and Student Loans Unit or the AAUW Educational Foundation, 2201 N. Dodge St, Dept 67, Iowa City, IA 52243 USA. Applications close late November.

### The ACSANZ Postgraduate Awards for Canadian Studies (I,L,R)

- Up to \$3,000 towards a research trip to Canada

The Association for Canadian Studies in Australia and New Zealand will offer grants to postgraduate students wishing to undertake a short research trip to Canada. Applicants must be enrolled in Master's or Doctoral degrees at Australian or New Zealand universities, and grants will be for research into all areas of academic enquiry that have a distinctly Canadian orientation, for example in the humanities, social and political sciences and some branches of the health and environmental sciences. Information and applications are available from the Academic and Cultural Relations Officer, Canadian High Commission, Commonwealth Avenue, Canberra, ACT 2600. Tel (02) 6273 3844, Fax (02) 6270 4083, Email: co.cnbra@cnbra01.x400.gc.ca. Applications close late September.

### The Asian Studies Library Awards (ASLA) (L,R)

- \$250 to \$800 in a lump sum

Applicants must be undertaking a Masters by Research or PhD. The award provides a contribution towards the travel costs to centres with Asian collections to undertake library research. Further information and application forms are available from the Project Coordinator, Asian Studies Library Awards, Collection Management Division, Library ANU, Canberra ACT 2600. Applications close mid-June.

### The Association of International Education Japan (AIEJ) Short-Term Student Exchange Promotion Program (Inbound) Scholarships (I,L,R,C)

- 50,000 yen (settling-in allowance), 80,000 yen per month, plus airfare
- Six months to one year

Applicants must be accepted by a Japanese university under a student exchange program agreement with UNSW. Students must initially apply directly to a Japanese university through the International Student Centre at UNSW. The Japanese host university will recommend candidates to AIEJ and students must apply as directed by the host university. Applications close February, May and September each year.

### The Association of International Education Japan (AIEJ) Short-Term Student Exchange Promotion Program (Inbound) Peace and Friendship Scholarships (I,L,R,C)

- 50,000 yen (settling-in allowance), 100,000 yen per month, plus airfare
- Ten months to one year

Applicants must be accepted by a Japanese university under a student exchange program agreement with UNSW. Students must initially apply directly to a Japanese university through the International Student Centre at UNSW. The Japanese host university will recommend candidates to AIEJ and students must apply as directed by the host university. Applications close February, May and September each year.

### Association of University Women Educational Foundation – Charles & June Ross International Fellowship (L,R,C)

- US\$15,400
- 1 year

The fellowship is available to Australian women who have graduated from an Australian university, for full-time postgraduate study or research in the United States for one academic year. Applicants must be members of the Australian Federation of University Women or AAUW and intend to return to Australia to pursue their professional career. Information and applications are available only from AAUW Educational Foundation, PO Box 4030, Iowa City, Iowa 52243-4030, USA. Tel +1 319 337 1716, fax +1 319 337 1204. Applications close late November.

### **The AT&T Leadership Award (I,L,R,C)**

- US\$5,000

The award is open to students who will be commencing full-time undergraduate or postgraduate study in the United States between January and September in the year of application. The scholarship is open to students from the following Asia/Pacific countries: Australia, China, Hong Kong, India, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand. Information and applications are available from the U.S. Consulate General, USIS, Level 59 MLC Centre, 19–20 Martin Place, Sydney NSW 2000. Tel (02) 9662 3016. Applications close 15 September.

### **The Australia–Korea Foundation Awards (L,R,C)**

The AKF provides assistance to Korean language graduates who will be undertaking teacher training in the Korean language, and for work-experience programs. Information and applications are available from the Programs Coordinator, National Korean Studies Centre, PO Box 218, Hawthorn Vic 3122. Email: nksc@swin.edu.au.

### **The Australian Bicentennial Scholarships and Fellowships Scheme (L,R,C)**

- 4,000 pounds sterling
- At least 3 months

Awards are available for study or research in the United Kingdom in any discipline, where it can be demonstrated that there is an advantage to be gained from a period of study in the U.K. Applicants must be enrolled as postgraduate students at Australian higher education institutions and usually resident in Australia. Applications are available from the Secretary, Sir Robert Menzies Centre for Australian Studies, University of London, 28 Russell Square, London, WC1B 5DS, UK. Tel +44 171 580 5876, Fax +44 171 580 9627, Email: mcintyre@sas.ac.uk. Applications close early November.

### **The Australian Federation of University Women (AFUW) (I,L,R,C)**

Each year the Federation offers to its members a number of awards for study in Australia and overseas. Details of awards are included in a booklet available from the Australian Federation of University Women Inc, 8th Floor, Dymocks Building, 428 George Street, Sydney NSW 2000. Tel (02) 9232 5629.

### **The British Aerospace Australia Chevening Scholarship (L, R, C)**

- Tuition fees, maintenance allowance, airfare
- 1 year

The scholarship is available to undertake an approved one-year MSc course in aerospace engineering at a British university. Applicants must hold, or expect to complete before October, an Honours 1 or 2/1 degree. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027. Tel (02) 9326 2022, Fax (02) 9327 4868. Applications close late October.

### **The British Chevening Scholarships (L,R,C)**

- Tuition fees, maintenance allowance and return airfare
- 3 months to 1 year

The awards are intended for outstanding graduates and young professionals with the potential to rise to senior positions in the private or public sectors and will contribute to Australian–British relations and understanding. The awards are tenable for postgraduate study at British universities. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027. Tel (02) 9326 2022, Fax (02) 9327 4868. Applications close October.

### **The Cambridge Commonwealth Trust Scholarships (L,R,C)**

The Cambridge Commonwealth Trust administers several scholarships for Australian Citizens to undertake postgraduate study at the University of Cambridge. Scholarship application forms should be requested from the University of Cambridge when applying for admission. Admission forms and copies of the Graduate Studies Prospectus are available from The Board of Graduate Studies, 4 Mill Lane, Cambridge CB2 1RZ, United Kingdom. By submitting one Scholarship Application Form, applicants will be considered for all the Trust's scholarships for which they are eligible. Information on how to apply is available from the Honorary Secretary, Australian Committee of the Cambridge Commonwealth Trust, c/o Dept of Classics, ANU, Canberra ACT 0200. Tel (02) 6249 2913/8830, Fax (02) 6249 5039. Applications for admission to Cambridge close 31 December and scholarship applications close 30 April in the following year.

### **The Cancer Research Fellowship Programme (I,L,R)**

- Travel expenses and living allowances
- 1 year

Applicants should be engaged in research in medical or allied sciences and intending to pursue a career in cancer research. The awards are tenable at the International Agency for Research on Cancer in France, or any other suitable institution abroad. Areas of research include epidemiology, biostatistics, environmental and viral carcinogenesis and mechanisms of carcinogenesis. Applications are available from the International Agency for Research on Cancer, 150 cours Albert–Thomas, 69372 Lyon Cedex 08, France, Tel 72 73 84 85, Fax 72 73 85 75. Applications normally close in December.

## Churchill Fellowships (L)

- Tuition, travel and living allowances

Churchill Fellowships provide financial support for Australian citizens to undertake study, training or projects overseas that offer special advantage over those in Australia. Fellowships will not normally be awarded for higher academic or formal qualifications however. Applicants must be over 18 years of age. Further information and applications are available from the Chief Executive Officer, The Winston Churchill Memorial Trust, 218 Northbourne Ave, Braddon ACT 2612. Tel (02) 6247 8333. Applications close late February.

## The Commonwealth Scholarship and Fellowship Plan (CSFP) (L,R,C)

- Varies for each country. Generally covers travel, living expenses, tuition fees, books and equipment, approved medical expenses
- Usually 2–3 years depending on the country

CSFP provides opportunities for Commonwealth students to undertake advanced academic study in other Commonwealth countries. Candidates should be Commonwealth citizens who are graduates. Applications close at different times depending on the country in which the study is proposed.

## The Coral Sea Scholarship (L,R,C)

- \$3,000 per month, plus \$2,500 travel entitlement
- Up to 3 months

The award is for applicants holding a tertiary qualification who are proposing study in the United States, to investigate a problem or opportunity relevant to Australian business or industry. Applicants must be Australian citizens (Permanent Residents are ineligible). Applications are available from the Program and Development Officer, Australian-American Foundation, GPO Box 1559, Canberra City ACT 2601. Tel (02) 6247 9331, Email: lindy@aaef.anu.edu.au. Applications close 30 September.

## DAAD – The German Academic Exchange Service Scholarships (I,L,R,C)

Application forms and information (including closing dates) for the following scholarships are available from the Consulate General of the Federal Republic of Germany, PO Box 204, Woollahra NSW 2025.

### One-Year Scholarships

- Monthly allowance between DM1,000 and DM1,600, airfares, health and accident insurance, and tuition fees
- 1 year

Scholarships are available for graduate studies in Germany. Applicants must be aged 32 or under and hold a Bachelors degree (or equivalent). A working knowledge of German is required of those who study arts, others may receive additional language training prior to the commencement

of the scholarship. Applications normally close in September.

### Research Grants

- Monthly stipend of DM1,600, health insurance contribution and travel assistance of DM2,500
- 2 to 6 months

PhD students can apply for assistance to undertake a short period of research in Germany. Applicants must be aged 32 or under.

### Information Visits by Groups of Professors and Students

Groups (minimum of 10 persons, maximum of 30 persons) of professors and students can apply for assistance to visit Germany with the intention of increasing the knowledge of specific German topics. The program offers support in making travel and study arrangements and may include some financial assistance (based on the length of the stay and the number of persons undertaking the study tour). The period of stay must be between 7 and 21 days. No tours will be organised for July or August.

### Deutschlandkundlicher Winterkurs

- Course fees, DM3,500 to assist with travel and living expenses, health insurance
- 8 weeks (3 January–21 February)

Undergraduate and postgraduate students from all fields with at least two years university-level German may apply for this scholarship. Applicants must be Australian or New Zealand citizens, aged from 19 to 32 and proposing to undertake a German Studies course (in German) at the Albert-Ludwigs University of Freiburg. The course provides language instruction and concentrates on historical and cultural aspects of contemporary Germany for students with a background in German Studies. Applications usually close in early August.

## East West Center Graduate Degree Fellowship (I,L,R,C)

- Accommodation, monthly stipend of US\$600, tuition fees, health insurance plus allowances
- 12 months with a possible 1 year extension

The Fellowships are available for postgraduate study at the University of Hawaii, preferably at Masters level. Citizens of countries in Asia, the Pacific and the United States are eligible to apply. Potential applicants must request an application package direct from the East West Centre, Awards Services Officer, Burns Hall 2066, 1601 East-West Road, Honolulu Hawaii 96848–1601, USA. Tel +1 808 944 7735, Fax +1 808 944 7730. Applications close early October.

## Frank Knox Memorial Fellowships (L,R,C)

- US\$15,000 pa plus tuition fees and health insurance
- 1 year with the possibility of renewal for a further year

Applicants must be undertaking, or near completion, of a postgraduate qualification at an Australian university. The scholarships are tenable at one of the graduate schools of Harvard University. Applications close early October.

### **The Fulbright Postgraduate Student Awards (I,L,R)**

- Up to \$28,050, depending on the type of award, with the possibility of other allowances (e.g. return airfares and tuition fees)
- 1 year

Students planning to undertake an American higher degree or engage in research towards an Australian higher degree in any field can apply for the Fulbright Student Awards. Four other privately sponsored awards include the Engineering Award, Aboriginal and Torres Strait Islander People Award, Visual and Performing Arts Award, and Tim Matthews Memorial Award in Statistics and Related Disciplines. Applicants must be Australian citizens who have completed an Honours degree or equivalent and who are eligible to undertake a higher degree at an American institution. Information and applications are available from the Honorary Secretary, Fulbright NSW State Selection Committee, Research and Scholarships office, University of Sydney NSW 2006. Tel (02) 9351 4464, Email: meredith@reschols.usyd.edu.au. Applications close late September.

### **The Golda Meir Scholarship (I,L,R,C)**

- Tuition (some allowances may be paid)
- 1 year

The Golda Meir scholarships are available to graduates, with a major field of study in Jewish studies, religious studies, Israel studies or Middle East studies, who meet the relevant requirements for the Graduate Year Program at the Hebrew University's Rothberg School for Overseas Students. Application forms are available from the Australian Friends of the Hebrew University, 36 Hawthorn Road, South Caulfield VIC 3162. Tel (03) 9272 5511.

### **The Gowrie Scholarship Trust Fund (L,R,C)**

- \$4000 pa
- 2 years

Applicants must be members of the Forces or children (or grandchildren or lineal descendants) of members of the Forces who were on active service during the 1939–45 War. Special consideration may be given to cases of financial hardship. Applications close October.

### **The Harkness Academic Fellowships (L,R,C)**

- Some allowances and tuition fees for study in the USA
- 12–21 months

The Academic Fellowships cover academic study and research. Applicants should be active in the public, business or voluntary sectors with an outstanding record of achievement. Special consideration may be given to studies in health care and related community issues. Applications are available on written request from the Harkness Fellowship, PO Box 836, Belconnen ACT 2606. Applications close early September.

### **The Harkness Mid-Career Fellowships (L,R,C)**

- Professional travel allowance
- 7–12 months

The Mid-career Fellowships are for study and practical experience. Applicants should be active in the public, business or voluntary sectors with an outstanding record of achievement. Special consideration may be given to studies in health care and related community issues. Applications are available on written request from the Harkness Fellowship, PO Box 836, Belconnen ACT 2606. Applications close early September.

### **Japanese Government (Monbusho) Scholarships (L)**

Scholarships are available to Australian citizens for study in Japan in the following categories: Japanese Studies, In-Service Training for Teachers, Research, Undergraduates. Applicants must be willing to study the Japanese language and receive instruction in Japanese. Further information and applications are available from Monbusho Scholarships, Embassy of Japan, 112 Empire Circuit, Yarralumla ACT 2600. Tel (02) 6273 3244, Fax (02) 6273 1848. Applications close April (for Japanese Studies and Teacher Training) and July (for Research and Undergraduate scholarships).

### **The Kobe Steel Postgraduate Scholarship (L,R,C)**

- Maintenance allowance of at least 7,000 pounds sterling plus tuition fees and travelling expenses
- Up to 2 years with the possibility of extension

The scholarship is tenable at St Catherine's College, Oxford University. The scholarship will be awarded to outstanding individuals who display qualities of leadership, excellence in sport as well as academic ability. Students should have a past or future interest in Japan. Applications close mid-October.

### **Korean Government Scholarships (L)**

- Tuition fees, living allowance, travel and other allowances
- Duration of course

Scholarships are available to Australian citizens for postgraduate study in Korea for Master's, PhD or Research



programs. Applicants with knowledge of the Korean language are preferred. Information and applications are available from the Embassy of the Republic of Korea, 113 Empire Circuit, Yarralumla ACT 2600. Tel (02) 6273 3044, Fax (02) 6283 4839. Applications close early May.

### **The Lady Davis Fellowship Trust (I,L,R,C)**

The Lady Davis Trust provides awards for study, research, or teaching at graduate, post-doctoral or professorial levels at the Hebrew University or the Technion (Israel Institute of Technology). Information is available from the Australian Friends of the Hebrew University, 36 Hawthorn Road, South Caulfield VIC 3162. Tel (03) 9272 5511. Applications normally close in November.

### **The Laporte Centenary Scholarship (L,R)**

- Airfare, living allowance, tuition fees
- 3–6 months

The scholarship is tenable for postgraduate research in the United Kingdom. Candidates should be undertaking a postgraduate qualification in a science-based discipline, preferably in the practical application of special chemicals. Applications are available from the Secretary, Sir Robert Menzies Centre for Australian Studies, University of London, 28 Russell Square, London, WC1B 5DS, UK. Tel +44 171 580 5876, Fax +44 171 580 9627. Email: mcintyre@sas.ac.uk. Applications close early November.

### **The Lionel Murphy Postgraduate Scholarship (L,R,C)**

- \$15,000 pa for study in Australia, up to \$30,000 for study overseas
- 1 year

Applicants must be intending to undertake a postgraduate degree in Law, Science, Legal Studies or other appropriate discipline. Preference will be given to applicants who propose to study the law and legal system in a social context, science/law or international law. Information and application forms are available from the Lionel Murphy Foundation, GPO Box 4545, Sydney NSW 2001. Tel (02) 9223 5151, Fax (02) 9223 5267. Applications close mid-September.

### **The Lloyd's Register of Shipping Chevening Scholarship (L,R,C)**

- Tuition fees, maintenance allowance, airfare
- 1 year

Two scholarships are available to graduates of proven academic merit and leadership potential, to pursue a postgraduate course at a British university. One scholarship is for a one-year MSc course in Marine Engineering/Naval Architecture, and the other is for a one-year MSc course in Environmental Sciences. Applicants must hold, or expect

to complete before October, an Honours 1 or 2/1 degree. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027. Tel (02) 9326 2022, Fax (02) 9327 4868. Applications close late October.

### **The Meat Research Corporation (MRC) Studentships and Junior Research Fellowships (L,R,C)**

- \$14,961 pa for study in a Masters or Diploma, \$20,000 for a PhD in Australia or US\$17,500 for study overseas, plus airfares, insurance and allowances
- 2 years for Studentships (Masters or Diploma), 3 years for Junior Research Fellowships (PhD)

Applicants should be proposing to undertake research and training in 'off-farm' disciplines of practical value to the Australian beef, sheep meat, goat meat and buffalo industries. Applications normally close in mid-August.

### **The Menzies Scholarships (L,R,C)**

The Menzies Scholarships are intended to provide funds for Australian citizens (aged 21 to 45) who wish to travel to Britain to undertake a course of research and to write a paper on a subject of concern and importance to the relationship between the Australian and British communities. Tertiary qualifications are preferred but the awards are not restricted to graduates or students. Information and applications are available from the Australia–Britain Society, GPO Box 551, Sydney NSW 2000. Tel (02) 9223 5244. Applications normally close in October.

### **Nanyang Technological University Singapore Research Scholarships (I,L,R)**

- Tuition fees plus S\$1,400–S\$1,500 per month allowance
- 2 years for a Master's, 3 years for a PhD degree

Research scholarships are available to graduates with good Honours degrees to undertake postgraduate study. Information and application forms are available from The Registrar, Nanyang Technological University. Email: Gleong@ntu.edu.sg, Fax: +65 791 1604.

### **The NSW Ministry for the Arts Scholarships (L)**

- \$5,000–\$25,000 (depending on the award)

The NSW Government offers a number of scholarships and awards to writers, artists and scholars living in NSW. Further information is available from The New South Wales Ministry for the Arts, GPO Box 5341, Sydney NSW 2000. Tel (02) 9228 3533, Fax (02) 9228 4722.

### **The Oxford Nuffield Medical Fellowship (L,R)**

- Between 27,525 and 31,945 pounds sterling pa (subject to tax), plus travel expenses
- 2 years with a possible 1 year extension

The awards are available for research in a clinical medicine or medical science department of the University of Oxford. The appointee is required to return to Australia for at least 3 years to perform work similar to that carried out in the United Kingdom during the tenure of the Nuffield fellowship. Further information is available from Australian Academy of Science, GPO Box 783, Canberra City ACT 2601. Tel (02) 6247 5777, Fax (02) 6257 4620. Applications close mid-March.

### **Overseas Research Students Awards Scheme (United Kingdom) (I,L,R)**

- Difference in tuition fees for a 'home' and an 'overseas' student

The ORS Scheme provides partial remission of tuition fees to overseas students of outstanding merit and research potential. The awards are open to graduates who will be commencing full-time research studies at a participating institution in the United Kingdom, and who will be liable to pay tuition fees at the overseas student rate. Information and applications must be obtained directly from the Registrar or Secretary of the institution students are applying to in the United Kingdom. Applications normally close in April in the year of tenure.

### **Queen's Trust Grants (L)**

- Up to \$15,000

The Queen's Trust provides grants to Australian citizens aged 18–28 years, for the pursuit of excellence in their chosen fields. Projects are supported for the advancement of Australian youth, development of community leadership and/or other skills which will be of benefit to Australia. Information and applications may be obtained from the Queen's Trust. Tel 1800 033 625. Applications close late April.

### **The Rhodes Scholarship (L,R,C)**

- Tuition fees, assistance with travel expenses, up to \$17,500 allowance
- 2 years, with a possible 1 year extension

The scholarship is tenable for postgraduate study at Oxford University. Applicants must be aged between 19 and 25 and have an honours degree or equivalent. Selection for the scholarship will be based on academic and personal achievements, including community spirit. Applications close late August.

### **The Robert Gordon Menzies Scholarship to Harvard (L,R,C)**

- Up to \$25,000 towards tuition fees, living expenses or travel costs (students who enrol in the Harvard Business School may be eligible for an additional \$12,000)
- 1 year

The scholarships are tenable at one of the graduate schools of Harvard University. Applicants must be postgraduates of an Australian tertiary institution who intend to return to Australia after studies at Harvard or to represent Australia overseas. The scholarships are awarded on the basis of academic excellence and personal qualities such as leadership and public duty. The successful applicant will be expected, when circumstances permit, to repay the scholarship in later years. Applications and additional information may be obtained from the Chair, Board of Faculties, ANU, Canberra ACT 0200. Fax (02) 6248 5561, E-mail: lynne.colley@anu.edu.au. Applications close at the end of December.

### **Rotary Foundation Ambassadorial Scholarships (I,L)**

The Rotary Foundation offers scholarships to study or train in another country where Rotary clubs are located. Applicants must have completed at least two years of a university or college course, or have completed high school and have been employed for at least two years. Applicants must also be citizens of a country in which there is a Rotary club. Information regarding scholarship availability, closing dates and applications should be obtained from the applicant's local Rotary club.

### **The Sir Charles Mackerras/Australia–Britain Society Music Scholarship (L)**

- 8,000 pounds sterling

The scholarship is open to outstanding young conductors, composers and répétiteurs, aged between 21 and 30 who are likely to be influential leaders in the field of music, to undertake study in the United Kingdom or the Czech republic for at least six months. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027. Tel (02) 9326 2022, Fax (02) 9327 4868, Email: bcsydney@sprint.com. Applications close early November.

### **The STA Travel Grant (I,L,R,C)**

- Up to \$1,500 (in 1998) and up to \$3,000 from 1999

Applicants must be undertaking study leading to a degree or diploma of the University and a member of the University Union. The grant is awarded on the basis of significant contribution to the community life of the University involving a leadership role in student affairs and the University Union and the relevance and merit of the proposed travel to the student's academic program or University Union activities. Applications close mid-April.

### The Swedish Institute Guest Scholarships (I,L)

- SEK 7,000 per month living allowance
- 9 months (1 academic year)

The scholarships are open to students/researchers who wish to travel to Sweden for studies/research which cannot equally well be pursued in countries other than Sweden. Applicants must establish contact with a Swedish University willing to accept the applicant for the proposed studies. Initial requests for application forms must be made in writing, including name and address, nationality, educational background and work experience, knowledge of any languages, statement of the purpose of study/research in Sweden, and a copy of a letter of invitation from a Swedish University Department. Requests for applications should be sent to the Swedish Institute, Department for Educational and Research Exchange, PO Box 7434, S-103 91, Stockholm, Sweden. Email: grantinfo@si.se. Requests for application forms must reach the Swedish Institute before 1 December.

### Swiss Government Scholarships (L,R,C)

- Tuition fees, living allowance, medical insurance and assistance with airfares
- 1 academic year

One scholarship is available for art/music and two for other disciplines, to undertake postgraduate study or attend an art school/conservatory in Switzerland. Applicants will be required to pass a language test in German or French. Applicants must be aged under 35. Applications close early October.

### The Tokyo Metropolitan Government Foreign Student Scholarship Program (L,R,C)

- 200,000 yen per month, tuition and travel expenses, plus allowances
- Up to 2.5 years

Scholarships are available for a Master's degree or postgraduate research at Tokyo Metropolitan University, or Tokyo Metropolitan Institute of Technology. Applicants must be aged under 35 years, be Australian citizens from New South Wales, and be graduates of a university in NSW.

### University College London Scholarships

The University College London offers various scholarships to students from overseas, who hold an offer of admission to a full-time programme of study at UCL. Applicants must be self-financing and liable to pay tuition fees at the rate for overseas students. Information and applications are available from the International Office, University College London, Gower St, London WC1E 6BT, UK. Tel +44 171 380 7708, Fax: +44 171 380 7380, Email: international@ucl.ac.uk.

### Yokohama Scholarship Awards (L,R,C)

- JPY 120,000 per month undergraduate, JPY 150,000 per month for postgraduate students, tuition fees, airfare plus allowances
- Up to 4 years (undergraduate), 1 year for Japanese language study, 2 years for Masters, 3 years for PhD

Applicants must be Australian citizens who have submitted their application to, or been accepted by a Japanese university and be able to communicate in Japanese (or be willing to undertake intensive study of the Japanese language). All disciplines are eligible except Medicine, Veterinary Science and Dentistry. Scholarships will be granted subject to the applicant's final acceptance by the chosen Japanese University. Original application forms only will be accepted and are available from the Yokohama Scholarship Foundation. Tel (07) 5588 0880. Fax (07) 5588 0842. Applications close with the Foundation in early October.

---

## Faculty Travel

---

### Faculty of the Built Environment

#### The Lindsay Robertson Memorial Travel Award (I,L,R,C)

- A maximum of \$1,500
- 1 year

Candidates should be Landscape Architecture graduates of the University of New South Wales. The award is to undertake full-time postgraduate study or research in Landscape Architecture at an approved institution overseas or in Australia. Applications close mid-May.

#### The Planning Workshop Australia Scholarship (I,L,C)

- Up to \$2,000 to cover travel expenses

A scholarship is available to cover the costs of an international field trip for a student undertaking the Master of Urban Development and Design (MUDD) program at UNSW. Selection is based on academic merit and professional excellence. A written application, including a curriculum vitae and the names of two referees, should be sent to the Head of School, Graduate School of the Built Environment, UNSW 2052. Applications close 31 August.

### **The Ronald Lu Travelling Scholarship in Architecture (I,L)**

- At least \$3,000 for travel to Asia

Applicants must be undertaking Year 3 or 4 of the Bachelor of Architecture degree. Applicants will be assessed on the basis of academic merit coupled with a statement outlining the reasons for their proposed travel and study. The scholarship will normally close June 1 each year, for travel to Asia during the long vacation period.

The following information summarises prizes awarded by the University. Prizes are grouped by level as follows: Undergraduate, common Undergraduate/Postgraduate, Postgraduate. Within these groups prizes are listed under the faculty, school or department in which they are awarded. Prizes which are not specific to any school are listed under General. Law prizes are awarded only for students enrolled in the LLB or Jurisprudence courses.

Information regarding the establishment of new prizes may be obtained from the Student Information and Systems Office.

Prize information is normally provided in the following format:

- Prize value
- Conditions

---

## Undergraduate Prizes

---

### The University of New South Wales (General Category for Prizes)

#### The Heinz Harant Challenge Prize

- \$1,000 (bi-annual prize)

For an original piece of assessable work submitted in the course of completing a General Education subject

#### The Sydney Technical College Union Award

- \$400 and a bronze medal

Leadership in student affairs combined with marked academic proficiency by a graduand

#### The UNSW Human Rights Essay Prize

- \$400

For the best research essay on a Human Rights topic by a student enrolled at the University of New South Wales proceeding to a Bachelor degree

---

### Faculty of the Built Environment

#### The Belt Collins Australia Design Prize

- \$500

For the best performance in Design Project (Landscape Design 6)

---

### Architecture Program

#### The Board of Architects of NSW Prize

- \$350

For the outstanding graduand in the School of Architecture

#### The Connell Wagner Award for Excellence in Architectural Structures

- \$600 and a silver medal

For 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 Structure Design ARCH5621 Advanced Structural Design ARCH5622 Lightweight Structural Design

### **The Eric Daniels Prize in Residential Design**

- \$500

For the best performance in design for Residential Accommodation by a student in the Bachelor of Architecture degree course

### **The Frank Fox Memorial Prize**

- \$150

For the best performance in Historical Research by a student in the Bachelor of Architecture degree course

### **The Frank W Peplow Prize**

- \$100

For the best performance in Church Architecture or Design by a student in the Bachelor of Architecture degree course

### **The Morton Herman Memorial Prize**

- \$100

For the best performance in Studies of Historic Structures in the Bachelor of Architecture degree course

### **The Royal Australian Institute of Architects Prize**

- \$250

For outstanding performance in Architectural Design and related studies in the final two years of the Bachelor of Architecture degree course

## **Building Program**

### **The Australian Institute of Building Chapter Medal**

- \$200 and a medal

For the highest marks achieved by a student completing the Bachelor of Building Construction Management degree course

### **The Building Services Corporation Prize**

- \$1,000

For meritorious academic performance in Year 1 or Year 2 of the Bachelor of Building Construction Management course

### **The Institute of Wood Science (Australian Branch) Timber in Building Prize**

- Membership of the Institute and a journal

For the best performance in BLDG4114 Building Science 4 (Timber) by a student in the Bachelor of Building Construction Management degree course

### **The Multiplex Constructions Prize**

- \$1,500

For the best performance in the major Building Construction subjects Construction 1 to 5 in the Bachelor of Building Construction Management degree course

### **The Reed Constructions Prize**

- \$1,000

For the most outstanding performance by a student in the Bachelor of Building Construction Management degree course

## **Industrial Design Program**

### **The Fay Adams Ergonomics in Design Prize**

- \$500

For the final project in IDES4301 Project Research or IDES4351 Project which most clearly reflects the effective application of ergonomic principles in its design and use

## **Landscape Architecture Program**

### **The Lindsay Robertson Memorial Prize**

- \$300

For the best performance in LAND2270 Landscape Design 2 in the Bachelor of Landscape Architecture degree course

## **Planning and Urban Development Program**

### **The Hans Westerman Prize**

- \$500

For the best performance by a student in Year 1 of the Bachelor of Town Planning degree course

**The Head of Program Prize**

- \$500

For the best performance by a student in Year 2 of the Bachelor of Town Planning degree course

**The John Shaw Memorial Prize**

- \$400

For the best thesis in the Bachelor of Town Planning course

**The New South Wales Department of Planning Prize**

- \$500

For the best performance in Year 5 of the Bachelor of Town Planning course

**The Royal Australian Planning Institute (NSW Division) Prize**

- \$250

For the best performance by a student in Year 3 of the Bachelor of Town Planning degree course

**The Royal Australian Planning Institute (NSW Division) Prize for Excellence in Local Planning**

- \$250

For the best performance by a student in the major subjects focussing on local planning in the Bachelor of Town Planning degree course

---

## Undergraduate and Postgraduate Prizes

---

### Faculty of the Built Environment

**The JM Freeland Prize**

- Annual interest from investment account

For a significant research achievement by a student or students in the field of History and/or Conservation of the

Built Environment in Australia. The work for which the prize is awarded must have been submitted as partial or complete fulfilment of the requirements for a degree offered in the Faculty of the Built Environment. Significant research achievements eligible for the award include a thesis, project report or dissertation, a substantial measured study or a conservation plan

---

## Postgraduate Prizes

---

### Building Program

**The Alex Rigby Prize**

- \$250

For the best overall performance in the Master of Project Management degree course

**The Hansen Yuncken Prize**

- \$1,000

For the best performance in the Master of Construction Management course by a student proceeding to the degree of Master of Construction Management

**The TWCA Prize**

- \$300

For the best performance by a student in Year 2 of the Master of Project Management degree course

---

## Notes



---

## Notes

# The University of New South Wales • Kensington Campus

## Theatres

Applied Science Theatre F11  
 Arndt Lykke Theatre C27  
 Biomedical Theatre E27  
 Central Lecture Block E19  
 Chemistry Theatres  
     *(Dwyer, Menon, Murphy, Nymann, Smith)* E12  
 Clancy Auditorium C24  
 Classroom Block *(Western Grounds)* H3  
 Fig Tree Theatre B14  
 Hettfron Theatres E13  
 Jo Myers Studio D9  
 Keith Burrows Theatre J14  
 MacAulay Theatre E15  
 Mathews Theatres D23  
 Parade Theatre E3  
 Physics Theatre K14  
 Quadrangle Theatre E15  
 Rex Vowles Theatre F17  
 Science Theatre F13  
 Webster Theatres G15

## Buildings

AGSM G27  
 Applied Science F10  
 Arcade D24  
 Architecture H14  
 Barker Apartments N13  
 Barker Street Gatehouse, Gate 14 N14  
 Basser College *(Kensington)* C18  
 Baxter College D14  
 Biosciences D26  
 Central Store B13  
 Charcellery C22  
 Dalton *(Chemistry)* F12  
 Goldstein College *(Kensington)* D16  
 Golf House A27  
 Gymnasium B5  
 High Street Gatehouse, Gate 9 B24  
 Hettfron, Robert *(Chemistry)* E12  
 International House C6  
 John Goodsell *(Commerce and Economics)* F20  
 Kensington Colleges *(Office)* C17  
 Library *(University)* E21  
 Link B6  
 Main K15  
 Maintenance Workshop and Central Store B13  
 Mathews F23  
 Menzies Library E21  
 Morven Brown *(Arts)* C20  
 New College L6

Newton J12  
 NIDA D2  
 Parking Station H25  
 Parking Station N18  
 Pavilions E24  
 Philip Baxter College *(Kensington)* D14  
 Quadrangle E15  
 Sam Cracknell Pavilion H8  
 Samuels Building F25  
 Science Product Development H13  
 Shalom College N9  
 Webster, Sir Robert 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 Resource and Research Centre E20  
 Aboriginal Student Centre A29  
 Accommodation *(Housing Office)* E17  
 Accounting E15  
 Admissions C22  
 Alumni Relations C22  
 Anatomy C27  
 Applied Bioscience D26  
 Applied Economic Research Centre F20  
 Applied Geology F10  
 Archives, University E21  
 Architecture H14  
 Arts and Social Sciences *(Faculty Office)* C20  
 Asia-Australia Institute, 45 Beach Street, Coogee  
 Asian Business and Language Studies E15  
 Audio Visual Unit F20  
 Australian Graduate School of Management G27  
 Banking and Finance E15  
 Biochemistry and Molecular Genetics D26  
 Biological Science D26  
 Biomedical Library F23  
 Biotechnology F25  
 Building H14  
 Built Environment *(Faculty Office)* H14  
 Business Law and Taxation F20  
 Campus Services C22  
 Cashier's Office C22  
 Chaplains E4  
 Chemical Engineering and Industrial Chemistry F10  
 Chemistry E12

Civil and Environmental Engineering H20  
 Commerce and Economics *(Faculty Office)* F20  
 Communications Law Centre C15  
 Community Medicine D26  
 Computer Science and Engineering G17  
 Cornea and Contact Lens Research Unit, 22-32 King  
     St, Randwick  
 Economics F20  
 Education Studies G2  
 Educational Testing Centre E4  
 Electrical Engineering G17  
 Energy Research, Development & Information Centre  
     F10  
 Engineering *(Faculty Office)* K17  
 English C20  
 Equity and Diversity Unit E15  
 Examinations C22  
 Facilities Department C22, B14A  
 Fees Office C22  
 Fibre Science and Technology G14  
 Food Science and Technology B8  
 Geography K17  
 Geomatic Engineering K17  
 Graduate School of Biomedical Engineering F25  
 Graduate School of the Built Environment H14  
 Graduate School of Engineering (MBT Program) K17  
 Groundwater Centre F10  
 Health Service, University E15  
 Health Services Management F25  
 History C20  
 Human Resources C22  
 Industrial Design G14  
 Industrial Relations and Organisational Behaviour  
     F20  
 Information, Library and Archives Studies F23  
 Information Systems E15  
 Information Technology Unit F21  
 International Student Centre F9  
 IPACE Institute F23  
 Kanga's House O14  
 Landscape Architecture K15  
 Law *(Faculty Office)* F21  
 Law Library F21  
 Legal Studies and Taxation F20  
 Library Lawn D21  
 Life Sciences *(Faculty Office)* D26  
 Loans C22  
 Lost Property H11  
 Marine Science D26  
 Marketing F20  
 Materials Science and Engineering E8

Mathematics F23  
 Mechanical and Manufacturing Engineering J17  
 Metallurgy C22  
 Medical Education C27  
 Medicine *(Faculty Office)* B27  
 Microbiology and Immunology D26  
 Michael Birt Gardens C24  
 Mines K15  
 Mining Engineering K15  
 Modern Language Studies C20  
 Music and Music Education B11  
 News Service C22  
 Optometry J12  
 Pathology C27  
 Performing Arts B10  
 Petroleum Engineering D12  
 Philosophy C20  
 Physics K15  
 Physiology and Pharmacology C27  
 Planning and Urban Development K15  
 Political Science C20  
 Pooh Corner N8  
 Printing Section C22  
 Professional Development Centre E17  
 Psychology F23  
 Publications Section C22  
 Remote Sensing and Geographic Information  
     Systems K17  
 Research Office, 34 Botany Street, Randwick  
 Safety Science B11a  
 Science and Technology *(Faculty Office)* E12  
 Science and Technology Studies C20  
 Security H13  
 Social Science and Policy C20  
 Social Policy Research Centre F25  
 Social Work G2  
 Sociology C20  
 Sport and Recreation Centre B6  
 Squash Courts B7  
 Student Centre *(off Library Lawn)* C22  
 Student Recruitment Office C22  
 Student Services: Careers, Housing, Counselling E15  
 Students' Guild E15  
 Swimming Pool B4  
 Tennis Pavilion J6  
 Textile Technology G14  
 Theatre and Film Studies B10  
 UNSW Bookshop E15  
 WHO Regional Training Centre C27  
 Wool and Animal Sciences G14  
 Works and Maintenance B14A