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UNIVERSITY OF
TECHNOLOGY SYDNEY

2003

JTS: INFORMATION TECHNOLOGY HANDBOOK

University of Technology,
Sydney. Faculty of
Information Technology.
Handbook
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CITY CAMPUS
University of Technology,



UTS:INFORMATION

TECHNOLOGY HANDBOOK 2003

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www.uts.edu.au/div/publications

Readers are responsible for verifying information which pertains to them by contacting the Faculty or the UTS Student Info & Admin Centre.

EQUAL OPPORTUNITY

It is the policy of UTS to provide equal opportunity for all persons regardless of race; colour; descent; national or ethnic origin; ethno-religious background; sex; marital status; pregnancy; potential pregnancy; carer's responsibilities; disability; age; homosexuality; transgender status; political conviction; and religious belief.

FREE SPEECH

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

NON-DISCRIMINATORY LANGUAGE

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

www.equity.uts.edu.au/resources/language.html

ACCESS UTS ON THE WEB

www.uts.edu.au

Faculty Handbooks and UTS: Calendar

www.uts.edu.au/div/publications/

UTS Rules, Policies and Procedures

www.uts.edu.au/div/publications/policies/

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GENERAL INFORMATION

WELCOME

Welcome to the University of Technology, Sydney (UTS), one of the largest universities in New South Wales – a university with an international reputation for quality programs and flexible learning. UTS develops and regularly revises its programs of study in partnership with industry, government and professional bodies, so that its degrees are based on the latest professional standards and current practices. As a result, UTS produces graduates who are ready for work, and this is demonstrated in the high numbers of its students who are members of the workforce within a few months of finishing their degree.

UTS offers its students a lively, supportive and diverse learning environment across three campuses, and a range of social, cultural and sporting facilities to enrich each student's experience. UTS regards learning as a lifelong experience, and offers a range of programs to cater for the educational needs of people at a variety of stages in their lives, and from diverse backgrounds and cultures.

UTS offers undergraduate and postgraduate degrees, developed by the Faculties of Business; Design, Architecture and Building; Education; Engineering; Humanities and Social Sciences; Information Technology; Law; Nursing, Midwifery and Health; and Science. Each of these faculties is responsible for programs across a number of key disciplines, and many offer courses in conjunction with one another, or with the Institute for International Studies. Courses developed and delivered by these faculties reflect the University's commitment to providing a relevant education to students through flexible and work-based modes of learning and through the ongoing internationalisation of the curriculum.

ABOUT THE UTS HANDBOOKS

Every year UTS produces 10 faculty/institute handbooks which provide the latest information on approved courses and subjects to be offered in the following year. These handbooks include comprehensive details about course content and structure, subject and elective choices, attendance patterns, credit-point requirements, and important faculty and student information. Many of them also contain faculty policies and guidelines for participation in specific courses. This provides students with the necessary information to meet the requirements of the course, complete a program of study, and receive a degree.

UTS also produces a companion volume to these handbooks every year. The *UTS: Calendar* contains the University Act, By-law and Rules, a list of courses offered across the University, and other useful University information. Copies of the faculty/institute handbooks and the *UTS: Calendar* are held in the University's libraries and faculty offices and can be purchased at the Co-op Bookshop.

Every effort is made to ensure that the information contained in the handbooks and the Calendar is correct at the time of printing. However, UTS is continuously updating and reviewing courses and services to ensure that they meet needs, both current and emerging, and as a result the information contained in these publications may be subject to change.

For the latest information, see the University's website at:

www.uts.edu.au

STUDENT INQUIRIES

UTS Student Info & Admin Centre

telephone (02) 9514 1222
 email info.office@uts.edu.au
www.uts.edu.au

City campus

CB01.4
 (Level 4 foyer, Tower Building)
 15 Broadway, Ultimo

Kuring-gai campus

KG01.6 (Level 6, Building K1)
 Eton Road, Lindfield

Postal address

PO Box 123, Broadway NSW 2007

International Programs Office

CB01.3A
 (Level 3A, Tower Building)
 telephone +61 2 9514 1531
 fax +61 2 9514 1530
 email intlprograms@uts.edu.au
www.ipo.uts.edu.au
 CRICOS provider code: 00099F

Faculty student offices

Business

Undergraduate inquiries

CM05C.1
 (Level 1, Building 5)
 City campus at Haymarket
 telephone (02) 9514 3500
 KG01.5
 (Level 5, Building K1)
 Kuring-gai campus
 telephone (02) 9514 5355
 email undergraduate.business@uts.edu.au

Postgraduate inquiries

CM05B.5
 (Level 5, Building 5)
 City campus at Haymarket
 telephone (02) 9514 3660
 email graduate.business@uts.edu.au

Design, Architecture and Building

CB06.5
 (Level 5, Building 6
 (Peter Johnson Building))
 City campus
 telephone (02) 9514 8913
 email dab.info@uts.edu.au

Education

CB10.05.430
 235 Jones Street
 City campus
 telephone (02) 9514 3900
 email education@uts.edu.au
 KG02.3.33
 (Room 333, Building K2)
 Kuring-gai campus
 telephone (02) 9514 5621
 email teached.office@uts.edu.au

Engineering

CB02.7
 (Level 7, Building 2)
 City campus
 telephone (02) 9514 2666
 email upo@eng.uts.edu.au
www.eng.uts.edu.au

Humanities and Social Sciences

Faculty Student Centre

CB03.2
 (Level 2, Building 3 (Bon Marche))
 City campus
 telephone (02) 9514 2300
 email hss.studentcentre@uts.edu.au

Faculty Research Office

CB02.7
 (Level 7, Building 2)
 City campus
 telephone (02) 9514 1959
 email research.degrees.hss@uts.edu.au

Information Technology

CB10.3.510
 (Level 3, Building 10)
 City campus
 telephone (02) 9514 1803
 email info@it.uts.edu.au
<http://it.uts.edu.au>

Law

CM05B.3.03
(Room B303, Building 5)
City campus at Haymarket
telephone (02) 9514 3444
email admingen@law.uts.edu.au

Nursing, Midwifery and Health

KG05.3.97
(Room 397, Level 3, Building K5)
Kuring-gai campus
telephone (02) 9514 5201 or (02) 9514 5202
email nmh@uts.edu.au

Science

CB04.3.07
(Level 3, Building 4)
City campus
SL01.2.01
(Level 2, Dunbar Building)
St Leonards campus
telephone (02) 9514 1756
email information@science.uts.edu.au

Institute for International Studies

10 Quay Street
Haymarket, City campus
telephone (02) 9514 1574
email iisinfo@uts.edu.au

Note: The Building ID system is a four-character code, comprising two letters describing a geographic location and two numerals that use existing building numbers. Office locations appear as BuildingID.FloorNo.RoomNo.

The geographic location codes are:

- CB City campus, Broadway
- CC City campus, Blackfriars, Chippendale
- CM City campus at Haymarket
- KG Kuring-gai campus
- SL St Leonards campus

APPLICATIONS AND ENROLMENT

Undergraduate

The NSW and ACT Universities Admissions Centre (UAC) processes most applications for undergraduate courses which start at the beginning of the year. Students are required to lodge these UAC application forms between August and December; early closing dates may apply to some courses. To find out more about these courses and the application procedures, check the *UAC Guide*, or the UAC website at:

www.uac.edu.au

Students can also apply for entry to some UTS courses by lodging a UTS application form directly with the University. These are usually courses that are not available to recent school leavers and do not have a UAC code.

Postgraduate

Applications for postgraduate courses should be made directly to UTS. For courses starting at the beginning of the year, most applications open in August with a first round closing date of 31 October. For courses starting in the middle of the year, applications open in May.

For further information, contact the UTS Student Info & Admin Centre.

International students

International student applications for both postgraduate and undergraduate courses can be made either directly to the International Programs Office or through one of the University's registered agents. For courses starting at the beginning of the year, applications should be received by 30 November of the previous year. For courses starting in the middle of the year, applications should be received by 31 May of that year. For more information, contact:

email intlprograms@uts.edu.au

CRICOS provider code: 00099F

Non-award and cross-institutional study

Students who want to study a single subject at UTS which is not part of a UTS degree or qualification, must apply for non-award or cross-institutional study. There are three application periods, and closing dates vary for each semester. For more information contact the appropriate faculty or the UTS Student Info & Admin Centre.

Enrolment

Students should be aware that it is their responsibility to ensure:

- that their personal details are correct and the University informed of any changes as they occur
- that their enrolment details are correct and that their subject choices can be credited toward the award in which enrolled.

ASSESSMENT

Students come to university for a variety of reasons including to gain a specific qualification, to pursue their interest in a particular field and to broaden their education. Good academic practice demands personal integrity and respect for scholarship. For example, academic staff are responsible for marking assessment fairly and consistently, and students are responsible for submitting work that represents their own efforts to meet the stated requirements.

Student learning is more effective and enjoyable if basic principles of good academic practice are followed. These include the following:

- academic integrity
- self-motivation and commitment to learning
- awareness of requirements
- participation
- respecting the rights of others, and
- seeking timely help from appropriate sources.

Each subject outline contains information on assessment and students should refer to it for specific details.

ENVIRONMENT, HEALTH, SAFETY AND SECURITY

The University is committed to providing a safe and healthy workplace for students, staff and visitors and adopting a socially responsible approach towards protecting and sustaining the environment. Staff and students must take reasonable care of themselves and others, cooperate with actions taken to protect health and safety and not wilfully place at risk the health, safety or wellbeing of others.

Emergency procedures

Report emergencies to Security by dialling '6' from any internal telephone or Freecall 1800 249 559 (24 hrs).

Let the Security Officer know:

- the nature of the problem (e.g. fire, medical emergency, assault)
- the location of the emergency, and
- your name and the telephone extension you are calling from.

Evacuation procedures

The Evacuation Alarm consists of two tones:

BEEP...BEEP...BEEP... (Prepare)

When you hear this tone:

- shut down or secure machinery and computers
- prepare to evacuate, and
- check whether anyone needs assistance.

WHOOO...WHOOO...WHOOO... (Evacuate)

When you hear this tone:

- listen for instructions, a public announcement will tell you to 'Evacuate the building'
- leave the building via the nearest fire exit
- do not use lifts
- provide assistance where required
- proceed to the assembly area
- follow instructions from Emergency Authorities and Security, and
- do not return to the building until the all clear is given.

Hazards and risks

If you see a hazard or condition that presents a risk to your health and safety, report it to a staff member or Security Officer so that something can be done to remedy it. Help to fix it if you can.

To report a serious hazard after hours, contact Security by dialling '6' from any internal telephone or Freecall 1800 249 559 (24 hrs).

Safe work practices

Always follow safe work practices as provided by your lecturer or a technical staff member. Ask for help if you are unsure about how to use a piece of equipment or undertake a task, particularly before carrying out new or unfamiliar work.

First aid

There are a number of First Aid Officers in every building on each UTS campus. See the first aid poster in your study area for their names, location and phone number. Security Officers also have first aid training and can be contacted by dialling '6' from any internal telephone or Freecall 1800 249 559 (24 hrs).

Medical attention is also available from the Health Service at City (Broadway) and Kuring-gai campuses.

Accident/incident reporting

If you are involved in an accident or incident, report it to a staff member or Security Officer and then complete a UTS Accident/Incident Report form, available from your faculty office or Security.

If the accident/incident is serious, call Security immediately by dialling '6' from any internal telephone or Freecall 1 800 249 559 (24 hrs).

Smoking

Smoking is not permitted inside any building on any campus of the University, or in any University vehicle.

Campus shuttle bus

The University operates a number of shuttle bus services. These run between:

- City and Kuring-gai campus
- Kuring-gai campus main entry and the Kuring-gai campus carpark
- City campus at Haymarket and Broadway and the student accommodation facilities (Geegal and Bulga Ngurra). This shuttle covers the area bounded by William Henry Street, Bay Street and Broadway. All students living within this area are urged to use the service to ensure a safe passage home.

Shuttle bus timetables are available from the Security Office on your campus.

Lost and found

The Security Office on your Campus is the first point of call to check for lost property or to hand in found items. Items are kept for three months and if unclaimed become the property of the person who found the item.

Security systems

All buildings are accessible by a personal identification number (PIN) and are protected by an electronic intrusion detection system and a closed circuit TV network. You can obtain a PIN from your faculty office. Remember, your PIN is assigned to you and is not transferable. Do not misuse your PIN as this could compromise the safety of others.

Keeping yourself safe

- If studying/working in an isolated area, particularly after hours, lock the doors and don't let anyone in who you don't know. Do not leave doors propped open.
- If you think you are being followed or feel frightened for any reason, contact Security by dialling '6' from any internal telephone or Freecall 1 800 249 559.
- Do not take shortcuts through isolated areas, particularly at the St Leonards campus where the cemetery is a definite no-go area, even during the day. Keep to well-travelled routes and well-lit areas.
- Walk near the curb, away from doorways and bushes.

- Be alert when using toilet facilities, particularly in isolated areas. Check for strangers while you are still near the door. Whenever possible, ask a friend to accompany you.
- If you plan to have a drink after classes, make plans ahead of time for getting home. Don't leave with people you are not comfortable with.
- Do not hitchhike or accept a lift from a stranger.
- If you feel uncomfortable about who is in a lift/elevator, do not get in. Wait until the next lift/elevator arrives.
- Remember, UTS Security staff are available 24 hours a day, 7 days a week.

Keeping your belongings safe

The University consists of a number of large public buildings in the CBD and experiences a level of property crime in keeping with its location. Purses, wallets and particularly mobile phones are a prime target for thieves.

- Mark your name or other personal identification (e.g. your driver's licence number) on personal items of value. Marked items are less likely to be stolen.
- Use the lockers in the Library to store personal property, particularly if you plan on spending some time studying.
- Keep your possessions with you at all times. Do not leave wallets, purses or phones unprotected or out of your sight, particularly in the Library, computer laboratories or cafeterias.
- Do not carry large amounts of money – there are automatic teller machines (ATMs) on most campuses.

Bicycle storage

Bicycle racks are located outside major buildings and often covered by a security camera.

Recycling

UTS has facilities for recycling paper, glass, cardboard and aluminium. Reduce, reuse and recycle.

Contacts

Environment, Health and Safety

telephone (02) 9514 1326, (02) 9514 1062,
(02) 9514 1063

email ehs.branch@uts.edu.au

www.ehs.uts.edu.au

Security

City campus at Broadway

telephone (02) 9514 1192

email security.general@uts.edu.au

City campus at Haymarket

telephone (02) 9514 3399

email security.haymarket@uts.edu.au

Kuring-gai campus

telephone (02) 9514 5551

email security.kuring-gai@uts.edu.au

St Leonards campus, Dunbar Building

telephone (02) 9514 4004

email security.dunbar@uts.edu.au

EQUITY AND DIVERSITY

UTS has a strong commitment to ensure that the diverse nature of the Australian society is reflected in all aspects of its employment and education. The University also aims to assist members of under-represented groups overcome past or present discrimination, and to provide a supportive and open organisational culture in which students and staff are able to develop to their full potential.

UTS is committed to implementing its Equal Opportunity Statement which aims to ensure that all students and staff are treated fairly and equitably, and can work and study in an environment free of harassment. Discrimination, harassment and victimisation are unlawful, undermine professional relationships, diminish the experience of university life, and are not tolerated at UTS. All students and staff have a responsibility to contribute to the achievement of a productive, safe and equitable study and work environment.

The Equity & Diversity Unit provides a range of services for students and prospective students. These include the coordination of the inpUTS Educational Access Scheme for students who have experienced long-term educational disadvantage; coordination of financial scholarships and awards for commencing low-income students; and the provision of confidential advice and assistance

with the resolution of discrimination and harassment-related grievances.

Equity & Diversity Unit
CB01.17
telephone (02) 9514 1084
email equity.diversity.unit@uts.edu.au
www.equity.uts.edu.au

INTERNATIONAL EXCHANGE STUDENT SCHEME

UTS encourages its students to develop an international perspective on their courses and careers. As part of their studies, students have the opportunity to spend one or two semesters studying at an overseas partner university and receive credit towards their UTS degrees. To enable this to happen UTS has formal links with a large number of universities around the world. UTS is expanding its partnerships with universities – particularly where students can learn in English – so that more students can experience an exchange program. Some of these exchange opportunities will be in countries where English is not the first language but where university-level teaching in English is available. These countries include Austria, Denmark, Finland, France, Malaysia, the Netherlands and Sweden.

Scholarships available

UTS supports student participation in the International Exchange Students Scheme through the provision of a number of \$1,000 scholarships each semester as a contribution to the costs of going on exchange. While on exchange, students do not pay tuition fees in the overseas university. They pay their usual HECS fees or, if they are international students at UTS, their Australian tuition fees.

Further information and application forms for the Exchange Scheme and scholarships can be obtained from:

International Exchange Students Scheme
Institute for International Studies
10 Quay Street
Haymarket, 2007
telephone +61 2 9514 1537
email international.exchange@uts.edu.au
www.iis.uts.edu.au/iexchange/

NSW CHILD PROTECTION LEGISLATION

Prohibited Person Declaration and Screening

In accordance with New South Wales Child Protection legislation, students participating in practical training placements which require them to have direct contact with children under 18 in designated child-related employment areas are required to complete a Prohibited Employment Declaration form on enrolment. In some circumstances students may also be subject to employment screening. Screening is carried out only with students' consent but eligibility for participation in such programs is determined on the basis of information obtained through these checks.

FEES AND COSTS

Service fees

Service fees are charged to students to contribute to the cost of a range of facilities and services which are generally available to all students during the course of their study.

Variations and exemptions

Fees and charges may vary from time to time. For current information refer to the UTS Fees and Charges website at:
www.sau.uts.edu.au/fees

In certain circumstances, some students may be eligible for reduced service fees. For full details of variations and exemptions, contact the UTS Student Info & Admin Centre.

Course fees

No course fees are paid by local students undertaking undergraduate studies at UTS. Students are, however, liable for HECS charges (see following). Many postgraduate courses attract a course fee. These course fees are calculated on a course-by-course basis and are charged in addition to the service fees outlined above. Payment of course fees may vary depending on a student's status, and on conditions laid down by the faculty. Contact the relevant faculty for full details.

Details of course fees are outlined under each course entry in this handbook. Readers should

note that fees quoted throughout the handbook are correct at the time of publication however they are subject to change and should be confirmed with the Student Info & Admin Centre.

Course fees for international students

At the time of publication, course fees for undergraduate international students range from A\$5,000 to A\$8,500 per semester, and for postgraduate international students from A\$5,000 to A\$8,700 per semester. These may vary from time to time and the International Programs Office should be contacted for up-to-date information, or visit the website:

www.ipo.uts.edu.au/courses/index.html

International students in Australia on a student visa are required to undertake full-time study as a condition of their visa.

For more information contact the International Programs Office, or visit the website:

www.ipo.uts.edu.au

Other costs

Students may incur other costs while they study at UTS. These may include books, printed sets of reading materials, photocopying, equipment hire, the purchase of computer software and hardware, and Internet services.

Some elective subjects may incur an additional cost where travel away from the University is involved.

HECS

The Higher Education Contribution Scheme (HECS) is a financial contribution paid to the Commonwealth Government by tertiary students towards the cost of their education. It is payable each teaching period and the amount paid varies according to the number of credit points undertaken and the method of payment nominated by the student.

Most students have three choices in the way they pay HECS:

1. paying all of the HECS up front and receiving a 25% discount
2. deferring all payment until a student's income reaches a certain level, or
3. paying at least \$500 of the HECS contribution up front and deferring the remainder.

Note: These options may not apply to New Zealand citizens and Australian Permanent Residents.

Commonwealth legislation sets strict conditions for HECS over which the University has no control. HECS charges are based on the subjects in which students are enrolled on the HECS census date. It is important for students to realise that any reductions in their academic workload after the census date for a particular semester will not reduce their HECS liability. Students who defer their HECS payments become liable to commence repayment once their taxable income reaches the repayment threshold. This does not necessarily mean at the conclusion of their studies – a student's income may reach this threshold before then.

New students, students returning from leave and students who are commencing a new or second course, must complete a Payment Options Declaration form. This form must be lodged with the University by the census date and should show a valid Tax File Number.

The HECS census date for Autumn semester is 31 March and for Spring semester is 31 August. HECS census dates for other teaching periods can be obtained from the UTS Student Info & Admin Centre.

There are a number of variations to these guidelines. It is the responsibility of each student to find out which HECS conditions apply to them. Information can be obtained from the booklet *HECS Your Questions Answered*, which is available from the Department of Education, Science and Training (DEST) on telephone 1800 020 108 or from the website at:

www.hecs.gov.au

This website also indicates the full-time, full-year contributions for each band in differential HECS and the circumstances in which a flat rate may apply.

POSTGRADUATE EDUCATION LOANS SCHEME (PELS)

PELS is an income-contingent loan facility similar to the Higher Education Contribution Scheme (HECS) for eligible students enrolled in fee-paying postgraduate non-research courses.

All eligible students enrolled in a postgraduate fee-paying non-research course in 2003 are eligible to apply for a loan. This means that both continuing and commencing students are eligible to apply.

Eligible students are able to borrow up to the amount of the tuition fee being charged by UTS for each semester for the duration of their course. Students are also able to pay part of their semester tuition fee to UTS for a course and obtain a PELS loan for the balance of their outstanding fees for each semester.

Students are required to complete a Loan Request form by the census date each semester requesting the Commonwealth to pay their tuition fees to UTS and declare that they are aware of their obligations to repay the loan under the scheme when their income reaches a certain amount. Students also have to provide a Tax File Number (TFN) to UTS in the same way that students choosing to defer their HECS payment already do.

Queries in relation to PELS should be directed to the Student Info & Admin Centre on telephone (02) 9514 1222, or further information can be obtained from the DEST website at:

www.hecs.gov.au/pels.htm

BRIDGING FOR OVERSEAS-TRAINED PROFESSIONALS LOAN SCHEME (BOTPLS)

BOTPLS is an interest-free loan facility for overseas-trained professionals who are seeking to work in regulated or self-regulated professions in Australia. It is similar to the deferred payment arrangements available under HECS or PELS (see above). Eligible overseas-trained professionals who are citizens or permanent residents of Australia wishing to meet formal recognition requirements for their profession in Australia are able to access these loans.

More information can be obtained from the booklet *BOTPLS Your Questions Answered*, which is available from the Department of Education, Science and Training on telephone 1800 020 108 or from the website at:

www.hecs.gov.au/botpls.htm

FINANCIAL HELP

Austudy / Youth Allowance

Students aged under 25 years may be eligible to receive financial assistance in the form of the Youth Allowance.

Full-time students aged over 25 years may be eligible to receive Austudy which provides financial help to students who meet its income and assets requirements.

Application forms and information about eligibility for both Youth Allowance and Austudy are available from the Student Services Unit at Kuring-gai or City campuses.

Commonwealth legislation sets strict requirements for Austudy/Youth Allowance over which the University has no control. It is important that the students concerned understand these requirements.

Students who receive Austudy or the Youth Allowance and decide to drop subjects during the semester must be aware that to remain eligible they must be enrolled in a minimum of 18 credit points, or have a HECS liability for the semester of .375 equivalent full-time student units. The only exceptions made are for some students with disabilities which interfere with their studies, students who are single supporting parents or, in exceptional cases, those who have been directed by the University to reduce their study load.

For more information, talk to a Financial Assistance Officer in the Student Services Unit. Call for an appointment on:

telephone (02) 9514 1177 (City campus)
or (02) 9514 5342 (Kuring-gai campus)

Application forms for both Austudy and Youth Allowance should be lodged as soon as possible with any Centrelink office.

Abstudy

Abstudy assists Aboriginal and Torres Strait Islander tertiary students by providing income support and other assistance. For more information about Abstudy, contact the staff at Jumbunna, Indigenous House of Learning: CB01.17

telephone (02) 9514 1902 or 1800 064 312

SUPPORT FOR STUDENT LEARNING

Student Services Unit

To ensure student success, the University provides a range of professional services to support different aspects of student life and learning at UTS.

These services include:

- orientation and University transition programs
- student housing and assistance in finding private rental accommodation
- workshops and individual counselling to enhance effective learning
- assistance for students with disabilities and other special needs
- student loans and financial assistance
- health services
- personal counselling
- assistance with administrative problems or complaints
- assistance when extenuating circumstances impact on study
- help with getting a job, and
- campus interview program.

All these services are sensitive to the needs of students from diverse backgrounds and are available at City and Kuring-gai campuses with flexible hours for part-timers.

The Student Services Unit website offers a jobs database, 'where UTS graduates get jobs', virtual counselling and links to the 'student help' website:

www.uts.edu.au/div/ssu

Transition to university programs

Orientation 2003

UTS offers a free Study Success Program of integrated lectures and activities before semester begins, to help new students manage the transition to university study. There are specially tailored programs for part-time and international students as well as for recent school leavers. Students are informed of academic expectations, the skills needed to be an independent learner, and learning strategies which can help them successfully manage the workload. They are also provided with valuable information about how the University and its faculties operate, and the services provided.

Peer support network

The Peer Network Program enlists the aid of existing students to assist with the orientation of new students.

For more information, contact:

Student Services Unit
telephone (02) 9514 1177 (City campus) or
(02) 9514 5342 (Kuring-gai campus)

Careers Service

The Careers Service can help students make the link between various UTS courses and the careers they can lead to. The Careers Service also offers general career guidance, and assists with job placement for students seeking permanent or casual vacation work and employment. Contact the Careers Service on:

telephone (02) 9514 1471 (City campus)
www.uts.edu.au/div/cas

Chaplaincy

The Chaplaincy is coordinated through Student Services. Visiting Chaplains and Worship Rooms are available to students.

Chaplains represent different Christian denominations, as well as Buddhism, Judaism and Islam. Further information is available on: telephone (02) 9514 1177 or (02) 9514 2523

Counselling

Counsellors are available at both the City and Kuring-gai campuses for individual consultation. Group programs are also held throughout the year. This service is free of charge, confidential and sensitive to diversity. For further information, contact:

telephone (02) 9514 1177 (City campus) or
(02) 9514 5342 (Kuring-gai campus)

Telephone counselling is available on:

telephone (02) 9514 1177.

Financial assistance

Financial assistance staff assist students with personal financial matters and are the contact point for student loans. They can also advise on Youth Allowance, Austudy and other Centrelink benefits. Contact them on:

telephone (02) 9514 1177

Health/Medical

The Health Service offers a bulk-billing GP practice to students at two locations. Experienced doctors with diverse personal backgrounds

and clinical interests are available. For appointments, contact:
telephone (02) 9514 1177 (City campus) or
(02) 9514 5342 (Kuring-gai campus)

Housing

University Housing provides assistance to students in locating private accommodation. A limited amount of UTS-owned housing is also available. For further information, contact:

telephone (02) 9514 1509 (listings) or
(02) 9514 1199 (UTS Residences)

Special Needs Service

The University has in place a range of services and procedures to improve access for students with disabilities, ongoing illnesses and other special needs. Students who have disabilities or illnesses which may impact on their studies are encouraged to contact the Special Needs Service for a confidential discussion of the assistance available on:

telephone (02) 9514 1177
TTY (02) 9514 1164
email special.needs@uts.edu.au

Contacting Student Services

telephone (02) 9514 1177
TTY (02) 9414 1164
fax (02) 9514 1172
email student.services@uts.edu.au
www.uts.edu.au/div/ssu

City campus

CB01.6.01

- Counselling Service
- Health Service
- Special Needs and Financial Assistance Service

CB01.3.01

- Careers Service

CB01.3.08

- Housing Service

Kuring-gai campus

KG01.5.19 (Level 5, Building K1)

- Counselling Service
- Health Service
- Special Needs and Financial Assistance

Computing facilities at UTS

UTS General Access Computing Facilities are located throughout all campuses of the University and are available for all students and staff. Details of locations and availability of the computer laboratories can be obtained from the Information Technology Division (ITD) website at:

www.itd.uts.edu.au

or call the IT Support Centre on:

telephone (02) 9514 2222

Access to these labs requires a login and password. Students can call the IT Support Centre for assistance in setting up a login or pick up a *Computing Facilities @ UTS* brochure from any of the labs or IT Support Centres.

All University computing facilities are to be used exclusively for purposes concerning your study. Misuse, damage to property, security breaches, harassment or offensive behaviour will result in bans and disciplinary action. The Acceptable Use of IT Facilities Policy covers all UTS IT facilities including email accounts. For further information see the website:

www.itd.uts.edu.au

Student email accounts

UTS provides students with an email account, which gives all students access to email facilities via the web. To find out more about an email account, visit the website:

www.uts.edu.au/email/

Alternatively, students can pick up the brochure, *Your UTS Email Account*, available in all ITD General Access Labs and drop-in centres. If students have any problems with activating their account or the computing facilities in general, they should contact the IT Support Centre on:

telephone (02) 9514 2222

email itsupport@uts.edu.au

Computer training

In general, where computer training is necessary as part of a course that attracts HECS, it is provided as part of that course. Students can also consult the Computing Study Centre (see below).

STUDENT LEARNING CENTRES

Chemistry Learning Resources Centre

The Chemistry Learning Resources Centre assists students in undergraduate courses in the faculties of Science; Nursing, Midwifery and Health; Engineering; and Business.

CB04.2.11, City campus

Rosemary Ward

telephone (02) 9514 1729

email Rosemary.Ward@uts.edu.au

Computing Study Centre

The Computing Study Centre assists students in developing skills in the use of various standard computer packages.

CB01.16.11, City campus

John Colville, Director

telephone (02) 9514 1854

email John.Colville@uts.edu.au

www.it.uts.edu.au/activities/csc/

English Language Study Skills Assistance (ELSSA) Centre

ELSSA, the UTS Centre for academic language development, provides free custom-designed programs in academic writing, reading, speaking, critical thinking and cultural knowledge to meet the needs of undergraduate and post-graduate UTS students completing their degree in English. ELSSA also collaborates with staff in the faculties to foster interest in, and knowledge of, literacy and learning through research, intellectual contributions and staff development. ELSSA values quality, diversity, internationalisation and flexibility as it serves the wider academic and professional communities. The Centre also offers several award programs. For details, refer to pages 21–24.

Alex Barthel, Director

CB01.18.22, City campus

telephone (02) 9514 2327

or

KG02.5.22

Kuring-gai campus

telephone (02) 9514 5160

email elssa.centre@uts.edu.au

www.uts.edu.au/div/elssa/

Jumbunna, Indigenous House of Learning

Student Support Unit

Jumbunna's Student Support Unit provides a range of academic and cultural support to Aboriginal and Torres Strait Islander students studying at UTS to ensure equal access and participation in higher education.

The support available to students includes academic assistance, cultural activities, cultural affirmation programs, group and private study areas, student common room and kitchen, and a computer laboratory and printing facilities.

Jumbunna, Indigenous House of Learning

CB01.17

City campus

telephone (02) 9514 1902 or 1800 064 312

fax (02) 9514 1894

Mathematics Study Centre

The Centre coordinates mathematics assistance across the University and is staffed by lecturers with expertise in mathematics and statistics. The Centre runs bridging and preparation courses as well as providing support during study.

CB01.16

City campus

Leigh Wood, Director

telephone (02) 9514 2268

email Leigh.Wood@uts.edu.au

KG02.2.52

Kuring-gai campus

telephone (02) 9514 5186

www.science.uts.edu.au/math/msc.html

Physics Learning Centre

This is a drop-in centre for first-year physics students.

CB01.11.14

City campus

(with an adjoining computer laboratory)

Peter Logan

telephone (02) 9514 2194

email Peter.Logan@uts.edu.au

www.science.uts.edu.au/physics/plc.html

OTHER SERVICES

Student Ombud

Enrolled or registered students with a complaint against decisions of University staff, or related to the University, may seek assistance from the Student Ombud.

All matters are treated in the strictest confidence and in accord with proper processes.

CB02.4.02

City campus

telephone (02) 9514 2575

email ombuds@uts.edu.au

www.uts.edu.au/oth/ombuds

Academic Liaison Officers

Each faculty has one or more Academic Liaison Officer (AOL) who is a member of the academic staff. AOLs can approve requests for adjustments to assessment arrangements for students with disabilities or ongoing illnesses. They are also contacts for students who experience difficulties because of carer responsibilities, inpUTS students and students who have English language difficulties. Contact the relevant faculty for more information or see online at:

www.uts.edu.au/div/ssu/alo.html

Freedom of Information and Privacy

Under the *Freedom of Information Act 1989* (NSW), individuals may apply for access to information held by the University.

Personal information may also be accessed under the *Privacy and Personal Information Act 1998*. In addition to the requirements of the Act, UTS has a number of policies which govern the collection and use of private information.

Dr J FitzGerald

Registrar

CB01.4.16

City campus

telephone (02) 9514 1322

email Jeff.FitzGerald@uts.edu.au

Student complaints

UTS is committed to providing a learning and working environment in which complaints are responded to promptly and with minimum distress and maximum protection to all parties.

All students and staff have a responsibility to contribute to the achievement of a productive, safe and equitable study and work environment at UTS. The University's procedures for handling student complaints are based on confidentiality, impartiality, procedural fairness, protection from victimisation and prompt resolution.

Students should first raise their complaint directly with the person concerned where possible, or with an appropriate person in the faculty or administrative unit concerned. To seek advice and assistance in lodging a complaint, contact the Student Services Unit or the Equity & Diversity Unit.

The Policy on Handling Student Complaints is published on the Rules, Policies and Procedures website at:

www.uts.edu.au/div/publications/policies

Information on how to make a complaint is available on the Equity & Diversity Unit's website at:

www.equity.uts.edu.au/resources/gota.html

UNIVERSITY GRADUATE SCHOOL

The University Graduate School provides a focus for higher degree research students in all graduate research courses at UTS. It takes the lead in developing policy for graduate research studies in partnership with the faculties. The University Graduate School also works to enhance the quality of graduate research programs by monitoring quality and supporting research degree students and their supervisors.

The University Graduate School is located at CB10.6, City campus.

telephone (02) 9514 1336

fax (02) 9514 1588

email ugs@uts.edu.au

www.gradschool.uts.edu.au

UTS LIBRARY

The University Library collections are housed in three campus libraries and contain over 650,000 books, journals and audiovisual materials as well as a large range of electronic citation and full-text databases.

Services for students include face-to-face assistance in finding information through service points in the libraries as well as at key locations around the university. Information skills training programs, Closed Reserve, loans (including from other libraries), computer access, printing and photocopying facilities are also available.

The Library's extensive range of electronic information resources includes catalogues, databases, over 36,000 e-journals and Electronic Reserve. Online services include web information, reference and research assistance incorporating a real-time email reference service, online training, loan renewals, reservations and Inter-Library requests. Many of these services can be accessed on-campus and remotely 24 hours a day from the Library's website at:

www.lib.uts.edu.au

The Library is open for extended hours. More information is available on the website.

City Campus Library

Corner Quay Street and Ultimo Road
Haymarket
telephone (02) 9514 3388

Kuring-gai Campus Library

Eton Road
Lindfield
telephone (02) 9514 5313

Gore Hill Library (St Leonards campus)

Corner Pacific Highway and
Westbourne Street
Gore Hill
telephone (02) 9514 4088

CAMPUS LIFE

UTS Union

The UTS Union is the community centre for the University. It provides food and drink services, lounges and recreational areas, comprehensive social and cultural programs, funding for about 70 affiliated clubs and societies, sports facilities and programs, stationery shops, a newsagency and resource centres. Off campus the Union provides access to a rowing club, sailing club, athletics club and basketball stadium.

Union Office (City campus)
telephone (02) 9514 1444
email office@utsunion.uts.edu.au

City campus (Haymarket)
telephone (02) 9514 3369

Kuring-gai campus
telephone (02) 9514 5011
www.utsunion.uts.edu.au

Union Sports Centre

The centre contains multipurpose spaces, squash courts, weights rooms, circuit training room and outdoor basketball court.

CB04.1
City campus
telephone (02) 9514 2444

UTS Rowing Club

Dobroyd Parade, Haberfield
telephone (02) 9797 9523

Child care

UTS Child Care Inc. (UTSCC) coordinates all child-care services at UTS. Child care is available from 8.00 a.m. to 10.00 p.m. at both City and Kuring-gai campuses.

Care is available for 0–5 year olds throughout the year and for 5–12 year olds during school holidays. Child care can be accessed on a full-time, or part-time basis.

telephone (02) 8289 8400 (Ultimo)
or (02) 9514 2960 (City campus – Blackfriars)
or (02) 9514 5105 (Kuring-gai campus)

Child care subsidies

UTS child-care centres charge a fee, comparable to other child-care centres, of between \$45–55 per day for 0–5 year olds and \$25 a day for 5–12 year olds. All families who

register with Centrelink can access Federal Government means-tested child-care subsidies of up to \$29 per day through child-care centres.

Further subsidies are available at UTS child-care centres to all current UTS staff and students of up to \$10.50 per day, funded by the University and the University Union and available on proof of employment/enrolment at UTS.

Low-income students may apply to the Equity & Diversity Unit for further assistance (funded by the Unit and the Students' Association) in cases of demonstrable financial hardship.

To obtain an application form, contact the Equity & Diversity Unit on:

telephone (02) 9514 1084

Co-op Bookshop

The Co-op Bookshop stocks the books on students' reading lists, and a variety of general titles and computer software. It has branches at the City and Kuring-gai campuses, and, at the start of semester, at Haymarket and Gore Hill (St Leonards campus).

City campus

telephone (02) 9212 3078

email uts@mail.coop-bookshop.com.au

Kuring-gai campus

telephone (02) 9514 5318

email kuringai@mail.coop-bookshop.com.au

www.coop-bookshop.com.au

Students' Association

The Students' Association (SA) is the elected representative body of students at UTS and represents all students of the University on welfare and education issues. UTS students have the right to stand for election of the SA and to vote in the annual elections. The Students Representative Council enacts, directs and coordinates the work of the SA.

All enrolled students are members of the SA and pay an annual fee. Revenue from fees is used to employ professional educational and welfare staff; fund the student newspaper, *Vertigo*; run the Peer Tutor Scheme and Second-hand Bookshop; and facilitate and support various information, education and action campaigns.

City campus

CB01.3

telephone (02) 9514 1155

Kuring-gai campus

KG02.4

telephone (02) 9514 5237

Radio Station 2SER-FM (107.3 FM)

2SER-FM is a community radio station situated on Level 26 of the UTS Tower. The station broadcasts a wide range of music with a particular emphasis on electronic and dance as well as a selection of talk programs covering everything from film and the arts to current affairs and health. All programs are presented and produced by volunteers.

Owned by Sydney Educational Broadcasting Ltd, 2SER was jointly established by the University of Technology, Sydney and Macquarie University in 1979. Students interested in broadcasting are invited to visit the studios:

Students interested in broadcasting are welcome to visit the studios:

CB01.26.22

City campus

telephone (02) 9514 9514

or for more information visit the website at:

www.2ser.com

UTS Gallery and Art Collection

The UTS Gallery is a dedicated public gallery on the City campus. The UTS Gallery presents local, interstate and international exhibitions of art and design. There are 12 exhibitions per year including design degree shows.

The UTS Art Collection comprises nearly 600 works including paintings, prints, photographs and sculptures which are displayed throughout the University.

CB06.4

City campus

702 Harris Street, Ultimo

telephone (02) 9514 1652

fax (02) 9514 1228

email uts.gallery@uts.edu.au

www.utsgallery.uts.edu.au

ENGLISH LANGUAGE STUDY SKILLS ASSISTANCE CENTRE

The English Languages Study Skills Assistance (ELSSA) Centre enhances teaching and learning at UTS through a focus on academic language development, which involves reading, writing, listening, speaking, critical thinking and cultural knowledge.

The Centre does this by:

- collaborating with faculties to integrate the development of students' academic language in their areas of study
- teaching custom-designed programs to meet the specific requirements and changing needs of undergraduate and postgraduate UTS students and staff
- fostering interest in, and knowledge of, language and learning through research, intellectual contributions and staff development, and
- valuing quality, diversity, internationalisation and flexibility as the Centre serves the wider academic and professional communities.

In addition to a wide range of free academic language development services available to UTS students who complete undergraduate and postgraduate degrees in English, the ELSSA Centre also offers the following elective subjects, award courses and programs.

For further details, contact:

Alex Barthel, Director

CB01.18.22

City campus

telephone (02) 9514 2327

or

KG02.5.22

Kuring-gai campus

telephone (02) 9514 5160

email elssa.centre@uts.edu.au

www.uts.edu.au/div/elssa/

Elective subjects

The ELSSA Centre offers three elective subjects aimed specifically at students from language backgrounds other than English. Some of these subjects may be completed during semester or in intensive mode during the February or July vacation periods.

Semester 1 or 2

59318	Seminar Presentation	6cp
59319	Communication for Employment	6cp
59320	English for Business	6cp

Undergraduate programs for international students

Advanced Diploma in Australian Language and Culture

- ◆ UTS course code: HA30
- ◆ Testamur title: Advanced Diploma in Australian Language and Culture
- ◆ Abbreviation: none
- ◆ Course fee: \$6,000 (local)
\$9,000 (international)

The Advanced Diploma in Australian Language and Culture (ADALC) has been designed jointly by the ELSSA Centre and the Institute for International Studies for international students – either as a study-abroad year in their current degree (fee-paying), or as part of a university-to-university exchange agreement, or as a stand-alone program.

It can be taken at undergraduate or post-graduate level and allows students to enrol in subjects about Australian society and culture while tailoring a program to their own interests and level of English language competence.

Students audit classes in their area of study as an integral part of the ADALC.

The Advanced Diploma is aimed at two types of students:

- exchange and Study Abroad students who wish to complete the ADALC and return to their country, or
- international students who do not meet the UTS language entry requirements and who need to develop their academic literacy skills to enable them to enrol in undergraduate courses at UTS.

International students who complete the ADALC meet the UTS language entry requirements and, provided they meet academic entry requirements into faculties, are eligible to study at UTS.

Admission requirements

Students must have reached an English language competence level of 5.0 (IELTS) or TOEFL 510 (computer 180). Students with an IELTS of 6.0 or TOEFL of 550 are exempt from Semester 1.

Course duration

The Advanced Diploma is normally a two-semester program.

Course structure

This program is a 48-credit-point course, comprising six subjects.

Course program

Semester 1

59304	English for Academic Purposes 1	8cp
59306	Researching Australia 1 – Ethnography	8cp
59308	Australian Society and Culture 1	8cp

Semester 2

59305	English for Academic Purposes 2	8cp
59307	Researching Australia – Researching Students	8cp
59309	Australian Society and Culture 2	8cp

Other information

Contact the English Language Study Skills Assistance (ELSSA) Centre for more information on this program:
telephone (02) 9514 2327

Australian English Language and Culture Program

- ◆ UTS course code: n/a
 - ◆ Testamur title: n/a – students receive a Statement of Completion
 - ◆ Abbreviation: n/a
 - ◆ Course fee: \$9,000 (international)¹
-

The Australian English Language and Culture Program (AELCP) is aimed at Study Abroad or exchange students who are not able to enrol in the Advanced Diploma in Australian Language and Culture.

This program enables international students from language backgrounds other than English to develop their English language skills through the study of aspects of contemporary Australian society and culture. Through both class activities and excursions, it introduces students to a range of intercultural issues and provides them with opportunities to interact with native speakers in order to develop the cultural understanding, skills, knowledge and confidence required to use English and participate actively in a variety of settings.

The program focuses particularly on oral skills and includes some participation in mainstream University classes. Students complete a major project using ethnographic research techniques.

Admission requirements

The program is designed for students whose language level is below IELTS 5.0 or TOEFL 510 (computer 180).

Course duration

This program is completed over two semesters.

Course structure

This program consists of two full-time subjects, comprising 24 credit points each.

¹ This program is not offered to local students.

Course program

Semester 1

59314	Australian English Language and Culture 1	24cp
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Semester 2

59315	Australian English Language and Culture 2	24cp
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Other information

Contact the English Language Study Skills Assistance (ELSSA) Centre for more information on this program:

telephone (02) 9514 2327

Postgraduate program for international students

Graduate Certificate in English for Academic Purposes

-
- ◆ UTS course code: HA80
 - ◆ Testamur title: Graduate Certificate in English for Academic Purposes
 - ◆ Abbreviation: none
 - ◆ Course fee: \$3,500 (local)
\$5,100 (international)
-

The Graduate Certificate in English for Academic Purposes (GCEAP) is aimed at international postgraduate research students who do not meet the UTS English language requirement but who meet all other entry requirements to commence studies at UTS at postgraduate research level.

Participation in the program is only possible for students who have already enrolled in a postgraduate research degree program elsewhere at UTS. Enrolment in the GCEAP is an integral part of the enrolment in a postgraduate research degree and emphasises the developmental approach of an integrated program.

Admission requirements

Applicants must:

- be international students
- be eligible to enrol in a postgraduate research degree at UTS, and
- have an IELTS score of 5.5 to 6.0 (minimum of 5.5 in writing) or TOEFL score of 530–550 (computer 197–213) or equivalent.

Other postgraduate students who meet the UTS language entry requirements and who feel they need to develop their language skills would also be eligible to attend the program.

Course duration

The first two subjects of the GCEAP are offered in the pre-session intensive mode (eight weeks before semester) and the final subject is offered concurrent with the first semester of students' enrolment in their research degree.

Course structure

In addition to being enrolled in a postgraduate research degree at UTS, students must complete the three compulsory subjects of the GCEAP (totalling 24 credit points).

Course program

59310	Postgraduate Study in Australia	8cp
59311	Academic English for Postgraduate Study	8cp
59312	Postgraduate Academic Writing in Context	8cp

Other information

Contact the English Language Study Skills Assistance (ELSSA) Centre for more information on this program:

telephone (02) 9514 2327

JUMBUNNA, INDIGENOUS HOUSE OF LEARNING

Jumbunna was relaunched as the Indigenous House of Learning (IHL) in 2001. Jumbunna has grown from being, in 1986, an Aboriginal student support centre, to become a successful academic, research and support centre with approximately 300 Indigenous Australian undergraduate and postgraduate students studying at UTS.

Jumbunna's role within UTS is to contribute to Australia's educational and social development by making UTS staff and students aware of Indigenous Australian cultures and associated issues. Jumbunna is committed to improving the quality of teaching and research at UTS by facilitating active links with the Indigenous community, higher education institutions and other professions with particular emphasis on Australia's growth as a multicultural nation.

Jumbunna IHL has a wide ranging, long term agenda that includes:

- involving Indigenous Australians in institutional decision-making and consultative structures, academic policy development and curriculums, and strengthening partnerships between it and the faculties
- broadening the awareness and acceptance of Indigenous Australian cultures, achievements, contributions, and contemporary issues by developing teaching subjects and awards
- broadening economic, social and political opportunities for Indigenous Australians, in particular expanding employment and income opportunities
- enhancing the teaching and coordination of postgraduate studies in Indigenous studies
- the provision of consultancy services to community and government, and
- improving accessibility, retention and graduation rates of Indigenous Australians in studies at UTS.

Reconciliation Studies elective

The subject Reconciliation Studies is offered by Jumbunna to all students. Offered for the first time in Autumn semester 2002, the subject is a transdisciplinary 6- or 8-credit-point elective available at both undergraduate and postgraduate levels.

Undergraduate

85208	Reconciliation Studies	6cp
85209	Reconciliation Studies	8cp

Postgraduate

85210	Reconciliation Studies	6cp
85211	Reconciliation Studies	8cp

For further details of these subjects, refer to the Subject Descriptions section at the back of this handbook.

UTS SHOPFRONT

UTS Shopfront is a University-wide gateway for community access to UTS. It links disadvantaged and under-resources community groups to University skills and professional expertise on a pro-bono basis. As part of the University's academic program, UTS Shopfront runs a Community Research Elective which is available to all students in all undergraduate and postgraduate courses (with Faculty approval).

Undergraduate

50293	Community Research Elective (UG)	6cp
50294	Community Research Elective (UG)	8cp

Postgraduate

50295	Community Research Elective (PG)	6cp
50296	Community Research Elective (PG)	8cp

For further details of these subjects, refer to the Subject Descriptions section at the back of this handbook.

PRINCIPAL DATES FOR 2003

January

- 1 New Year's Day – public holiday
- 2 Summer session classes recommence (to 7 February)
- 3 UTS Advisory Day
- 4 Closing date for change of preference (main round) to the Universities Admissions Centre (UAC), by mail or in person. Closing date (midnight) for change of preference (main round) UAC Infoline and website (www.uac.edu.au)
- 6 Provisional examination timetable available for Summer session
- 9 Supplementary examinations for Spring 2002
- 10 Last day to submit appeal against exclusion from Spring 2002
- 10 Due date for payment of Autumn semester 2003 tuition fees for continuing international students
- 17 Closing date for applications for non-award and cross-institutional enrolment in Autumn semester 2003
- 17 Late closing date for postgraduate research degree applications for Autumn semester 2003
- 17 Main round of offers to UAC applicants
- 20–25 Enrolment of new main round UAC undergraduate students at City campus
- 22 Closing date for change of preference to Universities Admissions Centre (UAC) for late round offers
- 24 Final examination timetable for Summer session available
- 27 Australia Day – public holiday
- 28 Public school holidays end (commenced 23 December 2002)
- 30 Closing date for applications for Postgraduate Coursework Equity Scholarships for Autumn semester 2003
- 31 Third round closing date for postgraduate coursework applications for Autumn semester 2003 (except Faculty of Business – closing date 14 February)
- 31 Late round of offers (UAC)

February

- 3 Closing date for change of preference to UAC for final round offers
- 3 Final closing date for UAC applications (\$99 late fee)
- 5–6 Enrolment of late round UAC students at City campus
- 7 Last day to lodge a Stage 2 appeal against assessment grade for Spring semester 2002
- 7 Summer session ends for subjects with formal exams (commenced 2 December 2002)
- 8 Final round offers (UAC)
- 10–14 Enrolment of new postgraduate students at City campus
- 10–14 Formal examinations for Summer session
- 17–28 Orientation of new international students
- 20–21 Enrolment of new international students at City campus
- 24–28 Orientation week for new students
- 24 Last day to pay student services fees for Autumn semester 2003
- 26 Release of results for Summer session
- 26 Union 'O' Day – Clubs and activities day
- 26–28 Late enrolment days

March

- 3 Autumn semester classes commence
- 3 Last day to pay postgraduate course fees for Autumn semester 2003
- 5 Late enrolment day
- 12 Last day to lodge a Stage 2 appeal against assessment grade for Summer session
- 14 Last day to enrol in a course or add subjects for Autumn semester 2003¹
- 17 Applications open for Thesis Completion Equity Grants
- 17 Applications open for Vice-Chancellor's Postgraduate Research Student Conference Fund (for conferences July–December)
- 31 HECS/PELS census date
- 31 Last day to withdraw from a course or subject without financial penalty¹
- 31 Last day to pay upfront HECS/PELS for Autumn semester 2003

April

- 11 Last day to withdraw from a course or subject without academic penalty¹
- 14–25 Public school holidays
- 18 Good Friday – public holiday
- 21 Easter Monday – public holiday
- 21–25 Vice-Chancellors' Week (non-teaching)
- 22–24 Graduation ceremonies (Kuring-gai campus)
- 25 ANZAC Day – public holiday
- 28 Closing date for applications for Thesis Completion Equity Grants

May

- 1 Applications open for undergraduate courses, where applicable, and postgraduate courses for Spring semester 2003
- 9 Provisional examination timetable for Autumn semester available
- 12–23 Graduation ceremonies (City campus)
- 23 Closing date for applications for Vice-Chancellor's Postgraduate Research Student Conference Fund (for conferences July–December)
- 30 Closing date for postgraduate research degree applications for Spring semester 2003
- 30 Final examination timetable available

June

- 9 Queen's Birthday – public holiday
- 13 Last teaching day of Autumn semester
- 14 Formal examinations for Autumn semester commence (to 4 July)
- 27 Closing date for applications for Postgraduate Coursework Equity Scholarships for Spring semester 2003
- 27 Closing date for applications for non-award and cross-institutional enrolment in Spring semester 2003
- 27 Last day to pay international fees (continuing students) for Spring semester 2003

July

- 4 Autumn semester formal examinations end (commenced 14 June)
- 7–11 Vice-Chancellors' Week (non-teaching)
- 7–18 Public school holidays
- 14–18 Formal alternative examination period for Autumn semester students
- 17–25 Enrolment of new students for Spring semester 2003
- 21–26 Orientation of new international students
- 21 Last day to pay student service fees for Spring semester 2003
- 23 Release of Autumn semester examination results
- 24 Formal supplementary examinations for Autumn semester students
- 28 Last day to pay postgraduate course fees for Spring semester 2003
- 28 Spring semester classes commence

August

- 1 Applications available for postgraduate research scholarships for Autumn semester 2004
- 1 Applications available for undergraduate and postgraduate courses for Autumn semester 2004
- 1 Last day to lodge a Stage 2 appeal against assessment grade for Autumn semester 2003
- 1 Last day to withdraw from full-year subjects without academic penalty
- 8 Last day to enrol in a course or add subjects for Spring semester 2003¹
- 18 Applications open for Thesis Completion Equity Grants
- 29 Closing date for International Postgraduate Research Scholarships (IPRS)
- 31 HECS/PELS census date (Note: 31 August is a Sunday)
- 31 Last day to pay upfront HECS/PELS for Spring semester 2003
- 31 Last day to withdraw from a course or subject without financial penalty¹

September

- 1 Applications open for UTS Academic Internships
- 5 Last day to withdraw from a course or subject without academic penalty¹
- 15 Applications open for Vice-Chancellor's Postgraduate Research Student Conference Fund (for conferences January–June 2004)
- 29 Closing date for applications for Thesis Completion Equity Grants
- 29 Graduation ceremonies (City campus) commence (to 3 October)
- 29 Public school holidays commence (to 10 October)
- 29 Vice-Chancellors' Week (non-teaching) commences (to 3 October)

October

- 3 Provisional examination timetable for Spring semester available
- 3 Vice-Chancellors' Week (non-teaching) ends
- 6 Labour Day – public holiday
- 10 Public school holidays end (commenced 29 September)
- 24 Final examination timetable available
- 30 Closing date for applications for Postgraduate Coursework Equity Scholarships for Summer session 2003/4
- 31 Closing date for Australian Postgraduate Awards, the RL Werner and University Doctoral scholarships
- 31 First round closing date for postgraduate coursework applications for Autumn semester 2004, Summer session 2003/4 and for non-award and cross-institutional study in Summer session 2003/4
- 31 First round closing date for postgraduate research degree applications for Autumn semester 2004

November

- 7 Last teaching day of Spring semester
- 8–28 Formal examination period for Spring semester
- 17 Closing date for applications for UTS Academic Internships
- 24 Closing date for applications for Vice-Chancellor's Postgraduate Research Student Conference Fund (for conferences January–June 2004)
- 24 Last day to pay student service fees for Summer session 2003/4

December

- 1 Summer session commences (to 6 February 2004)
- 1 Last day to pay postgraduate course fees for Summer session 2003/4
- 5 Second round closing date for post-graduate coursework applications for Autumn 2004
- 8–12 Formal alternative examination period for Spring semester students
- 17 Release of Spring semester examination results
- 22 Public school holidays commence (to 26 January 2004)
- 25 Christmas Day – public holiday
- 26 Boxing Day – public holiday

¹ HECS/PELS/Postgraduate course fees will apply after the HECS census date (31 March and August). Contact the relevant Faculty Office for further information about enrolment and withdrawal deadlines for flexible delivery subjects.

Note: Information is correct as at August 2002. The University reserves the right to vary any information described in Principal Dates for 2003 without notice.

FACULTY INFORMATION

MESSAGE FROM THE DEAN

I am pleased to extend this welcome to you on behalf of all the staff of the Faculty of Information Technology at UTS. The Faculty name reflects the strong growth and popularity of computing and IT at UTS. We are renowned as the premier provider of university-level IT education in the Sydney region. The name also reflects the growing strategic importance of IT education to the future of UTS.

The Faculty has an enviable array of programs at Bachelor's level. The Bachelor of Science in Information Technology, with its industry-linked Diploma of Information Technology Professional Practice, continues to produce graduates who are keenly sought by industry. The Diploma enables students to develop life-long learning skills so they gain a better understanding of the relationship between theory and practice. The Bachelor of Information Technology is now in its sixteenth year. Students in this program receive generous stipends from companies who are eager in return to hire graduates of the very highest quality.

The Faculty has a commitment to lifelong learning for experienced professionals. The Faculty offers a stable of postgraduate coursework and short courses that are intended to satisfy various career development needs. The Master of Science in Computing offers an opportunity for professionals to update their skills in a variety of streams. The IT Management program provides a unique opportunity for management education to those with substantial experience in the IT industry.

The graduate program in Internetworking aims to retrain practising IT people to support the explosive growth in Internet and Intranet technologies. This program has attracted large numbers of students who use a state-of-the-art Internetworking laboratory. This program incorporates the Cisco Certified Network Associate (CCNA) program from Cisco Systems. Thus graduates are able to obtain an industry certification as well as a university award. Elements of the CCNA program are also included in undergraduate programs. From 2002, the Faculty has progressively been introducing the Cisco Certified Network Professional (CCNP) program.



*Professor Michael Fry
Dean*

The e-Business Technology program is designed to meet the growing needs of industry for IT specialists who can operationalise e-business strategies for their organisation as they navigate future technological and commercial change. The program has been developed with substantial input from industry to help ensure the program's currency. Students will benefit from considering real-world case studies, learn of emerging e-business strategies and best practice, and have access to state-of-the-art B2B, EAI and B2C supporting products.

The Faculty has an international outlook and aims to become a faculty of high international standing. Significant numbers of high-quality international students have enrolled in our various programs.

The Faculty continues to develop its research profile, with significant successes in attracting research funding. The Faculty is an active participant in two Cooperative Research Centres: the CRC for Enterprise Distributed Systems Technology; and the Capital Markets CRC. In 2001, the Faculty set itself a strategic priority to significantly boost its research profile. This strategy has been successful in

terms of attracting increased research funding from the Australian Research Council, and in the enrolment of a record number of PhD students in 2002.

In 2002, the Faculty moved to new accommodation at City campus, greatly increasing both the quantity and quality of available space. This has significantly enhanced the Faculty's teaching and research programs as it moves to the next phase of its development.

Finally, it is important to remember that there are many activities and opportunities available within UTS that enrich the experience of university life. I commend these activities to you. Support services, provided by experienced and sympathetic staff, can help students through the difficult times that often arise. I hope that your time at UTS is both enjoyable and productive. I am confident that it will assist you in achieving both professional and personal success.

FACULTY MISSION STATEMENT

The mission of the Faculty is to provide high-quality, innovative programs of teaching and learning, research and consulting, and short courses to clients of wide backgrounds, both nationally and internationally, in the discipline of Information Technology. It is committed to technology transfer for the benefit of society by interacting closely with industry, business and government in research and development.

To support its mission, the Faculty aims to:

Teaching and learning

- maintain a comprehensive range of educational programs to satisfy the spectrum of needs in the community
- excel in both the quality of the learning environment and the professional relevance of its educational programs
- develop an international perspective to its teaching programs

Research and scholarship

- excel in the quality of its research activities
- encourage and facilitate participation by all staff in research or scholarly activities while focusing its research activities onto its defined areas of strength and a small number of targeted areas for development

- increase the participation rate of students in postgraduate programs
- promote intra-faculty, inter-faculty, national and international research collaboration
- emphasise to staff and students the benefits of an international perspective on their disciplines

Management and resources

- assure the quality of activities within the Faculty through the ongoing monitoring and the continuous development of a range of quality control processes
- maintain a balanced portfolio of expertise within its staff, which reflects perceived trends within the industries and disciplines addressed by the Faculty
- seek supplementary sources of external funding through research, joint ventures and entrepreneurial activities
- ensure the principles of equity are observed in all aspects of the Faculty's work, with particular emphasis on the areas of importance identified in the UTS Equity Plan
- develop links with prestigious overseas universities and research institutions

Community service

- preserve strong, effective links with industry, government, business, professional and community organisations
- improve credit transfer arrangements to facilitate the movement of properly prepared students who wish to transfer between universities, or who move into the university sector with prior education and knowledge.

INFORMATION FOR INFORMATION TECHNOLOGY STUDENTS

The Faculty of Information Technology operates with three departments – Computer Systems, Information Systems and Software Engineering. Together these disciplines form the basis of 'enabling technologies' for applications in most other disciplines. Student administration functions are all centralised at Faculty level. Teaching is carried out at City campus, Broadway.

A range of professional degrees are offered, from undergraduate through to Doctoral studies. The Faculty maintains a strong commitment to cooperative education, of both the work experience 'sandwich' form and the cooperative scholarship form. The Faculty continues to be active in research and has strong links with industry in all aspects of its work. All Faculty staff are located at City campus, Broadway in Building 10.

Academic advisers

Undergraduate Programs in Information Technology

John Colville
Professor Jenny Edwards
Dr Sean He
Chris S Johnson
Dr Paul Kennedy
Peter Nicholls

Postgraduate Programs in Computing and Information Technology

Peter Bebbington
Rene Leveaux
Dr Simeon Simoff

Advice to students from other faculties

Chris W Johnson

Academic Liaison Officers

Academic Liaison Officer

Dr Daniel Chandran

Jumbunna Liaison

Dr Toni Robertson

International Students/Programs

Richard Raban
Dr Daniel Chandran

Library

Dr Andy Simmonds

CISCO Network Academy

Ury Szewcow

Computing Study Centre

John Colville
Dr Mao Lin Huang

Postgraduate Projects

Professor Jenny Edwards

Undergraduate Projects

John Colville
Dr Kevin Suffern

Refer to Faculty contact details (pages 32–35) for Program Leaders and staff contact details.

Centres within the Faculty

Centre for Object Technology Applications and Research (COTAR)

Established in 1994, the Centre for Object Technology Applications and Research (COTAR) provides a focal point for the software industry using, or considering using, the new software development techniques of object technology. COTAR aims to promote and conduct research in object-oriented software engineering, object-oriented information systems and object-oriented computing. It provides not only a focus for such research and collaborative work with industry, but also high quality professional development education. Further information can be obtained from Professor Brian Henderson-Sellers on telephone (02) 9514 1687.

Cooperative Research Centre for Enterprise Distributed Systems Technology (DSTC)

The mission of the CRC for Enterprise Distributed Systems Technology (DSTC) is to build the distributed information systems of the future through leading-edge research, and to work with industry and government to apply and commercialise the results. The UTS participation in DSTC draws on expertise from the Department of Computing Sciences. The primary focus of the UTS research is on Quality of Service (QoS) and the delivery of multimedia information in real time within various distributed systems frameworks, such as the World Wide Web, Java and CORBA. For further information, contact Professor John Hughes on telephone (02) 9514 1344.

CRC for Capital Markets

The Cooperative Research Centre (CRC) for Capital Markets aims to be the technology provider of choice to global securities business markets. It supports research programs in corporate governance, data mining, interoperability, language technology, market design and visualisation. For further information contact Professor Chengqi Zhang on telephone (02) 9514 7941.

FACULTY CONTACTS

The Faculty Student Centre staff are located at CB10.3.510. The Faculty Student Centre operates to assist students and the general public with course-related matters.

When telephoning from outside the University, all extension numbers should be prefixed by (02) 9514. Email addresses should be suffixed with '@it.uts.edu.au'.

Name	Telephone	Location	Email	Responsibility
<i>Dean</i>				
Professor Michael Fry	1801	CB10.3.573	mike	
<i>Executive Assistant to the Dean</i>				
Vacant	1800	CB10.3.572		
<i>Associate Dean (Education)</i>				
Associate Professor David Wilson	1832	CB10.3.571	davidw	
<i>Associate Dean (Research, Policy and Planning)</i>				
Associate Professor Barry Jay	1814	CB10.3.570	cbj	
<i>Executive Assistant to the Associate Deans</i>				
Stella Thorndike	7863	CB10.3.564	stella	
<i>Faculty Manager</i>				
Gerard Goodwin-Moore	1880	CB10.3.568	gerard	
<i>Technical Services Manager</i>				
Peter Gale	1686	CB10.3.340	gale	
Department of Computer Systems				
<i>Head of Department</i>				
Associate Professor Tom Hintz	1865	CB10.4.435	hintz	
<i>Associate Professors</i>				
Associate Professor Sue Fowell	7936	CB10.4.547	sfowell	
Associate Professor Doan Hoang	7943	CB10.4.430	dhoang	
Associate Professor Massimo Piccardi	7942	CB10.4.431	massimo	
<i>Senior Lecturers</i>				
John Colville	1854	CB10.4.447	colville	
Dr David Green	7871	CB10.4.443	davidg	
Dr Xiangjian He	1816	CB10.4.449	sean	
Chris W Johnson	1855	CB10.4.414	chris	
Dr Elaine Lawrence	1861	CB10.4.434	elaine	Program Leader for the Internetworking Program
Dr Toni Robertson	1966	CB10.4.437	toni	
Dr Andrew Simmonds	7873	CB10.4.445	simmonds	
Dr Simeon Simoff	1103	CB10.4.432	simeon	Program Leader for the Master of Science in Computing
Ury Szewcow	1862	CB10.4.426	ury	
<i>Lecturers</i>				
Dr Wayne Brookes	1872	CB10.4.412	brookes	Program Leader for the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice, Bachelor of Science in Information Technology Innovation and undergraduate combined degrees
Dr Mao Lin Huang	1858	CB10.4.444	maolin	
Priyadarsi Nanda	1853	CB10.4.448	pnanda	
Karla Felix Navarro	1873	CB10.4.424	karla	
Jon Pike	1805	CB10.4.425	jon	
Dr Andrew Solomon	7938	CB10.4.433	andrews	
Dr Robert Steele	7872	CB10.4.446	rsteale	Acting Program Leader for the e-Business Technology Program
John Tu	1856	CB10.4.413	vohao	
<i>Associate Lecturers</i>				
Ozgur Demirtas	1874	CB10.4.420	demirtas	
Hatice Gunes	1873	CB10.4.420	haticeg	

Name	Telephone	Location	Email	Responsibility
Tony Jan	4473	CB10.4.450	jant	
David Orr	4502	CB10.4.347	dorr	
<i>Administrative Assistant</i>				
Indrawati Nataatmadja	2048	CB10.4.436	indra	
Department of Information Systems				
<i>Head of Department</i>				
Dr Jim Underwood	1831	CB10.4.340	jim	
<i>Professor</i>				
Professor Igor Hawryszkiewicz	1809	CB10.4.356	igorh	
<i>Associate Professor</i>				
Associate Professor Kenneth Dovey	7937	CB10.4.351	kend	Program Leader for the Information Technology Management Program
<i>Senior Lecturers</i>				
Peter Bebbington	1828	CB10.4.215	peterb	Program Leader for the Master's, Graduate Diploma and Graduate Certificate in Information Technology
Dr Robert Kay	4495	CB10.4.326	rkay	
Dr Christopher Lueg	1851	CB10.4.352	lueg	
<i>Lecturers</i>				
Bruce Campbell	1882	CB10.4.312	brucec	Program Leader for Industry Training, Diploma of Information Technology Professional Practice
Dr Daniel Chandran	1827	CB10.4.321	noble	
Gordana Culjak	1833	CB10.4.320	gordana	
Jamal El-Den	1830	CB10.4.311	jamal	
Chris S Johnson	1834	CB10.4.318	chrisj	Program Leader for the Bachelor of Information Technology
Kyeong-Soon Kang	1912	CB10.4.355	kyeong	
Rene Leveaux	1958	CB10.4.353	rene	
Kewan McDonald	1258	CB10.4.313	kewan	
Peter Nicholls	1830	CB10.4.319	petern	
Bernard Wong	1825	CB10.4.354	bernard	
<i>Associate Lecturers</i>				
Bee Bee Chua	4498	CB10.4.342	bbchua	
Laurel Dyson	4493	CB10.4.324	laurel	
Srinivas Injam	4484	CB10.4.230	injam	
Andrew Johnston	4497	CB10.4.341	aj	
<i>Administrative Assistant</i>				
Tim Kevin	2046	CB10.4.329	timk	
Department of Software Engineering				
<i>Head of Department</i>				
Richard Raban	1829	CB10.4.557	richard	
<i>Professors</i>				
Professor John Debenham	1837	CB10.4.571	debenham	
Professor Jenny Edwards	1844	CB10.4.575	jenny	
Professor Brian Henderson-Sellers	1687	CB10.4.570	brian	
Professor John Hughes	1344	CB10.4.568	hughes	
Professor Chengqi Zhang	7941	CB10.4.357	chengqi	Program Leader for Postgraduate Research Degrees
<i>Associate Professor</i>				
Associate Professor John Leaney	2389	CB10.4.574	johnl	Director, UTS Software Engineering Unit
<i>Senior Lecturers</i>				
Dr George Feuerlicht	1835	CB10.4.552	jiri	Program Leader for the e-Business Technology Program
Dr Raymond Lister	1850	CB10.4.551	raymond	
Dr Jie Lu	1838	CB10.4.550	jjelu	
Venkat Ramaswamy	7396	CB10.4.442	venkat	

34 Faculty information

Name	Telephone	Location	Email	Responsibility
Dr Robert Rist	1849	CB10.4.572	rist	Program Leader for the Bachelor of Science (Honours) in Information Technology
Dr Kevin Suffern	1845	CB10.4.573	kevin	
Dr Didar Zowghi	1860	CB10.4.553	didar	
Lecturers				
Ban Al-Ani	1848	CB10.4.558	alani	
Dr Paul Kennedy	1875	CB10.4.543	paulk	
Dr Brian Lederer	2263	CB10.4.549	brianl	
Gordon Lingard	7935	CB10.4.559	glingard	
Julia Prior	4480	CB10.4.544	julia	
Pramod Kumar Singh	1852	CB10.4.560	pkssingh	
Associate Lecturers				
Dr Madhu Goyal	4536	CB10.4.579	madhu	
Helen Lu	1846	CB10.4.578	helenlu	
Sri Madhisetty	4550	CB10.4.579	sri	
Suresh Paryani	4548	CB10.4.578	suresh	
Administrative Assistant				
Ann Goldwater	2033	CB10.4.556	ann	
Teaching and Learning				
Senior Lecturer				
Andrew Litchfield	4501	CB10.04.346	ajl	
Faculty Administration				
Finance Officer				
Kim O'Toole	1808	CB10.3.562	kimo	
Promotions Officer				
Jenny Donovan	1263	CB10.3.510	jennyd	
Administrative Assistant				
Teraesa Ashworth	1310	CB10.3.563	teraesa	
Faculty Student Centre				
Student Liaison Manager				
Sophie Clarke	1867	CB10.3.520	sophie	All courses
Professional Programs Manager				
Alison Waugh	1925	CB10.3.522	alison	Information Technology Management Program and Short Courses
Senior Student Liaison Officer				
Ivy Chu	1802	CB10.3.523	ivy	All BSc (Comp Sc), BSc (Inf Tech) and Graduate Certificate and Diploma and Master's in Information Technology
Industry Liaison Officer				
Des Saunders	1804	CB10.3.524	des	BInfTech and Industrial Training
Partnership Programs Officer				
Julie Lui	2287	CB10.3.510	juliel	BSc (Inf Tech) Innovation, e-Business Technology, Internetworking and Work-based Learning Programs
Graduate and Research Liaison Officer				
Dianne Pratt	1806	CB10.3.521	dianne	All research, the Master of Science in Computing, and Interactive Multimedia Program
Liaison Officers				
Paula Gabriel	1886	CB10.3.510	paula	General inquiries
Vacant	2154	CB10.3.510		General inquiries
Margaret Herczeg	1308	CB10.3.510	marg	General inquiries
William Kusuma	1866	CB10.3.510	william	General inquiries

Name	Telephone	Location	Email	Responsibility
Information Assistants				
Wolfram Schillig	1803	CB10.3.510	wolfie	General inquiries
Kate Wilson	1803	CB10.3.510	katew	General inquiries
Technical Services				
Systems Manager				
Stephen Gowing	1685	CB10.3.341	sbg	
Network and Development Manager				
Graham Redwood	1815	CB10.3.307	graeme	
Systems Programmers				
Benjamin Kuit	1841	CB10.3.354	bj	
Wee Liang Lim	4433	CB10.3.359	wliang	
Wim Pranata	1812	CB10.3.355	wim	
Trainee Systems Programmer				
Paul Carey	1868	CB10.3.356	pcarey	
Information Systems Developers				
Eduardo Chavez	1839	CB10.3.366	eduardo	
Elwyn Chow	1695	CB10.3.363	elwyn	
Trainee Web Developer				
Thuy Tran	1839	CB10.3.362	thnt	
Senior Technical Services Officer				
Barry Power	1819	CB10.3.345	barry	
Technical Officers				
Matthew Power	1820	CB10.3.311	matt	
Malik Sharafudinov	1876	CB10.3.310	malik	
Technical Services Officers				
Alex Altman	1817	CB10.3.344	alex	
Shane Isley	1818	CB10.3.348	shane	
Walter Yee	4434	CB10.3.357	walter	
Technical Assistant				
Adam Tonitto	4426	CB10.3.312	tonitto	
Research Staff				
ARC Doctoral Fellow				
Dr Guangquan Zhang	7932	CB10.4.220	zhangg	
Postdoctoral Research Fellows				
Dr Andrew Cohen	7931	CB10.05.274	andrewc	
Dr Cesar Gonzalez Perez	4477	CB10.4.222	cesargon	
Dr Gao Shang	4622	CB10.3.273	gaos	
Dr Schichao Zhang	tba	tba	tba	
Dr Hong Zhou	1281	CB10.4.225	hong	
Research Scientists				
Dr Mehran Dowlatshahi	2353	CB10.4.212	mehdow	
Glen MacLarty	2039	CB10.3.211	marty	
Research Assistants				
Norazlin Binte Yusop	4441	CB10.3.415	norazlin	
Dr Debbie Zhang	4620	CB10.05.274	debbiez	
CRC for Enterprise Distributed Systems Technology (DSTC)				
Senior Research Scientist				
Dr Tim Mansfield	2689	CB10.3	timbomb@dstc.edu.au	
Research Scientists				
Luke Cole	2689	CB10.3	lrcole@dstc.edu.au	
Jose Siqueira	2689	CB10.3	jose@dstc.uts.edu.au	
Dongbai Xue	1940	CB10.3	dbxue@dstc.uts.edu.au	

tba = to be advised

SHORT COURSES

The Faculty offers a variety of short courses throughout the year in the areas of Computing and Information Technology.

The Faculty normally offers courses in: Object-oriented Programming with C++; Programming with C; Prototyping with Visual Basic; Programming on the Internet; Electronic Commerce on the Internet; Java Programming (Advanced); and IT Management courses.

Computing and IT courses can also be customised for corporate clients.

Information on all short courses is available from the Faculty Information Office on telephone (02) 9514 2154 or online at:

<http://it.uts.edu.au/courses/short>

COMPUTING FACILITIES

The Faculty provides network connected laboratories used in both teaching and research. The network and UNIX servers provide the application software required and network services (www, ftp, email, news) used to access resources and information throughout the University and the world. The Faculty URL is:

<http://it.uts.edu.au>

The following information is accurate at the time of printing.

Teaching laboratories

UNIX laboratories

A combination of Solaris and Linux workstations provides students with a UNIX environment. They are used for many of the Faculty's subjects.

PC laboratories

A number of PC laboratories provide access to the PC/Windows environment.

Access

General access to these laboratories is 9.00 a.m. to 9.00 p.m., Monday to Friday, during semester. On some occasions, these laboratories are booked for different subjects and, during these booked times, students not enrolled in those subjects should vacate that laboratory. Timetable bookings are located on doors, and are available on the Faculty's Intranet website. After the first week of each semester's

examination period, and also during vacation periods, the laboratories are available only between 9.00 a.m. and 6.00 p.m. Seven-day-per-week, 24-hour access is provided for some laboratories throughout the University.

Specific purpose laboratories

Access to these specific purpose laboratories is arranged by the academic involved in a particular subject or research project.

Internetworking Laboratories

Two laboratories equipped for teaching of computer network subjects. These laboratories are equipped with user configurable rack mounted network equipment.

Graphics Laboratory

A number of Silicon Graphics UNIX and PC/Linux computers for graphics subjects.

Collaborative Systems

A research laboratory applying computer communications technology to improving work practices.

Distributed Multimedia Infrastructure Research Laboratory

A laboratory used for research into distributed systems, in particular, software protocols, network management, and interaction between multimedia and network technologies.

Usability Laboratory

A studio set up for the testing, evaluation and analysis of interaction between computers and human operators.

Remote access facility

The remote access facility provides modem access for students and staff through either terminal emulation or remote network connection using PPP. This allows users to access some of the Faculty's computing systems and perform work from home.

Help desk facility

The Faculty's help desk, located in the Interface Room at CB10.3.370, provides users with information on the usage of equipment, software and facilities, help with problems and is a point of contact for reporting faults: telephone (02) 9514 1869.

Information Technology Division (ITD) facilities

ITD is a University division that provides general computing facilities for all students at UTS. It provides a University-wide network interconnection, a number of large UNIX servers and laboratories throughout the different campuses. The University provides access to Internet resources through its connection to AARNet.

Laboratories

ITD provides UNIX, PC and Macintosh laboratories throughout the University which are available for use by all students. Access to ITD's UNIX servers is available from all laboratories provided by ITD and the Faculty of Information Technology. Laboratories in CB02 and CB05 provide 24-hour, seven-day-per-week access. Access to UNIX and PC laboratories in CB10 is from 9.00 a.m. to 9.00 p.m., Monday to Friday only.

Resource Centre facility

ITD's Resource Centre and help desk – located at CB01.9 – provides assistance to the users of the academic computing facilities. During semester, the Resource Centre is open from 9.00 a.m. to 10.00 p.m., Monday to Friday. On weekends, and during semester breaks, it is open from 9.00 a.m. to 5.00 p.m. The help desk can be contacted on telephone (02) 9514 2222.

STUDY CENTRE

Computing Study Centre

The Computing Study Centre offers self-managed computer-based training in a range of introductory computer skills which includes:

- Microsoft Windows
- Microsoft Word (word processing)
- Email (electronic mail)
- Microsoft Excel (spreadsheets)
- Microsoft PowerPoint
- UNIX System Basic
- Simple Web Page Design (HTML and CSS)
- Web Browsers (MS IE and Netscape)

The Computing Study Centre aims to provide students, across all faculties with the basic

computing skills training and practice that will be useful for them in the future.

The Computing Study Centre has designed a number of modules so that students can teach themselves. This means that students choose when, for how long and how they learn the skills required for each module. Students also mark their own assessment tasks and decide when to move onto the next module.

As students learn computer skills at different rates, depending on their previous experience, confidence and motivation, being able to work at one's own pace through these materials in the relaxed and supportive environment of the Centre is a successful way to learn.

The Computing Study Centre is located at CB01.16.11. The Centre is open Monday to Friday during semester from 9.00 a.m. – 5.00 p.m. on Monday, Wednesday and Friday, and from 9.00 a.m. – 7.00 p.m. on Tuesday and Thursday to cater for part-time students.

Contact details

For further information, students should contact John Colville on:

telephone (02) 9514 1854

email John.Colville@uts.edu.au

<http://it.uts.edu.au/activities/csc>

PRIZES AND SCHOLARSHIPS

Altiris Operations Management Prize

The Altiris Operations Management Prize was established in 2002. The prize is awarded to the student who is enrolled in either the Bachelor of Science in Information Technology, or Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice and who obtains the highest aggregate mark in the subject 31097 IT Operations Management. The prize is a cash award of \$600.

ASX Ltd Scholarship

Established in 2001, the ASX Ltd Scholarship is awarded to a registered full-time HECS student in the Bachelor of Science in Information Technology. To be eligible for the award, students must have a weighted average mark which places them among the top twenty full-time students at the end of the first year of the course. Final selection for this scholarship is determined at an interview with staff from

the Australian Stock Exchange. Each scholarship has a total value of \$10,000 and is awarded as two disbursements of \$5,000 each at the commencement of the student's second and fourth years.

CSC Australia Prize for Communications¹

Since 1971, Computer Sciences Corporation Australia Pty Ltd has made available an award in the interests of furthering education and knowledge in the field of telecommunications. The prize is awarded to a student enrolled in the Bachelor of Science in Information Technology. The prize is a cash award of \$750.

¹ This prize is currently under review.

Equant Prize for Academic Excellence

Established in 1996 by SITA, this prize is awarded annually to the student enrolled in the Bachelor of Science in Information Technology who achieves the best overall performance in the final year of the degree and who has completed the course within the minimum time. The prize is a cash award of \$1,000.

Gilbert & Tobin Essay Prizes for Strategic IT Contract Management

The Gilbert & Tobin prizes were established in 1998 and are awarded to two students enrolled in the Information Technology Management Program who, in the year for which the awards are made, have written the Best Research Essay and the Highly Commended Research Essay respectively in the subject 32704 Strategic IT Contract Management. The prizes are cash awards of \$1,000 and \$500 respectively.

Insearch Doctoral Award

As a result of the generous support of Insearch UTS, the Faculty of Information Technology is able to offer a full-time PhD scholarship for study in any area of information technology. The scholarship has a cash value of \$18,000 per year, tax free, and may be supplemented by a limited amount of teaching and/or research assistant activity within the Faculty.

Insearch Prize for General Proficiency in the Faculty of Information Technology

This prize, established in 1999, is awarded to the graduating student each year who, having entered the Faculty after completing the Diploma in Information Technology at Insearch

UTS, has gained the highest weighted average mark of such students over all subjects studied in the Bachelor of Science in Information Technology. The prize is a cash award of \$500.

Insearch Prize

This prize was established in 1998. It is awarded to the most outstanding international student graduating in the Bachelor of Science in Information Technology. The prize is a cash award of \$450.

Mastech Asia Pacific Pty Ltd Tuition Scholarship

This tuition scholarship, established in 1995 by Asia Pacific Computer Consultants, now Mastech Asia Pacific Pty Ltd, may be awarded annually to an able, needy, first-year, full-time student who is currently enrolled in the Bachelor of Science in Information Technology degree, and for whom this is the first year of tertiary study. The total value of the scholarship is \$10,000.

Oracle Database Prize¹

Established in 1994, the Oracle Database prize is awarded to a student enrolled in the Bachelor of Science in Information Technology. The prize is a cash award of \$400.

¹ This prize is currently under review.

Skillsearch Software Development Case Study Prize

This prize was established in 1999 by Skillsearch Computing Pty Ltd. It is awarded annually to the members of the group of students in the Bachelor of Science in Information Technology who achieve the highest mark in the project in the subject 31476 Systems Development Project. The prize has a shared cash value of \$2,000.

Software Quality Association (NSW) Prize for Software Quality Assurance

This prize was established in 1997 by the Software Quality Association (NSW). It is awarded annually to the Bachelor of Science in Information Technology or the Bachelor of Information Technology student who achieves

the highest mark in the subject 31093 Quality Assurance and Process Improvement. The prize has a cash value of \$400.

Solution 6 Information Technology Planning and Design Prize

Established in 1985 by Computer Automated Business Systems Pty Ltd (CABS), now a part of the Solution 6 Group, this prize is awarded annually to the group of final-year students, enrolled in either the Bachelor of Science in Information Technology or the Bachelor of Information Technology, who obtain the highest mark in the subject 31480 Strategic Information Technology Planning Project. The cash award of \$1,000 is shared among all students in the group.

Westpac Information Systems Award

This prize was established in 1987 by the Westpac Banking Corporation. It is awarded annually to the full-time Bachelor of Science in Information Technology student who develops the best IT strategic plan based on his or her Industrial Training experience. The prize has a cash value of \$1,000.

Inquiries

For further information on prizes and scholarships administered by the Faculty of Information Technology contact:

Faculty Information Office
Faculty of Information Technology
telephone (02) 9514 1803
fax (02) 9514 1807
email info@it.uts.edu.au

STATEMENT OF GOOD PRACTICE AND ETHICS IN INFORMAL ASSESSMENT

Aims of assignments

In many subjects offered by the Faculty, students undertake assessment tasks in the form of assignments. The setting of assignments is intended to promote a number of educational aims, including furthering each student's learning of the subject, particularly the acquisition of practical skills; providing a means for staff to assess each student's learning; providing feedback to the student on his or her progress in learning; and providing feedback to staff on the effectiveness of their teaching.

These aims can be subverted if students deceive staff about the authorship of their work.

Acceptable behaviour

Using sources

Whenever anything from someone else's work is used, it is standard practice to indicate exactly where the information comes from. Acknowledgment is achieved by using a standard system of referencing, such as footnotes, end notes, the Harvard system, etc. *The Guide to Writing Assignments* (available from the Co-op Bookshop) explains how to use all these standard systems of reference.

Collaboration

In some cases assignment guidelines may permit or require students to cooperate in developing a solution to part or all of an assignment. This may occur formally when a staff member assigns students to groups and indicates which components of the assignment they are to work on as a group and which components they are to work on individually.

It may also occur informally. For example, some assignments may involve an 'ideas gathering' phase followed by an 'execution' phase. Students may be permitted to collaborate informally on the preliminary phase(s), but be expected to work completely individually on the subsequent phase(s). In a programming assignment, for example, it is normally acceptable for one student to discuss with another student (or other person) the specifications of the task so as to determine the requirements (see below). Whether this collaboration could extend to subsequent phases (such as the

design phase) would depend on the assignment guidelines; normally, collaboration in the design and subsequent phases is not permitted.

Depending on the type of assignment and degree of collaboration permitted it is possible to define several categories of collaboration:

- individual effort (the student is required to work on all phases entirely by himself or herself)
- group effort (the student is required to work on all phases as part of a formal group), and
- mixed effort (the student is required or permitted to work on some or all phases as part of a formal or informal group).

Unless assignment guidelines specifically state otherwise, **a student should assume that an assignment requires a completely individual effort.** The forms of cooperative collaborative behaviour that are acceptable under most circumstances are:

- discussing assignment specifications with another student (or other person) with a view to clarifying what is required
- getting help from another student (or other person) on technical matters that are not directly part of the assessment task (e.g. how to use some facility provided by the computer system, such as the editor)
- getting help from another student (or other person) in debugging a program; this is a common occurrence in computing, and
- obtaining help from a tutor.

Generally, what distinguishes the acceptable cases of collaborative behaviour from the unacceptable ones is the student's intention to deceive. For example, in an assignment requiring a completely individual effort, a student may encounter some snag, such as an unfamiliar compiler diagnostic. If the student was to seek help from another student (or person) to remove the snag, then this would normally be considered acceptable behaviour. If, however, several students designed and coded a solution together, then disguised this collaboration, that would be unacceptable behaviour.

Unacceptable behaviour

Outright lying

This is seen most often in programming assignments, where the program does not run, or runs incorrectly, yet the output handed in is correct. The output has been 'tailored' using a word processor in an attempt to fool the marker. Lying is never acceptable behaviour.

Plagiarism

Plagiarism is the action of taking and using as one's own the thoughts, writings or inventions of another with the intention to deceive.

For example, if one student in a computing subject was to obtain a copy of another student's (or other person's) program, modify parts of the program (e.g. change variable names) so as to disguise its origin, and then submit the modified program as his or her solution, then this would be considered plagiarism.

As another example, a student may obtain all or a major part of the solution to an assignment problem from a text book and, without acknowledging this, submit the solution as his or her own work.

As a further example, a student may use a source of information in an essay, without acknowledging the source. Such plagiarism may range from a sentence or two, or a table or diagram, to occasional cases where the entire paper consists of material copied from a book with only a few sentences added by the student. The student thus submits another's ideas as his or her own work.

Plagiarism is a form of cheating and is never acceptable.

Collusion

Collusion occurs when a student combines with one or more other students (or other persons) to produce a common essay or solution to part or all of an assignment, disguises the shared origin of the solution, and submits the solution as his or her own individual work. Allowing another student access to your work is also regarded as collusion and students caught doing so are penalised.

Collusion is regarded as a form of cheating and is never acceptable.

GRADUATION CEREMONIES

University graduation ceremonies are held in the Autumn and Spring semesters of each year. All students should take note of the Academic Board policy on late approval of graduands which states that 'any graduands who have their results confirmed **after** the appropriate Academic Board meeting should **not** be eligible to graduate at the immediately forthcoming ceremony'. Any graduand who is approved, through exceptional circumstances, to attend a ceremony after the Academic Board deadline may not have his or her name included in the Graduation Program.

ENVIRONMENTAL HEALTH AND SAFETY PLAN

The Faculty has an Environmental Health and Safety Plan, copies of which are available from either the Faculty Information Office, or on the Department and Faculty web pages. Staff and students should familiarise themselves with the plan and comply with all hazard procedures outlined in it.

The names and locations of First Aid Officers, and of first aid kits, are indicated by appropriate signs in Faculty and Department areas.

UNDERGRADUATE COURSES

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice

- ◆ UTS course code: C10152 (pre-2003: MC17)
- ◆ UAC code: 605000 (FT); 605001 (PT)
- ◆ Testamur title: Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice
- ◆ Abbreviation: BSc DiplInfTechProfPrac
- ◆ Program Leader: Dr W Brookes
- ◆ Course fee: HECS (local)
\$8,500 per semester plus \$2,000 in total for the DiplInfTechProfPrac (international)
- ◆ Total credit points: 156

Bachelor of Science in Information Technology

- ◆ UTS course code: C10148 (pre-2003: MC09)
- ◆ Testamur title: Bachelor of Science in Information Technology
- ◆ Abbreviation: BSc
- ◆ Program Leader: Dr W Brookes
- ◆ Course fee: HECS (local)
\$8,500 per semester (international)
- ◆ Total credit points: 144

Note: These courses were introduced in Autumn 2002. They replace the pre-2002 undergraduate offerings: Bachelor of Science in Computing Science, Diploma of Information Technology Professional Practice (C10149), and the Bachelor of Science in Computing Science (C10142) (see page 54); Bachelor of Computing, Diploma of Information Technology Professional Practice (C10151), and the Bachelor of Computing (C10145) (see page 62).

Overview

The Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice course consists of six academic semesters of full-time study or the equivalent in part-time attendance, and a

period of industrial training. The Diploma of Information Technology Professional Practice formally recognises the technical and generic skills developed during the industry training undertaken by all students.

The Bachelor of Science in Information Technology provides an alternative three-year pathway (six academic semesters of full-time study or the equivalent in part-time attendance) to:

- international students who do not want to undertake industry training and the Diploma of Information Technology Professional Practice in Australia before returning to their own country, or
- students who want to undertake the Bachelor of Science (Honours) in Information Technology and pursue further postgraduate study and a research career.

Students completing either the four-year Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice or the three-year Bachelor of Science in Information Technology are eligible for entry into the Bachelor of Science (Honours) in Information Technology.

Course aims

The Bachelor of Science in Information Technology aims to provide a sound education in all aspects of computing and information technology for students who intend to make a career in the profession as well as providing a pathway to Honours, postgraduate study and a research career. It is intended that the course will provide a suitable background covering all aspects of computer science and information technology, short of the actual design and construction of computer hardware. The sub-major stream and elective subjects that may be taken allow students to broaden their knowledge of information technology or other disciplines and areas of interest to them. The sub-major stream provides for further study within particular areas of the computing and information technology discipline; students intending to pursue Honours, postgraduate study and a research career should discuss their sub-major choices with the Honours Program Leader. The elective subjects may be

taken outside the Faculty and allow for further study in complementary disciplines such as business or the social sciences.

The Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice has the same aims of the Bachelor of Science in Information Technology. The additional industry training component recognised by the Diploma aims to offer students an opportunity to apply and further develop their technical and generic skills in a workplace environment.

A UTS information technology graduate will be able to apply, in the context of any organisation, knowledge and skills in the following areas:

- networked computer systems and applications
- systems development / software engineering
- information systems management, and
- data management.

Graduates will be committed to lifelong learning built on the foundations provided by their course of study.

Both courses provide an in-depth study of information technology and its applications which enable graduates to fill an appropriate role in the business activities of an organisation. Formal studies are treated in a manner that will encourage initiative.

Admission requirements

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice

This course is offered to both local and international students and to both school leavers and non-recent school leavers.

The number of students admitted each year is limited to a strict quota based on the availability of resources.

For local school leavers, selection into the course is based on the HSC UAI or equivalent. There are no prerequisites for entry, however, the assumed knowledge is Mathematics, preferably Mathematics Extension 1, and English Advanced.

For local non-recent school leavers, selection into the course is based on prior study and previous work experience. The Faculty may consider the Limited UAI and will consider a compulsory Personal Statement.

Applicants wishing to transfer from another university must apply as a non-recent school leaver in competition with other applicants.

Bachelor of Science in Information Technology

Direct entry into the Bachelor of Science in Information Technology is only available to international applicants. All other students must complete the first three semesters of the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice before applying to transfer to the Bachelor of Science in Information Technology.

The Bachelor of Science in Information Technology is intended for :

- international students who do not want to undertake industry training and the Diploma of Information Technology Professional Practice in Australia before returning to their own country
- students who want to undertake the Bachelor of Science (Honours) in Information Technology and pursue further postgraduate study and a research career.

Students applying under the second criterion must have attained an average mark of 75 per cent or higher and, normally, no failures in the core subjects after the first full-time year or the equivalent part-time program for the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice.

Selection of international students

International applicants apply through the International Programs Office, but are assessed by the Faculty. Applicants are required to have a competitive Pass in a recognised matriculation examination equivalent to the Australian Year 12 qualification, and to meet or better the University's IELTS criteria.

For details of IELTS criteria, contact the UTS International Programs Office on:

telephone (02) 9514 1531

or visit their website at:

www.ipo.uts.edu.au

Advanced standing

Exemptions may be granted on the basis of recent academic study (within the last three years) towards a degree. Students must be able to demonstrate that the knowledge is

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current. Exemptions are not normally granted for elective subjects.

Students are expected to apply for exemptions at the commencement of their first year of study. The Faculty usually processes exemptions immediately following enrolment.

Exemptions for transfer students from ATN Universities

The ATN Universities have an agreement in place concerning exemptions for study in equivalent courses for students transferring between ATN Universities. Contact the Bachelor of Science in Information Technology Program Leader for details if you are transferring from another university.

Exemption for holders of the Diploma in Information Technology from Insearch UTS

Students entering the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice or the Bachelor of Science in Information Technology who have graduated with a Credit average from the revised Diploma of Information Technology at Insearch will receive automatic exemptions from the following subjects (total 48 credit points):

31465	Object-oriented Programming	6cp
31466	Principles of Distributed Computing	6cp
31467	Networking 1	6cp
31468	Information, Classification and Control	6cp
31469	Object-oriented Design	6cp
31470	Distributed Computing Architecture	6cp
31471	Networking 2	6cp
31472	Introduction to Collaborative Systems	6cp

Students should note that these exemptions apply to students graduating from the Insearch Diploma of Information Technology in 2003 who have completed similarly named subjects at Insearch. Students who graduated from the Insearch Diploma of Information Technology prior to 2003, or who have not completed all of the above subjects at Insearch, should contact the Bachelor of Science in Information Technology Program Leader for details of applicable exemptions.

Exemptions for holders of TAFE Diplomas

Students who have completed a TAFE Diploma are eligible for up to 24 credit points of advanced standing in the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice or Bachelor of Science in Information Technology.

Exemptions for specific core IT subjects may be granted on the basis of recently completed studies at TAFE (Diploma or Certificate level). Currently, specific patterns of advanced standing are available for the following TAFE courses:

3612	Diploma of Information Technology (PC and Network Support)
3613	Diploma of Information Technology (Applications Programming)
3614	Diploma of Information Technology (Analyst/Programmer)
3615	Diploma of Information Technology (Business Systems)
3635	Diploma of Information Technology (Website Production and Management)
3661	Diploma of Information Technology (Systems Administration)
3662	Diploma of Information Technology (Software Development)
3663	Diploma of Information Technology (Business Analysis)
3664	Diploma of Information Technology (Network Engineering)
6790	Advanced Diploma of Electrical Technology (Computer Technology)

The details of which core IT subjects will be exempted will depend upon the TAFE course undertaken and the specific modules completed within that course. Students should contact an academic adviser for details.

In addition to exemptions from specific core IT subjects, students who have completed a recognised Diploma or Advanced Diploma will be granted a number of credit points of 'Unspecified IT Electives', to give a maximum of 24 credit points of exemptions.

Course duration

The Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice is four years, full time and six years, part time. The course consists of six academic semesters of full-time study or the equivalent in part-time attendance, and a period of industrial training. The Bachelor of Science in Information Technology is three years, full time and six years, part time.

Course structure

The Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice requires students to complete 156 credit points which consists of: 96 credit points for the core; 24 credit points

for the IT sub-major stream; 24 credit points of electives; and 12 credit points for the Diploma of Information Technology Professional Practice.

The Bachelor of Science in Information Technology requires students to complete 144 credit points for a Pass degree which consists of: 96 credit points for the core; 24 credit points for the IT sub-major stream; and 24 credit points of electives.

Course program

Note that the semester timing of the IT sub-major stream and electives in the following program is indicative only. The IT sub-major stream and the electives may be taken in any order on completion of the first full-time year or equivalent part-time year. The requirement is to complete 24 credit points of an IT sub-major and 24 credit points of electives.

Typical full-time program

Year 1

Autumn semester

31465	Object-oriented Programming	6cp
31466	Principles of Distributed Computing	6cp
31467	Networking 1	6cp
31468	Information, Classification and Control	6cp

Spring semester

31469	Object-oriented Design	6cp
31470	Distributed Computing Architecture	6cp
31471	Networking 2	6cp
31472	Introduction to Collaborative Systems	6cp

Year 2

Autumn semester

31473	Data Structures and Procedural Programming	6cp
31474	Database Fundamentals	6cp
31475	Requirements Engineering	6cp
xxxxx	Elective	6cp

Spring semester

31476	Systems Development Project	12cp
31xxx	IT sub-major stream	6cp
xxxxx	Elective	6cp

Year 3

Autumn semester

31136	Preparation and Review of IT Experience	6cp
31137	IT Experience 1	0cp

Spring semester

31138	Review of IT Experience	6cp
31139	IT Experience 2	0cp

Year 4

Autumn semester

31478	Project Management and Quality Assurance	6cp
31xxx	IT sub-major stream	6cp
31xxx	IT sub-major stream	6cp
xxxxx	Elective	6cp

Spring semester

31479	Information Technology Professional and Society	6cp
31480	Strategic Information Technology Planning Project	6cp
31xxx	IT sub-major stream	6cp
xxxxx	Elective	6cp

Typical part-time program

Year 1

Autumn semester

31466	Principles of Distributed Computing	6cp
31468	Information, Classification and Control	6cp

Spring semester

31465	Object-oriented Programming	6cp
31467	Networking 1	6cp

Year 2

Autumn semester

31471	Networking 2	6cp
31469	Object-oriented Design	6cp

Spring semester

31470	Distributed Computing Architecture	6cp
31472	Introduction to Collaborative Systems	6cp

Year 3

Autumn semester

31473	Data Structures and Procedural Programming	6cp
xxxxx	Elective	6cp

Spring semester

31475	Requirements Engineering	6cp
31474	Database Fundamentals	6cp

Year 4

Autumn semester

31476	Systems Development Project	12cp
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Spring semester

31xxx	IT sub-major stream	6cp
xxxxx	Elective	6cp

Year 5

Autumn semester

31xxx	IT sub-major stream	6cp
xxxxx	Elective	6cp
31136	Preparation and Review of IT Experience	6cp
31137	IT Experience 1	0cp

Year 5 (cont.)**Spring semester**

31478	Project Management and Quality Assurance	6cp
31xxx	IT sub-major stream	6cp
31138	Review of IT Experience	6cp
31139	IT Experience 2	0cp

Year 6**Autumn semester**

31479	Information Technology Professional and Society	6cp
31480	Strategic Information Technology Planning Project	6cp

Spring semester

31xxx	IT sub-major stream	6cp
xxxxx	Elective	6cp

English language testing

Despite the technical nature of some aspects of information technology, English language proficiency is an important factor in the successful academic study of information technology and for a successful career in the information technology industry.

In recognition of this, all students enrolling in the Bachelor of Science in Information Technology are required to undertake an English test administered by the English Language Study Skills Assistance (ELSSA) Centre. The results of this test indicate three possible courses of action:

1. The student's English proficiency is considered adequate: the student is allowed to enrol normally in first-year subjects.
2. The student's English proficiency is considered inadequate: the student is strongly recommended to undertake the subject 31034 Advanced Communication for IT.
This subject is recognised as one of the four electives that comprise the course (it may be counted as 6 credit points of the 12 credit points that must be completed outside the Faculty of Information Technology). 31034 Advanced Communication for IT is undertaken in the first year of study. The student's program of study is adjusted to maintain an acceptable workload.
3. The student's English proficiency is considered poor: the student is strongly recommended to undertake remedial English classes with the ELSSA Centre before undertaking the subject 31034 Advanced Communication for IT.

31034 Advanced Communication for IT is recognised as one of the four electives that comprise the course (it may be counted as 6 credit points of the 12 credit points that must be completed outside the Faculty of Information Technology). It is undertaken in the first year of study following English support classes with the ELSSA Centre. The student's program of study is adjusted to maintain an acceptable workload.

Students who fail to follow the Faculty's recommendation receive a letter to confirm this. The letter is lodged in the student's file as a record that they have chosen not to follow the Faculty's recommendation and that the student takes full responsibility for that decision.

IT sub-major stream

Students are required to undertake a minimum of 24 credit points of an approved IT sub-major stream.

A list of currently approved sub-majors is shown below. Additional sub-majors may be approved by the Faculty in the future. The Faculty may withdraw the offering of a sub-major if there is insufficient demand; where appropriate numbers in a sub-major drop, subject substitutions may be approved by the Faculty to enable individual students to complete their sub-major. Students are advised to discuss their choice of sub-major with an academic adviser.

Applications Development

The core subject of this sub-major introduces a variety of IS development approaches covering both design and programming aspects. Electives allow students to specialise in application programming languages, database development or software quality assurance.

31092	IS Development Approaches	6cp
	<i>plus three of the following</i>	
31093	Quality Assurance and Process Improvement	6cp
31098	Software Metrics and Testing	6cp
31335	Extreme Programming	6cp
31443	Distributed Databases and Client/Server Computing	6cp
31921	Objectbases	6cp
31927	Applications Development with Visual Basic	6cp
31928	Applications Development with Delphi	6cp

Computer Graphics

Some of our best computer graphics students have had very successful careers in the special effects industry. In the last few years four students have received credits for their work on Academy Award winning films, including *The Matrix*. Our students have also worked on *Babe II*, *The Thin Red Line*, *Moulin Rouge*, *Walking with Dinosaurs*, *Walking with Beasts*, *Ice Age* and the second *Matrix* movie. One of our students now works in the R&D division of George Lucas' company Industrial Light and Magic in San Francisco.

The subjects in the sub-major provide the theoretical and practical knowledge that is required to understand and build modern 3D computer graphics applications. This knowledge is applied to building a ray tracer, producing a 3D computer animation, and carrying out a computer graphics project. The project can be on any area of graphics, and a popular topic recently has been to build a real time renderer using OpenGL. The subjects are as follows:

31140	Introduction to Computer Graphics	6cp
31460	Computer Graphics Project	6cp
31603	3D Computer Animation	6cp
31605	Computer Graphics Rendering Techniques	6cp

Database

Database technology is at the heart of all enterprise systems today, and database skills are in high demand. The Database sub-major is directed at students who wish to gain in-depth expertise in the database area, and pursue a career as database administrators, database designers and data architects.

This sub-major presents a series of closely related database subjects which deal with advanced database topics in distributed database and object databases as well as a range of other specialised database topics. Both theoretical and practical aspects of design and implementation of modern database systems are covered, with most subjects containing a significant hands-on component including using the Oracle9i database server. Database industry standards for distributed databases, data-warehousing, spatial and mobile database applications, and multimedia databases are also covered. The sub-major comprises of the following subjects:

31074	Advanced Database Concepts and Techniques	6cp
31099	Database Programming and Administration	6cp

31443	Distributed Databases and Client/Server Computing	6cp
31921	Objectbases	6cp

Digital Media

This sub-major is oriented towards future IT and other professionals who wish to be prepared for the new economy in a knowledge-oriented society. The program addresses current and emerging paradigms of information technology and computing in the realm of digital media. It is aimed specifically at developing comprehension and aesthetic awareness of the issues and skills relating to the production of interactive digital media.

31080	Digital Multimedia	6cp
31081	Digital Media Programming and Communication	6cp
	<i>plus one of the following</i>	
31040	Data Mining and Knowledge Discovery	6cp
31049	Computer Vision and Image Processing	6cp
	<i>plus one of the following</i>	
31334	Distributed Virtual Worlds	6cp
31606	Virtual Communities	6cp

Intelligent Systems

Knowledge is power. Intelligent systems are the key to managing complex environments including the Internet. Students learn how to apply these valuable, intelligent tools. This sub-major provides the knowledge needed to understand and build intelligent systems. These are computer systems that learn to do tasks that are not explicitly programmed into them. Such computer systems might apply ideas from nature to solve problems (e.g. neural networks and evolution) or from engineering and other areas. Intelligent systems may be used in such diverse applications as finding hidden patterns and nuggets of information from large corporate or medical databases or the Internet, controlling robots, predicting the stock market or predicting protein structure. Professionals experienced in intelligent systems would be qualified for jobs in a variety of disciplines such as management/marketing consulting, data mining, bioinformatics, web mining, or intelligent agents. This sub-major consists of the following subjects:

31040	Data Mining and Knowledge Discovery	6cp
31743	Machine Learning	6cp
31750	Intelligent Agents in Java	6cp
31916	Cognitive Modelling	6cp

Internet Business Technology

This sub-major broadly prepares students to work as IT professionals at the cutting-edge of industry. It gives students skills in leading Internet technologies and a broad knowledge but also provides them with a business perspective and an understanding of the role of these technologies in organisations and the community. An introduction to emerging developments and their potential for innovative impact is also covered.

31337	Advanced Internet Technologies	6cp
31749	Internet Commerce	6cp
	<i>plus two of the following</i>	
31088	Mobile Networks	6cp
31336	Internet Middleware Programming	6cp
31338	Network Servers	6cp
31750	Intelligent Agents in Java	6cp
31777	Human-Computer Interaction	6cp

Internetworking

This sub-major is designed to meet the growing needs of industry for graduates with a strong knowledge of networking. It provides students with a firm foundation for the design, implementation and management of a modern organisation's IT infrastructure that makes use of intranets and the Internet.

31084	VLANs and WANs	6cp
31085	Internetwork Design	6cp
31086	Network Security	6cp
31087	Network Management	6cp

IS Theory and Methodologies

This sub-major concentrates on the social aspects of Information System development. While of interest to all IT students (and students from other faculties), it is particularly recommended for those with an interest in IS research.

31092	IS Development Approaches	6cp
31095	IS Theory and Research Methods	6cp
31735	Information Systems and Organisation Development	6cp
95556	Technology, Society and Change	6cp

A suitable Business or Humanities subject may be substituted for 95556 Technology, Society and Change, with the approval of the Program Leader for the Bachelor of Science in Information Technology.

IT Management and Strategy

This sub-major deals with principles and practices of the use of information technology in organisations at the operational, management and strategic levels. A choice of electives

deals with the application of these principles to management of the IT function, software quality assurance and management of relations with external IT suppliers.

31735	Information Systems and Organisation Development	6cp
31736	Business Processes and IT Strategy	6cp
	<i>plus two of the following</i>	
31093	Quality Assurance and Process Improvement	6cp
31096	Managing Client/Vendor Relations	6cp
31097	IT Operations Management	6cp

IT Quality Management

The quality of information systems produced by IT professionals is critical to the success of software companies and user organisations, and to the reputation of the IT profession. This sub-major covers practical strategies for providing quality information systems through consideration of usability issues, quality controlled software production and planned management of system operation.

31093	Quality Assurance and Process Improvement	6cp
31097	IT Operations Management	6cp
31098	Software Metrics and Testing	6cp
31777	Human-Computer Interaction	6cp

Mobile Computing

This sub-major prepares students for the emerging possibilities that access to Internet resources any time and place provides. Business issues, wireless communication infrastructure, mobility problems and solutions, and appropriate application software are studied.

31088	Mobile Networks	6cp
31090	Mobile Programming	6cp
31091	Mobile Computing Project	6cp
	<i>plus one of the following</i>	
31089	Mobile IP and Wireless LANs	6cp
31086	Network Security	6cp
31749	Internet Commerce	6cp

Operations Theory and Applications

This sub-major is intended to expose students to the theory and practice of operations research with application in an area of information technology, in particular, optimisation techniques, network optimisation or simulation techniques.

35140	Operations Research Modelling	6cp
33401	Introductory Mathematical Methods	6cp
35241	Optimisation 1	6cp
	<i>plus one of the following</i>	

35342	Optimisation 2	6cp
35344	Network Optimisation	6cp
35363	Simulation Modelling	6cp

Scientific Computing

This sub-major is intended to expose students to the theory and practice of computing as applied in the area of computational science. This is a newly emerging area of science in which computational experimentation is used as an integral component not only of scientific research but also in the consequent development of new technologies, particularly in the fields of information technology and communications. The elementary statistical and mathematical modelling techniques studied in the initial subjects of the sub-major underpin the study of sophisticated computational tools in later subjects.

35363	Simulation Modelling	6cp
33401	Introductory Mathematical Methods	6cp
35281	Numerical Methods	6cp
35383	High Performance Computing	6cp

Software Engineering

The development and management of large complex software systems provide some of the greatest personal and intellectual challenges for software developers available today. Systems of millions of lines of code controlling enormous organisations require talented, intelligent developers and managers equipped with modern tools and techniques for software design, measurement, analysis, construction and testing.

This sub-major presents industry relevant tools and techniques that are needed to build medium to large complex systems. These tools and techniques are applied to the design, measurement, analysis, construction and testing of systems. The subjects focus on software architecture and design, measurement of the software system and ensuring correctness of the software system. The sub-major includes the following subjects:

31077	Software Engineering Fundamentals	6cp
31078	Software Architecture	6cp
31079	Software Engineering Processes	6cp
31098	Software Metrics and Testing	6cp

Note: To enhance software engineering knowledge and capability, it is recommended that students in this sub-major consider taking as electives the subjects 31093 Quality Assurance and Process Improvement and 31335 Extreme Programming.

Electives

Students must complete a minimum of 24 credit points of electives. At least 12 credit points of electives must be completed outside the Faculty.

Electives may be taken as individual subjects either from within the Faculty or from other faculties within UTS (bearing in mind the requirement to complete at least 12 credit points of electives outside the Faculty). Alternatively, they may be taken as a coherent staged group of subjects, normally a formally approved sub-major from other faculties within UTS. Typically, other faculties offering sub-majors to students from the Faculty of Information Technology are the Faculties of Business, Engineering, Humanities and Social Sciences, and Science.

Subjects that are offered by other faculties may contain material which is already covered in the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice degree. Students who would like to take subjects from other parts of the University which are not part of sub-majors approved for students from the Faculty of Information Technology (as listed in this handbook) should discuss their proposed subjects with the Program Leader or an Academic Adviser. Students should note that subjects in other faculties may be worth varying amounts of credit points and that a student's total elective credit points may exceed 24 but must be at least 24. However, once a student has completed a sufficient number of credit points to fulfil the elective requirements, that student is not permitted to enrol in additional elective subjects.

Students should be aware that they may enrol in subjects in another faculty only if a class place is available. This applies particularly to the Faculties of Business and Humanities and Social Sciences.

Communication and English Language Studies

Offered through the ELSSA Centre, these subjects are designed for students with particular needs in relation to language and study skills.

59304	English for Academic Purposes 1	8cp
59305	English for Academic Purposes 2	8cp

Note: These subjects are under review for 2003 and may change. Contact the ELSSA Centre on telephone (02) 9514 2327 for details.

Electives from other universities

Students wishing to do electives outside the University must see the Bachelor of Science in Information Technology Program Leader to discuss the proposal. Special approval must be sought well before the intended semester of study. Students may undertake subjects outside the University as electives only if no comparable subject is offered by the University.

International Studies electives

The Institute for International Studies at UTS offers electives in language studies and in the study of contemporary societies in parts of the non-English-speaking world. All subjects last for one semester and have a value of 8 credit points.

Language Studies

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

Contemporary Society

The Institute also offers a series of subjects that provides an introduction to the contemporary societies, politics, economies and cultures of China, Japan, and the countries of South-East Asia, Latin America and Europe, which are the areas of specialisation of the Institute.

The subjects are:

- 976111 Contemporary China
- 976211 Contemporary Japan
- 976301 Contemporary South-East Asia
- 976401 Contemporary Europe
- 976501 Contemporary Latin America

Note: These subjects are only offered in Spring semester. For further details, students should consult the 2003 handbook for the Institute for International Studies, or

Institute for International Studies
10 Quay Street
Haymarket NSW 2007
telephone: (02) 9514 1426
fax: (02) 9514 1578
email iisinfo@uts.edu.au

Sub-majors from other faculties and centres

Students may choose one of the following sub-majors to fulfil their elective requirements for the Bachelor of Science in Information Technology or the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice. These sub-majors may **not** be chosen to fulfil the IT sub-major stream of the degree.

Aboriginal Studies

The Faculties of Humanities and Social Sciences and Education offer a range of Aboriginal Studies subjects that may be taken as a sub-major, or as elective subjects, as appropriate, within any undergraduate course.

The sub-major provides Aboriginal and non-Aboriginal students with an opportunity to study subjects that are culturally appropriate to an understanding of Aboriginal culture, history and social/political structures. These initial studies serve as a basis for applying critical analysis skills to Aboriginal and non-Aboriginal perspectives on issues and trends which affect the cultural and social integrity of Aboriginal peoples. Consideration is also given to other indigenous people, including Torres Strait Islanders.

Sub-major in Aboriginal Studies (24cp)

- 015110 Aboriginal Cultures and Philosophies 8cp
- 015168 The Politics of Aboriginal History 8cp
- 015395 Aboriginal Social and Political History 8cp

For further information on this sub-major, contact the Faculty of Education on telephone (02) 9514 3900.

Humanities and Social Sciences

The Faculty of Humanities and Social Sciences offers electives and elective sub-majors to students across the University.

Information on the timetabling of subjects can be obtained by viewing the Electives timetable displayed outside the Faculty Student Centre, Faculty of Humanities and Social Sciences, in CB03.2. Information regarding electives from this Faculty may be obtained from the 2003

Faculty of Humanities and Social Sciences handbook (available for viewing in the Faculty Student Centre), and by visiting or calling the Faculty Student Centre, Faculty of Humanities and Social Sciences, CB03.2, telephone (02) 9514 2300.

Business

The Faculty of Business offers the following sub-majors to students in the Faculty of Information Technology. Students may undertake other sub-majors if they have the necessary prerequisites. Further information about these sub-majors can be obtained from the 2003 Faculty of Business handbook. Students who wish to undertake a Business sub-major should first seek advice from the Faculty of Business Student Liaison Office, telephone (02) 9514 3500.

Sub-major in Business Accounting (24cp)

22207	Accounting Transactions and Business Decisions	6cp
22321	Cost Management Systems <i>plus two of the following</i>	6cp
22320	Accounting for Business Combinations	6cp
22420	Accounting Standards and Regulations	6cp
22240	International Accounting	6cp
22610	Accounting for Insolvency	6cp

Sub-major in Small Business Accounting (24cp)

22321	Cost Management Systems	6cp
22207	Accounting Transactions and Business Decisions	6cp
22566	Accounting for Small Business 1	6cp
22567	Accounting for Small Business 2	6cp

Sub-major in Economics (24cp)

25115	Economics for Business	6cp
25210	Microeconomic Theory and Policy ¹	6cp
25303	Industry Economics	6cp
25309	Macroeconomic Theory and Policy ¹	6cp

¹ This subject is under review.

Sub-major in Employment Relations (24cp)

21128	International Business	6cp
21129	Managing People and Organisations	6cp
21306	Employment Relations in the Global Context	6cp
21407	Strategic Human Resource Management	6cp

Sub-major in International Management (24cp)

21128	International Business	6cp
21129	Managing People and Organisations	6cp
21591	International Management	6cp
21531	Managing the International Organisation	6cp

Sub-major in Introductory Advertising (24cp)

24108	Marketing Foundations	6cp
24202	Consumer Behaviour	6cp
24210	Advertising and Promotions Management	6cp
24309	Introductory Marketing Research	6cp

Sub-major in Introductory Marketing (24cp)

24108	Marketing Foundations	6cp
24202	Consumer Behaviour	6cp
24309	Introductory Marketing Research <i>plus one of the following</i>	6cp
24205	Business Marketing	6cp
24220	International Marketing	6cp

Science

The Faculty of Science offers the following sub-majors to students in the Faculty of Information Technology. Further information about these sub-majors and Science subjects can be obtained from the 2003 Faculty of Science handbook.

Sub-major in Electronics and Computer Interfacing (24cp)

This sub-major provides the knowledge needed to use microprocessors for recording and analysing experimental measurements. It progresses from digital electronic circuitry to microcomputer architecture and then to transducers and devices for interfacing with the real world.

68101	Foundations of Physics ¹	6cp
68201	Physics in Action (Physics 2)	6cp
68314	Electronics	6cp
68514	Electronics and Interfacing	6cp

¹ Students with a sufficiently strong background may substitute 68312 Electrotechnology and Data Analysis (prerequisite 68201 Physics in Action (Physics 2)) for this subject.

Sub-major in Operations Research (24cp)

This sub-major assumes students have completed 33190 Mathematical Modelling for Science and 33290 Computing and Mathematics for Science.

35140	Operations Research Modelling	6cp
35241	Optimisation 1 <i>plus two of the following</i>	6cp
35342	Optimisation 2	6cp
35344	Network Optimisation	6cp
35363	Simulation Modelling	6cp

Sub-major in Operations Theory and Applications (24cp)

This sub-major is intended to expose students to the theory and practice of operations research with application in an area of information technology, in particular: optimisation techniques, network optimisation or simulation techniques.

35140	Operations Research Modelling	6cp
33401	Introductory Mathematical Methods	6cp
35241	Optimisation 1	6cp
	<i>plus one of the following</i>	
35342	Optimisation 2	6cp
35344	Network Optimisation	6cp
35363	Simulation Modelling	6cp

Sub-major in Physics (General) (24cp)

This sub-major provides a grounding in general physics. It is of benefit to students contemplating a career in the programming of scientific and engineering problems.

68101	Foundations of Physics	6cp
68201	Physics in Action (Physics 2)	6cp
	<i>plus two of the following</i>	
68311	Atoms, Photons and Orbits (Physics 3)	6cp
68312	Electrotechnology and Data Analysis	6cp
68411	Vibrations, Quanta and Nucleons (Physics 4)	6cp

Sub-major in Quantitative Methods (24cp)

This sub-major is intended to expose students to the theory and application of quantitative methods that are widely used by information technology professionals, especially techniques drawn from the disciplines of statistics and management science.

35140	Operations Research Modelling	6cp
35151	Statistics 1	6cp
33401	Introductory Mathematical Methods	6cp
	<i>plus one of the following</i>	
35241	Optimisation 1	6cp
	<i>or</i>	
35252	Statistics 2	6cp

Sub-major in Scientific Computing (24cp)

This sub-major is intended to expose students to the theory and practice of computing as applied in the area of computational science.

35363	Simulation Modelling	6cp
33401	Introductory Mathematical Methods	6cp
35281	Numerical Methods	6cp
35383	High Performance Computing	6cp

Sub-major in Statistics (24cp)

33401	Introductory Mathematical Methods	6cp
35252	Statistics 2	6cp
	<i>plus two of the following</i>	
35353	Regression Analysis	6cp
35355	Quality Control	6cp
35356	Design and Analysis of Experiments	6cp
35361	Probability and Stochastic Processes	6cp

Sub-major in Statistical Modelling and Applications (24cp)

This sub-major is intended to expose students to the theory and practice of statistical modelling.

33401	Introductory Mathematical Methods	6cp
35151	Statistics 1	6cp
35252	Statistics 2	6cp
	<i>plus one of the following</i>	
35353	Regression Analysis	6cp
	<i>or</i>	
35355	Quality Control	6cp
	<i>or</i>	
35356	Design and Analysis of Experiments	6cp
	<i>or</i>	
35361	Probability and Stochastic Processes	6cp

Projects

In lieu of one elective subject, students may take one 6-credit-point project. In many cases, these projects may be completed over the Christmas or between-semester breaks, if desired.

A list of projects nominated by various staff members is accessible from the Faculty of Information Technology website, and details are available from the Faculty Student Centre or Projects Coordinator. Every project must be supervised by an academic staff member. Students who have their own ideas for projects may approach relevant staff members to be their supervisors and must also see the Projects Coordinator for approval. The supervisor must complete a Project Registration form, accessible from the website listing available projects.

Students may not use work done in the normal course of duties as an Industrial Training student, or as a part-time student, as a project. Students may, however, do a project that is related to their employment if it is done with their employer's permission and outside normal hours of employment. In this case, the student's work supervisor would probably become a joint supervisor of the project. Projects are also available through the UTS Shopfront: telephone (02) 9514 2900

www.shopfront.uts.edu.au

As a general guide, a student doing a 6-credit-point project is expected to spend a minimum of 150 hours on the project.

In special circumstances, projects worth 2 credit points or 4 credit points may be undertaken. These projects are normally only available to students who require an additional 2 or 4 credit points to be eligible for graduation. Students who believe they may be eligible for one of these projects should discuss their availability with the Projects Coordinator.

Industrial experience

Diploma of Information Technology Professional Practice

Full-time students normally undertake the Diploma of Information Technology Professional Practice and Industrial Training after completing Year 2, and part-time students after completing Year 4.

Refer to page 63 for full details in the Diploma of Information Technology Professional Practice entry.

Assessment

Grading of awards

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice

The Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice degree is awarded at the levels of Pass, Credit or Distinction.

Students who have completed at least 156 credit points (including the 12 credit points for the Diploma of Information Technology Professional Practice) and have an average raw mark of 50 per cent or greater, qualify for a Pass degree.

Qualification above the Pass level is based on the weighted average mark of core subjects, excluding the first year subjects and the Diploma of Information Technology Professional Practice subjects. For a degree with Distinction, no failures in core subjects over the entire course are permitted. For a degree with Credit, only one failure in core subjects over the entire course is permitted. In Autumn 2002, the average raw mark required to achieve a degree with Distinction was 77.5 per cent and a degree with Credit was 72.25 per cent.

The grading of qualifying students is carried out on an individual basis by the Faculty's

Examination Review Committee. The Examination Review Committee is provided with the following information on each qualifier:

- any failures, including subject details and whether or not the failure was of a technical nature
- the subject details and marks for all electives undertaken
- the time taken to complete the course in terms of stages, excluding periods of leave of absence, and
- the average mark for each stage of the course.

Bachelor of Science in Information Technology

This degree is awarded as a Pass degree. All students who have completed at least 144 credit points and have an average raw mark of 50 per cent or greater, qualify for a Pass degree.

Professional recognition

Holders of these degrees are eligible for professional level membership of the Australian Computer Society.

Bachelor of Science in Computing Science, Diploma of Information Technology Professional Practice (pre-2002)

- ◆ UTS course code: C10149 (pre-2003: MC12)
- ◆ UAC code: n/a (no new admissions)
- ◆ Testamur title: Bachelor of Science in Computing Science, Diploma of Information Technology Professional Practice
- ◆ Abbreviation: BSc DiplInfTechProfPrac
- ◆ Program Leader: Dr W Brookes
- ◆ Course fee: HECS (local)¹
- ◆ Total credit points: 156

Bachelor of Science in Computing Science (pre-2000)

- ◆ UTS course code: C10142 (pre-2003: MC02)
- ◆ UAC code: n/a (no new admissions)
- ◆ Testamur title: Bachelor of Science in Computing Science
- ◆ Abbreviation: BSc
- ◆ Program Leader: Dr W Brookes
- ◆ Course fee: HECS (local)¹
- ◆ Total credit points: 144

Note: From Autumn semester 2002 these courses were replaced by the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice (C10152) and the Bachelor of Science in Information Technology (C10148) (see page 42).

Students currently enrolled in these courses will continue with their course rather than transferring to the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice. In the event of changes to subject availability, students will be advised separately by the Faculty as to the appropriate substitute subject/s to undertake.

¹ This course is not offered to international students.

Admission requirements

No new applications will be accepted for this course. Prospective students should refer to the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice (C10152) on page 42.

Course program

Students who commenced the Bachelor of Science in Computing Science prior to 1995 should consult the Bachelor of Science in Computing Science Program Leader, to determine their course program.

Typical full-time program

Year 1

Autumn semester

31414	Information Systems	6cp
31415	Principles of Software Development A	6cp
31416	Computer Systems Architecture	6cp
31417	Computing Practice	6cp

Spring semester

31424	Systems Modelling	6cp
31425	Principles of Software Development B	6cp
31428	Quantitative Modelling	6cp
31429	Procedural Programming	6cp

Year 2

Autumn semester

22615	Accounting Information Systems	6cp
31434	Database Design	6cp
31436	Systems Software and Networks	8cp
xxxxx	Electives	6cp

Spring semester

31444	Systems Design and Development	10cp
xxxxx	Electives	12cp

Year 3 Post-2000

Autumn semester

31136	Preparation and Review of IT Experience	6cp
31137	IT Experience 1	0cp

Spring semester

31138	Review of IT Experience	6cp
31139	IT Experience 2	0cp

Year 3 Pre-2000

Autumn semester

31696	Industrial Training	0cp
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Spring semester

31697	Industrial Training	0cp
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Year 4**Autumn semester**

31454	Project Management and the Professional	6cp
31455	Software Development Case Study	6cp
xxxxx	Electives	12cp

Spring semester

31464	Information Technology Planning and Design	6cp
31455	Software Development Case Study (cont.)	6cp
xxxxx	Electives	12cp

Typical part-time program**Year 1****Autumn semester**

31416	Computer Systems Architecture	6cp
31417	Computing Practice	6cp

Spring semester

31414	Information Systems	6cp
31415	Principles of Software Development A	6cp

Year 2**Autumn semester**

31425	Principles of Software Development B	6cp
31428	Quantitative Modelling	6cp

Spring semester

31424	Systems Modelling	6cp
31429	Procedural Programming	6cp

Year 3**Autumn semester**

31434	Database Design	6cp
xxxxx	Elective	6cp

Spring semester

31436	Systems Software and Networks	8cp
xxxxx	Elective	6cp

Year 4**Autumn semester**

31444	Systems Design and Development	10cp
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Spring semester

22615	Accounting Information Systems	6cp
xxxxx	Elective	6cp

Year 5 Post-2000**Autumn semester**

31455	Software Development Case Study	6cp
xxxxx	Elective	6cp
31136	Preparation and Review of IT Experience	6cp
31137	IT Experience 1	0cp

Year 5 Post-2000 (cont.)**Spring semester**

31455	Software Development Case Study (cont.)	6cp
31454	Project Management and the Professional	6cp
31138	Review of IT Experience	6cp
31139	IT Experience 2	0cp

Year 5 Pre-2000**Autumn semester**

31455	Software Development Case Study	6cp
xxxxx	Elective	6cp
31698	Industrial Training	0cp

Spring semester

31455	Software Development Case Study (cont.)	6cp
31454	Project Management and the Professional	6cp
31699	Industrial Training	0cp

Year 6 Post-2000**Autumn semester**

31464	Information Technology Planning and Design	6cp
xxxxx	Elective	6cp

Spring semester

xxxxx	Electives	12cp
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Year 6 Pre-2000**Autumn semester**

31464	Information Technology Planning and Design	6cp
xxxxx	Elective	6cp
31698	Industrial Training	0cp

Spring semester

xxxxx	Electives	12cp
31699	Industrial Training	0cp

Industrial experience**Diploma of Information Technology Professional Practice**

Full-time students normally undertake the Diploma of Information Technology Professional Practice and Industrial Training after completing Year 2, and part-time students after completing Year 4.

Refer to page 63 for full details in the Diploma of Information Technology Professional Practice entry.

Bachelor of Information Technology

- ◆ UTS course code: C10143 (pre-2003: MC03)
- ◆ UAC code: 605010
- ◆ Testamur title: Bachelor of Information Technology
- ◆ Program Leader: Mr C S Johnson
- ◆ Abbreviation: BInfTech
- ◆ Course fee: HECS (local)¹
- ◆ Total credit points: 144

Overview

This course is a cooperative education program in computer information systems and has been developed by the Faculty of Information Technology in cooperation with a group of private and public sector employers.

The number of students admitted each year is limited by the number of sponsorship commitments secured from employers to a maximum of 50 places.

Each student admitted to the course receives a scholarship for the duration of the course, subject to satisfactory performance and to certain conditions detailed further in this handbook. Each of the industry partners undertakes to sponsor a stated number of students, and contributes the full amount of their scholarship to a fund administered by the University.

The industry partners also provide the industry-based semester facilities for each of the students assigned to them.

Course aims

The program differs from other cooperative education courses in that during the industry-based semesters, students follow a structured program designed jointly by the University and the employer group, including formal coursework taught in industry. This coursework is assessed to University and business standards and familiarises students with business needs and requirements. During the industry-based semesters, students are exposed to real problems within an environment quite different from that of the University. The resources of industry are available to support the education of students.

The central curriculum of the course is information systems; this is supported by studies in management and strategic planning

as well as the necessary background subjects in computing science and programming. The active participation of industry practitioners in course design and course delivery further ensures that graduates of the course are well equipped with skills that are relevant to present and future industry needs.

Admission requirements

Selection into the course is based on HSC results and the compulsory Bachelor of Information Technology questionnaire. Promising applicants are then selected for an interview and suitability is determined on the applicant's performance at the interview. Interviews are conducted by panels that comprise representatives of the University and the industry group. Applicants are assessed for their suitability to the industrial as well as the academic components of the course. The course is aimed primarily at school leavers and is limited to citizens and permanent residents of Australia. Mature age students are not normally admitted.

Further information is available at:

<http://it.uts.edu.au/courses/mc03.html>

Course duration

The course is of three years' duration and involves four semesters of full-time study at the University and two semesters of full-time study and practical experience in industry. The industry-based semesters are of 23 weeks' duration, and a 42-week academic year is the norm for the course.

Course structure

	Semester 1	Semester 2
Year 1	UTS	Industry
Year 2	UTS	UTS
Year 3	Industry	UTS

Course program

Post-2002 program

Year 1

Autumn semester

31465	Object-oriented Programming	6cp
31466	Principles of Distributed Computing	6cp
31467	Networking 1	6cp
31468	Information, Classification and Control	6cp

¹ This course is not offered to international students.

Year 1 (cont.)**Spring semester**

31474	Database Fundamentals	6cp
31491	Industry Project 1	9cp
31489	Industry Study 1	6cp

Year 2**Autumn semester**

31469	Object-oriented Design	6cp
31470	Distributed Computing Architecture	6cp
31475	Requirements Engineering	6cp
xxxxx	Approved business elective	6cp
xxxxx	Elective	6cp

Spring semester

31476	Systems Development Project	12cp
31735	Information Systems and Organisation Development	6cp
xxxxx	Elective	6cp

Year 3**Autumn semester**

xxxxx	Elective	6cp
31492	Industry Project 2	9cp
31490	Industry Study 2	6cp

Spring semester

31479	Information Technology Professional and Society	6cp
31480	Strategic Information Technology Planning Project	6cp
31736	Business Processes and IT Strategy	6cp
xxxxx	Elective	6cp

Pre-2002 program**Year 1****Autumn semester**

31414	Information Systems	6cp
31415	Principles of Software Development A	6cp
31416	Computer Systems Architecture	6cp
31718	Contemporary Information Technology 1	6cp

Spring semester

31722	Commercial Programming	5cp
31770	Industry Project 1	5cp
31771	Business Requirements Analysis	5cp
31779	Applications of Information Technology 1	5cp

Year 2**Autumn semester**

22615	Accounting Information Systems	6cp
31424	Systems Modelling	6cp
31434	Database Design	6cp
31436	Systems Software and Networks	8cp

Year 2 (cont.)**Spring semester**

31444	Systems Design and Development	10cp
31443	Distributed Databases and Client/Server Computing	6cp
31735	Information Systems and Organisation Development	6cp
xxxxx	Elective	6cp

Year 3**Autumn semester**

31756	Project Management	5cp
31781	Business Systems Design	5cp
31789	Applications of Information Technology 2	5cp
31790	Industry Project 2	5cp

Spring semester

24108	Marketing Foundations	6cp
31464	Information Technology and Planning Design	6cp
31736	Business Processes and IT Strategy	6cp
31769	Contemporary Information Technology 2	4cp
xxxxx	Elective	6cp

Electives

Electives may be taken from the Faculty of Law, the Faculty of Business or within the Faculty of Information Technology, subject to the approval of the Bachelor of Information Technology Program Leader.

Industrial experience

The two industry-based semesters are spent with two different companies. Students are not employees of the company, and are not obliged to find employment with a given company on completion of their studies. Nevertheless, students are encouraged to find employment within the group of sponsoring employers.

The dates of the industry-based semesters for 2003 are as follows:

- Autumn semester (third-year students): Monday 13 January – Friday 27 June
- Spring semester (first-year students): Monday 7 July – Friday 19 December

Students are expected to attend their assigned sponsoring company on a full-time basis throughout these periods. Students cannot expect any absences to be approved during the industry-based semesters.

Scholarship

The scholarship is paid at three different and increasing levels; all first-year students start at Level 1. At the end of each year, all Bachelor of Information Technology students with satisfactory progress move from their current level to the next level.

The levels for 2002 were as follows and will be reviewed for 2003:

- Level 1: \$11,500 per annum
- Level 2: \$12,000 per annum
- Level 3: \$12,500 per annum

The scholarship paid to Bachelor of Information Technology students has been ruled as tax exempt. The reference for the ruling by the Australian Tax Office is Item 2.1A, section 51-10 of the *Income Tax Assessment Act 1997*. Class Ruling CR 2001/8.

Assessment

Grading of awards

The Bachelor of Information Technology is awarded as a Pass degree, a degree with Credit or a degree with Distinction.

The grading is based on the weighted average mark of core subjects (with the exception of the industry-based semester subjects) and performance in the industry-based semesters.

The grading of qualifying students is carried out on an individual basis by the Faculty's Examination Review Committee. This Committee takes account of input from the Bachelor of Information Technology Course Steering Committee. The Examination Review Committee is provided with the same information as that made available for the grading of Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice students, with one important addition: the overall assessment, by industry, of the industry-based semesters.

Rules and regulations

There are special conditions relating to students enrolled in the Bachelor of Information Technology.

Leave of absence is not normally granted to students, except under extraordinary circumstances and subject to satisfactory arrangements being possible. Likewise, withdrawal from the course and subsequent readmission is not normally granted. Students are reminded that withdrawal without penalty from any course

at the University is only possible up to the deadlines imposed by the University. After such deadlines, students are expected to complete all assessment tasks for subjects in which they are enrolled.

Variations to the approved program of study for the Bachelor of Information Technology are restricted. No industry-based subject may be deleted from the program, except under extraordinary circumstances and at the discretion of the Course Steering Committee and the Faculty of Information Technology. No industry-based subject may be taken during a University-based semester. The taking of additional subjects during an industry-based semester is seen as unusual and may only be done at the discretion of the Course Steering Committee and the Faculty.

The Faculty will not recommend probation for unsatisfactory academic performance. Instead, the Faculty recommends to the Faculty Board that a student be **excluded** under any of the following circumstances:

- a student fails any subject for the second time
- a student gains less than 50 per cent of the credit points for which he or she is enrolled in that assessment period
- a student fails any subject that is part of the program of an industry-based semester (there is provision for a supplementary examination to be taken in these subjects following a failure on the first attempt) or a student performs unsatisfactorily during an industry-based semester, or
- immediately prior to the commencement of an industry-based semester, a student has still to complete more than one subject in the normal program of the course to that stage.

Appeals against exclusion are dealt with by the University's Appeals Committee (of the Academic Board), which takes into account the recommendation of the Course Steering Committee.

Professional recognition

Holders of these degrees are eligible for professional level membership of the Australian Computer Society.

Bachelor of Science in Information Technology Innovation¹

- ◆ UTS course code: C10153 (pre-2003: MC18)
- ◆ UAC code: 605005
- ◆ Testamur title: Bachelor of Science in Information Technology Innovation
- ◆ Abbreviation: BSc
- ◆ Program Leader, Innovation Programs: Associate Professor Graeme Sheather (Faculty of Business)
- ◆ Course fee: HECS (local)
- ◆ Total credit points: 144

Overview

The Bachelor of Science in Information Technology Innovation is one of four related technology innovation courses offered at UTS. The innovation program embodies a trans-disciplinary team-based approach to course curriculum and delivery that is designed to provide graduates with the ability to develop and commercialise technology-based initiatives. The course offers students the opportunity to develop knowledge and skills in information technology and the know-how to apply this knowledge in the context of any organisation. Students study across major areas of computing and information technology, learning how to develop and commercialise new IT technologies and initiatives. The course combines the study of information technology with the key ideas of innovation, business, capital management and sustainability, and students learn the fundamentals of making ideas work.

Course aims

The overall course aim is to combine an in-depth study of IT and computing with the knowledge of how to develop and commercialise new technologies and initiatives in the field of information technology.

The entrepreneurial component of the program aims to equip students with an entrepreneurial attitude and appropriate business skills to transform new ideas, knowledge and technologies into new products and processes. This enables graduates to bring to industry a greatly improved capacity to manage risk and to create an environment conducive to innovation.

¹ This course is not offered to international students or non-recent school leavers.

The information technology component of the program aims to provide a sound education in all aspects of computing and information technology for students who intend to make a career in the profession, as well as providing a pathway to Honours, postgraduate study and a research career. The electives provide for further specialisation within the computing and information technology discipline and/or further innovation studies.

Graduates are committed to lifelong learning built on the foundations provided by their course of study.

The course provides a sound study of information technology and its applications together with related business skills that enable graduates to take a leading role in the entrepreneurial activities of an organisation. Graduates are also equipped to start up their own companies.

Admission requirements

This course is only offered to local students who are recent school leavers.

The number of students admitted each year is limited to a strict quota based on the availability of resources.

For local recent school leavers, selection into the course is based on the HSC UAI or equivalent. There are no prerequisites for entry, however, the assumed knowledge is Mathematics and any two units of English, with Mathematics Extension 1 and English Advanced recommended.

Advanced standing

Exemptions are not normally granted for this course on the basis of recent academic study, as applicants are recent school leavers.

Course duration

The Bachelor of Science in Information Technology Innovation is three years, full time. The course consists of six academic semesters of full-time study, and a minimum period of eight weeks of industry experience.

This course is not offered in part-time mode.

Course structure

The Bachelor of Science in Information Technology Innovation requires students to complete 144 credit points which consist of:

126 credit points of core subjects; and 18 credit points of electives.

The course consists of two streams: the Disciplinary Stream and the Entrepreneurial Stream. The Disciplinary Stream in Information Technology consists of 72 credit points of core Information Technology subjects and 18 credit points of elective subjects.

The Entrepreneurial Stream consists of 48 credit points of subjects introducing basic concepts in entrepreneurship, innovation, information technology, business and sustainability. Also in the Entrepreneurial Stream, students undertake a 6-credit-point Capstone Project which involves drawing on scientific, innovation, and venture capital expertise in the University and its partners. Subjects in the Entrepreneurial Stream are drawn from several faculties.

Course program

Typical full-time program

Year 1

Autumn semester

D	31465	Object-oriented Programming	6cp
D	31466	Principles of Distributed Computing	6cp
E	31060	Information Systems Principles	6cp
E	24108	Marketing Foundations	6cp

Spring semester

D	31469	Object-oriented Design	6cp
D	31470	Distributed Computing Architecture	6cp
E	48210	Engineering for Sustainability	6cp
E	22107	Accounting for Business	6cp

Year 2

Autumn semester

D	31473	Data Structures and Procedural Programming	6cp
D	31467	Networking 1	6cp
E	25559	New Start Financing and Valuation	6cp
E	24307	Electronic Business	6cp

Spring semester

D	31474	Database Fundamentals	6cp
D	31475	Requirements Engineering	6cp
D	xxxxx	IT Innovation elective	6cp
E	21193	Introduction to Corporate Strategy	6cp

Summer session

	31062	Entrepreneurial Experience	0cp
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D = Disciplinary Stream subject

E = Entrepreneurial Stream subject

Year 3

Autumn semester

D	31476	Systems Development Project	12cp
D	xxxxx	IT Innovation elective	6cp
E	21227	Innovation and Small Venture Management	6cp

Spring semester

D	31479	Information Technology Professional and Society	6cp
D	31478	Project Management and Quality Assurance	6cp
D	xxxxx	IT Innovation elective	6cp
E	21126	Capstone Project in Business Planning	6cp

D = Disciplinary Stream subject

E = Entrepreneurial Stream subject

English language testing

Despite the technical nature of some aspects of information technology, English language proficiency is an important factor in the successful academic study of information technology and for a successful career in the information technology industry.

In recognition of this, all students enrolling in the Bachelor of Science in Information Technology Innovation are required to undertake an English test administered by the English Language Study Skills Assistance (ELSSA) Centre. The results of this test indicate three possible courses of action:

1. The student's English proficiency is considered adequate: the student is allowed to enrol normally in first-year subjects.
2. The student's English proficiency is considered inadequate: the student is strongly recommended to undertake the subject 31034 Advanced Communication for IT.

This subject is recognised as one of the electives that comprise the course. 31034 Advanced Communication for IT is undertaken in the first year of study. The student's program of study is adjusted to maintain an acceptable workload.

3. The student's English proficiency is considered poor: the student is strongly recommended to undertake remedial English classes with the ELSSA Centre before undertaking the subject 31034 Advanced Communication for IT.

31034 Advanced Communication for IT is recognised as one of the electives that comprise the course. It is undertaken in the first year of study following English support classes with the ELSSA Centre.

The student's program of study is adjusted to maintain an acceptable workload.

Students who fail to follow the Faculty's recommendation receive a letter to confirm this. The letter is lodged in the student's file as a record that they have chosen not to follow the Faculty's recommendation and that the student takes full responsibility for that decision.

Electives

Students must complete a minimum of 18 credit points of electives. A list of approved electives for the Bachelor of Science in Information Technology Innovation course will be published by the Faculty of Information Technology.

Students wishing to enroll in subjects not included on the approved list should seek the approval of the Program Leader. Students may undertake subjects outside the University only if no comparable subject is offered by the University.

Projects

In lieu of one elective subject, students may take one 6-credit-point project. In many cases, these projects may be completed over the Christmas or between-semester breaks, if desired.

A list of projects nominated by various staff members is accessible from the Faculty of Information Technology website, and details are available from the Faculty Student Centre or Projects Coordinator. Every project must be supervised by an academic staff member. Students who have their own ideas for projects may approach relevant staff members to be their supervisors and must also see the Projects Coordinator for approval. The supervisor must complete a Project Registration form, accessible from the website listing available projects.

Students may not use work done in the normal course of duties during entrepreneurial experience/industry training as a project.

Projects are also available through the UTS Shopfront:

telephone (02) 9514 2900

www.shopfront.uts.edu.au/

As a general guide, a student doing a 6-credit-point project is expected to spend a minimum of 150 hours on the project.

Industrial experience

Students normally undertake a minimum of eight weeks of entrepreneurial experience in

the summer session between the second and third years of study. Students are linked with industry partners who provide industrial experience in the information technology industry in an environment conducive to innovation and entrepreneurship. The goal is to provide a period of targeted industrial experience that is structured to link with the subjects studied at university and reinforce students' learning in a workplace setting.

Specific arrangements for entering the entrepreneurial experience will be published by the Faculty of Information Technology in 2003.

Assessment

Grading of awards

The Bachelor of Science in Information Technology Innovation degree is awarded at the levels of Pass, Credit or Distinction.

Students who have completed at least 144 credit points and have an average raw mark of 50 per cent or greater, qualify for a Pass degree.

Qualification above the Pass level is based on the weighted average mark of core subjects, excluding the first-year subjects. For a degree with Distinction, no failures in core subjects over the entire course are permitted. For a degree with Credit, only one failure in core subjects over the entire course is permitted.

The grading of qualifying students is carried out on an individual basis by the Faculty's Examination Review Committee. The Examination Review Committee is provided with the following information on each qualifier:

- any failures, including subject details and whether or not the failure was of a technical nature
- the subject details and marks for all electives undertaken
- the time taken to complete the course in terms of stages, excluding periods of leave of absence, and
- the average mark for each stage of the course.

Professional recognition

Approval is being sought for holders of this degree to be eligible for professional level membership of the Australian Computer Society.

Bachelor of Computing, Diploma of Information Technology Professional Practice (pre-2002)

- ◆ UTS course code: C10151 (pre-2003: MC16)
- ◆ Testamur title: Bachelor of Computing,
Diploma of Information Technology
Professional Practice
- ◆ Abbreviation: BComp DiplInfTechProfPrac
- ◆ Program Leader: Dr W Brookes
- ◆ Course fee: \$8,500 per semester plus \$3,400 in
total for the DiplInfTechProfPrac (international)¹
- ◆ Total credit points: 156

Bachelor of Computing (pre-2002)

- ◆ UTS course code: C10145 (pre-2003: MC06)
- ◆ Testamur title: Bachelor of Computing
- ◆ Abbreviation: BComp
- ◆ Program Leader: Dr W Brookes
- ◆ Course fee: \$7,000 per semester
(international)¹
- ◆ Total credit points: 144

Note: From Autumn semester 2002 these courses were replaced by the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice (C10152) and the Bachelor of Science in Information Technology (C10148), (see page 42).

Students currently enrolled in these courses will continue with their course rather than transferring to the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice. In the event of changes to subject availability, students will be advised separately by the Faculty as to the appropriate substitute subject(s) to undertake.

Admission requirements

No new applications will be accepted for this course. Prospective students should refer to the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice (C10152) on page 42.

Course program

Pre-2002 program

Year 1

Autumn semester

31515	Introduction to Australian IT Industry	6cp
31507	Australian IT Industry	6cp
31417	Computing Practice	6cp
31414	Information Systems	6cp

Spring semester

31424	Systems Modelling	6cp
31508	Programming Fundamentals	6cp
31509	Computer Fundamentals	6cp
31425	Principles of Software Development B	6cp

Year 2

Autumn semester

31434	Database Design	6cp
31429	Procedural Programming	6cp
31510	Operating Systems	6cp
xxxxx	Elective 1	6cp

Spring semester

31511	Systems Design	6cp
31512	Networking 1	6cp
31428	Quantitative Modelling	6cp
xxxxx	Elective 2	6cp

Year 3

Autumn semester

31136	Preparation and Review of IT Experience	6cp
31137	IT Experience 1	0cp

Spring semester

31138	Review of IT Experience	6cp
31139	IT Experience 2	0cp

Year 4

Autumn semester

31454	Project Management and the Professional	6cp
22615	Accounting Information Systems	6cp
xxxxx	Elective ¹	
	<i>or</i>	
31514	Computing Theory	6cp
xxxxx	Elective 3	6cp

¹ This course is not offered to local students.

Year 4 (cont.)**Spring semester**

31464	Information Technology Planning and Design	6cp
xxxxx	Elective ¹	6cp
	<i>or</i>	
31514	Computing Theory	6cp
31931	Software Quality Assurance	6cp
xxxxx	Elective 4	6cp

¹ These elective subjects may be taken from any of the computing electives offered by the Faculty of Information Technology or one of a small set of approved subjects from other faculties, for example subjects in International Finance or International Management.

Industrial experience***Diploma of Information Technology Professional Practice***

International students may undertake the Diploma of Information Technology Professional Practice and Industrial Training after completing Year 2, providing they are able to secure employment.

Refer to the following Diploma of Information Technology Professional Practice entry for full details.

Diploma of Information Technology Professional Practice

- ◆ UTS course code: n/a
- ◆ Testamur title: Diploma of Information Technology Professional Practice
- ◆ Abbreviation: DipInfTechProfPrac
- ◆ Program Leader: Mr B Campbell
- ◆ Course fee: HECS (local)
\$2,000 in total (international)
- ◆ Total credit points: 12

Overview

The Diploma of Information Technology Professional Practice (DipInfTechProfPrac) is not a separate course in its own right but is the award received upon completion of the industrial training component of the Faculty's undergraduate programs. The Diploma of Information Technology Professional Practice may be undertaken in the following courses: C10152, C10149, C10151, C10150 and C10141.

Course aims

The Diploma aims to further develop the students technical and generic work skills in a workplace environment. It also enables students to develop lifelong learning skills so they gain a better understanding of the relationship between theory and practice.

Admission requirements

No student is permitted to enrol in the DipInfTechProfPrac until they have obtained suitable employment.

No student is permitted to enrol in the DipInfTechProfPrac until they have completed successfully (or have been exempted from) all subjects that are prerequisites for Industrial Training. These are listed below for the various courses:

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice (C10152)

- 31465 Object-oriented Programming
- 31469 Object-oriented Design
- 31466 Principles of Distributed Computing
- 31470 Distributed Computing Architecture
- 31467 Networking 1
- 31471 Networking 2
- 31472 Introduction to Collaborative Systems

64 Undergraduate courses

- 31468 Information, Classification and Control
- 31473 Data Structures and Procedural Programming
- 31474 Database Fundamentals
- 31475 Requirements Engineering

Bachelor of Science in Computing Science, Diploma of Information Technology Professional Practice (pre-2002) (C10149)

- 31414 Information Systems
- 31415 Principles of Software Development A
- 31416 Computer Systems Architecture
- 31417 Computing Practice
- 31424 Systems Modelling
- 31429 Procedural Programming
- 31434 Database Design
- 31436 Systems Software and Networks

Bachelor of Computing, Diploma of Information Technology Professional Practice (pre-2002) (C10151)

- 31515 Introduction to Australian IT Industry
- 31507 Australian IT Industry
- 31417 Computing Practice
- 31414 Information Systems
- 31424 Systems Modelling
- 31508 Programming Fundamentals
- 31509 Computing Fundamentals
- 31425 Principles of Software Development B
- 31434 Database Design
- 31429 Procedural Programming
- 31510 Operating Systems

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice, Bachelor of Arts in International Studies (C10150)

- 31465 Object-oriented Programming
- 31466 Principles of Distributed Computing
- 31467 Networking 1
- 31468 Information, Classification and Control
- 31469 Object-oriented Design
- 31470 Distributed Computing Architecture
- 31471 Networking 2
- 31472 Introduction to Collaborative Systems
- 31473 Data Structures and Procedural Programming
- 31474 Database Fundamentals
- 31475 Requirements Engineering
- 50140 Comparative Social Change
- 971xx Language and Culture 1

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice, Bachelor of Laws (C10141)

- 31466 Principles of Distributed Computing
- 31468 Information, Classification and Control
- 31467 Networking 1
- 31472 Introduction to Collaborative Systems
- 31471 Networking 2
- 31465 Object-oriented Programming
- 31469 Object-oriented Design
- 31470 Distributed Computing Architecture
- 31473 Data Structures and Procedural Programming
- 31474 Database Fundamentals
- 31475 Requirements Engineering

Advanced standing

In exceptional circumstances, students enrolled in the DipInfTechProfPrac may be granted an exemption from the subjects 31137 IT Experience 1 and 31139 IT Experience 2 if they have at least 12 months of suitable recent full-time employment. In general, contracting and self-employment are not regarded as suitable employment. Students will not be exempted from 31136 Preparation and Review of IT Experience and 31138 Review of IT Experience. No student may apply for an exemption from 31137 and 31139 until after successful completion (or exemption) from all subjects that are prerequisites for Industrial Training.

Course duration

To gain credit for the DipInfTechProfPrac, students are required to obtain an approved, full-time job within the information technology industry. The duration of the Diploma is a minimum of nine months.

Course structure

Full-time BSc(InfTech), DipInfTechProfPrac (C10152) students normally undertake the Diploma of Information Technology Professional Practice and Industrial Training after completing Year 2, and part-time students after completing Year 4. BSc(InfTech), DipInfTechProfPrac, LLB (C10141) students normally undertake the DipInfTechProfPrac after completing Semester 7. BSc(InfTech), DipInfTechProfPrac, BA (C10150) students normally undertake the DipInfTechProfPrac after completing Year 5.

Course program

The DipInfTechProfPrac consists of four subjects:

31136	Preparation and Review of IT Experience	6cp
31137	IT Experience 1	0cp
31138	Review of IT Experience	6cp
31139	IT Experience 2	0cp

Rules and regulations

During the DipInfTechProfPrac students are required to behave in a professional manner, and to keep the Faculty informed of the status of their employment at all times so that the Faculty is able to assess their experience. Each year the Faculty of Information Technology publishes a DipInfTechProfPrac Student Guide (for full-time students) which sets out in detail what is required to pass the subject. Students receive a copy of this Guide at the DipInfTechProfPrac information session held in May each year.

DipInfTechProfPrac students are assessed by members of the academic staff who visit students during their employment.

Other information

Although the securing of suitable employment for the DipInfTechProfPrac is the student's responsibility, the Faculty provides assistance to all students. Students who wish to benefit from the direct assistance of the Faculty should refer to the DipInfTechProfPrac Student Guide for the procedure to be followed.

Students seeking a DipInfTechProfPrac position without the direct assistance of the Faculty should first make an appointment to see the Industry Liaison Officer. If a student finds employment, a second appointment must be made to see the Industry Liaison Officer to obtain certification that the employment is suitable for the DipInfTechProfPrac.

In general, students find the Diploma extremely beneficial in relating the final year of coursework to the practical needs of the information industry, and this experience can be cited when applying for graduate career positions.

Bachelor of Science (Honours) in Information Technology

-
- ◆ UTS course code: C09019 [pre-2003: MC10]
 - ◆ Testamur title: Bachelor of Science (Honours) in Information Technology
 - ◆ Abbreviation: BSc(Hons)
 - ◆ Program Leader: Dr R Rist
 - ◆ Course fee: HECS [local]
\$8,500 per semester (international)
 - ◆ Total credit points: 48
-

Overview

This course provides the opportunity for students to develop their level of competence in a chosen area of information technology.

Course aims

The Honours program aims to: provide students with a sound research methodology; provide for the in-depth study of particular topics in information technology; provide students with the experience of undertaking a research-oriented project; and provide students with a basis for postgraduate research or a career in industrial research and development.

The precise selection of subjects to be offered in any particular year depends on the interests of the students, and the interests and availability of academic staff. Students should consult the Honours Program Leader who will assist them in planning their program.

Admission requirements

For students within the Faculty who are eligible to graduate from an undergraduate degree, the admission criterion is a weighted average mark of 70 per cent or higher, normally with no recorded failures in the core subjects after the first year (full time) or Stages 1 and 2 (part time) of the undergraduate degree.

Students are expected to be drawn from the following undergraduate groups:

- Bachelor of Science in Computing Science
- Bachelor of Science in Computing Science, Diploma of Information Technology Professional Practice
- Bachelor of Mathematics and Computing

- Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice
- Bachelor of Science in Information Technology
- Bachelor of Science in Information Technology Innovation.

Students enrolled in the Bachelor of Information Technology degree are **not** eligible to start the Honours program on graduation. The Bachelor of Information Technology is supported by scholarships from industry and sponsors expect to employ the graduates after three years. These students may apply for admission to the Honours program at a later stage in their career.

Admission to the Honours program is not automatic. At the time of application, a student specifies an area of interest for the 31482 Honours Project B, and a possible Honours adviser. If an adviser cannot be found, then the student is not admitted to the program. It is expected that students will 'sound out' a potential adviser during their final undergraduate semester, or sometime before the application deadline for external students.

'External' students are those students from another faculty in the University, or from another university, with qualifications equivalent to the Bachelor of Science in Computing Science. These students are considered for entry, subject to approval by the Honours Program Leader, on the basis of their potential to complete the Honours degree.

Course duration

The Honours program is offered over one year, full time, or two years, part time.

Course structure

The Honours degree consists of research (comprising half the program) and advanced coursework (comprising the other half of the program). The research component is spread over the entire course: in the first semester, students take 32931 Information Technology Research Methods and review the research literature in their chosen area (31481 Honours Project A); in the second semester, students undertake a formal research project in their chosen area (31482 Honours Project B).

Course program

Year 1

Autumn semester

32931	Information Technology Research Methods	6cp
31481	Honours Project A	6cp
xxxxx	Honours electives	12cp

Spring semester

31482	Honours Project B	12cp
xxxxx	Honours electives	12cp

Any undergraduate elective or Master's subject in the Faculty of IT may be taken by an Honours student, subject to prerequisites and availability. Other subjects may be taken as electives with the permission of the Program Leader.

Assessment

Grading of awards

The assessment of students' results takes into account the Honours level coursework subjects and the research project (31482 Honours Project B). Honours at the grades of First Class, Second Class (Division 1), Second Class (Division 2) and Third Class are awarded for successful completion of the course.

A student with 48 credit points of approved study, a weighted average mark of 50 per cent or greater, and at most one failure over the course, qualifies for Third Class Honours.

The grading of awards above Third Class Honours is carried out on an individual basis by the Faculty's Examination Review Committee. The actual qualifying standards are determined yearly by the Committee within the following criteria:

- for First Class Honours, the minimum qualifying average mark is 85 per cent and no failures are permitted over the entire course¹
- for Second Class (Division 1) Honours, the minimum qualifying average mark is 75 per cent and only one failure is permitted over the entire course¹
- for Second Class (Division 2) Honours, the minimum qualifying average mark is 65 per cent and only one failure is permitted over the entire course.¹

¹ The term 'entire course' refers only to subjects in the Honours course. A student's undergraduate results are not considered when grading an Honours award.

The Committee is provided with the following information on each qualifier:

- any failures, including subject details and whether the failure was of a technical nature
- the subject details and marks for all subjects undertaken
- the time taken to complete the course in terms of stages, excluding leave of absence, and
- the average mark for each stage of the course.

Other information

For addition information on the Honours Program, see:

<http://it.uts.edu.au/courses/mc10.html>

COMBINED DEGREES

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice, Bachelor of Laws

-
- ◆ UTS course code: C10141 (pre-2003: LL19)
 - ◆ UAC code: 609020
 - ◆ Testamur title: Bachelor of Science in Information Technology
Diploma of Information Technology
Professional Practice
Bachelor of Laws
 - ◆ Abbreviation: BSc DiplInfTechProfPrac LLB
 - ◆ Course fee: HECS (local)
\$7,000 per semester (international)
 - ◆ Total credit points: 252
-

Bachelor of Science in Computing Science, Bachelor of Laws (pre-2002)

-
- ◆ UTS course code: C10128 (pre-2003: LL06)
 - ◆ UAC code: n/a (no new admissions)
 - ◆ Testamur title: Bachelor of Science in Computing Science
Bachelor of Laws
 - ◆ Abbreviation: BSc LLB
 - ◆ Course fee: HECS (local)
\$7,000 per semester (international)
 - ◆ Total credit points: 252
-

Overview

The Bachelor of Science in Information Technology, Diploma in Information Technology Professional Practice, Bachelor of Laws was introduced in Autumn 2002. This course replaces pre-2002 undergraduate offering Bachelor of Science in Computing Science, Bachelor of Laws (C10128).

Transition arrangements for students commencing the Bachelor of Science in Computing Science, Bachelor of Laws prior to 2002 to transfer to the Bachelor of Science in Information Technology, Diploma in Information Technology Professional Practice, Bachelor of Laws are published on the Faculty of Information Technology website and details are available from the Faculty of Information Technology Office.

The Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice, Bachelor of Laws course is offered jointly by the Faculty of Law and the Faculty of Information Technology. The program allows students the option of undertaking the professional program as part of their undergraduate studies.

Admission requirements

Local students are required to apply for admission through the NSW Universities Admissions Centre (UAC). For school leavers, admission is based on UAI scores. Non-recent school leavers should apply through UAC in addition to sending a Personal Statement to UTS. Applications are taken from August to end of October each year. Considerations for admission as a non-recent school leaver takes into account the following:

- English proficiency and written expression
- previous legal study
- tertiary study
- legal experience or related employment
- motivation and the reason for wanting to study law (and other discipline in the case of a combined or double degree)
- commitment to study law, and
- supporting material such as professional and personal references and/or letter of employer's support.

International students should contact the UTS International Programs Office (IPO) for application procedures. In addition to academic requirements, students are required to meet English language proficiency requirements.

Course duration

The course is of five years' duration and is offered only on a full-time basis (although students will be expected to attend some evening lectures).

Course structure

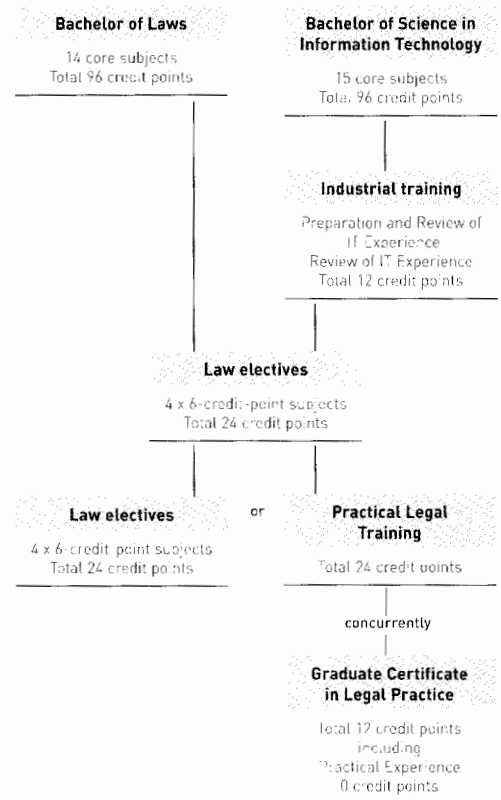
Students enrol with the Faculty of Law and are required to complete a total of 252 credit points, 108 credit points in Information Technology and 144 credit points in Law.

Students will be awarded two degrees and therefore will receive two testamurs on graduation. Students who elect not to complete the joint degree may be permitted to

complete Bachelor of Science in Information Technology, Diploma in Information Technology Professional Practice or a Bachelor of Laws as a stand-alone degree.

Students must complete the Diploma in Information Technology Professional Practice, which is normally undertaken after completing Year 4, Autumn semester. To gain credit for the DipInfTechProfPrac, students are required to obtain an approved, full-time job within the IT industry. The duration of the DipInfTechProfPrac is a minimum of nine months.

Course diagram



Course program

Year 1

Autumn semester

31466	Principles of Distributed Computing	6cp
31468	Information, Classification and Control	6cp
70105	Legal Research	4cp
70113	Legal Process and History	10cp

Spring semester

31467	Networking 1	6cp
31472	Introduction to Collaborative Systems	6cp
70211	Law of Contract	8cp
70217	Criminal Law	6cp

Year 2

Autumn semester

31471	Networking 2	6cp
31465	Object-oriented Programming	6cp
70311	Law of Tort	8cp
70616	Federal Constitutional Law	8cp

Spring semester

31469	Object-oriented Design	6cp
31470	Distributed Computing Architecture	6cp
70317	Real Property	8cp
70318	Personal Property	4cp

Year 3

Autumn semester

31473	Data Structures and Procedural Programming	6cp
31474	Database Fundamentals	6cp
70417	Corporate Law	8cp
70617	Administrative Law	8cp

Spring semester

31475	Requirements Engineering	6cp
70516	Equity and Trusts	8cp
76xxx	Law elective subject 1	6cp
76xxx	Law elective subject 2	6cp

Year 4

Autumn semester

31476	Systems Development Project	12cp
71005	Practice and Procedure	4cp
71216	Law of Evidence	6cp
76xxx	Law elective subject 3	6cp

Spring semester

31478	Project Management and Quality Assurance	6cp
71116	Remedies	6cp
76xxx	Law elective subject 4	6cp
31136	Preparation and Review of IT Experience	6cp
31137	IT Experience 1	0cp

Year 5

Autumn semester

31479	Information Technology Professional and Society	6cp
31480	Strategic Information Technology Planning Project	6cp
31138	Review of IT Experience	6cp
31139	IT Experience 2	0cp

Spring semester

	Practical Legal Training	24cp
	<i>or</i>	
	Four Law electives	24cp

Industrial experience

Diploma of Information Technology Professional Practice

Full-time students normally undertake the Diploma of Information Technology Professional Practice and Industrial Training after completing Semester 7.

Refer to page 63 for full details in the Diploma of Information Technology Professional Practice entry.

Other information

The Faculty of Law administers the course and inquiries should be directed to them on telephone (02) 9514 3444. Specific inquiries about the Information Technology component may be directed to the Faculty of Information Technology on telephone (02) 9514 1803.

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice, Bachelor of Arts in International Studies

- ◆ UTS course code: C10150 [pre-2003: MC15]
- ◆ UAC code: 609230
- ◆ Testamur title: Bachelor of Science in Information Technology
Diploma of Information Technology Professional Practice
Bachelor of Arts in International Studies
- ◆ Abbreviation: BSc DiplInfTechProfPrac BA
- ◆ Program Leader: Dr W Brookes
- ◆ Course fee: HECS (local)
\$8,500 per semester plus \$2,000 in total for the DiplInfTechProfPrac (international)
- ◆ Total credit points: 252

Bachelor of Science in Computing Science, Bachelor of Arts in International Studies (pre-2002)

- ◆ UTS course code: C10144 [pre-2003: MC05]
- ◆ UAC code: n/a [no new admissions]
- ◆ Testamur title: Bachelor of Science in Computing Science
Bachelor of Arts in International Studies
- ◆ Abbreviation: BSc BA
- ◆ Program Leader: Dr W Brookes
- ◆ Course fee: HECS (local)¹
- ◆ Total credit points: 240

Note: The Bachelor of Science in Information Technology, Diploma in Information Technology Professional Practice, Bachelor of Arts in International Studies (C10150) was introduced in Autumn 2002. This course replaces pre-2002 undergraduate offerings: Bachelor of Science in Computing Science, Bachelor of Arts in International Studies (C10144).

Students currently enrolled in these courses will continue with their course rather than transfer to the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice, Bachelor of

Arts in International Studies. In the event of changes to subject availability, students will be advised separately by the Faculty.

Overview

This course combines the Bachelor of Science in Information Technology, Diploma in Information Technology Professional Practice with the University's Bachelor of Arts in International Studies. Information technology is integrated with a major in the language and culture of another country.

Course aims

The information technology component of the combined degree aims to provide a sound education in all aspects of computing and information technology for students who intend to follow a career in the profession. It is intended that the course will provide a suitable background covering all aspects of computer science and information technology, short of the actual design and construction of hardware systems.

The International Studies component of the joint degree is designed to offer students the chance of gaining an in-depth understanding of a culture other than their own through academic and experiential learning. The program equips students with the ability to make progress towards acquiring sufficient language skills to study and live in this culture as well as encouraging an appreciation of the diversity of ways of seeing and practices of others, and promoting empathic understanding of other cultures in general. It fosters an awareness of and sensitivity towards the needs and values of people and cultures of other countries in international, cultural and local contexts.

Admission requirements

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice, Bachelor of Arts in International Studies

Local students apply for entry to this course through the Universities Admissions Centre (UAC).

International students apply through UTS International Programs Office, but are assessed by the Faculty. Applicants are required to have a competitive Pass in a recognised matriculation examination equivalent to the Australian Year 12 qualification, and to meet or better the

¹ This course is not offered to international students.

University's IELTS criteria. For details of IELTS criteria, contact the UTS International Programs Office:

telephone (02) 9514 1531

www.ipos.uts.edu.au

Bachelor of Science in Computing Science, Bachelor of Arts in International Studies and Bachelor of Computing, Bachelor of Arts in International Studies

No new admissions will be accepted from 2002 onwards.

Advanced standing

For the information technology component, refer to the Bachelor of Science in Information Technology, Diploma in Information Technology Professional Practice on page 63.

Course duration

The course is of six years' duration and students spend the fourth year of study at a university overseas. The fifth and sixth years are completed part time.

Course structure

The structure of the six-year course is derived from the combination of the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice with the Bachelor of Arts in International Studies.

All arrangements currently in force for both the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice and the Bachelor of Arts in International Studies apply equally to the combined degree program.

To graduate, a student is required to have completed 252 credit points: 156 credit points in Information Technology and 96 credit points in International Studies.

There are a substantial number of prerequisites for the Diploma of Information Technology Professional Practice. In this combined degree program the Diploma is normally undertaken part time in Years 5 and 6. To gain credit for the Diploma in Information Technology Professional Practice, students are required to obtain an approved, full-time job within the information technology industry.

International Studies component

The Bachelor of Arts in International Studies requires undergraduates to study a major – a region or country – over a minimum of three years. In Sydney, students study Language and Culture for at least two years, followed by a period of study overseas.

In the International Studies program, students study one of the following countries or majors: Canada (Québec), Chile, China, France, Germany, Indonesia, Italy, Japan, Latino Studies (USA), Malaysia, Mexico, Spain, Switzerland and Thailand. There are two other majors available that permit students to pursue programs of study about and in countries where other arrangements have not already been made. The Heritage major permits students with significant prior knowledge of a particular language and culture to continue their study in countries such as Croatia, Greece, Hong Kong, Korea, Poland, Russia, Taiwan, the Philippines, Vietnam and others. The Independent Study major is available where a language is taught in Sydney and a program of In-country Study can be arranged.

Australia and the Asia-Pacific is only available as a major to international students. International students may access one of the other majors offered provided that the country they choose as their major is able to grant them a visa to study there. This needs to be determined prior to commencing subjects within the major. If a visa cannot be granted, then it is not possible to undertake the chosen major.

Students are admitted to the International Studies program with no guarantee of entry to a specific major, although every effort is made to meet students' preferences. The Institute reserves the right to allocate places in majors according to its resources and arrangements with overseas universities.

Each major includes 32 credit points (four 8-credit-point subjects) of instruction in Language and Culture; 8 credit points of study of Comparative Social Change; 8 credit points of study of Contemporary Society; and 48 credit points (two semesters) of study at a university or institution of higher education in the country of the major.

There are no prior language requirements for the International Studies component of this combined degree, except for programs within the Heritage major.

Arrangements for In-country Study

Students are required to complete all appropriate subjects in their combined degree, including four consecutive semesters of study of Language and Culture before proceeding to In-country Study.

The Institute for International Studies makes arrangements for students to spend two semesters of In-country Study at an institution of higher education in the country of their major. The costs of tuition at overseas universities and of travel between Sydney and the student's place of study are paid by UTS, except in cases where a scholarship has been awarded to a student with provision for these costs. Visa fees are also paid by UTS, and students are covered by the UTS Overseas Insurance Policy. Students undertaking the Heritage or Independent Study major may be required to bear some of the tuition costs at the overseas university. During their In-country Study, students continue to be enrolled at UTS and to pay HECS for their study.

Students must pay the costs of accommodation and other living expenses during their period of In-country Study. Students should be aware that the living costs vary from country to country and that in some countries, such as Japan, living costs are high.

The In-country Study is the key component of the International Studies program. It provides a unique opportunity for students to immerse themselves in the language and culture of another country through a learning program at a host university, through involvement in the life of the local community and through project work which is supervised by the Institute. Each student's individual study program depends on their level of language competence and the subjects and other learning experiences that are available at the host university. All students who undertake In-country Study must agree to the Institute's Conditions of Participation for In-country Study. Any study undertaken at the host university during the two semesters of In-country Study is part of the In-country Study experience. Students may not credit any subjects completed at their host university during the period of In-country Study towards the professional component of their combined degree.

Course program

Year 1

Autumn semester

31465	Object-oriented Programming	6cp
31466	Principles of Distributed Computing	6cp
31467	Networking 1	6cp
31468	Information, Classification and Control	6cp

Spring semester

31469	Object-oriented Design	6cp
31470	Distributed Computing Architecture	6cp
31471	Networking 2	6cp
31472	Introduction to Collaborative Systems	6cp

Year 2

Autumn semester

31473	Data Structures and Procedural Programming	6cp
50140	Comparative Social Change	8cp
971xxx	Language and Culture 1	8cp
31xxx	Information Technology elective	6cp

Spring semester

31474	Database Fundamentals	6cp
972xxx	Language and Culture 2	8cp
31xxx	Information Technology elective	6cp

Year 3

Autumn semester

31475	Requirements Engineering	6cp
973xxx	Language and Culture 3	8cp
31xxx	Information Technology elective	6cp

Spring semester

31476	Systems Development Project	12cp
974xxx	Language and Culture 4	8cp
976xxx	Contemporary Society	8cp

Year 4

Autumn semester

977xxx	In-country Study 1	24cp
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Spring semester

978xxx	In-country Study 2	24cp
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Year 5

Autumn semester

31xxx	IT sub-major stream	6cp
31xxx	Information Technology elective	6cp

Spring semester

31478	Project Management and Quality Assurance	6cp
31xxx	IT sub-major stream	6cp

Year 6**Autumn semester**

31479	Information Technology Professional and Society	6cp
31480	Strategic Information Technology Planning Project	6cp
31136	Preparation and Review of IT Experience	6cp
31137	IT Experience 1	0cp

Spring semester

31xxx	IT sub-major stream	6cp
31xxx	IT sub-major stream	6cp
31138	Review of IT Experience	6cp
31139	IT Experience 2	0cp

English language testing

Despite the technical nature of some aspects of information technology, English language proficiency is an important factor in the successful academic study of information technology and for a successful career in the information technology industry.

In recognition of this, all students enrolling in the Bachelor of Science in Information Technology are required to undertake an English test administered by the English Language Study Skills Assistance (ELSSA) Centre. The results of this test indicate three possible courses of action:

1. The student's English proficiency is considered adequate: the student is allowed to enrol normally in first-year subjects.
2. The student's English proficiency is considered inadequate: the student is strongly recommended to undertake the subject 31034 Advanced Communication for IT.

This subject is recognised as one of the four electives that comprise the course. 31034 Advanced Communication for IT is undertaken in the first year of study. The student's program of study is adjusted to maintain an acceptable workload.

3. The student's English proficiency is considered poor: the student is strongly recommended to undertake remedial English classes with the ELSSA Centre before undertaking the subject 31034 Advanced Communication for IT.

It is recognised as one of the four electives that comprise the course. 31034 Advanced Communication for IT is undertaken in the first year of study following English support classes with the ELSSA Centre. The student's program of study is adjusted to maintain an acceptable workload.

Students who fail to follow the Faculty's recommendation receive a letter to confirm this. The letter is lodged in the student's file as a record that they have chosen not to follow the Faculty's recommendation and that the student takes full responsibility for that decision.

Industrial experience**Diploma of Information Technology Professional Practice**

Full-time students normally undertake the Diploma of Information Technology Professional Practice and Industrial Training after completing Year 5.

Refer to page 63 for full details in the Diploma of Information Technology Professional Practice entry.

Professional recognition

Holders of these degrees are eligible for professional-level membership of the Australian Computer Society.

Other information

For further information on the information technology component of the combined degree, see the course outline for the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice on page 42.

For details of International Studies subjects, students should refer to the Subject Descriptions section in this handbook. Queries regarding the International Studies component of the course should be addressed to the Institute itself on telephone (02) 9514 1574.

Combined degree students are required to confirm, during the University pre-enrolment and enrolment period, the subjects they intend to take for the year with the Institute at 10 Quay Street, Haymarket, Sydney.

DOUBLE DEGREE

Bachelor of Business

- ◆ UTS course code: C10026 (City campus) [pre-2003: B02C]; C10027 (Kuring-gai campus) [pre-2003: B02K]
- ◆ UAC code: 600010 (City – FT), 600011 (City – PT); 600020 (Kuring-gai – FT)
- ◆ Testamur title: Bachelor of Business
- ◆ Abbreviation: BBus
- ◆ Course fee: HECS (local)
- ◆ Total credit points: 144

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice

- ◆ UTS course code: C10152 (pre-2003: MC17)
- ◆ UAC code: 605000 (FT); 605001 (PT)
- ◆ Testamur title: Bachelor of Science in Information Technology
Diploma of Information Technology Professional Practice
- ◆ Abbreviation: BSc DiplInfTechProfPrac
- ◆ Course fee: HECS (local)
\$8,500 per semester plus \$2,000 in total for the DiplInfTechProfPrac (international)
- ◆ Total credit points: 156

Bachelor of Science in Computing Science, Diploma of Information Technology Professional Practice (pre-2002)

- ◆ UTS course code: C10149 [pre-2003: MC12]
- ◆ UAC code: n/a (no new admissions)
- ◆ Testamur title: Bachelor of Science in Computing Science
Diploma of Information Technology Professional Practice
- ◆ Abbreviation: BSc DiplInfTechProfPrac
- ◆ Course fee: HECS (local)¹
- ◆ Total credit points: 156

¹ This course is not offered to international students.

Overview

This double degree (two testamurs) is offered jointly by the Faculty of Business and the Faculty of Information Technology. Students complete the Bachelor of Business with a sub-major in Information Technology, as advised by the Faculty of Information Technology, and then apply for entry into the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice.

The Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice was introduced in Autumn 2002. This course replaces pre-2002 undergraduate double degree offering Bachelor of Science in Computing Science, Diploma of Information Technology Professional Practice and Bachelor of Business.

Admission requirements

Bachelor of Business

Students apply initially for the Bachelor of Business as either a recent school leaver or non-recent school leaver. Refer to the Bachelor of Business course entry in the Faculty of Business handbook for details.

Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice

On satisfactory completion of the Business degree and with a sub-major in Information Technology, as advised by the Faculty of Information Technology, students may then apply as a non-recent school leaver for admission to the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice degree. If admitted, students receive exemptions for the computing core subjects they completed in the sub-major in Information Technology. They also receive 24 credit points worth of exemptions for electives, the equivalent of a Business sub-major in the Information Technology degree.

Both degrees – selection of international students

International applicants apply through International Programs, but are assessed by the relevant faculty. Refer to the individual degree entries in either the Business or Information Technology 2003 handbooks for further details.

Course duration

The Bachelor of Business is offered as a three-year, full-time, or six-year, part-time course. The Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice is offered as a four-year, full-time, or six-year, part-time course.

Course structure

Students initially enrol in the Bachelor of Business degree and must take the sub-major in Information Technology, as advised by the Faculty of Information Technology. Students wishing to undertake this double degree program should first seek academic advice from the Faculty of Information Technology Office on telephone (02) 9514 1803.

Other information

Students considering this double degree should talk to an academic adviser in the Faculty of Information Technology before beginning the sub-major in Information Technology.

Full details of the Bachelor of Science in Information Technology, Diploma of Information Technology Professional Practice program are contained in this handbook. Full details of the Bachelor of Business program are detailed in the 2003 handbook for the Faculty of Business.

POSTGRADUATE COURSEWORK DEGREES

Master of Science in Computing

- ◆ UTS course code: C04156 (pre-2003: MC58)
 - ◆ Testamur title: Master of Science in Computing
 - ◆ Abbreviation: MSc
 - ◆ Program Leader: Dr S Simoff
 - ◆ Course fee: \$18,000 (local)
\$8,700 per semester (international)
 - ◆ Total credit points: 72
-

Overview

The Master of Science in Computing is offered with a fixed quota of student places and the course fees have been set in accordance with University policy. For students commencing in 2002, tuition fees will be set at \$250 per credit point for local students; students normally take 12 credit points per semester. Course fees are revised from year to year in accordance with University and government policy. Details of the current fee structure may be obtained from the University Graduate School.

Course aims

The Master of Science in Computing is a professional course. Graduates select a program of study that suits their individual career goals. For example, a program may be chosen which develops specialised expertise in computer systems, which provides a general update of information systems or which equips the student for a position in management.

Admission requirements

Applicants for the Master of Science in Computing should have:

- a) a minimum qualification equivalent to a Bachelor's degree with a major in computing/information technology (or related discipline), or a Bachelor's degree plus a Graduate Diploma in computing/information technology (or related discipline), from a recognised Australian university, and

- b) at least three years' full-time (or equivalent) professional computing experience.

As a guide, the level of the applicant's professional knowledge should be at least equivalent to that of a Level 3 Member of the Australian Computer Society.

Criteria for admission to the Master of Science in Computing support the University's Equal Opportunity policy.

Applicants with insufficient formal qualifications may be admitted as 'qualifying' students. Progression to registration as a Master's student would then depend on whether the results achieved in the Qualifying Program are of the standard specified in the offer of a place as a Master's Qualifying Student. Applicants with insufficient formal qualifications should submit evidence to the effect that the level of their knowledge of computing is equivalent to that described above.

Prerequisite knowledge

All subjects in the Master of Science in Computing course are presented at the post-graduate level. Students are expected to be familiar with the undergraduate material that lies behind the postgraduate work.

For the subjects offered by the Faculty of Information Technology, before the start of each semester, a set of references to the presumed undergraduate material is given by each lecturer. It is important to note that these references are not 'pre-reading', but are a summary of the undergraduate knowledge required for each subject. Students are responsible for ensuring that they are completely familiar with the undergraduate knowledge implied by those references. If they are not, then they should defer their enrolment in that subject and should attend suitable remedial undergraduate lectures as advised by the Program Leader for the Master of Science in Computing.

For a subject offered by faculties or schools other than the Faculty of Information Technology, students are advised to contact that subject's coordinator before the start of semester

to determine whether they possess the prerequisite knowledge for that subject. If students do not possess the prerequisite knowledge, they should seek advice from those schools or faculties on the feasibility of a remedial program. The Program Leader, Master of Science in Computing, will assist in obtaining this advice.

Advanced standing

Exemption from subjects in the Master of Science in Computing program is not given on the basis of previous study. Some exemptions are granted to students who are undertaking joint qualifications at UTS.

Challenge rules

Under University Rule 2.28.5, students may apply for an exemption for a subject based on knowledge gained by professional experience, previous informal studies or studies at a private institution. This process is called 'application to challenge a subject' and includes a formal assessment, most likely in the form of an examination set by the Subject Coordinator, and incorporates the assessment requirements of the subject. If successful the student receives an exemption for the subject. Note that a non-refundable fee of \$200 is applicable.

Advanced standing for UTS MBA graduates

Under an agreement between the Faculty of Information Technology and the Faculty of Business at UTS, students who wish to complete both the Master of Science in Computing (by coursework) and the MBA degrees are granted exemption from some of the subjects in these two degrees.

Graduates from the University's MBA program are, if admitted to the Master of Science in Computing, granted exemption from the Faculty of Business electives that could form part of the program of study for the Master of Science in Computing. In this case, the regulations outlined in the section Course structure are modified as follows:

- the student must gain 36 credit points by passing Master of Science in Computing subjects offered by the Faculty of Information Technology
- the student must complete 6 credit points of research methods and 6 credit points of project which should be closely related to the student's program of study.

Students entering the Master of Science in Computing program who intend to apply subsequently for admission to the University's MBA program, should first discuss the matter both with the Program Leader, Master of Science in Computing and the Director of the MBA program in the Faculty of Business, preferably **before** they commence their studies for the Master of Science in Computing.

Attendance

Lectures are normally given only in the evenings and attendance is required at least two evenings per week, normally from 6.00 p.m. to 9.00 p.m.

Course duration

The course may be taken on a part-time basis over six semesters or three years, or on a full-time basis over three semesters or approximately 18 months.

Course structure

To complete the course, students must obtain 72 credit points. Most coursework subjects are six credit points each. Students normally complete 60 credit points of coursework subjects, 6 credit points of research methods and 6 credit points of project. There is a wide choice of subjects offered by the Faculty of Information Technology and by other faculties including Business, Law and Engineering. Students may obtain up to 24 credit points by passing approved subjects from outside the Faculty of Information Technology.

Students select their program of study with the assistance of an adviser from the Faculty of Information Technology. The subjects chosen by a student should form a coherent plan of study and be consistent with the student's professional career goals. The program of study may be a broad collection of subjects or a series of streams for those who wish to study certain areas in more depth. The underlying theme is information technology in a distributed environment. The subjects offered in this program are revised regularly to preserve the currency of the course.

Course program

Master of Science in Computing subjects

Each Master of Science in Computing subject is of one semester's duration. Specific subjects

may be available during the Summer session – these will be notified on an annual basis. Some subjects may be offered in ‘block mode’, meaning that the subject is presented in a semi-intensive format (for example, attendance may involve a whole weekend) – such offerings will be advertised as ‘block mode’. Not all subjects are offered each year. They are dependent on the availability of specialist lecturing staff and sufficient interest in a subject from students. Some of the Master of Science in Computing subjects have prerequisites.

At present the intention is to offer the Master of Science in Computing subjects on a two-year cycle, however the Master of Science in Computing program is constantly under review. The list of Master of Science in Computing subjects offered is expected to expand. The contents and sequence of existing Master of Science in Computing subjects may be revised to reflect changes in the area.

Other subjects

The following subjects present specialised material and whether they are offered will thus depend on the availability of specialist staff and on a student meeting the pre-requisites. These subjects may share lectures with senior undergraduate students and may not be available every semester. The Faculty timetable will show the availability of these subjects. A maximum of two subjects from this list may be included in a student’s program.

32543	Advanced 3D Computer Animation	6cp
32542	Advanced Cognitive Modelling	6cp
32544	Advanced Image Synthesis Techniques	6cp
32513	Advanced Machine Learning	6cp
32530	Building Intelligent Agents	6cp
32501	Computer Graphics	6cp
32509	Interaction Design	6cp

Subject number	Subject name	Credit points	Semester offered
32204	Advanced Data Management	6	A
32108	Applications of Artificial Intelligence	6	S
32546	Business Process Engineering	6	A
32517	Commerce on the Internet	6	A & S
32532	Conducting Business Electronically	6	A & S
32131	Data Mining and Visualisation in e-Business	6	A
32535	Databases in Distributed Environments	6	S
32531	Global Information Systems	6	A & S
32208	Information Processing Strategy	6	S
32931	Information Technology Research Methods	6	A & S
32509	Interaction Design	6	
32534	Knowledge Management	6	A & S
32545	Multi-agent Systems	6	S
32533	Networking Communities	6	A & S
32510	Principles of Object-oriented Programming in C++	6	S
32536	Object-oriented Modelling	6	A
32106	Object-oriented Process	6	S
32130	Principles and Practice of Data Mining	6	S
32932	Project A1	6	A & S
32933	Project B1	6	A & S
32934	Project B2	12	A & S
32541	Project Management	6	A & S
32902	Recent Advances in Information Systems	6	S
32115	Requirements Engineering Research and Practice	6	S

A = Autumn semester
S = Spring semester

Internetworking subjects

The subjects listed below are offered in the Master of Science in Internetworking Program and are also available to Master of Science in Computing students if space is available (students enrolled in the Master of Science in Internetworking Program will be given priority).

32549	Advanced Internet Programming	6cp
32527	Internetwork Design	6cp
32516	Internet Programming	6cp
32525	Distributed Software Programming	6cp
32523	Operating Systems for Internetworking	6cp
32547	Unix Systems Programming	6cp

A very limited number of places may be available in the following subjects (students enrolled in the Master of Science in Internetworking program are given priority) if the student satisfies the admission requirements for the Master of Science in Internetworking program and any subject prerequisites. Master of Science in Computing students wishing to enrol in these subjects should consult the Program Leader, Internetworking Program.

32521	WANs and VLANs	6cp
32524	LANs and Routing	6cp

No other subjects from the Master of Science in Internetworking program are available to Master of Science in Computing students.

Information Technology Management subjects

The subjects listed below are offered in the Master of Business in Information Technology Management Program (ITMP). A small number of places may be available to Master of Science in Computing students if space is available (students enrolled in ITMP are given priority) and if the student satisfies the admission requirements for ITMP and any subject prerequisites. Master of Science in Computing students wishing to enrol in these subjects should consult the Program Leader, ITMP.

32702	Contemporary Telecommunications	6cp
32704	Strategic IT Contract Management	6cp
32604	Systems Integration	6cp

e-Business Technology subjects

The subjects listed below are offered in the Master of Science in e-Business Technology Program. A small number of places may be available to Master of Science in Computing students if space is available (students enrolled in the Master of Science in e-Business Technology Program are given priority) and if the

student satisfies the admission requirements for the Master of Science in e-Business Technology Program and any subject prerequisites. Master of Science in Computing students wishing to enrol in these subjects should consult the Program Leader, e-Business Technology Program.

32120	Evolution of the Internet	6cp
24726	Economics and Marketing in the New Economy	6cp
32122	Business to Consumer: Fundamental Principles and Technologies	6cp
32123	Business to Business: Fundamental Principles and Technologies	6cp

Interactive Multimedia subjects

The subjects below are offered in the Master of Interactive Multimedia Program. A small number of places may be available to Master of Science in Computing students if space is available (students enrolled in the Interactive Multimedia Program are given priority). Master of Science in Computing students wishing to enrol in these subjects should consult the Program Leader, Interactive Multimedia Program.

95563	Digital Media Development Process	6cp
95564	Digital Media Technologies	6cp
95565	Digital Graphics and the Still Image	6cp
95566	Digital Information and Interaction Design	6cp
95567	Digital Media in Social Context	6cp
95568	Digital Sound and the Moving Image	6cp

Subjects from other faculties

Postgraduate subjects from the Faculties of Law and Business are available to students in the Master of Science in Computing as electives. Students should contact the relevant faculty for prerequisites.

Choosing a program in 2003

Students are issued with a Master’s handbook which details suggested subject patterns and themes, and when individual subjects are available.

Project

Students are required to undertake a research methods subject (which is offered either in Summer session or during Autumn semester) before undertaking a compulsory introductory project subject (32932 Project A1). Students may then choose to undertake an optional extensive project subject (32933 Project B1 or 32934 Project B2) in Spring semester or they

may choose to undertake elective coursework subjects.

32930	Information Technology Management Research Methods	6cp
32931	Information Technology Research Methods	6cp
32932	Project A1	6cp
32933	Project B1	6cp
32934	Project B2	12cp

Possible study patterns are:

Example 1

32930	Information Technology Management Research Methods	6cp
	<i>or</i>	
32931	Information Technology Research Methods	6cp
	<i>and</i>	
32932	Project A1	6cp
xxxxx	Elective 1	6cp
xxxxx	Elective 2	6cp

Example 2

32930	Information Technology Management Research Methods	6cp
	<i>or</i>	
32931	Information Technology Research Methods	6cp
	<i>and</i>	
32932	Project A1	6cp
32933	Project B1	6cp
xxxxx	Elective 1	6cp

Example 3

32930	Information Technology Management Research Methods	6cp
	<i>or</i>	
32931	Information Technology Research Methods	6cp
	<i>and</i>	
32932	Project A1	6cp
32934	Project B2	12cp

Students who enrolled prior to 2001 can elect to complete the pre-2001 program.

32932 Project A1 requires students to choose a project topic; if students complete an optional extensive project (either 32933 Project B1 or 32934 Project B2), then the project topic will carry over into that subject (32932 Project A1 involves preparation for 32933 Project B1 or 32934 Project B2). The chosen topic should be directly relevant to the student's professional career goals and should be an area of current research interest in the student's area of study.

The project work should be a vehicle for importing the knowledge learned from the coursework to the student's professional life. Students are advised to seek the assistance of the lecturing staff and/or the Program Leader, Master of Science in Computing in finalising the topic for their project work.

The Master's Project website is recommended for access to the latest information on personnel or contacts, dates and times for Project Information Sessions, Project A1 Literature Reviews, and Project B Research Seminars, and current lists of potential supervisors as well as general project information.

Rules and regulations

Subject failure

Students are permitted, at the most, two failures during the Master of Science in Computing. Note the resolution of the Faculty Board, FBIT/02/28, that any Master's degree candidate enrolled in the Master of Science in Computing who records any three failures will have his or her registration in the course discontinued. In addition, students are bound by the Rules of the University and are advised to refer to them. The Rules are published online at:

www.uts.edu.au/div/publications/policies/rules/contents.html

Minimum and maximum time

There are two important University Rules concerning minimum and maximum time of which students should be aware:

- A Master's degree candidate shall not normally be eligible for the award of a Master's degree by coursework until he or she has completed at least six semesters of a part-time course. A student who is specially qualified in a relevant discipline may, with the approval of the Academic Board, be allowed to complete the course in less than the minimum time (Rule 3.3.5.2).
- A student who fails to complete all of the work prescribed for the higher degree within nine semesters from the time of his or her registration as a part-time Master's degree candidate will only be permitted to continue with the approval of the Faculty Board (Rule 3.3.7.1).

Other information

Each semester the Faculty publishes the *Master of Science in Computing Course Guide*. This Course Guide contains administrative information as well as a detailed statement of the course regulations. Students and prospective applicants are advised to obtain a copy of the Course Guide and to study it carefully.

From August each year, an Admission package containing a copy of the Course Guide, the application forms and other relevant information is available from the UTS Student Info & Admin Centre.

Note: Completed application forms must be submitted to the University by the published deadline, which is usually the last week of October in the year prior to that in which admission is sought. Applicants may be required to attend an interview.

Graduate Certificate in Information Technology Management

-
- ◆ UTS course code: C11138 (pre-2003: MC63)
 - ◆ Testamur title: Graduate Certificate in Information Technology Management
 - ◆ Abbreviation: none
 - ◆ Program Leader: Associate Professor K Dovey
 - ◆ Course fee: \$6,600 (local)¹
 - ◆ Total credit points: 24
-

Graduate Diploma in Information Technology Management

-
- ◆ UTS course code: C06060 (pre-2003: MC75)
 - ◆ Testamur title: Graduate Diploma in Information Technology Management
 - ◆ Abbreviation: GradDiplInfTechM
 - ◆ Program Leader: Associate Professor K Dovey
 - ◆ Course fee: \$13,200 (local)¹
 - ◆ Total credit points: 48
-

Master of Business in Information Technology Management

-
- ◆ UTS course code: C04161 (pre-2003: MC85)
 - ◆ Testamur title: Master of Business in Information Technology Management
 - ◆ Abbreviation: MBus
 - ◆ Program Leader: Associate Professor K Dovey
 - ◆ Course fee: \$19,800 (local)¹
 - ◆ Total credit points: 72
-

Overview

These courses form a joint program between the Faculty of Information Technology and the Faculty of Business. Administration of these courses is the responsibility of the Faculty of Information Technology.

Course aims

The courses aim to:

- develop the professional skills necessary for successfully undertaking the role of manager in terms of people, resources and processes in a variety of organisational contexts (which may include business,

¹ This course is not offered to international students.

community, public, manufacturing, consultancy or professional contexts)

- enable the acquisition of conceptual and analytical understanding of the corporate/organisational needs from the differing perspectives of individuals and groups within the organisation
- provide a well-balanced selection of subjects from both advanced information technology (IT) and management, in an integrated program which is relevant to the current and future demands of the IT industry
- develop an understanding of the IT business environment and to extend knowledge and skills in specialist areas of management related to management of IT in business, and
- enhance and develop a partnership between UTS and the IT industry.

Admission requirements

Graduate Certificate in Information Technology Management

- a recognised Bachelor's degree (or equivalent) in an appropriate discipline such as Business or Computing. Normally students are expected to have a minimum of five years' professional work experience in the IT industry, plus some supervisory experience. Selection for admission is based on merit. Applicants should also provide references and a CV outlining their practical experience, or
- evidence of general and professional qualifications, such as other post-secondary school qualifications that can establish the applicant's aptitude, knowledge and practical experience, which will satisfy the Faculty Board in Information Technology that the applicant possesses the educational preparation and capacity to pursue postgraduate studies (experience in the IT industry will be especially important in this regard, e.g. five years' minimum vocational experience).

Graduate Diploma in Information Technology Management

- a recognised Bachelor's degree (or equivalent) in an appropriate discipline such as Business or Computing. Normally students are expected to have a minimum of five years' professional work experience in the IT industry plus some supervisory

experience. Selection for admission is based on merit. Applicants should also provide references and a CV outlining their practical experience, or

- the prior successful completion of the Graduate Certificate in Information Technology Management (such students will therefore be exempt from Semesters 1 and 2), where entry to the Graduate Certificate was based on a recognised Bachelor's degree (or equivalent) in an appropriate discipline such as Business or Computing, or
- the successful completion of an approved bridging program for non-graduate entry (i.e. the Graduate Certificate in Information Technology Management) with passes in all subjects and a Credit average over the entire course.

Master of Business in Information Technology Management

- a recognised Bachelor's degree (or equivalent) in an appropriate discipline such as Business or Computing. Normally students are expected to have a minimum of five years' professional work experience in the IT industry, plus some supervisory experience. Selection for admission is based on merit. Applicants should also provide references and a CV outlining their practical experience, or
- the prior successful completion of the Graduate Diploma in Information Technology Management (such students will therefore be exempt from Semesters 1, 2, 3 and 4), or
- the successful completion of an approved bridging program for non-graduate entry (i.e. the Graduate Certificate in Information Technology Management) with passes in all subjects and a Credit average over the entire course.

It should be noted that applicants for these courses may be required to attend an interview.

Presumed knowledge and prerequisites

Subjects in the Graduate Certificate, Graduate Diploma and Master's courses are presented at postgraduate level. Students are expected to be familiar with the undergraduate material on which the postgraduate work is based. A set of references to the presumed undergraduate material is given by each lecturer before the start of each semester for the subjects offered by the Faculty of Information

Technology and the Faculty of Business. It is important to note that these references are not 'pre-reading' but are a summary of the undergraduate knowledge required for each subject. Students are responsible for ensuring that they are completely familiar with the undergraduate knowledge implied by those references. If they are not, then they should seek advice from the Program Leader, Information Technology Management Program, in the first instance, and may then be advised to contact the Subject Coordinator before the start of semester to determine whether they possess the prerequisite knowledge for that subject.

For subjects offered by faculties or schools other than the Faculty of Information Technology and the Faculty of Business, students are advised to contact that subject's coordinator before the start of semester to determine whether they possess the prerequisite knowledge for that subject. If students do not possess the prerequisite knowledge, then they should seek advice from that school or faculty on the feasibility of a remedial program. The Program Leader, Information Technology Management Program, will assist in obtaining this advice.

In addition, there are prerequisite requirements within the structure of the course itself (see Course structure below).

Advanced standing

Students may apply for exemption from core subjects on the basis of the successful completion of equivalent postgraduate level subjects taken in other UTS faculties or UTS approved universities. Students interested in applying for subject exemptions should in all cases first consult the Program Leader, Information Technology Management Program.

Note that exemptions are not normally granted to students for elective subjects.

Challenge rules

Under University Rule 2.28.5, students may apply for an exemption for a subject based on knowledge gained by professional experience, previous informal studies or studies at a private institution. This process is called 'application to challenge a subject' and includes a formal assessment, most likely in the form of an examination set by the Subject Coordinator, and incorporates the assessment requirements of the subject. If successful the student receives an exemption for the subject. Note that a non-refundable fee of \$200 applies to this process.

Course duration

Students may commence these courses in either Autumn or Spring semester.

The Graduate Certificate in Information Technology Management is normally completed in one year (two semesters) of part-time study.

The Graduate Diploma in Information Technology Management is normally completed in two years (four semesters) of part-time study.

The full Master's degree course is normally completed in three years (six semesters) of part-time study. The project is normally commenced in the fifth semester, together with one subject related to research methodology.

Course structure

All subjects are assessed to the Master's standard, regardless of the course in which a student is enrolled. Therefore, a student who takes several individual subjects may later gain credit towards these awards.

The courses have been designed to allow freedom of choice at the individual subject level. The subjects at the Graduate Certificate level aim to teach the student skills and competencies for IT management. At the Graduate Diploma level, the subjects aim to focus on organisational strategies and planning. At the Master's level, the subjects are related to organisational development and research for the IT industry.

Core subjects are offered by the Faculties of Information Technology and Business on a regular basis. Additional subjects available on an elective basis are offered depending on demand and the availability of specialist staff. The industrially linked project must build on the core/elective subjects already taken by the student and should ideally be related to his or her place of work.

Course programs

Level 1 – Non-award

A student may take any number of subjects relevant to his or her professional needs. Subject prerequisites, if any, need to be taken into account.

All subjects are presented and assessed to the Master's level. Therefore, a student who takes several appropriate subjects may later gain credit towards these awards.

No formal qualification is awarded by UTS.

Level 2 – Graduate Certificate in Information Technology Management (24cp)

A student must complete:

the following three core subjects

21788	Effective People Management	6cp
21789	Contemporary Management Practices	6cp
32601	Advanced Project Management	6cp

plus one elective from the list below

Level 3 – Graduate Diploma in Information Technology Management (48cp)

A student must complete the requirements for the Graduate Certificate in Information Technology Management (24cp);

plus the following two core subjects

21806	Managing Organisational Change	6cp
21808	Strategic Business Management	6cp

plus two electives from the list below

Electives

24704	Managing Client Relations	6cp
32604	Systems Integration	6cp
32702	Contemporary Telecommunications	6cp
32703	Information Technology Strategy	6cp
32704	Strategic IT Contract Management	6cp

plus one of the following

25705	Financial Modelling and Forecasting	6cp
25742	Financial Management	6cp
22746	Managerial Accounting	6cp
22747	Accounting for Managerial Decisions	6cp

or other electives as available

Level 4 – Master of Business in Information Technology Management (72cp)

A student must complete the requirements for the Graduate Diploma in Information Technology Management (48cp).

In addition students must complete one of the following curriculum options:

Example 1

32930	Information Technology Management Research Methods	6cp
32932	Project A1	6cp
xxxxx	Elective 1	6cp
xxxxx	Elective 2	6cp

Example 2

32930	Information Technology Management Research Methods	6cp
32932	Project A1	6cp
32933	Project B1	6cp
xxxxx	Elective 1	6cp

Example 3

32930	Information Technology Management Research Methods	6cp
32932	Project A1	6cp
32934	Project B2	12cp

Project

As part of the Master of Business in Information Technology Management, students are required to undertake a research methods subject (which is offered either during Summer session or during Autumn semester) before undertaking a compulsory introductory project subject (32932 Project A1). Students may then choose to undertake an optional extensive project subject (32933 Project B1 or 32934 Project B2) in Spring semester or they may choose to undertake elective coursework subjects.

Students who enrolled prior to 2001 can elect to complete the pre-2001 program.

32932 Project A1 requires students to choose a project topic; if students complete an optional extensive project (either 32933 Project B1 or 32934 Project B2), then the project topic is carried over into that subject (32932 Project A1 involves preparation for 32933 Project B1 or 32934 Project B2). The chosen topic should be directly relevant to the student's professional career goals and should be an area of current research interest in the student's area of study.

The project work should be a vehicle for importing the knowledge learned from the coursework to the student's professional life. Students are advised to seek the assistance of the lecturing staff and/or the Program Leader, Information Technology Management in finalising the topic for their project work.

The Master's Project website is recommended for access to the latest information on personnel or contacts, dates and times for Project Information Sessions, Project A1 Literature Reviews, and Project B Research Seminars, and current lists of potential supervisors as well as general project information.

Rules and regulations

Subject failure

Students are permitted, at the most, two failures during enrolment in either the Graduate Certificate, Diploma or Master of Business in Information Technology Management. Note the resolution of the Faculty Board, FBIT/02/28, that any candidate enrolled in the above

three courses who records any three failures will have his or her registration in the course discontinued. In addition, students are bound by the Rules of the University and are advised to refer to them. The Rules are published online at:

www.uts.edu.au/div/publications/policies/rules/contents.html

Other information

All inquiries regarding these courses should be directed to Alison Waugh, Professional Programs Manager, on telephone (02) 9514 1925. Further information can be accessed online at:

<http://it.uts.edu.au/itmp>

Graduate Certificate in Internetworking

- ◆ UTS course code: C11145 (pre-2003: MC82)
 - ◆ Testamur title: Graduate Certificate in Internetworking
 - ◆ Abbreviation: none
 - ◆ Program Leader: Dr E Lawrence
 - ◆ Course fee: \$6,600 (local)¹
 - ◆ Total credit points: 24
-

Graduate Diploma in Internetworking

- ◆ UTS course code: C07080 (pre-2003: MC81)
 - ◆ Testamur title: Graduate Diploma in Internetworking
 - ◆ Abbreviation: GradDiplInternetworking
 - ◆ Program Leader: Dr E Lawrence
 - ◆ Course fee: \$13,200 (local)
\$9,600 per semester (international)²
 - ◆ Total credit points: 48
-

Master of Science in Internetworking

- ◆ UTS course code: C04160 (pre-2003: MC80)
 - ◆ Testamur title: Master of Science in Internetworking
 - ◆ Abbreviation: MSc
 - ◆ Program Leader: Dr E Lawrence
 - ◆ Course fee: \$19,800 (local)
\$9,600 per semester (international)²
 - ◆ Total credit points: 72
-

Course aims

This program is intended for computing or engineering graduates with or without networking experience who wish to learn or extend their knowledge of networking. As students have a variety of backgrounds, there is a degree of subject choice in the program to meet individual's needs.

The program aims to:

- meet the growing needs of industry for networking specialists
- allow the student to gain a University qualification and prepare them for CCNA (Cisco Certified Network Associate) and CCNP (Cisco Certified Network

¹ This course is not offered to international students.

² This course will be offered to international students from Autumn semester 2003.

Professional) industry certification within the UTS/Cisco Local Network Academy

- retrain IT professionals wishing to move into networking and internetworking
- provide a thorough and practical grounding in networking, network design, network administration and network management
- provide a solid foundation for the writing of networked applications using Java and other WWW technologies, and
- meet students' needs through project work and elective subjects, for some specialisation, at any layer of the OSI reference model.

Admission requirements

Applicants should have a first degree. A first degree in Computing Science, Computer Systems Engineering, Telecommunications or cognate discipline is an advantage but not essential.

Entry based on experience in the networking industry is possible. An applicant's suitability for the program, in this case, is determined by academic staff and may require an interview.

Experience/background

Two years experience in networking or other positions in the IT industry is desirable.

Advanced standing

Exemptions are only granted for subjects at the Graduate Certificate level. Applicants may apply for exemptions if they have successfully completed studies of a comparable standard from a recognised University.

Challenge rules

Under University Rule 2.28.5, students may apply for an exemption for a subject based on knowledge gained by professional experience, previous informal studies or studies at a private institution. This process is called 'application to challenge a subject', and includes a formal assessment, most likely in the form of an examination set by the Subject Coordinator, and incorporates the assessment requirements of the subject. Holders of CCNA and CCNP certification are subject to this challenge rule and must sit an assessment test. If successful the student receives an exemption for the subject. Note that a non-refundable fee of \$200 applies to this process.

Course duration

The Graduate Certificate, Graduate Diploma and Master's in Internetworking are offered in part-time mode. They normally take one, two and three years, respectively, to complete. From Autumn semester 2003 the Graduate Diploma and Master's in Internetworking will also be offered in full-time mode. They normally take one and one-and-a-half years respectively to complete.

Course programs

Graduate Certificate in Internetworking (24cp)

Full-time program

32516	Internet Programming	6cp
32524	LANS and Routing	6cp
32547	UNIX Systems Programming	6cp
32702	Contemporary Telecommunications	6cp

Part-time program

32516	Internet Programming	6cp
32521	WANs and VLANs	6cp
32524	LANS and Routing	6cp
32547	UNIX Systems Programming	6cp

Graduate Diploma in Internetworking (48cp)

A student must complete the requirements for the Graduate Certificate in Internetworking (24cp);

plus four of the following subjects (24cp)

32009	Advanced Routing Principles ²	6cp
32010	Wide Area Network Implementation ²	6cp
32011	Multilayer Switched Networks ²	6cp
32109	Network Analysis and Troubleshooting	6cp
32118	Mobile Communications and Computing	6cp
32520	UNIX Systems Administration	6cp
32521	WANs and VLANs ¹	6cp
32523	Operating Systems for Internetworking	6cp
32525	Distributed Software Programming	6cp
32527	Internetwork Design	6cp
32528	Network Management	6cp
32548	Network Security	6cp
32549	Advanced Internet Programming	6cp
3xxxx	An elective approved by the Program Leader, Internetworking Program	6cp

¹ Available as an elective to students enrolled in the full-time program.

² Only two subjects from 32009, 32010 and 32011 may be taken simultaneously.

Master of Science in Internetworking (72cp)

A student must complete the requirements for the Graduate Diploma in Internetworking (48cp);

plus the following subjects

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp

plus an additional 12 credit points of subjects selected from subjects not already completed from the list under the Graduate Diploma in Internetworking and the subjects 32933 Project B1 (6cp) and 32934 Project B2 (12cp). Rules for taking the additional project subjects are outlined below.

Project

As part of the Master of Science in Internetworking, students are required to undertake 32931 Information Technology Research Methods and a compulsory introductory project subject (32932 Project A1). Students may then choose to undertake an optional extensive project subject (32933 Project B1 or 32934 Project B2) in Spring semester or they may choose to undertake elective coursework subjects.

Possible study patterns are:

Example 1

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp
xxxxx	Elective 1	6cp
xxxxx	Elective 2	6cp

Example 2

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp
32933	Project B1	6cp
xxxxx	Elective 1	6cp

Example 3

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp
32934	Project B2	12cp

Students who enrolled prior to 2001 can elect to complete the pre-2001 program.

32932 Project A1 requires students to choose a project topic; if students complete an optional extensive project (either 32933 Project B1 or 32934 Project B2), then the project topic is carried over into that subject (32932 Project

A1 involves preparation for 32933 Project B1 or 32934 Project B2). The chosen topic should be directly relevant to the student's professional career goals and should be an area of current research interest in the student's area of study.

The project work should be a vehicle for importing the knowledge learned from the coursework to the student's professional life. Students are advised to seek the assistance of the lecturing staff and/or the Program Leader, Internetworking Program in finalising the topic for their project work.

The Master's Project website is recommended for access to the latest information on personnel or contacts, dates and times for Project Information Sessions, Project A Literature Reviews, and Project B Research Seminars, and current lists of potential supervisors as well as general project information.

Rules and regulations**Subject failure**

Students are permitted, at the most, two failures during enrolment in either the Graduate Certificate, Diploma or Master of Science in Internetworking. Note the resolution of the Faculty Board, FBIT/02/28, that any candidate enrolled in the above three courses who records any three failures will have his or her registration in the course discontinued. In addition, students are bound by the Rules of the University and are advised to refer to them. The Rules are published online at:

www.uts.edu.au/div/publications/policies/rules/contents.html

Other information

Further information can be accessed online at: www.iwork.uts.edu.au

Graduate Certificate in e-Business Technology

- ◆ UTS course code: C11144 (pre 2003:MC77)
 - ◆ Testamur title: Graduate Certificate in e-Business Technology
 - ◆ Abbreviation: none
 - ◆ Program Leader (Acting): Dr J Feuerlicht, Dr R Steele
 - ◆ Course fee: \$7,200 (local)¹
 - ◆ Total credit points: 24
-

Graduate Diploma in e-Business Technology

- ◆ UTS course code: C07079 (pre-2003: MC78)
 - ◆ Testamur title: Graduate Diploma in e-Business Technology
 - ◆ Abbreviation: GradDipeBusTech
 - ◆ Program Leader (Acting): Dr J Feuerlicht, Dr R Steele
 - ◆ Course fee: \$14,400 (local)¹
 - ◆ Total credit points: 48
-

Master of Science in e-Business Technology

- ◆ UTS course code: C04159 (pre-2003: MC79)
 - ◆ Testamur title: Master of Science in e-Business Technology
 - ◆ Abbreviation: MSc
 - ◆ Program Leader (Acting): Dr J Feuerlicht, Dr R Steele
 - ◆ Course fee: \$21,600 (local)¹
 - ◆ Total credit points: 72
-

Overview

This program is intended for computing graduates or graduates of related disciplines who wish to learn or extend their knowledge of e-business technologies so as to be able to participate in or lead and manage technology development projects. The program has been developed with substantial input from industry to help ensure the program's currency. Students benefit from considering real world case studies, learn of emerging business technology strategies and have access to state-of-the-art B2B, EAI and B2C supporting products.

¹ This course is not offered to international students.

Course aims

The e-Business Technology program is designed to provide students with a knowledge of e-business technologies and also a business perspective on the role of technology in terms of business goals and fundamentals. As students have differing aims the program does allow some flexibility of emphasis.

The program aims to: meet the growing need of industry for IT specialists who can lead and manage or participate in e-business technology projects with a focus on business fundamentals; retrain IT professionals who wish to be further involved in the management of business technology projects; allow students to pursue in greater depth if they choose, expertise in advanced Java, WWW and business technologies.

Admission requirements

Graduate Certificate in e-Business Technology

- an undergraduate degree in computing or a closely-related discipline from a recognised university or other higher education institution
- a minimum of at least two years work experience in systems development, including programming, or
- evidence of general and professional qualifications, such as other post-secondary school qualifications that can establish the applicant's aptitude, knowledge and practical experience, which will satisfy the Faculty Board in Information Technology that the applicant possesses the educational preparation and capacity to pursue postgraduate studies (experience in the IT industry will be especially important in this regard, e.g. five years' minimum vocational experience).

Graduate Diploma in e-Business Technology

- an undergraduate degree in computing or a closely-related discipline from a recognised university or other higher education institution
- a minimum of at least two years work experience in systems development, including programming
- the prior successful completion of the Graduate Certificate in e-Business Technology (such students are therefore exempt

from Semesters 1 and 2), where entry to the Graduate Certificate was based on a recognised Bachelor's degree (or equivalent) in computing or a closely related discipline, or

- the successful completion of an approved bridging program for non-graduate entry (i.e. the Graduate Certificate in e-Business Technology) with passes in all subjects and a Credit average over the entire course.

Master of Science in e-Business Technology

- an undergraduate degree in computing or a closely-related discipline from a recognised university or other higher education institution
- a minimum of at least two years work experience in systems development, including programming
- the prior successful completion of the Graduate Diploma e-Business Technology (such students are therefore exempt from Semesters 1, 2, 3 and 4), or
- the successful completion of an approved bridging program for non-graduate entry (i.e. the Graduate Certificate in e-Business Technology) with passes in all subjects and a Credit average over the entire course.

It should be noted that applicants for these courses may be required to attend an interview.

Advanced standing

Exemptions are only granted for subjects at the Graduate Certificate level. Students may apply for exemptions at this level if they have successfully completed studies of a comparable standard, or if they can demonstrate equivalent, comparable, relevant experience.

Challenge rules

Under University Rule 2.28.5, students may apply for an exemption for a subject based on knowledge gained by professional experience, previous informal studies or studies at a private institution. This process is called 'application to challenge a subject', and includes a formal assessment, most likely in the form of an examination set by the Subject Coordinator, and incorporates the assessment requirements of the subject. If successful the student receives an exemption for the subject. Note that a non-refundable fee of \$200 applies to this process.

Course duration

The Graduate Certificate, Graduate Diploma and Master's in e-Business Technology are only offered in part-time mode. They normally take one, two and three years, respectively, to complete.

Course programs

Graduate Certificate in e-Business Technology (24cp)

32120	Evolution of the Internet	6cp
24726	Economics and Marketing in the New Economy	6cp
32122	Business to Consumer: Fundamental Principles and Technologies	6cp
32123	Business to Business: Fundamental Principles and Technologies	6cp

Graduate Diploma in e-Business Technology (48cp)

A student must complete the requirements for the Graduate Certificate in e-Business Technology (24cp);

plus the following subjects (18cp)

32124	e-Business Project Management	6cp
32125	Enterprise Application Integration: Principles and Technologies	6cp
32126	Web Content Design and Management	6cp

plus one of the following subjects

32127	Business to Consumer: Advanced Principles	6cp
32128	Business to Business: Advanced Principles	6cp

Master of Science in e-Business Technology (72cp)

A student must complete the requirements for the Graduate Diploma in e-Business Technology (48cp);

plus the following subjects (12cp)

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp

plus 12cp of the following subjects

32131	Data Mining and Visualisation in e-Business	6cp
32524	LANs and Routing	6cp
32549	Advanced Internet Programming	6cp
32933	Project B1	6cp
32934	Project B2	12cp

Project

As part of the Master of Science in e-Business Technology, students are required to undertake a research methods subject before undertaking a compulsory introductory project subject (32932 Project A1). Students may then choose to undertake an optional extensive project subject (32933 Project B1 or 32934 Project B2) in Spring semester or they may choose to undertake elective coursework subjects.

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp
32933	Project B1	6cp
32934	Project B2	12cp

Possible study patterns are:

Example 1

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp
xxxxx	Elective 1	6cp
xxxxx	Elective 2	6cp

Example 2

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp
32933	Project B1	6cp
xxxxx	Elective 1	6cp

Example 3

32931	Information Technology Research Methods	6cp
32932	Project A1	6cp
32934	Project B2	12cp

32932 Project A1 requires students to choose a project topic; if students complete an optional extensive project (either 32933 Project B1 or 32934 Project B2), then the project topic is carried over into that subject (32932 Project A1 involves preparation for 32933 Project B1 or 32934 Project B2). The chosen topic should be directly relevant to the student's professional career goals and should be an area of current research interest in the student's area of study.

Alternatively, the topic may be chosen to be of value to the student's future career. The project work should be a vehicle for importing the knowledge learned from the coursework to the student's professional life. Students are advised to seek the assistance of the lecturing staff and/or the Program Leader, e-Business

Technology Program in finalising the topic for their project work.

The Master's Project website is recommended for access to the latest information on personnel or contacts, dates and times for Project Information Sessions, Project A1 Literature Reviews, and Project B Research Seminars, and current lists of potential supervisors as well as general project information.

Rules and regulations**Subject failure**

Students are permitted, at the most, two failures during enrolment in either the Graduate Certificate, Diploma or Master of Science in e-Business Technology. Note the resolution of the Faculty Board, FBIT/02/28, that any candidate enrolled in the above three courses who records any three failures will have his or her registration in the course discontinued. In addition, students are bound by the Rules of the University and are advised to refer to them. The Rules are published online at:

www.uts.edu.au/div/publications/policies/rules/contents.html

Graduate Certificate in Information Technology

- ◆ UTS course code: C11142 (pre-2003: MC67)
- ◆ Testamur title: Graduate Certificate in Information Technology
- ◆ Abbreviation: none
- ◆ Program Leader: Mr P Bebbington
- ◆ Course fee: \$6,000 (local)¹
- ◆ Total credit points: 24

Graduate Diploma in Information Technology

- ◆ UTS course code: C06058 (pre-2003: MC52)
- ◆ Testamur title: Graduate Diploma in Information Technology
- ◆ Abbreviation: GradDiplInfTech
- ◆ Program Leader: Mr P Bebbington
- ◆ Course fee: \$12,000 (local)
\$8,700 per semester (international)
- ◆ Total credit points: 48

Master of Information Technology

- ◆ UTS course code: C04157 (pre-2003: MC59)
- ◆ Testamur title: Master of Information Technology
- ◆ Abbreviation: MInfTech
- ◆ Program Leader: Mr P Bebbington
- ◆ Course fee: \$12,000 (local)
\$8,700 per semester (international)
- ◆ Total credit points: 48

Overview

These courses comprise a set of related offerings:

- Graduate Certificate in Information Technology – 24cp
- Graduate Diploma in Information Technology – 48cp
- Master of Information Technology – 48cp.

These courses were introduced in Autumn 2002 and are fee-paying courses. Entry to the Master of Information Technology is only available to graduates of the Graduate Diploma in Information Technology which effectively provides 24 credit points of advanced standing against a normal 72 credit point Master's degree.

¹ This course is not offered to international students.

Course aims

Graduate Certificate in Information Technology

Stream 1 (general; for progression to Graduate Diploma)

This form of the Graduate Certificate provides an introduction to information technology for those students who are uncertain of their capabilities in the discipline, or who wish to gain only a very basic knowledge of the area.

Stream 2 (specialised subject sequence)

This form of the Graduate Certificate enables students who have a degree in IT, or a related field, to undertake a specialised sequence of subjects in an area not covered in their previous studies.

Graduate Diploma in Information Technology

The Graduate Diploma enables students to gain the basic knowledge required of an IT professional, plus gain knowledge in a specialised area.

Master of Information Technology

The Master's level program is designed to enable students to achieve a comprehensive and advanced understanding of information technology.

Admission requirements

Graduate Certificate in Information Technology

Stream 1

- minimum qualification equivalent to a Bachelor's degree from a recognised Australian university, and
- little or no formal IT education and/or experience.

Stream 2

- minimum qualification equivalent to a Bachelor's degree in information technology, or a related discipline, from a recognised Australian university, and
- a minimum of at least two years work experience in the IT area.

Graduate Diploma in Information Technology

Direct entry

- minimum qualification equivalent to a Bachelor's degree from a recognised Australian university, and

- little or no formal IT education and/or experience, and
- Graduate Certificate IT Stream 1 entrant, with no failures in any individual subject.

Transfer from Graduate Certificate

Successful completion of at least two subjects in the Graduate Certificate in Information Technology with no failures in any individual subject.

Master of Information Technology

There is no direct entry to the Master of Information Technology. Students must satisfy one of the three following entrance criteria:

1. General Entry

Students must complete the Graduate Diploma of Information Technology subjects plus two core subjects (12 credit points) and 36 credit points of electives. Entry is only by completion of Graduate Diploma at Credit average, or better, across all subjects, and no failures in any individual subject.

2. Graduates of Graduate Diploma in Information Technology or Information Systems courses undertaken at other Australian universities

Graduates of Graduate Diploma in Information Technology or Information Systems courses undertaken at other Australian universities may also apply, provided they:

- meet the entry requirements of the UTS Graduate Diploma in Information Technology (i.e. a first degree, equivalent to an undergraduate three-year degree from the UTS)
- have obtained a minimum Credit average across all subjects with no failures in their Graduate Diploma course, and
- have undertaken, and passed, a data communications subject and a database subject which the Faculty of Information Technology deems to be equivalent in content to the Graduate Diploma in Information Technology subjects 31486 Data Communications and 31487 Database Management Systems.

3. Graduates of a full three-year Bachelor's course in Information Technology or Information Systems

Graduates of a full three-year Bachelor's course in Information Technology or Information Systems undertaken at an Australian university may also apply, provided that:

- the subjects undertaken are deemed by the Faculty of Information Technology to be equivalent to all the core subjects in the UTS Bachelor of Science in Information Technology, and
- they have obtained a minimum Credit average across all subjects and no failures in their course.

Advanced standing

Graduate Certificate in Information Technology

There are no exemptions granted at Graduate Certificate in Information Technology level.

Graduate Diploma in Information Technology

Up to 24 credit points of core subjects may be exempted. Exemption is on the basis of tertiary study undertaken within three years prior to the commencement of this course, or demonstrable extensive industrial experience in the area. In special circumstances, students may be granted exemption for one additional core subject but only on the basis that an extra elective subject is undertaken in its place. The Graduate Certificate in Information Technology articulates into this course. Exemption is only granted for core subjects undertaken in the Graduate Certificate of Information Technology. Students articulating from the Graduate Certificate in Information Technology are given exemption for Graduate Diploma in Information Technology core subjects passed.

Master of Information Technology

There are no exemptions granted in this course.

Challenge rules

Under University Rule 2.28.5, students may apply for an exemption for a subject based on knowledge gained by professional experience, previous informal studies or studies at a private institution. This process is called 'application to challenge a subject' and includes a formal assessment, most likely in the form of an examination set by the Subject

Coordinator, and incorporates the assessment requirements of the subject. If successful the student receives an exemption for the subject. Note that a non-refundable fee of \$200 applies to this process.

Course duration

The Graduate Certificate is offered on a one-semester, full-time, or two-semester, part-time basis.

The Graduate Diploma is offered on a two-semester, full-time, or four-semester, part-time basis.

The Master's is offered on a two-semester, full-time, or four-semester, part-time basis.

Course programs

Graduate Certificate in Information Technology (24cp)

Stream 1

Students normally take four of the core subjects offered in the Graduate Diploma but may, with the approval of the Program Leader, take up to two of the electives offered in the Graduate Diploma in place of core subjects.

Stream 2

Subjects are taken normally from the list of core and elective subjects offered in the Graduate Diploma. These subjects are undergraduate in content.

Graduate Diploma in Information Technology (48cp)

31484	Information Systems Foundations	6cp
31485	Systems Development	6cp
31486	Data Communications	6cp
31487	Database Management Systems	6cp
31488	Programming Foundations	6cp
3xxxx	Electives	18cp

Electives are selected from a defined list that allows for the core knowledge gained in the Graduate Diploma and time constraints of elective sequences.

Master of Information Technology (48cp)

A student must complete the requirements for the Graduate Diploma in Information Technology (48cp);

plus complete the following subjects

32113	Advanced Database	6cp
32114	Advanced Data Communications	6cp
3xxxx	Electives	36cp

Electives are selected from those available in Master of Science in Computing program provided prerequisites are met.

Assessment

Grading of awards

Graduate Certificate in Information Technology

The award of Graduate Certificate in Information Technology is not graded.

Graduate Diploma in Information Technology

Students must have completed at least 48 credit points and have an average raw mark of at least 50 per cent to qualify for the award. Satisfactory completion of the course leads to the award of Graduate Diploma in Information Technology at Pass, Credit, or Distinction level.

The grading of qualifying students is based on the weighted average mark (WAM) of core subjects. For the purposes of the calculation of the WAM, the mark for any core subject that has been failed, and then subsequently passed, is set at 50 percent. Students who have articulated from the Graduate Certificate in Information Technology will have the marks for any core subjects passed included in the calculation of the WAM.

The grading process is carried out by the Faculty's Examination Review Committee each semester. The Committee is provided with the following information about each qualifying student:

- any core, or elective subject failures
- marks for all core subjects
- the time taken to complete the award, excluding leave of absence, and
- the total number of credit points undertaken.

The Committee also has the academic transcript for each qualifying student, if necessary. For an award with Distinction, no failures in any subjects are permitted. For an award with Credit, only one failure in an elective is permitted. The minimum WAM for Credit and Distinction grades is not fixed but is determined by the Committee each semester as part of the grading process. For Autumn 2002 graduands, the WAM required to achieve the award with Distinction was 77.14 per cent and for the award with Credit was 71.5 per cent.

Master of Information Technology

The award of Master of Information Technology is not graded.

Rules and regulations

All students enrolled in this course should be aware of the following University Rules under which a student's registration will be discontinued.

Maximum time

Students will have their registration discontinued for failure to complete these courses in the required maximum time. The maximum time limits are:

- Graduate Certificate in Information Technology – three semesters for both full time and part time
- Graduate Diploma in Information Technology – three semesters, full time, and six semesters, part time
- Master of Information Technology – three semesters, full-time, and six semesters, part time.

These time limits are not inclusive of periods of approved leave of absence (see Rule 3.2.6.1).

Unsatisfactory progress

Students will have their registration discontinued for any three failures in the course (unsatisfactory progress as defined by the Faculty Board resolution, FBIT/02/28) (Rule 3.2.6.2).

Graduate Certificate in Interactive Multimedia

- ◆ UTS course code: C11143 [pre-2003: MC72]
- ◆ Testamur title: Graduate Certificate in Interactive Multimedia
- ◆ Abbreviation: none
- ◆ Program Leader: Mr G Matthews
- ◆ Course fee: \$6,000 [local]¹
- ◆ Total credit points: 24

Graduate Diploma in Interactive Multimedia

- ◆ UTS course code: C07078 [pre-2003: MC71]
- ◆ Testamur title: Graduate Diploma in Interactive Multimedia
- ◆ Abbreviation: GradDiplM
- ◆ Program Leader: Mr G Matthews
- ◆ Course fee: \$12,000 [local]
\$8,700 per semester [international]
- ◆ Total credit points: 48

Master of Interactive Multimedia

- ◆ UTS course code: C04158 [pre-2003: MC70]
- ◆ Testamur title: Master of Interactive Multimedia
- ◆ Abbreviation: MIM
- ◆ Program Leader: Mr G Matthews
- ◆ Course fee: \$18,000 [local]
\$8,700 per semester [international]
- ◆ Total credit points: 72

Overview

These courses comprise a set of articulated offerings:

- Graduate Certificate in Interactive Multimedia – 24cp
- Graduate Diploma in Interactive Multimedia (24cp plus Graduate Certificate) – 48cp
- Master of Interactive Multimedia (24cp plus Graduate Diploma) – 72cp.

These are fee-paying courses. While the program will be managed by the Faculty of Information Technology, it is a joint program between the Institute for Interactive Media and Learning (IML) and a number of teaching faculties.

¹ This course is not offered to international students.

Course aims

The program is designed for students from a wide variety of background disciplines who may or may not already be working in areas of multimedia. For this reason, the program contains a considerable number of elective subjects to enable students to gain new areas of knowledge or broaden existing areas. It has also been designed as an articulated program commencing with a Graduate Certificate, then a Graduate Diploma and finally a Master's degree. Non-graduate entry into the Graduate Certificate only will be possible for applicants with substantial senior professional experience. Successful completion of the Graduate Certificate at some appropriately defined level by such students will permit them to articulate into the Graduate Diploma.

Admission requirements

Graduate Certificate in Interactive Multimedia

Applicants need to have one of the following:

- a three-year undergraduate degree (or equivalent)
- a diploma and considerable relevant professional experience, or
- substantial senior professional experience.

Places in the course are limited and applicants should indicate an informed understanding of how their undergraduate qualifications and work experience fit with their proposed multimedia studies to open up future career directions.

Graduate Diploma in Interactive Multimedia

Applicants need to have one of the following:

- a three-year undergraduate degree (or equivalent), and either
 - (i) one year of relevant professional experience, or
 - (ii) a Credit average or better in a Graduate Certificate in Interactive Multimedia
- a diploma and substantial relevant professional experience, or
- substantial senior professional experience.

Master of Interactive Multimedia

Applicants need to have one of the following:

- an Honours degree (or equivalent)

- a three-year Bachelor degree (or equivalent), and either
 - (i) two years of relevant professional experience, or
 - (ii) a Credit average or better in a Graduate Certificate or Graduate Diploma in Interactive Multimedia, or
- outstanding professional experience at a senior level.

Note: Relevant professional experience is not restricted to experience in multimedia, the traditional media or computing, but may include experience in any field which will augment the applicant's capacity to become a good multimedia professional. The onus is on the applicant to demonstrate its relevance.

Advanced standing

Given the interdisciplinary focus and teamwork emphasis of these courses, advanced standing and subject exemptions are not normally granted for other postgraduate study or work experience.

Course duration

The Graduate Certificate, Graduate Diploma and the Master's degree are offered on a part-time and a full-time basis. Because of visa requirements, international students can enrol in the Graduate Diploma and Master's courses only and must do so on a full-time basis. Part-time courses normally take one, two and three years, respectively, to complete. Full-time courses normally take one, two and three semesters, respectively, to complete.

Course structure

All students undertake a core course of study in interactive multimedia. This consists of six 6-credit-point core subjects which may be undertaken at various levels of the program: two core subjects in the Graduate Certificate; a further two core subjects in the Graduate Diploma; and the final two subjects in the Master's. At the Graduate Certificate level, the balance of the program comprises two elective subjects (6 credit points each), which may include core subjects for students intending to exit at Graduate Certificate level. At the Graduate Diploma level, the balance of the program comprises four elective subjects (6 credit points each), which may include core subjects for students intending to exit at the Graduate Diploma level. The Master's degree concludes with a 12-credit-point project subject.

Course program

Graduate Certificate in Interactive Multimedia (24cp)

two of the following core subjects

95563	Digital Media Development Process	6cp
95564	Digital Media Technologies	6cp
95565	Digital Graphics and the Still Image	6cp
	<i>and</i>	
xxxxx	Two elective subjects	12cp

Graduate Diploma in Interactive Multimedia (48cp)

two of the following core subjects

95563	Digital Media Development Process	6cp
95564	Digital Media Technologies	6cp
95565	Digital Graphics and the Still Image	6cp
	<i>and</i>	
95xxx	Two other core subjects	12cp
xxxxx	Four electives subjects	24cp

Master of Interactive Multimedia (72cp)

95xxx	Six core subjects	36cp
xxxxx	Four electives subjects	24cp
95569	Digital Media Project	12cp

Core subjects

95563	Digital Media Development Process	6cp
95564	Digital Media Technologies	6cp
95565	Digital Graphics and the Still Image	6cp
95566	Digital Information and Interaction Design	6cp
95567	Digital Media in Social Context	6cp
95568	Digital Sound and the Moving Image	6cp

Project subject

95569	Digital Media Project	12cp
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Electives

Students are advised to choose their electives from a group of related subjects and use their choices to build upon current skills where appropriate and to further their understanding and knowledge in a particular area. Electives may be chosen from across the University and must be approved by the relevant faculty. Students should seek advice from the relevant faculties and/or from IML before selecting their elective subjects.

Rules and regulations

Subject failure

Students are permitted, at the most, two failures during enrolment in either the Graduate Certificate, Diploma or Master of Interactive Multimedia. Note the resolution of the Faculty Board, FBIT/02/28, that any candidate enrolled in the above three courses who records any three failures will have his or her registration in the course discontinued. In addition, students are bound by the Rules of the University and are advised to refer to them. The Rules are published online at:

www.uts.edu.au/div/publications/policies/rules/contents.html

Other information

For additional information on the Interactive Multimedia program go to:

<http://mim.iml.uts.edu.au>

RESEARCH DEGREES

General inquiries should be directed to:

University Graduate School
telephone (02) 9514 1523

or (within the Faculty)

Graduate Research and Liaison Officer
telephone (02) 9514 1806

Applicants for research degrees should discuss their proposed research with either the Program Leader for Postgraduate Research Degrees, or their chosen supervisor before submitting applications. The Faculty's Graduate Research and Liaison Officer can assist applicants in contacting members of staff and in completing the application form.

Research areas

Areas of particular interest for work towards research degrees in the Faculty of Information Technology include:

- cognitive aspects of software design
- combinatorial optimisation
- computer graphics and animation
- computer vision and image processing
- computer supported collaborative work
- data mining
- data visualisation
- distributed computing
- distributed databases
- e-commerce
- enterprise systems design and development
- high performance computing
- intelligent interfaces
- knowledge-based systems
- multiagent systems
- networking
- neural networks and machine learning
- object technology
- programming language design and semantics
- project management
- requirements engineering
- search and visualisation methodologies for the internet

- software quality
- social and personal impact of internet applications
- systems development methodologies
- systems integration
- usability of mobile and web-based applications
- user-developer relationships
- virtual worlds and communities
- web services and semantic web

Information Technology research centres/groups/laboratories

Within the Faculty, a wide range of information technology research is supported by a variety of research centres/groups/laboratories. Graduate research students, academics, visiting researchers and research assistants undertake collaborative research within these laboratories. The quality and relevance of research in the laboratories is enhanced by well-established links, both with industry and with overseas research institutions.

Research groups with formal external links are:

- **CRC for Enterprise Distributed Systems Technology** – the primary focus is on management security and performance for controlled and efficient access to the resources of distributed systems such as databases, collaboration software and distributed software tools (contact: Professor John Hughes).
- **Capital Markets CRC** – aims to be the technology provider of choice to global securities businesses/markets. It supports research programs in corporate governance, data mining, interoperability, language technology, market design and visualisation (contact: Professor Chengqi Zhang).
- **Centre for Object Technology Applications and Research (COTAR)** – has been instrumental in the development of object-oriented and component-based methodologies for software development. It has developed the third generation OO/CBD method called OPEN (Object-oriented

Process, Environment and Notation) (contact: Professor Brian Henderson-Sellers).

- **Cooperative Systems** – focuses on the implementation and data modelling of distributed databases, client-server computing, cooperative workgroup systems, the development of methods for integrating databases with expert systems, the modelling of constraints, the development of design tools and the integration of groupware with databases (contact: Professor Igor Hawryszkiewicz).

In addition, the Faculty has research groups/laboratories in the following areas:

- **eMarkets** (contact: Profesor John Debenham)
- **Internet** (contact: Dr Robert Steele)
- **Networking** (contact: Associate Professor Doan Hoang)
- **Programming Language Design** (contact: Associate Professor Barry Jay)
- **Requirements Engineering** (contact: Dr Didar Zowghi)
- **Interaction Design** (contact: Associate Professor Sue Fowell)
- **VisLab** (contact: Dr David Green)

Doctor of Philosophy

- ◆ UTS course code: C02029 (pre-2003: MC54)
 - ◆ Testamur title: Doctor of Philosophy
 - ◆ Abbreviation: PhD
 - ◆ Course fee: see note (local)
\$7,500 per semester (international)
-

Overview

The Doctor of Philosophy (PhD) is intended for students who wish to pursue research at the highest level. Such research is expected to demonstrate significant originality and make a substantial contribution to computing knowledge. For specific areas of interest in research work in the Faculty of Information Technology, see page 97. A limited number of stipends are available at \$22,000 per annum from the Faculty of Information Technology.

Admission requirements

Application

Application forms for all postgraduate courses may be obtained from the UTS Student Info & Admin Centre. Applicants should hold a First Class or Second Class (Division 1) Honours degree with a major computing component, or a Master's degree in an appropriate area, or have previously undertaken other postgraduate studies in computing. Prospective applicants are expected to have developed interests in a specific area of research, and should have one or more outline proposals for research work in that area. Before submitting a formal application for admission to this degree course, applicants should first seek the approval of the Faculty for their proposed research work. To gain this approval, applicants should initially:

- send a summary proposal of approximately 1,000 words to the Program Leader for Postgraduate Research Degrees, Faculty of Information Technology, containing references to seminal works in the area of proposed research. If the proposal is appropriate for the Faculty, the Program

Note: Research degrees are offered on a sponsored, scholarship, faculty part-sponsored, or full-fee paying basis. Students should contact the Faculty or the University Graduate School for further details. There are, however, student service fees to be paid (see Fees and costs, page 12). The Faculty of Information Technology offers fee waivers to all students and these are applicable to both local and international students.

Leader for Postgraduate Research Degrees will then refer the applicant to a suitable member of staff for further detailed discussion, or

- approach a suitable member of the Faculty's academic staff directly and discuss the proposed research area.

All Doctor of Philosophy students at UTS are required to have at least two supervisors for their research work, one of whom should be an academic staff member of the University and, normally, one of whom should hold a Doctoral degree. Of the two supervisors, one will be the principal supervisor and the other the co-supervisor.

Prospective applicants should seek agreement from a member of the Faculty's academic staff to act as a (principal) supervisor for the proposed research if the application is successful. Once this agreement has been obtained, applicants may then apply formally for admission by completing an Application for Candidature – Doctoral Degrees form and the Faculty's Supplementary Doctoral Application form. These forms must be signed by the applicant, the proposed supervisor and the Head of Department.

Attendance

The Faculty of Information Technology has a strong preference for research work that proceeds at a full-time pace. This preference should not be seen as a deterrent to those students who wish to remain in employment. Students who are working in a full-time job are encouraged to select a topic for their research which is closely aligned with their professional work. Once such a topic has been selected, the Faculty usually requires that the student's employer provide a statement to the effect that at least half of the student's working week will be devoted to work which is directly relevant to the research. The student is then expected to contribute some of his or her own time to the project so that the total number of hours devoted to research is that expected of full-time attendance.

Course duration

The Doctor of Philosophy degree is available on both a full-time and a part-time basis. The normal duration of enrolment is three years for full-time attendance and six years for part-time attendance. Candidates who already

possess a degree at the Master's level may be permitted to complete their PhD in two years of full-time research, or three years of part-time research. The maximum duration of enrolment is five years for full-time students and seven-and-a-half years for part-time students.

Course structure

Progress reports

All Doctor of Philosophy students are required to submit, in consultation with their supervisors, a progress report at the end of each semester. The University Graduate School contacts each student and their supervisor(s) to initiate this process. Students are also required to complete a Doctoral Assessment and seminar.

Submission of thesis

All candidates for the degree of Doctor of Philosophy should give the Registrar two months' written notice of intention to submit their written thesis. Appropriate forms and the information brochure *Presentation and Submission of Theses for Higher Degrees* are available from the University Graduate School.

Master of Science

- ◆ UTS course code: C03025 (pre-2003: MC51)
 - ◆ Testamur title: Master of Science
 - ◆ Abbreviation: MSc
 - ◆ Course fee: see note (local)
\$7,500 per semester (international)
-

Overview

The Master of Science degree enables graduates to extend and deepen their knowledge of a specialised area in computing by undertaking research under the supervision of a member of the academic staff. For specific areas of interest in research work in the Faculty of Information Technology, refer to page 97.

Admission requirements

Application

Application forms for all postgraduate courses may be obtained from the UTS Student Info & Admin Centre. Applicants should hold a First Class or Second Class (Division 1) Honours degree with a major computing component, or have previously undertaken other postgraduate studies in computing. Prospective applicants are expected to have developed interests in a specific area of research, and should have one or more outline proposals for research work in that area. Before submitting a formal application for admission to this degree course, applicants should first seek the approval of the Faculty for their proposed research work. To gain this approval, applicants should initially:

- send a summary proposal of approximately 1,000 words to the Program Leader for Postgraduate Research Degrees, Faculty of Information Technology, containing references to seminal works in the area of proposed research. If the proposal is appropriate for the Faculty, the Program Leader for Postgraduate Research Degrees will then direct the applicant to a suitable member of staff for further detailed discussion, or

- approach a suitable member of the Faculty's academic staff directly and discuss the proposed research area.

Every Master of Science student at UTS is required to have at least two supervisors for their research work, one of whom should be an academic staff member of the University. Of the two supervisors, one will be the principal supervisor and the other the co-supervisor.

Prospective applicants should seek agreement from a member of the Faculty's academic staff to act as a supervisor for the proposed research if the application is successful. Once this agreement has been obtained, applicants may then apply formally for admission by completing an Application for Admission – Graduate Courses form and the Faculty's Details of Proposed Study form. These forms must be signed by the applicant, the proposed supervisor and the Head of Department.

Attendance

The Faculty of Information Technology has a strong preference for research work that proceeds at a full-time pace. This preference should not be seen as a deterrent to those students who wish to remain in employment. Students who are working in a full-time job are encouraged to select a topic for their research which is closely aligned with their professional work. Once such a topic has been selected, the Faculty usually requires that the student's employer provide a statement to the effect that at least half of the student's working week will be devoted to work which is directly relevant to the research. The student is then expected to contribute some of his or her own time to the project which brings the total number of hours devoted to research within that expected of full-time attendance.

Course duration

This degree is available on both a full-time and a part-time basis. The normal duration of enrolment for this degree is two years for full-time attendance or three years for part-time attendance. The maximum time to complete the course is three years for full-time students and four-and-a-half years for part-time students.

Note: Research degrees are offered on a sponsored, scholarship, faculty part-sponsored, or full-fee paying basis. Students should contact the Faculty or the University Graduate School for further details. There are, however, student service fees to be paid (see Fees and costs, page 12). The Faculty of Information Technology offers fee waivers to all students and these are applicable to both local and international students.

Course structure

Progress reports

All thesis students are required to submit, in consultation with their supervisors, a progress report at the end of each semester. The University Graduate School contacts each student and their supervisor(s) to initiate this process.

Submission of thesis

Each candidate for the degree of Master of Science should give the Registrar two months' written notice of their intention to submit their written thesis. Appropriate forms and the information brochure *Presentation and Submission of Theses for Higher Degrees* are available from the University Graduate School.

SUBJECT DESCRIPTIONS

SUBJECTS OFFERED BY INFORMATION TECHNOLOGY

31027

Building e-Market Negotiators

6cp; prerequisite(s): ability to program in Java

This subject covers the following topics: the structure of electronic markets and their role in electronic business; an analysis of various negotiation mechanisms suitable for deployment in electronic business; take-it-or-leave-it mechanisms, auctions, bargaining (haggling) and contracts; an examination of the mechanisms being used in existing commercial electronic markets; and the design, construction and deployment of negotiation software for electronic markets.

31028

Project 2cp

2cp; by consent of supervisor

This subject is intended to give students experience in working independently on a small research or development project. The project may be drawn from any area of information technology. Each project is supervised by a member of academic staff.

31029

Project 4cp

4cp; by consent of supervisor

This subject is intended to give students experience in working independently on a small research or development project. The project may be drawn from any area of information technology. Each project is supervised by a member of academic staff.

31030

Project 6cp

6cp; by consent of supervisor

This subject is intended to give students experience in working independently on a small research or development project. The project may be drawn from any area of information technology. Each project is supervised by a member of academic staff.

31040

Data Mining and Knowledge Discovery

6cp; prerequisite(s): 31474 Database Fundamentals

Data mining is the art and science of turning large quantities of usually incomprehensible data into meaningful and sometimes commercially valuable information. It includes a number of IT areas, including statistical methods for identifying patterns in data and making inferences, database technologies, intelligent and smart systems technologies, visualisation and other multimedia techniques that support human pattern discovery capabilities. The subject offers the foundations of data mining and knowledge discovery methods and their application to practical problems. It brings together the state-of-art research and practical techniques in data mining, providing students with the necessary knowledge and capacity to initiate and conduct data mining research and development projects.

31043

Principles of Data Mining and Visualisation for Knowledge Discovery

6cp; prerequisite(s): 31474 Database Fundamentals

Data mining is the art and science of teasing meaningful information and patterns out of large quantities of data. It combines statistical techniques for making inferences, database techniques for handling massive volumes of data, artificial intelligence techniques for integrating domain knowledge and visualisation techniques to appeal to the cognitive mechanisms that stimulate human creativity and discovery. The subject brings together the state-of-the-art research and practice in data mining, providing students with the necessary knowledge and capacity to initiate and conduct data mining research and development projects.

31044

Advanced Topics in Computer Networks

6cp; prerequisite(s): 31471 Networking 2 or equivalent

This subject allows students to study several major advanced topics in networking in depth in an informal, small group situation.

Learning is based around a series of readings, where a set of readings is discussed each week by the students and the Subject Coordinator.

31045

Mobile Computing

6cp; prerequisite(s): 31471 Networking 2 or equivalent

This subject aims to provide students with an understanding and appreciation of one of the fastest growing and most exciting areas of Computer Networks. The subject covers the development of the wireless network technology from cellular networks to IP wireless networks. The emphasis is on the concepts, infrastructure, and protocols for supporting device and user mobility. The subject also focuses on the development of a simple application using Wireless Application Protocol (WAP) and Wireless Markup Language (WML).

31049

Computer Vision and Image Processing

6cp; prerequisite(s): 31473 Data Structures and Procedural Programming or equivalent

Computer vision is a widespread discipline playing a relevant role in fields such as multimedia, robotics, automated industrial inspection, visual surveillance and medicine. This subject aims to give the students the ability to understand how a computer can emulate vision functions. It also enables students to design and practically implement computer vision and image processing applications.

31054

Honours Seminar 1

6cp; prerequisites for an offered Honours Seminar topic will be specified by the Subject Coordinator

This subject allows students to study a specific area in depth in an informal, small group situation. Learning is based around a series of readings, where a set of readings are discussed each week by the students and the Subject Coordinator.

31055

Honours Seminar 2

6cp; prerequisites for an offered Honours Seminar topic will be specified by the Subject Coordinator

This subject allows students to study a specific area in depth in an informal, small group situation. Learning is based around a series of readings, which are discussed each week by the students and the Subject Coordinator.

31056

Honours Seminar 3

6cp; prerequisites for an offered Honours Seminar topic will be specified by the Subject Coordinator

This subject allows students to study a specific area in depth in an informal, small group situation. Learning is based around a series of readings, which are discussed each week by the students and the Subject Coordinator.

31057

Honours Seminar 4

6cp; prerequisites for an offered Honours Seminar topic will be specified by the Subject Coordinator

This subject allows students to study a specific area in depth in an informal, small group situation. Learning is based around a series of readings, where a set of readings are discussed each week by the students and the Subject Coordinator.

31060

Information Systems Principles

6cp

This subject introduces the concepts of information and information systems and introduces information retrieval systems which deal with classification and search techniques and the evaluation of web-based information resources. Students also learn key human aspects of IS development – stakeholder consideration, teamwork and usability. Students use collaborative software tools to produce a group report and reflect on this activity as a design process.

31062

Entrepreneurial Experience

6cp; prerequisite(s): four semesters of BSc (InfTech) Innovation

Contact the Faculty for details.

31074

Advanced Database Concepts and Techniques

6cp; prerequisite(s): 31474 Database Fundamentals

This subject covers a wide range of advanced topics of database management techniques and research issues. Advanced database concepts include relational data model and its limitations, dependency theory and normalisation, semantic data models, object-oriented, distributed and active databases. The topics are related with OLAP, data warehousing and

104 Subject descriptions

data mining concepts. Hypertext databases and multimedia databases are also covered in this subject. The main focus of the subject is on the technical concepts and research issues of the various advanced approaches of database management.

31077

Software Engineering Fundamentals

6cp; prerequisite(s): 31475 Requirements Engineering

This subject's aims are to develop an understanding of the issues which beset software engineering and to build competence in the application of mathematics in software development. The issues portion of the subject covers topics like the nature of software as an entity to be engineered, the newness of the software engineering discipline and current issues in the large scale application of software engineering practice. The mathematics portion covers fundamental concepts and methods for software development and engineering, including formal specification, program development from specification and proving/verifying correctness. Appropriate tools and packages are used, including Z and OCL. The mathematical basis includes predicate logic and structures (sets, relations, functions, trees).

31078

Software Architecture

6cp; prerequisite(s): 31079 Software Engineering Processes

This subject aims are to understand concepts and use techniques in the high level design, or architecture, of large software systems. It shows how an architectural model can assist in achieving the non-functional requirements of a system, such as reliability and time performance. The subject covers basic architecture concepts including modelling (based on components, connections and constraints), architectural styles, and principles and viewpoints. It includes the use of architectural patterns, including infrastructures. Architectural description languages are used to describe the architecture.

31079

Software Engineering Processes

6cp; prerequisite(s): 31475 Requirements Engineering

This subject examines the processes that support the design of simple, understandable and maintainable OO systems. Four main areas are covered. First, a small set of explicit design rules are applied to generate good OO software. Second, a set of common schemas or patterns that define expert knowledge in software design are presented and evaluated. Third, the generation of new knowledge (expertise development) is examined. Finally, team software development is presented and analysed. The subject applies these techniques to the design and construction of an OO software system by a small team.

31080

Digital Multimedia

6cp; prerequisite(s): to be advised

Contact the Faculty for details.

31081

Digital Media Programming and Communication

6cp; prerequisite(s): to be advised

Contact the Faculty for details.

31083

Multimedia Data Mining

6cp; prerequisite(s): to be advised

Contact the Faculty for details.

31084

VLANs and WANs

6cp; prerequisite(s): 31471 Networking 2

This subject extends the work covered in 31467 Networking 1 and 31471 Networking 2 to cover VLANs and WAN protocols. WAN and LAN design is introduced. The UTS Cisco Academy resources are used for practical work and threaded case study. After completing this subject, students may sit for the industry certification CCNA (Cisco Certified Network Associate) at their own expense.

31085**Internetwork Design**

6cp; prerequisite(s): 31471 Networking2;
corequisite(s): 31084 VLANs and WANs

This subject combines the principles studied in 31467 Networking 1, 31471 Networking 2 and 31084 VLANs and WANs and extends them. These are then applied to the design of internetworks.

31086**Network Security**

6cp; prerequisite(s): 31084 VLANs and WANs

This subject consolidates the student's understanding of network security by considering security principles, methodologies and techniques from a technical and management perspective. Issues such as Policy Based Networking, Directory Services, IPsec, as well as basic methodologies such as firewalls, proxies, encryption and authentication are dealt with.

31087**Network Management**

6cp; prerequisite(s): 31084 VLANs and WANs

This subject explains the role of the network manager and the network management system. It discusses the components of network management, i.e. fault management, performance management, configuration management, security management and accounting management. The integration of the components into an enterprise management system is addressed. The lecture material is integrated with laboratory sessions throughout, which allow students to experience aspects of network management.

31088**Mobile Networks**

6cp; prerequisite(s): 31467 Networking 1

This subject covers wireless wide area networks: cellular telephone and mobile data networks. It covers wireless transmission technology, media access control protocols, satellite systems, and the development of cellular networks from first-, second-, and third-generation systems. The emphasis is on the concepts, infrastructure, protocols for supporting device/user mobility, and the integration of wireless networks into the Internet.

31089**Mobile IP and Wireless LANs**

6cp; prerequisite(s): 31088 Mobile Networks

This subject covers Mobile IP, the extension of the Internet protocol (IP) into the mobile domain, and several wireless local area network (WLAN) technologies: IEEE 802.11 WLANs, Hiperlan, Bluetooth. The subject introduces the concept of ad hoc networking, protocols and mechanisms for supporting mobility, and wireless application infrastructure. It also introduces techniques for developing simple applications over the wireless Internet.

31090**Mobile Programming**

6cp; prerequisite(s): 31470 Distributed Computing Architecture

This subject covers the core Internet programming technologies that support online e-commerce running over the Internet (31336 Internet Middleware Programming). It also covers Wireless Application Protocol (WAP) Architecture, Wireless Markup Language (WML) and WMLScript. This subject is an essential requirement for 31091 Mobile Computing Project.

31091**Mobile Computing Project**

6cp; prerequisite(s): 31089 Mobile IP and Wireless LANs; 31090 Mobile Programming

This subject provides students with an opportunity to participate in a group project, developing a simple wireless application. A member of academic staff supervises each group project.

31092**IS Development Approaches**

6cp; prerequisite(s): 31469 Object-oriented Design; corequisite(s): 31475 Requirements Engineering

This subject provides a study of a variety of approaches to systems development with particular emphasis on socio-technical frameworks and the place of requirements in systems design. Topics include soft systems methodology, user lead development, rapid application development, development in three tier software environments.

31093

Quality Assurance and Process Improvement

6cp; prerequisite(s): 31475 Requirements Engineering

This subject provides students with the practical knowledge and skills that are necessary to effectively measure and improve the quality of software products. Topics include quality assurance principles, various quality metrics, certification of software products and processes, building quality into software and the importance of quality measurement to business strategic values.

31095

IS Theory and Research Methods

6cp; prerequisite(s): 31472 Introduction to Collaborative Systems

This subject introduces theories from a variety of disciplines that form the basis of much IS research. Topics include key IS research questions, how IS research contributes to IS development, information theory, viable systems models, systems dynamics, social aspects of meaning, comparison of survey and case-based research and action research. Current researchers discuss their research approaches.

31096

Managing Client/Vendor Relations

6cp; prerequisite(s): 31476 Systems Development Project

This subject deals with management, social, legal and financial issues that arise when several parties are involved in the development of an information system. Situations considered are outsourcing, insourcing, development partnerships, support relationships and individual contracting. Students are provided with sufficient resources to plan for and evaluate their position as a client or vendor, and to assess where they need professional advice.

31097

IT Operations Management

6cp; prerequisite(s): 31466 Principles of Distributed Computing; 31468 Information, Classification and Control

This subject allows students to develop the knowledge and skills required for effective management of hardware, software and human resources within an information

systems organisation. Major topics are resource acquisition, developing software, workplace environment, recruitment and training policies, hardware and software security, operations management and EDP accounting.

31098

Software Metrics and Testing

6cp; prerequisite(s): 31475 Requirements Engineering

This subject's aims are to develop techniques in the measurement of software product attributes (such as maintainability, complexity, reliability and openness) and in the verification and validation of software systems. Basic functional and structural testing is extended to complex data types and formal verification techniques. Other verification techniques such as walkthroughs and 'clean-room' are examined. Test coverage in terms of program and system structure is developed. Integration testing techniques include thread testing. Test planning focuses on risk-based testing. The relational measurement system is used to understand product measures in use. Issues in the design and collection of measures that are valid are covered.

31099

Database Programming and Administration

6cp; prerequisite(s): 31474 Database Fundamentals

This subject introduces students to database programming and administration using the Oracle9i database server as an example. Following a brief overview of the architecture and operation of Oracle9i database server, database administration tasks are described. We then describe various database programming techniques including database stored procedures, functions, and triggers. The subject contains a substantial practical component with exercises designed to support the various lecture topics.

31136

Preparation and Review of IT Experience

6cp; prerequisite(s): refer to the DiplnITechProfPrac entry on page 63; available only to students of the Diploma of IT Professional Practice

This subject involves formal planning of and regular reporting on work experience undertaken in 31137 IT Experience 1. There is particular emphasis on the skills students hope to gain, both technical and social.

31137**IT Experience 1**

0cp; prerequisite(s): refer to the DiplInfTechProfPrac entry on page 63; corequisite(s): 31136 Preparation and Review of IT Experience; available only to students of the Diploma of IT Professional Practice

To pass this subject and 31139 Industrial Experience 2 students must complete a total of nine months' full-time employment in suitable IT-related work.

31138**Review of IT Experience**

6cp; prerequisite(s): refer to the DiplInfTechProfPrac entry on page 63; corequisite(s): 31139 IT Experience 2; available only to students of the Diploma in IT Professional Practice

This subject involves continued regular reporting and includes structured reflection on your work experience undertaken for 31139 IT Experience 1. Assessment also includes a report and an oral presentation given to fellow students on completion of your work experience.

31139**IT Experience 2**

0cp; prerequisite(s): refer to the DiplInfTechProfPrac entry on page 63; corequisite(s): 31138 Review of IT Experience; available only to students of the Diploma of IT Professional Practice

This subject is a continuation of 31137 IT Experience 1.

31140**Introduction to Computer Graphics**

6cp; prerequisite(s): 31425 Principles of Software Development B; 31429 Procedural Programming

This subject provides a thorough introduction to the computer representation, manipulation and display of pictorial information. Topics covered include: passive and interactive graphics; hardware devices and programming; mathematical tools for two- and three-dimensional graphics; two- and three-dimensional graphics and algorithms; graphics standards; human-computer interaction and graphical design; and application areas of computer graphics.

31334**Distributed Virtual Worlds**

6cp; prerequisite(s): 31748 Programming on the Internet

Virtual worlds are environments that offer a rich 3D interaction and communication between humans and software agents. The behaviour in such a place is governed by some laws or protocols – 'physical', 'biological', 'ethical', etc. Virtual worlds can provide scalable professional working environments that integrate communication, interaction, information retrieval, negotiation and other activities and exchanges between humans and between agents and humans. This subject presents the virtual world technology in the context of its application in e-business environments.

31335**Extreme Programming**

6cp; prerequisite(s): 31473 Data Structures and Procedural Programming or 31476 Systems Development Project (for BInfTech)

This subject introduces the Extreme Programming practices and in general Agile Methodologies. It covers the topics of analysis, estimation, iteration planning, testing and pair programming within the Extreme Programming methodology. It also looks at how to introduce Extreme Programming into an organisation.

31336**Internet Middleware Programming**

6cp; prerequisite(s): 31470 Distributed Computing Architecture

This subject covers the core Internet programming technologies that support online e-commerce running over the Internet. It also provides an essential understanding of the framework of B2C e-commerce applications. On successful completion of this subject, students are capable of developing at least two types of B2C e-business applications (e.g. the Shopping-Cart Model and the Auction Model) operating on the Internet using HTML, DHTML, CSS, PHP, MySQL, JavaScript and Java.

31337**Advanced Internet Technologies**

6cp; prerequisite(s): 31470 Distributed Computing Architecture

This subject provides students with knowledge of and skills in advanced Internet technologies particularly related to server-side Internet

programming and business-to-business systems. It covers the topics of application servers, n-tier architectures, Internet technology standards, and description and lookup. The subject also approaches these technologies from a business perspective. In doing so it covers the theory and architectures for business-to-business systems and Enterprise Application Integration.

31338

Network Servers

6cp; prerequisite(s): 31467 Networking 1; 31470 Distributed Computing Architecture

Through this subject students gain an understanding of the design principles and implementation issues for the deployment of network servers based on Windows 2000 and Linux operating systems. Techniques and skills for system administration are developed through a comprehensive sequence of laboratory activities in combination with mini-lectures and design tasks. Although this subject is not a preparation course for industry certification students should be well placed, with further study, to sit certification examinations.

31424

Systems Modelling

6cp; availability: not for Faculty of IT students

This subject introduces information system concepts, including their static and dynamic components. It describes how these concepts can be used to model information systems to correctly capture their structure and needs. It outlines how the ability to capture information about the system in ways understood by its eventual users will improve the final quality of the system.

The subject introduces analysis using various approaches found in contemporary system development, including object-oriented methods, data flow diagrams and Entity-Relationship modelling, and describes the relationships between these techniques and their application.

31443

Distributed Databases and Client/Server Computing

6cp; prerequisite(s): 31434 Database Design

This subject introduces students to basic distributed databases and client/server concepts. The classical approach to distributed

databases is described in detail, and supported with both theoretical and practical exercises. Modern client/server and database server techniques are introduced.

31460

Computer Graphics Project

6cp; prerequisite(s): 31140 Introduction to Computer Graphics and either 31603 3D Computer Animation or 31605 Computer Graphics Rendering Techniques

This subject gives students experience in working independently on a small computer graphics project. It also gives students the responsibility for the development of the project from initial analysis to user documentation. The project may be in any area of computer graphics, and the students gain a detailed knowledge of and experience in the project area.

31465

Object-oriented Programming

6cp

This subject introduces object-oriented (OO) programming in Java. It covers the topics of data flow, procedures, classes, and data structures. It also shows how to build a graphical user interface (GUI) to a Java system.

31466

Principles of Distributed Computing

6cp

This subject introduces distributed applications as one of the foundations of a modern computing environment. It focuses on the principles surrounding the use and development of applications in a networked environment and introduces some of the basic hardware components of networked computing devices. Students have the opportunity to develop skills in using distributed applications and developing simple websites.

31467

Networking 1

6cp

This subject introduces computer networks as an arrangement of computers, networking devices and processes driven by complex distributed software. The focus in this subject is Layer 1 and Layer 2 of the OSI model to prepare the student for later work in network design, implementation and management.

Students are also exposed in sufficient detail to issues associated with Layer 3, the inter-network layer viz IP addressing and routing. Layers 4 to 7 of the OSI model and their mapping to TCP/IP utilities and application software are discussed. The course material is supported by a range of hands-on practical sessions.

31468

Information, Classification and Control

6cp

This subject introduces the concepts of information and information systems and introduces two major types. For information retrieval systems, the subject deals with classification and search techniques and the evaluation of web based information resources. For accounting information systems, the subject covers basic accounting principles, classification of accounts, accounting with spreadsheet packages and budgeting and control.

31469

Object-oriented Design

6cp; prerequisite(s): 31465 Object-oriented Programming

This subject shows how to design, build, test, document, and maintain large or complex object-oriented (OO) systems. It presents a set of design frameworks, patterns, and rules, along with a set of explicit evaluation criteria that can be used to judge the quality of a reusable OO system. It also presents the problems that arise in large system development, and discusses technical tools to solve these problems.

31470

Distributed Computing Architecture

6cp; prerequisite(s): 31466 Principles of Distributed Computing; 31465 Object-oriented Programming

This subject focuses on the design and development of distributed applications that exchange information. It looks at information architectures for distributed applications, and typical application requirements for information exchange. It examines the Extensible Mark-up Language, XML, and related standards as a language for information exchange and provides the opportunity for students to develop Java applications that parse and exchange information. Finally it offers more distributed system theory, including coverage of operating systems and software for distributed systems.

31471

Networking 2

6cp; prerequisite(s): 31467 Networking 1

This subject extends the work done in 31467 Networking 1. Students learn to apply the concepts and develop higher level skills in the design and operation of larger scale networks using higher level networking devices. Students will be well placed to pursue a specialisation in network design and management if they so choose. The subject also develops skills necessary for information technology planning and design of systems that are network focused. The emphasis in this subject is intranets that use routers. The role and operation of routers in a range of computer networks are examined in detail. Router-based networks are designed and routers configured. Deeper treatment of IP addressing and routing protocols is undertaken. The impact of routing protocol choices on network behaviour is emphasised. Skills in network design, router configuration and network troubleshooting are further developed.

31472

Introduction to Collaborative Systems

6cp

This subject introduces students to key human aspects of IS development: stakeholder consideration, team work and usability. Students use collaborative software tools to produce a group report and reflect on this activity as a design process.

31473

Data Structures and Procedural Programming

6cp; prerequisite(s): 31469 Object-oriented Design

In first year, students learned more abstract aspects of programming. This subject takes a more machine-oriented viewpoint: it discusses the implementation and design of data structures, the efficiency of data structures, the design and implementation of algorithms and the complexity of algorithms. Students learn to program in C, gain an understanding of aspects involved in the execution of programs in various languages (such as memory management and garbage collection) and develop skills in using tools for program development (such as source level debuggers, version control tools and make files/project files).

31474

Database Fundamentals

6cp

This subject introduces students to basic database modelling, design, and implementation concepts and techniques. Entity-Relationship (E-R) modelling methodology is described in detail and the students learn how to model information requirements and develop conceptual models from user specifications. Relational database theory is presented including the description of the relational model and theory of Normal Forms. Transformations techniques between the E-R and relational models are described. Database programming using SQL is introduced in lectures and supported by practical exercises using a relational DBMS. Advanced database topics including database APIs, triggers, and stored procedures are briefly introduced.

31475

Requirements Engineering

6cp; prerequisite(s): 31472 Introduction to Collaborative Systems

This subject introduces students to the foundations of Requirements Engineering which is among the most important contributors for developing good quality software that meets the real needs of users. Students become familiar with the front-end activities of software development and learn about methods, techniques and tools that assist in the important collection of activities that makes up the requirements engineering process.

31476

Systems Development Project

12cp; prerequisite(s): 31474 Database Fundamentals, 31475 Requirements Engineering

This subject involves using a case study approach to explore the design and development of a complex set of information systems services. The application domain is a commercial setting, with a special focus on integration of new and legacy systems. In addition, transaction processing and distribution issues are addressed.

31478

Project Management and Quality Assurance

6cp; prerequisite(s): 31476 Systems Development Project

This subject covers the management of the development and implementation of information technology solutions, with particular emphasis on information systems project management and software quality assurance. It considers the roles of project management and software quality, particularly from the viewpoint of the practitioner as a member of a project team. There is a focus on both product and process issues together with the factors that impact quality outcomes associated with all phases of development.

31479

Information Technology Professional and Society

6cp; prerequisite(s): 31476 Systems Development Project

This subject covers the body of ideas and commonly held principles that apply to professional standards and ethical behaviour in the information technology industry. The intent is to expose students to standards of professional behaviour and legal responsibility through case studies and current media-related articles featuring potential ethical and/or legal situations/dilemmas. It considers the history of information technology, the impact of information technology on society, the IT profession's Codes of Ethics and Codes of Conduct and the legal requirements pertaining to the information technology industry.

31480

Strategic Information Technology Planning Project

6cp; prerequisite(s): 31478 Project Management and Quality Assurance

This subject deals with the issues involved in strategic level analysis and design in a corporate-wide information systems environment. Through a major case study, it reinforces material previously studied while giving groups of students scope to use their own judgment in applying their knowledge. It stresses the development and assessment of alternative approaches to a system strategy. Senior management and communication skills are also developed.

31481**Honours Project A**

6cp

Students undertake a literature review describing the structure of their chosen area of research.

31482**Honours Project B**

12cp; prerequisite(s): 31481 Honours Project A; 32931 Information Technology Research Methods

Honours Project B is the second part of the Honours program where students undertake a research proposal as developed in the Honours Project A. This involves a substantial investigation under the supervision of a member of academic staff and is examined on the quality of the written report.

31484**Information Systems Foundations**

6cp; availability: Graduate Certificate and Graduate Diploma in IT students only

This subject introduces the concepts of information and information systems and introduces students to key human aspects of IS development – stakeholder consideration, teamwork and usability. Students use accounting information systems covering basic accounting principles, classification of accounts, accounting with spreadsheet packages and budgeting and control.

31485**Systems Development**

6cp; prerequisite(s): 31484 Information Systems Foundations (desirable); availability: Graduate Certificate and Graduate Diploma in IT students only

This subject introduces students to the foundations of Requirements Engineering which is among the most important contributors for developing good quality software that meets the real needs of users. Students become familiar with the front-end activities of software development and learn about the methods, techniques and tools that assist in the important collection of activities that make up the requirements engineering process.

31486**Data Communications**

6cp; availability: Graduate Certificate and Graduate Diploma in IT students only

This subject introduces computer networks as an arrangement of computers, networking devices and processes driven by complex distributed software. The focus in this subject is Layer 1 and Layer 2 of the OSI to prepare the student for later work in network design, implementation and management. Students are also exposed in sufficient detail to issues associated with Layer 3, the internetwork layer viz IP addressing and routing. Layer 4 to 7 of the OSI model and their mapping to TCP/IP utilities and application software are also discussed.

31487**Database Management Systems**

6cp; availability: Graduate Certificate and Graduate Diploma in IT students only

This subject introduces students to basic database modelling, design, and implementation concepts and techniques. Entity-Relationship (E-R) modelling methodology is described in detail and students learn how to model information requirements and develop conceptual models from user specifications. Relational database theory is presented including the description of the relational model and theory of Normal Forms. Transformations techniques between the E-R and relational models are described.

Database programming using SQL is introduced in lectures and supported by practical exercises using a relational DBMS. Advanced database topics including database APIs, triggers, and stored procedures are briefly introduced.

31488**Programming Foundations**

6cp; availability: Graduate Certificate and Graduate Diploma in IT students only

This subject introduces object-oriented (OO) programming in Java. It covers the topics of data flow, procedures, classes and data structures. It also shows how to build a graphical user interface (GUI) to a Java system.

31489

Industry Study 1

6cp; prerequisite(s): one semester of BInfTech

Students undertake an academic study of a particular issue in IT, using their experience in their first industry semester as a case study. Study topics are chosen in consultation with the mentor from: business benefits of IT, business processes; IS design methods; IS usability; and particular technologies used during industry experience.

31490

Industry Study 2

6cp; prerequisite(s): four semesters of BInfTech

Students undertake an academic study of a particular issue in IT, using their experience in their second industry semester as a case study. Study topics are chosen in consultation with the mentor from: business benefits of IT; business processes; IS design methods; IS usability; and particular technologies used during industry experience. A different topic is chosen from that undertaken by the student in 31489 Industry Study 1.

31491

Industry Project 1

9cp; prerequisite(s): one semester of BInfTech

This subject is based on the student's first industry placement with a BInfTech sponsor. Subject components are: preparation for industry experience with sponsor seminars, project work with the sponsor and a reflective report on personal and organisational aspects of the industry experience.

31492

Industry Project 2

9cp; prerequisite(s): four semesters of BInfTech

This subject is based on the student's second industry placement with a BInfTech sponsor. Subject components are: preparation for industry experience with sponsor seminars, project work with the sponsor and a reflective report on personal and organisational aspects of the industry experience.

31508

Programming Fundamentals

6cp; availability: not for Faculty of IT students

Students learn programming concepts, and learn to write medium-sized programs in an object-oriented language.

31509

Computer Fundamentals

6cp

This subject introduces students to the internal organisation and operation of computer systems. The functions, characteristics and interrelationships of the hardware components of computer systems are studied. Other topics include binary arithmetic, data representation, digital logic, and data transmission. This subject provides a sound basis for understanding how computer hardware supports higher-level software constructions.

31510

Operating Systems

6cp; prerequisite(s): 31429 Procedural Programming

This subject introduces students to modern operating systems, and shows how operating systems support application programs.

31511

Systems Design

6cp; prerequisite(s): 31424 Systems Modelling

This subject focuses on the user and business aspects of systems design. User interface issues cover dialogue, screen, report and forms design, as well as designing and writing user documentation. Integration with business environment includes business procedures, security, control and implementation. A variety of design and implementation strategies are introduced, such as prototyping and CASE tools.

31512

Networking 1

6cp; prerequisite(s): 31509 Computer Fundamentals

This subject introduces computer networks as an arrangement of computers, networking devices and processes driven by complex distributed software. The focus in this subject is Layer 1 and Layer 2 of the OSI model to prepare the student for later work in network design, implementation and management. Students are also exposed in sufficient detail to issues associated with Layer 3, the internetwork layer viz IP addressing and routing. Layers 4 to 7 of the OSI model and their mapping to TCP IP utilities and application software are discussed. The course material is supported by a range of hands-on practical sessions.

31513**Networking 2**

6cp; prerequisite(s): 31512 Networking 1 or equivalent

This subject examines in detail the role and operation of routers in a range of computer networks, but with a primary emphasis on local area networks. A range of routing protocols is discussed. The course material is supported by extensive hands-on practical work. Network management is also introduced.

31514**Computing Theory**

6cp

This subject introduces students to some of the theory underlying computing science. It includes such topics as formal methods and computational complexity.

31516**Networking Fundamentals**

6cp

Computer networks have taken a major role in many modern organisations and business enterprises, and indeed, in everyday life. This subject introduces students to the fundamentals of data communications and computer networks, and imparts an understanding of the principles and practices of computer networking. The core set of protocols employed on the global Internet, TCP/IP, is studied, and students learn the mechanisms of the support which networks provide to net-based application programs.

Taken by itself, this subject provides a 'breadth first' introduction to networking. As part of a networking sub-major, this subject provides a firm foundation for other subjects that deal with distributed applications and networked organisations.

31601**Programming for Performance**

6cp; prerequisite(s): 31425 Principles of Software Development B or equivalent; 31429 Procedural Programming

FISH is a new programming language developed at UTS which combines a high level of abstraction (no pointers!) with efficient code. Latest experiments shows quicksort in FISH is twice as fast as in C!

This subject appeals to (computer) scientists and (software) engineers who want: broader or deeper knowledge of algorithms; exposure

to the latest theoretical developments; and the opportunity to connect to an exciting research project.

Assessment is by assignment and project. The assignment tests understanding of basic concepts. The project implements in FISH an algorithm or software library chosen by the student in consultation with the coordinator.

31603**3D Computer Animation**

6cp; prerequisite(s): 31140 Introduction to Computer Graphics

This subject covers the major areas of 3D computer animation. It provides students with the opportunity to learn a major commercial 3D modelling, animation, and rendering package. Students also gain experience with Silicon Graphics workstations and the Irix environment. The subject also covers the principles and practice of pre-production planning, production management, and post-production of an animation project. The subject is project-based, and each student develops an animation of their choice.

31605**Computer Graphics Rendering Techniques**

6cp; prerequisite(s): 31140 Introduction to Computer Graphics

This subject covers the major rendering techniques used for image synthesis in computer graphics: scan-line algorithms, ray tracing, and radiosity. Topics covered include shading and illumination models, the scan conversion of graphics primitives, recursive ray tracing, textures, anti-aliasing, shadows, constructive solid geometry, acceleration techniques for ray tracing, and radiosity for diffuse and specular environments.

31606**Virtual Communities**

6cp

Developing and nurturing virtual communities (known also as 'virtual', 'online', 'cyber', 'web' communities) is a challenging task. This subject focuses on the phenomenon of virtual communities, its application in different areas of human activities and the research and development activities in the area. The subject covers the underlying information technologies and architectures supporting virtual communities, methods for developing such communities and different factors that influence the growth and success of virtual commu-

nities. The subject also covers a broad range of environments that support collaboration over the Internet, and the cultural aspects of virtual organisations and global communities.

31696

Industrial Training (FT)¹

Ocp; prerequisite(s): 31414 Information Systems; 31415 Principles of Software Development A; 31416 Computer Systems Architecture; 31417 Computing Practice; 31424 Systems Modelling; 31434 Procedural Programming; 31434 Database Design; 31436 Systems Software and Networks or equivalent

The first and second semesters of Industrial Training are a compulsory requirement for the course. All full-time students must enrol in these subjects and obtain a minimum of nine months of full-time employment. Students must normally have completed the equivalent of at least four full-time semesters before obtaining employment.

¹ For pre-2000 students only.

31697

Industrial Training (FT)¹

Ocp; prerequisite(s): 31696 Industrial Training (FT) (first semester)

The first and second semesters of Industrial Training are a compulsory requirement for the course. All full-time students must enrol in these subjects and obtain a minimum of nine months of full-time employment. Students must normally have completed the equivalent of at least four full-time semesters before obtaining employment.

¹ For pre-2000 students only.

31698

Industrial Training (PT)¹

Ocp; prerequisite(s): 31414 Information Systems; 31415 Principles of Software Development A; 31416 Computer Systems Architecture; 31417 Computing Practice; 31424 Systems Modelling; 31434 Procedural Programming; 31434 Database Design; 31436 Systems Software and Networks or equivalent

The first and second years of Industrial Training are a compulsory requirement for the course, normally taken for a total of four semesters in Stages 5 and 6. All part-time students must enrol in these subjects and obtain a minimum of 18 months of full-time employment.

¹ For pre-2000 students only.

31699

Industrial Training (PT)¹

Ocp; prerequisite(s): 31698 Industrial Training (PT) (first year)

The first and second years of Industrial Training are a compulsory requirement for the course, normally taken for a total of four semesters in Stages 5 and 6. All part-time students must enrol in these subjects and obtain a minimum of 18 months of full-time employment.

¹ For pre-2000 students only.

31718

Contemporary Information Technology 1

6cp; available only to BlnfTech students

This is a self-paced learning subject that provides basic skills students will use in a variety of other subjects and in industry – including word processing, spreadsheets, graphics, email, etc. The self-paced learning is complemented by lectures from partner organisations about the industry and the first industry semester.

31722

Commercial Programming

5cp; prerequisite(s): one semester of BlnfTech

The subject deals with commercial structured design techniques and commercial programming in either a batch or online environment. Students are taught the design technique and language of the particular industry organisation using approved assignment work.

31735

Information Systems and Organisation Development

6cp; prerequisite(s): at least 36 credit points

This subject introduces theories dealing with the behaviour of people in organisations, the structure of organisations, and the relation between the two. Systems thinking is used to bring these views together as a basis for organisation development in an environment changing through the influence of information systems.

31736**Business Processes and IT Strategy**

6cp; prerequisite(s): at least 36 credit points

This subject aims to provide students with the skills and knowledge required to creatively plan for the strategic use of information systems in organisations. Students are provided with an awareness of the problems in developing corporate strategies in general, and information technology strategies in particular. Their skills in the selection and use of information technology planning methods are developed. They learn how to use methods designed to analyse and restructure organisational processes through the innovative use of information systems technology. Current proposals for organisational restructuring are introduced and evaluated through comparison with previous theories of restructuring.

31743**Machine Learning**

6cp; prerequisite(s): 31428 Quantitative Modelling

This subject is concerned primarily with machine learning: automatic construction of computable models from data. Symbolic and non-symbolic methods are studied. Topics include: statistical learning, clustering and correlations; neural networks methods; genetic algorithms; genetic programming; Shannon information; rule induction; and first-order learning.

31744**Case-based Reasoning**

6cp

This subject builds on fundamental work in knowledge technology and introduces students to the concepts of case-based reasoning; neural architecture; human memory; semantic nets; memory indexing; case finding; case evaluation; case adaptation; building a case base; planning – adaptation, correctness; case-based planning; expectations; and explanation-based learning.

31745**Knowledge-based Systems**

6cp; prerequisite(s): 31743 Machine Learning or 31744 Case-based Reasoning

This subject addresses the important issues relating to the design of flexible Knowledge-Based Systems (KBS). These include understanding analytical techniques for KBS, bases for deep-level representation of the world,

knowledge acquisition techniques, design principles and case studies of how these principles are implemented in the current KBS.

31746**Artificial Intelligence Applications**

6cp; prerequisite(s): 31743 Machine Learning or 31744 Case-based Reasoning

This subject builds on fundamental work in knowledge technology and introduces students to issues in building a substantial artificial intelligence system. The subject looks at the use of artificial intelligence languages; knowledge acquisition; application selection; knowledge engineering, computer-assisted knowledge engineering; designing for maintainability; truth maintenance systems; and review of artificial intelligence applications.

31748**Programming on the Internet**

6cp; prerequisite(s): 31436 Systems Software and Networks and an OO Programming language

This subject introduces students to the specifics of the World Wide Web and Internet based programming. The evolution of the Internet and its technical foundation will be studied as well as basic techniques for presenting data, text and pictures on the World Wide Web. The client/server paradigm will be explored in detail featuring website design and construction using HTML (Hyper Text Markup Language), CSS (Cascading Style Sheets), PHP (Hypertext Preprocessor), MySQL (Backend database), JavaScript and Java Applets.

The subject introduces the concept of concurrent programming. In the course, students learn how to use threading in Java to design advanced Graphical User Interfaces. This subject also introduces some existing tools that can be used for website design and administration. This subject provides a sound basis for understanding how the WWW functions, how to construct web pages and how to write software for the WWW using scripting techniques and the Java programming language.

31749**Internet Commerce**

6cp

This subject aims to give students exposure to Internet commerce and develops an understanding of the stakeholders and their capabilities and limitations in the strategic

convergence of technology and business. Topics include business models for Internet commerce, security, and legal and ethical issues. Students develop skills in identifying the advantages and disadvantages of the various electronic payment options, and complete computer-based activities on Internet commerce.

31750

Intelligent Agents in Java

6cp; prerequisite(s): 31748 Programming on the Internet or an equivalent knowledge of programming in Java

This subject introduces students to the concepts of agent computing, and applies those concepts in the context of intelligent Internet-based systems. Students gain sufficient knowledge to be able to take more specialised subjects in Internet-based computing and artificial intelligence. By the end of this subject, students should be able to design a simple intelligent agent and to implement a simple intelligent agent in Java.

31756

Project Management

5cp; prerequisite(s): four semesters of the BInfTech

This subject provides students with the practical knowledge and skills that are necessary to effectively manage project teams and software development projects. The major topics are: planning a software project; software time and cost estimation; controlling a software project; development aids and alternatives; and leadership and people management. This subject provides an essential understanding of project management issues and identifies the knowledge required of a project manager in the IT industry.

31769

Contemporary Information Technology 2

4cp; prerequisite(s): five semesters of the BInfTech

This subject covers topical issues in the development, implementation and use of information systems, and the professionalism, ethics and social responsibility in the IT industry.

31770

Industry Project 1

5cp; prerequisite(s): one semester of the BInfTech

This subject provides students with an understanding of the function of the Information Systems Department (IS) in an organisation and also of at least one user business function serviced by IS. Understanding is developed through a number of strategies such as interviewing, observation and work experience. Students are taught human communication skills in conjunction with the project work, with a special emphasis on oral and written communication. Training is also provided in a variety of development tools used in the information systems development process in order to build up a defined skills profile in conjunction with the subject 31790 Industry Project 2.

31771

Business Requirements Analysis

5cp; prerequisite(s): one semester of the BInfTech

Topics in this subject include: applications of systems analysis (data flow diagrams, relational modelling, etc.) in a business setting; the roles of the business analyst and the systems analyst; systems research and requirements analysis (interviewing, document analysis, etc.) for data processing, management information systems, etc., top-down enterprise-wide perspective; evolution of the business environment; business, product and other life cycles; and industry case studies.

31777

Human-Computer Interaction

6cp; prerequisite(s): 31444 Systems Design and Development or equivalent

This subject focuses on the design, evaluation and implementation of interactive computing systems for human use within actual situations. Students gain an understanding of human-computer interaction (HCI) principles, including the main concepts, tools and techniques available to build user-centred systems. This subject considers the effects on use of the different metaphors for human activity that designers use in their systems and how user-centred design and evaluation methods can improve the usability of computer systems.

31778**Resource Management for IT Professionals**

6cp

This subject aims to instil the knowledge and skills required for effective management of hardware and software resources within an information systems organisation. The major topics include: resource acquisition; developing software; workplace environments; hardware and software security; operations management; and contracting and outsourcing.

31779**Applications of Information Technology 1**

5cp; prerequisite(s): one semester of the BInfTech

This subject covers formal and practical exposure to, and understanding of, a variety of specific applications of information technology, such as management information systems, databases, decision support systems, process control, graphics, etc. Subject material complements that of 31789 Applications of Information Technology 2 to ensure a common level of experience for all students. This is an industry subject for the BInfTech.

31781**Business Systems Design**

5cp; prerequisite(s): four semesters of the BInfTech

Topics in this subject include: understanding systems design in a business setting; performance and quality criteria; alternative implementation strategies; approaches to systems construction and estimation (including package evaluation and prototyping); implementation issues; productivity issues; methods engineering; information technology in business; industry and product differences; and case studies. This is an industry subject for BInfTech.

31789**Applications of Information Technology 2**

5cp; prerequisite(s): four semesters of the BInfTech

The subject covers formal and practical exposure to, and understanding of, a variety of specific applications of information technology, such as management information systems, databases, decision support systems, process control, graphics, etc. Subject material complements that of 31779 Applications of Information Technology 1 to ensure a common level of experience for all students.

31790**Industry Project 2**

5cp; prerequisite(s): four semesters of the BInfTech

Students in this subject gain practical 'hands-on' experience of the role of members of an information systems development team in relation to business organisational goals and objectives; and are incorporated as members of a project team in a sponsoring company. Training is also provided in a variety of development tools in order to build up a defined skills profile in conjunction with the subject 31770 Industry Project 1. Students also undertake a group investigative project focusing on an issue of current concern to the IT industry.

31860**Object-oriented Programming and C++**

6cp; prerequisite(s): 31424 Systems Modelling; 31429 Procedural Programming or equivalent

This subject introduces ANSI C++ as a language to implement object-oriented programming. The subject covers objects, classes, inheritance, polymorphism and memory management in C++. Students build upon their object-oriented experience in Eiffel, and their syntax knowledge of C.

31876**Operating Systems Facilities**

6cp; prerequisite(s): 31436 Systems Software and Networks or equivalent

The development of applications to make use of the facilities offered by an operating system offering support for a graphical user interface, such as Microsoft Windows or Macintosh, is covered in this subject. Included is the methodology involved in building applications that are driven by user actions such as the mouse as well as input from a keyboard. Issues related to inter-application communication are also explored.

31904**Systems Programming**

6cp; prerequisite(s): 31429 Procedural Programming

This subject allows students to develop their Perl and UNIX knowledge and skills appropriate for professional practice in a UNIX environment. The subject also exposes students to other high level 'scripting' utilities. This is of general benefit and is not covered elsewhere in the course.

31916**Cognitive Modelling**

6cp

This subject examines recent developments in cognitive science. It brings together research from: psychology, neurophysiology, philosophy and AI. It investigates mechanisms and models underlying intelligent and adaptive behaviour with a view to their use in system design. Topics include philosophy of the mind, learning paradigms, memory systems, attention, neurophysiology, neural assemblies, feature discovery and identification, physical symbol hypothesis and Human Information Processing, and AI technologies.

31919**Distributed Software Programming**

6cp; prerequisite(s): 31436 Systems Software and Networks or equivalent; 31904 Systems Programming or equivalent

This subject builds on material learned in 31436 Systems Software and Networks and 31904 Systems Programming. Students apply the knowledge and skills obtained in those subjects to explore the design and construction of Distributed Software Applications. Skills in the use of network communication libraries, thread and RPC libraries are developed. At the present time, the C language and the UNIX environment are used.

31921**Objectbases**

6cp; prerequisite(s): 31434 Database Design

This subject introduces the students to OODB concepts. It reviews the basic OO principles and discuss their application to databases. The theoretical discussion of the topic is supported with practical exercises using a commercially available OODBMS.

31922**Object-oriented Methodologies**

6cp; prerequisite(s): 31424 Systems Modelling

This subject introduces the object-oriented methods of analysing the problem domain and creating an implementation independent formal representation of the system requirements. Elements of the object-oriented analysis (OOA) process, OOA representation and OOA complexity management are introduced and compared with the related concepts of structured analysis methodologies. The

differences between the two approaches, and the advantages and disadvantages of each of them, are discussed. While UML is predominantly used, various object-oriented modelling methodologies are compared and their applicability to different application domains is assessed. The transition from implementation independent results of the OOA to the object-oriented design (OOD) for different implementation platforms is also covered.

31925**Smalltalk**

6cp; prerequisite(s): 31415 Principles of Software Development A; 31424 Systems Modelling

This subject provides an introduction to the Smalltalk programming language and environment. Topics include the syntax and semantics of Smalltalk, the Smalltalk programming tools, the Smalltalk class library, Smalltalk programming style and design, and adding graphical interfaces to Smalltalk programs.

31927**Applications Development with Visual Basic**

6cp; prerequisite(s): 31414 Information Systems and one of 31415 Principles of Software Development A or 31429 Procedural Programming; corequisite(s): 31424 Systems Modelling or 31434 Database Design

This subject introduces event-driven programming. Students use Visual Basic to build an interactive system. The system is designed using dialogue-oriented prototyping. Students also learn how to connect to various application packages using OLE.

31928**Applications Development with Delphi**

6cp; prerequisite(s): 31414 Information Systems and one of 31415 Principles of Software Development A or 31429 Procedural Programming; corequisite(s): 31424 Systems Modelling or 31434 Database Design

This subject aims to give students exposure to the development of user-orientated applications using visual programming languages. Students are required to apply software tools and packages which have different strengths and weaknesses to create an application. The technical environment for this subject is Borland Delphi and a database package.

31931**Software Quality Assurance**

6cp; prerequisite(s): 31424 Systems Modelling or equivalent

The subject aims to provide students with the practical knowledge and skills that are necessary to effectively measure and control the quality of software products. Major topics include: quality assurance principles; quality metrics; verification, validation and testing; implementing quality assurance, and software engineering methods and tools.

31950**Networked Enterprise Design**

6cp

This subject describes evolution of systems towards distributed business environments with more emphasis on processes that require people to work together over distance. It describes how people work together and the changes to work practices resulting from the distribution of such work. The subject covers collaboration technologies such as email, video-conferencing, co-authoring and workflows needed to support distributed business processes. The subject emphasises the design process, describing how to choose and implement collaborative technologies based on systems such as the World Wide Web or Lotus Notes to provide business benefits.

32009**Advanced Routing Principles**

6cp; prerequisite(s): 32521 WANs and VLANs or completion of CCNA preparation in another Cisco Networking Academy or the holding of the CCNA Industry certification and relevant industrial experience; availability: Internetworking students

This subject complements and extends the theory and practice learned in 32524 LANs and Routing and 32521 WANs and VLANs. It extends skills and knowledge in scalable interior and exterior routing protocols (OSPF, EIGRP, BGP), route optimisation and redistribution, NAT and network security. The subject is run in the UTS Cisco Systems Network Academy. Cisco routers are programmed as part of practical work. The subject is part of a sequence that allows students to prepare for the CCNP industry certification.

32010**Wide Area Network Implementation**

6cp; prerequisite(s): 32521 WANs and VLANs or completion of CCNA preparation in another Cisco Networking Academy or the holding of the CCNA Industry certification and relevant industrial experience; availability: Internetworking students

This subject complements and extends the theory and practice learned in 32524 LANs and Routing and 32521 WANs and VLANs. It extends skills and knowledge in WAN issues for part-time and full-time connectivity. Frame relay, ISDN and POTS technologies are deployed. Emerging WAN technologies are introduced. The course is run in the UTS Cisco Systems Network Academy. Cisco routers are programmed as part of practical work. The subject is part of a sequence that allows students to prepare for the CCNP industry certification.

32011**Multilayer Switched Networks**

6cp; prerequisite(s): 32521 WANs and VLANs or completion of CCNA preparation in another Cisco Networking Academy or the holding of the CCNA industry certification and relevant industrial experience; availability: Internetworking students

This subject complements and extends the theory and practice learned by completing 32524 LANs and Routing and 32521 WANs and VLANs. This subject extends skills and knowledge in the design and implementation of switched campus networks using VLANs for performance, reliability and security. Inter VLAN routing methods are explored. Multicast protocols, including issues that arise with switched networks are introduced. Practical work is done on Cisco Systems layer 2 and layer 3 switches. The course is run in the UTS Cisco Systems Network Academy. The subject is part of a sequence which allows students to prepare for the CCNP industry certification.

32106**Object-oriented Process**

6cp; prerequisite(s): 32536 Object-oriented Modelling or equivalent knowledge/experience; availability: Honours and postgraduate degree students

This subject covers the basic principles of object-oriented software development. It focuses on classes as modules and classes as types; OO analysis and design; software design as object modelling through abstract data type definition; design by contract

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and subcontracting; the different forms of inheritance; OO programming; software development environments; support for OO methods and techniques; OO models of the software development process; project management for OO; and models of application domains as the basis for OO frameworks for fast application development.

32108

Applications of Artificial Intelligence

6cp; availability: Honours and postgraduate degree students

This subject covers some important areas of artificial intelligence and their applications. These areas include, broadly: knowledge representation; problem solving; planning; knowledge-based systems; dealing with uncertainty; explanation facilities; and machine learning and applications of AI. The subject quickly introduces students to the basic AI techniques and then deals with individual topics in depth.

32109

Network Analysis and Troubleshooting

6cp; prerequisite(s): 32009 Advanced Routing Principles; 32010 Wide Area Network Implementation, 32011 Multilayer Switched Networks

The subjects 32009 Advanced Routing Principles, 32010 Wide Area Network Implementation and 32011 Multi Layer Switched Networks have allowed the student to develop knowledge and skills for the design and implementation of a variety of complex internetworking scenarios. This subject consolidates approaches to analysing and correcting internetworks that are under-performing or failing by applying sound problem solving principles to a series of structured laboratory exercises and case studies. On completion of this subject a student is prepared for the troubleshooting (and final) paper of the industry accreditation CCNP (Cisco Certified Network Professional).

32113

Advanced Database

6cp; prerequisite(s): 31487 Database Management Systems; availability: Honours and postgraduate degree students

This subject reviews material on relational databases and covers advanced topics such as object-oriented and distributed databases. Data warehousing and mining techniques,

implementation and management are covered in detail.

32114

Advanced Data Communications

6cp; prerequisite(s): 31486 Data Communications; availability: Honours and postgraduate degree students

This subject covers the principles of network design before dealing with the role of the network manager and network management systems. It discusses the components of network management – fault management, performance, configuration, security, and accounting. The integration of the components into an organisation's data communications infrastructure, and IT and management systems is discussed.

32115

Requirements Engineering Research and Practice

6cp; prerequisite(s): a good understanding of Software Development Process; availability: Honours and postgraduate degree students

Requirements engineering is a very important part of systems and software development and has recently received substantial attention from many researchers and practitioners. The subject introduces students to the foundations of requirements engineering research and practice. It also familiarises them with the range of techniques, methods and tools for various activities making up the requirements engineering process.

32118

Mobile Communications and Computing

6cp; prerequisite(s): 32524 LANs and Routing

This subject covers the development of the wireless network technology from cellular networks to IP wireless networks. The emphasis is on the concepts, infrastructure and protocols for supporting device and user mobility. The subject also focuses on the development of a simple application using Wireless Application Protocol (WAP) and Wireless Markup Language (WML).

32120**Evolution of the Internet**

6cp; corequisite(s): 24726 Economics and Marketing in the New Economy; availability: Honours and postgraduate degree students

This is an overview of Internet technologies: architecture; protocols; systems integration; and security. It is also an overview of the World Wide Web (WWW): http/html, browsers and servers; scripting, caching; applets; servlets; and application integration. It covers the evolution of websites, from transactional sites to content management and personalisation, and future e-business technologies: broadband; wireless; streaming; and content distribution. The subject incorporates practical skill development in website development and scripting.

32122**Business to Consumer: Fundamental Principles and Technologies**

6cp; prerequisite(s): 32120 Evolution of the Internet; availability: Honours and postgraduate degree students

This subject introduces students to the fundamental B2C concepts and models. Online retailing and CRM case studies are covered. The subject includes a hands-on practical component using a B2C development platform.

32123**Business to Business: Fundamental Principles and Technologies**

6cp; prerequisite(s): 32120 Evolution of the Internet; availability: Honours and postgraduate degree students

This subject introduces students to the fundamental e-business concepts and models. Supply Chain Management (SCM) and Procurement case studies are presented. The subject includes a hands-on component using an e-business development platform.

32124**e-Business Project Management**

6cp; availability: Honours and postgraduate degree students

This subject covers the management of the development and implementation of e-business technology solutions, with particular emphasis on information systems project management and contemporary issues in the delivery of e-business technology solutions to the business. It considers the role of

project management in e-business technology solutions and enables students to discuss specific issues of e-business technology development projects.

32125**Enterprise Application Integration: Principles and Technologies**

6cp; prerequisite(s): 32120 Evolution of the Internet; availability: Honours and postgraduate degree students

This subject introduces students to fundamental EAI concepts and techniques. Main EAI standards and approaches to the implementation of EAI solutions covered in detail and are supported by case studies and practical laboratory exercises.

32126**Web Content Design and Management**

6cp; availability: Honours and postgraduate degree students

This subject provides an introduction to the design and management of web-based systems. Specific emphasis is placed on the design of usable, scalable, standards-based systems. Taking a human-centred systems design approach students develop their understanding of the theory and practical skills required to effectively design and deliver web information content to different kinds of users in a variety of formats. Content creation, management, evaluation and workflow are addressed with particular emphasis on the end-to-end design enterprise e-commerce initiatives.

32127**Business to Consumer: Advanced Principles**

6cp; prerequisite(s): 32122 Business to Consumer: Fundamental Principles and Technologies; availability: Honours and postgraduate degree students

This subject builds upon the material presented in B2C Fundamentals and introduces a number of advanced B2C topics. The subject involves practical laboratory work.

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32128

Business to Business: Advanced Principles

6cp; prerequisite(s): 32123 Business to Business: Fundamental Principles and Technologies; availability: Honours and postgraduate degree students

The subject covers advanced B2B concepts, techniques, and associated business models. Collaborative Supply Chain Management (SCM) case study is presented. The subject includes both demonstration and hands-on exercises using an EAI platform.

32130

Principles and Practice of Data Mining

6cp; prerequisite(s): knowledge of database technologies; availability: Honours and postgraduate degree students

Data mining is the art and science of teasing meaningful information and patterns out of large quantities of data. It combines statistical methods for identifying patterns in data and making inferences with a number of IT technologies, including database technologies for handling massive volumes of data, intelligent and smart systems technologies, visualisation and other multimedia techniques that appeal to human pattern discovery capabilities. The subject offers broad background to data mining methods and their application in practice. It brings together the state-of-the-art research and practice in related areas and provides students with the necessary knowledge and capacity to initiate and lead data mining projects that can turn company data into commercially valuable information.

32131

Data Mining and Visualisation in e-Business

6cp; prerequisite(s): knowledge of database technologies; availability: Honours and postgraduate degree students

Electronic commerce and e-business systems integrate data mining technologies to discover new information and knowledge about products they offer, customers they serve and the relations between them. Data mining incorporates a number of IT technologies for data analysis and visualisation. The subject offers broad coverage of the application of data mining technologies in the areas of electronic commerce and electronic business environments.

32204

Advanced Data Management

6cp; availability: Honours and postgraduate degree students

This subject covers a range of advanced database topics, including relational, object-oriented database systems and distributed databases. The subject area is treated mainly from a technological viewpoint, but also includes a discussion of management issues.

32208

Information Processing Strategy

6cp; availability: Honours and postgraduate degree students

This subject is designed to provide students with an awareness of the problems in developing corporate strategies for information processing, and to develop skills in the selection and use of appropriate techniques.

32307

Operating Systems

6cp; availability: Honours and postgraduate degree students

This subject discusses topics in modern operating systems: concurrency in multi-processor operating systems, programming support environments, user friendly system interfaces, object-based systems, fault-tolerant systems, and secure systems.

32501

Computer Graphics

6cp; availability: Honours and postgraduate degree students

This subject demonstrates why computer graphics are important and through the lectures and practical work, gives students a working knowledge of elementary two- and three-dimensional graphics programming algorithms.

32509

Interaction Design

6cp; availability: Honours and postgraduate degree students

Interaction Design (ID) is defined as designing interactive products to support people in their everyday and working lives. This entails creating user experiences that enhance and extend the way people work, communicate and interact. ID extends the focus of Human-Computer Interaction (HCI) beyond designing computer systems for a single user sitting in

front of a single machine. One of the central challenges is to keep abreast of technological development, to understand the usability issues associated with these and to use this understanding to ensure that technology is harnessed for maximum human benefit. This subject focuses on user-centred approaches to, and methods for, technology design. It provides students with an understanding of the principles of Interaction Design as well as concepts, tools and techniques that can assist in the creation of both useful and usable technology that supports users' activities. The subject introduces both the social and the technological aspects of Interaction Design as well as usability design and evaluation methods.

32510

Principles of Object-oriented Programming in C++

6cp; prerequisite(s): 32106 Object-oriented Process; availability: Honours and postgraduate degree students

Topics in this subject include: review of object-oriented design principles and practice; and objects, classes, run-time instantiation, inheritance, information hiding, polymorphism and libraries, and their implementation in ANSI C++.

32511

Principles of Object-oriented Programming in Smalltalk

6cp; prerequisite(s): 32106 Object-oriented Process; availability: Honours and postgraduate degree students

The Smalltalk language and programming environment is covered in the first half of the subject. The second half uses the Smalltalk class library to build an interactive system with a graphical user interface (GUI).

32513

Advanced Machine Learning

6cp; availability: Honours and postgraduate degree students

This subject is concerned primarily with machine learning: automatic construction of computable models from data. Symbolic and non-symbolic methods are studied. Topics include: statistical learning, clustering and correlations; neural networks methods; genetic algorithms; genetic programming; Shannon information; rule induction; and first-order learning.

32516

Internet Programming

6cp; availability: Honours and postgraduate degree students

This subject introduces students to the specifics of the World Wide Web and Internet based programming. The evolution of the Internet and its technical foundation is studied as well as basic techniques for presenting data, text and pictures on the World Wide Web. The client/server paradigm is explored in detail featuring website design and construction using html (Hyper text Markup Language), CSS (Cascading Style Sheets), PHP (Hypertext Preprocessor), MySQL (Backend Database), JavaScript and Java Applets.

The subject introduces the concept of concurrent programming. In the course, students learn how to use threading in Java to design advanced Graphical User Interfaces. This subject also introduces some existing tools that can be used for website design and administration. This subject provides a sound basis for understanding how the WWW functions, how to construct web pages and how to write software for the WWW using scripting techniques and the Java programming language.

32517

Commerce on the Internet

6cp; availability: Honours and postgraduate degree students

This subject aims to give students exposure to Internet commerce and develops an understanding of the stakeholders and their capabilities and limitations in the strategic convergence of technology and business. Topics include business models for Internet commerce, security, and legal and ethical issues. Students develop skills in identifying the advantages and disadvantages of the various electronic payment options. Students complete computer-based activities on Internet commerce.

32520

UNIX Systems Administration

6cp; prerequisite(s): 32547 UNIX Systems Programming; availability: Honours and postgraduate degree students

Students learn about basic UNIX systems administration, including: registering users; file systems; networking; and performance management. Students should be competent

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users of UNIX. There is a laboratory component to the subject.

32521

WANs and VLANs¹

6cp; prerequisite(s): 32524 LANs and Routing; availability: Honours and postgraduate degree students

This subject extends the work covered in 32524 LANs and Routing with VLANs and WAN protocols. WAN and LAN design is introduced. Use of the UTS Cisco Academy resources are used for practical work and threaded case study. After completing this subject students may sit for the industry certification CCNA (Cisco Certified Network Associate).

¹ This subject was formerly called 32521 Internetworking.

32523

Operating Systems for Internetworking

6cp; availability: Honours and postgraduate degree students

This subject looks at the principles of operating systems and the fundamental differences between systems currently used in Internetworking, such as UNIX and NT.

32524

LANs and Routing

6cp; availability: Honours and postgraduate degree students

This subject provides students with knowledge of LAN hardware and physical layer standards, and basic computer networking concepts and principles, and introduces local area network (LAN) design and the use of routers and routing in autonomous system intranets. It also explains how these access WANS. Use of the Cisco Academies online resources and practical work in wiring and configuring LANs, including Cisco routers, is an integral part of this subject.

32525

Distributed Software Programming

6cp; prerequisite(s): 32516 Internet Programming; availability: Honours and postgraduate degree students

This subject gives additional knowledge of distributed systems programming and Java technologies building upon knowledge from 32516 Internet Programming. It also covers the basic principles and architectures of distributed software applications. It covers a

range of topics from low-level to high-level distributed programming technologies, including recent emerging technologies. The topics can include Java socket programming, remote method invocation, J2EE, Enterprise Java Beans, Simple Object Access Protocol (SOAP), web services description and lookup, and the composition of web services.

32527

Internetwork Design

6cp; prerequisite(s): 32524 LANs and Routing; availability: Honours and postgraduate degree students

This subject combines the principles studied in 32524 LANs and Routing, and 32521 WANs and VLANs and extends them. These are then applied to the design of internetworks.

32528

Network Management

6cp; prerequisite(s): 32524 LANs and Routing; availability: Honours and postgraduate degree students

This subject explains the role of the network manager and the network management system. It discusses the components of network management, i.e. fault management, performance management, configuration management, security management and accounting management. The integration of the components into an enterprise management system is addressed. The lecture material is integrated with laboratory sessions throughout, which allow students to experience aspects of network management.

32530

Building Intelligent Agents

6cp; availability: Honours and postgraduate degree students

This subject introduces students to the concepts of agent computing, and applies those concepts in the context of intelligent Internet-based systems. Students gain sufficient knowledge to be able to take more specialised subjects in Internet-based computing and artificial intelligence. By the end of this subject, students should be able to design a simple intelligent agent and to implement a simple intelligent agent in Java.

32531**Global Information Systems**

6cp; availability: Honours and postgraduate degree students

This subject covers new requirements placed on information systems arising out of the globalisation of business operations. It covers new ways of doing business in global environments, including formation of alliances and joint ventures, and ways that information systems must be developed to support them. The interaction of technical issues and social issues, including culture, is studied.

32532**Conducting Business Electronically**

6cp; availability: Honours and postgraduate degree students

This subject describes ways to assess an organisation's computer networking needs and identify those business operations that will benefit most from using web or groupware technologies in business-to-business and Intranet applications. It then covers ways for designing the applications by identifying ways of doing business using such technologies and by specifying workspaces that allow users to share information and knowledge while working towards organisational goals. Different kinds of workspaces are identified, including those for information exchange, developing personal relationships and knowledge sharing. Ways of using web technologies to implement workspaces are then described.

32533**Networking Communities**

6cp; availability: Honours and postgraduate degree students

Designing networking communities (known also as 'virtual', 'on-line', 'cyber', 'web' communities) is a compelling and challenging task. The subject focuses on the phenomenon of networking communities, its application in different areas of human activities and the research and development activities in the area. It covers different types and models of networking communities, the underlying information technologies supporting them, design principles and strategies for developing such communities, and different factors that influence the growth and success of networking communities, including collaboration within the community, shared representations that support such collaboration and cultural aspects in organisational and global communities.

32534**Knowledge Management**

6cp; availability: Honours and postgraduate degree students

This subject addresses the processes of generation, dissemination, retention, measurement, application and distribution of corporate knowledge for re-use. It also addresses techniques in data warehousing and data mining and identifies their relevance to knowledge management. While the course has a strong technological focus, a range of issues in business, marketing, and organisational behaviour are also covered.

32535**Databases in Distributed Environments**

6cp; availability: Honours and postgraduate degree students

This subject covers a range of topics in distributed databases. The main topics include: discussion of distributed database design; distributed transactions and queries; and data replication strategies. Modern database server techniques are introduced.

32536**Object-oriented Modelling**

6cp; availability: Honours and postgraduate degree students

This subject deals with the use of object-oriented techniques in the full life cycle of developing software, addressing both technical and management issues, focusing on pre-coding issues. These techniques are also explored practically in a project-based systems development assignment.

Lectures primarily discuss the third generation OO methodology, OPEN. There is a software engineering focus throughout the subject, including discussion of project management, re-use and metrics appropriate for an object-oriented systems development environment.

32537**Enterprise Wide Software Systems**

6cp; availability: Honours and postgraduate degree students

This subject looks at software from an enterprise point of view. It investigates issues concerning the incorporation of legacy code versus a new system; maintenance; costs; and the effect of a business re-engineering process on software systems or the opportunities provided by the necessity to introduce new systems.

32541

Project Management

6cp; availability: Honours and postgraduate degree students

This subject covers the management of the development and implementation of information technology solutions, with particular emphasis on information systems, project management, and contemporary issues in the delivery of information technology solutions to the business. It considers the role of project management in business and identifies the managerial control and reporting aspects necessary from inception to implementation of a software development project.

32542

Advanced Cognitive Modelling

6cp; availability: Honours and postgraduate degree students

This subject is designed to provide an overview of recent developments in the exciting field of cognitive science. Bringing together work from several disciplines, including psychology, neurophysiology, philosophy and AI, this subject investigates the biological mechanisms underlying human intelligence in order to provide a theoretical model for emulating such behaviour artificially. Topics include: philosophy of mind; memory systems; selective attention; learning; and emerging AI techniques such as neural networks.

32543

Advanced 3D Computer Animation

6cp; prerequisite(s): 32501 Computer Graphics; availability: Honours and postgraduate degree students

This subject covers the major areas of 3D computer animation. It provides students with the opportunity to learn a major commercial 3D modelling, animation and rendering package. Students also gain experience with Silicon Graphics workstations and the Irix environment. The subject also covers the principles and practice of pre-production planning, production management and post-production of an animation project. The subject is project-based, and each student develops an animation of their choice.

32544

Advanced Image Synthesis Techniques

6cp; prerequisite(s): a strong programming background in C, C++ or Java; availability: Honours and postgraduate degree students

This subject covers the three major rendering techniques used for image synthesis in computer graphics: scan-line algorithms, ray tracing and radiosity. Topics covered include: shading and illumination models, the scan conversion of graphics primitives, recursive ray tracing, textures, anti-aliasing, shadows, constructive solid geometry, acceleration techniques for ray tracing, and radiosity for diffuse and specular environments.

32545

Multi-agent Systems

6cp; availability: Honours and postgraduate degree students

This subject aims to introduce students to current research and state-of-the-art applications of multi-agent technology, and to teach them how to recognise a problem that should be addressed by multi-agent technology.

32546

Business Process Engineering

6cp; availability: Honours and postgraduate degree students

This subject aims to introduce current approaches to modelling process; designing, implementing and maintaining business process systems; and current approaches to managing process systems and to managing the application of business process engineering technology.

32547

UNIX Systems Programming

6cp; availability: Honours and postgraduate degree students

This subject allows students to develop their Perl and UNIX knowledge and skills appropriate for professional practice in a UNIX environment. The subject also exposes students to other high level 'scripting' utilities. This is of general benefit and is not covered elsewhere in the course.

32548**Network Security**

6cp; prerequisite(s): 32521 WANs and VLANs or equivalent; availability: Honours and postgraduate degree students

This subject consolidates the student's understanding of network security by considering security principles, methodologies and technologies from a technical and management perspective. Issues such as Policy Based Networking, Directory Services, IPsec, as well as basic methodologies such as firewalls, proxies, encryption and authentication are dealt with.

32549**Advanced Internet Programming**

6cp; prerequisite(s): 32516 Internet Programming or equivalent; availability: Honours and postgraduate degree students

This subject complements and extends 32516 Internet Programming. It focuses on server side issues and the construction of medium to large scale web-based business-to-business (B2B) applications. In this subject application servers, integration of data from multiple sources, transactions, and delivery of resultant data as XML or WAP to multiple client mechanisms are dealt with. Topics include Java Server Pages (JSP), servlets, Java Data Base Connectivity (JDBC), Java Naming and Directory Interface (JNDI) and Enterprise Java Beans (EJB). Consideration is also given to dealing with legacy systems. RMI and CORBA are discussed.

32601**Advanced Project Management**

6cp; availability: Honours and postgraduate degree students

This subject covers the management of developing and implementing information technology solutions, with particular emphasis on information systems, project management, and contemporary issues in the delivery of information technology solutions to the business. It considers the role of project management in business and identifies the managerial control and reporting aspects necessary from inception to implementation of a software development project.

32604**Systems Integration**

6cp; prerequisite(s): 32601 Advanced Project Management; availability: for Graduate Certificate, Graduate Diploma and Master's in IT Management students only. Other students may undertake the subject if they have demonstrated relevant IT management experience

Systems integrators are facing new challenges as a result of the increasing complexity of information systems and the fast evolving technologies used in their construction. This subject introduces students to various topics relating to systems integration. The subject covers both the technological and management issues in this area. The focus is on frameworks, architectures, and standards that facilitate component-based systems integration.

32606**Database**

6cp; prerequisite(s): 32607 Systems Analysis; availability: Honours and postgraduate degree students
Postgraduate

This subject introduces the basic database design and implementation concepts and presents database design techniques including relational design and E-R modelling. It discusses the implementation of relational database and describes database query techniques using the Structured Query Language (SQL). It also introduces object-oriented databases and discusses their applicability to various problem domains.

32607**Systems Analysis**

6cp; availability: not for Faculty of IT students

This subject deals with information systems in their organisational context. The effects of information systems on society, organisations and individuals are discussed. Examples from typical organisations are used to illustrate information systems concepts. Techniques for analysing and describing user requirements are introduced.

Throughout the subject there is an emphasis on human activities, the importance of the user in the analysis phase and the usability of systems. Another theme is communication skills, i.e. the ability of the analyst and designer of an information system to interview, write reports and manuals, design efficient and effective interfaces, and give presentations on the system.

32702

Contemporary Telecommunications

6cp; availability: for Graduate Certificate, Graduate Diploma and Master's in IT Management students only. Other students may undertake the subject if they have demonstrated relevant IT management experience

This subject explores management perspectives on contemporary telecommunications, data communications and networks. Topics covered include: network architecture and standards; new communications technologies; Internetworking; domestic and international communications environments; application-oriented services; network resource architectures; client/server systems; introduction to distributed processing; distributed databases; emerging technologies; and business and telecommunications planning.

32703

Information Technology Strategy

6cp; availability: for Graduate Certificate, Graduate Diploma and Master's in IT Management students only. Other students may undertake the subject if they have demonstrated relevant IT management experience

This subject is designed to provide students with an awareness of the problems in developing corporate strategies for information processing, and to develop students' skills in the selection and use of appropriate techniques.

32704

Strategic IT Contract Management

6cp; availability: Honours and postgraduate degree students

This subject is designed to provide students with an understanding and practical knowledge of IT contracting and intellectual property laws relating to the IT industry, and of implementing contract design and negotiation strategies to achieve project objectives.

32902

Recent Advances in Information Systems

6cp; availability: Honours and postgraduate degree students

This subject presents some key developments in the information systems discipline and related research areas. A number of selected IS researchers present an overview and open questions from a research area in which they are particularly interested. Students are encouraged to actively participate in the discussions of the topics presented.

32930

Information Technology Management Research Methods

6cp; prerequisite(s): to be undertaken in final year of study; availability: Honours and postgraduate degree students

This subject familiarises participants with a range of approaches used in management research, with an emphasis on approaches commonly used in practical settings. The advantages and limitations of different research approaches are examined, as well as their applicability in different IT contexts. Experience is provided in the design of research studies, in the analysis and interpretation of data, and in report presentation. Participants acquire skills which will be useful in the conduct of research agendas in their own IT organisations and in the critical evaluation of others' research work.

32931

Information Technology Research Methods

6cp; prerequisite(s): to be undertaken in final year of study; availability: Honours and postgraduate degree students

This subject familiarises participants with a range of approaches used in information technology research, with an emphasis on approaches commonly used in practical settings. The advantages and limitations of different research approaches are examined, as well as their applicability in different information technology contexts. Experience is provided in the design of research studies, in the analysis and interpretation of data, and in report presentation. Participants acquire skills which will be useful in the conduct of research agendas in their own information technology organisations and in the critical evaluation of others' research work.

32932

Project A1

6cp; prerequisite(s): 32930 Information Technology Management Research Methods or 32931 Information Technology Research Methods; availability: Honours and postgraduate degree students

Project A1 is the compulsory part of the final Master's project. Participants practise the methods and techniques introduced in the prerequisite research methods subject by undertaking a literature review and producing a research proposal. The research proposal

may then optionally be undertaken as either Project B1 or Project B2.

32933

Project B1

6cp; prerequisite(s): 32932 Project A1; availability: Honours and postgraduate degree students

Project B1 is the second and optional part of the final Master's project. Participants undertake the research proposal developed in Project A – this involves a substantial investigation under the supervision of a member of academic staff, and is examined on the quality of both a written report and an oral presentation of the project work.

32934

Project B2

12cp; prerequisite(s): 32932 Project A1; availability: Honours and postgraduate degree students

Project B2 is the second and optional part of the final Master's project. Participants undertake the research proposal developed in Project A – this involves a substantial investigation under the supervision of a member of academic staff, and is examined on the quality of both a written report and an oral presentation of the project work.

32xxx

Virtual Worlds: Programming and Design

6cp; prerequisite(s): 32516 Internet Programming; availability: Honours and postgraduate degree students

Virtual worlds are environments that offer a rich 3D interaction and communication between humans and software agents. The behaviour in such a place is governed by some laws or protocols – 'physical', 'biological', 'ethical', etc. Virtual worlds can provide scalable professional working environments that integrate communication, interaction, information retrieval, negotiation and other activities and exchanges between humans, and between agents and humans. This subject presents the virtual worlds technology in the context of its application in business environments.

SUBJECTS OFFERED BY OTHERS

015110

Aboriginal Cultures and Philosophies

8cp; 3hpw; weekly; block
Undergraduate

This subject introduces participants to Aboriginal culture and social organisation as expressions of Aboriginal cosmology. Contemporary Aboriginal culture is presented as an evolving response to colonialism and as an assertion of cultural empowerment.

015395

Aboriginal Social and Political History

8cp; 3hpw; weekly; block; prerequisite(s): 015110
Aboriginal Cultures and Philosophies

200 level

This subject is a campus-wide elective. It examines and analyses the impact of colonialism on indigenous people, with particular reference to the Aboriginal inhabitants of this region. The emergence of Aboriginal social and political movements is presented as the basis for repossession of traditional heritages in land and culture.

21126

Capstone Project in Business Planning

6cp; prerequisite(s): all foundation core (48 credit points) and disciplinary theme subjects (72 credit points) of the Innovation degrees offered by the Faculties of Science, Engineering and Information Technology only
Undergraduate

This is a core subject in the 'Innovation' degrees and provides a linking function to the four Technology Innovation and Science Specialisations. It draws together the two key themes of innovation and entrepreneurship as they are developed and practiced within the respective specialisations. It provides an applied context for integrating business and disciplinary skills and competencies in the creation, initiation, implementation and operation of a range of science, bio-engineering, engineering, and information technology-related business innovations. Students work in small teams located in situ with host companies to produce a business plan for the commercialisation of a scientific or technical idea or venture, which is assessed by experts in the respective fields of

130 Subject descriptions

application. Students develop innovative, entrepreneurial, communicative and interpersonal skills in obtaining expert advice from scientists, engineers, designers, business people and venture-capitalists in the development of their business plans.

21128

International Business

6cp

Undergraduate

This subject introduces students to the multidimensional nature of international business and discusses the importance of globalisation and how it has changed the competitive environment of business. It introduces the role of multinational corporations and the complexity of international operations and management and discusses current debates surrounding multilateral bodies. An Australian perspective is adopted throughout with students also developing an understanding of business in Asia.

21129

Managing People and Organisations

6cp

Undergraduate

This subject introduces students to the fundamentals of management and organisational behaviour in the context of today's contemporary global business environment. It examines the major theories and models in areas of communication, group dynamics, individual behaviour and motivation, decision making, leadership, power and politics, and ethics and social responsibility. It places particular emphasis on the application of theory to dilemmas and issues likely to confront managers today and in the future.

21193

Introduction to Corporate Strategy

6cp; prerequisite(s): 22107 Accounting for Business; 25115 Economics for Business; 21129 Managing People and Organisations; 24108 Marketing Foundations

Undergraduate

This subject introduces students to the concept and process of strategic analysis and decision making. It provides students with competencies, skills and the understanding necessary for implementing and managing the strategy process which aims to ensure the long term viability and success of an enterprise. Thus students can more readily understand,

communicate and materially contribute to the purpose of the organisation. The subject gives participants an understanding of the contemporary business environment in which business operates and how decision-making processes, leadership and organisational politics impact on the strategic activities of managers.

21227

Innovation and Small Venture Management

6cp

Undergraduate

This subject gives students an understanding of the contemporary business environment in which new ventures are created and in which small business operates. By developing a business plan for a new venture and from discussions with small business operators, students gain an understanding of the skills necessary for success. They are thus better equipped to start and run a small business or deal with entrepreneurs and small business owners in a consulting capacity.

21306

Employment Relations in the Global Context

6cp; prerequisite(s): 21129 Managing People and Organisations

Undergraduate

This subject introduces the theories, issues and practices involved in the management of employment relations within an increasingly competitive global market. As well as gaining a broad understanding of the context and nature of different systems of international employment relations, students are encouraged to explore the cross-national similarities and differences between Australia and its geographical neighbours and trading partners through the completion of case studies and the research of current literature on the topic. The subject exposes students to the human resources policies and practices of multinational corporations, and explores how they are utilised for competitive advantage.

21407

Strategic Human Resource Management

6cp

Undergraduate

This subject focuses on the strategic nature of human resource management (HRM) functions within various organisations and builds on general issues first raised in 21306

Employment Relations in the Global Context. It develops an appreciation of critical HRM issues through an exploration of conceptual issues such as alternative ways of viewing the HRM field, how HRM should relate to changes in the organisational environment, and the relationships between organisation strategy and HRM functions. The underlying concept considered in this subject is how an organisation in a changing environment can best manage its human resources in such a way as to provide long-term benefits to the organisation.

21591

International Management

6cp; prerequisite(s): 21129 Managing People and Organisations
Undergraduate

This subject develops an understanding of the management practices required to successfully conduct business in other countries. It develops an appreciation of the distinctive features of selected countries and their particular management practices and explores the ways in which management theories and behaviours may be adapted to suit their application in an international setting. It aims to enhance the skills of Australian managers operating internationally through the development of a more integrated view of international business and related management practices.

22107

Accounting for Business

6cp
Undergraduate

In most economies business success is measured in financial terms. It is the accountants who undertake this measurement. Many decisions in business are made based on accounting information, both historical (based on past events) and projected (based on estimates of the future). Understanding accounting as a systematic way of measuring and communicating financial information on the financial status of various business entities is the foundation for any successful career in both the private and public business sectors.

22207

Accounting Transactions and Business Decisions

6cp; prerequisite(s): 22107 Accounting for Business
Undergraduate

This subject continues the study of accounting as an information system and equips students with the appropriate accounting skills necessary to participate in a managerial capacity in the analysis of accounting information as it is used to facilitate and enhance decision-making, accountability and control. Ethical implications of decisions are considered throughout the subject. The subject covers areas in both financial and management accounting, including the preparation and examination of accounting reports for partnerships and companies; the development of relevant cost concepts used in cost systems and the use of this information in performance evaluation. A computer software package is used in the review and presentation of accounting information.

22240

International Accounting

6cp; prerequisite(s): 22107 Accounting for Business
Undergraduate

In a rapidly changing world environment, the significance of international accounting has grown substantially, along with the expansion of international business activity. This subject enables students to explore the complexity and diversity of the international dimensions of accounting. It introduces a range of issues with special reference to the comparative development of national accounting systems, international accounting standards and transnational reporting issues. The subject covers a number of important areas and does not only inform students about the major issues, ideas and developments, but also stimulates further inquiry and debate.

22320

Accounting for Business Combinations

6cp; prerequisite(s): 22207 Accounting Transactions and Business Decisions
recommended: to be taken at the same time as 22420 Accounting Standards and Regulations
Undergraduate

Together with 22420 Accounting Standards and Regulations, this subject deals with the application and analysis of prescribed accounting treatments and surveys the institutional and legal framework of modern Australian

accounting. It refers to international accounting standards and local and overseas standards and exposure drafts and emphasises reporting – main topics include accounting for companies including debt and equity and its restructuring, accounting for acquisition of assets including business enterprises, valuation and goodwill, consolidated accounts of complex economic entities, accounting for associate companies and joint ventures, corporate restructuring and liquidation. The subject deals with preparation of accounts to meet corporate law and professional disclosure requirements and looks at emerging issues and exposure drafts. It makes extensive use of spreadsheet programs. Students are expected to produce business-quality reports using word-processing programs.

22321**Cost Management Systems**

6cp; prerequisite(s): 22207 Accounting Transactions and Business Decisions
Undergraduate

This subject introduces students to the basic concepts underlying management accounting with a particular emphasis on current developments. It introduces appropriate cost management concepts, techniques and skills such as cost planning, cost behaviour, cost estimation, and cost accumulation and allocation systems (job, process and activity-based costing). It emphasises using accounting information to understand and make decisions about the management of the cost structure of an organisation.

22420**Accounting Standards and Regulations**

6cp; prerequisite(s): 22207 Accounting Transactions and Business Decisions
recommended: to be taken at the same time as 22320 Accounting for Business Combinations
Undergraduate

This subject provides students with the ability to understand, critically evaluate and apply accounting standards and interpret financial reports. It considers the financial reporting environment and factors influencing the form of financial reporting, and addresses a range of accounting issues from within a contracting cost framework.

22566**Accounting for Small Business 1**

6cp
Undergraduate

This subject develops the knowledge and skills required by accountants in dealing with the problems which are unique to their professional work in the small business sector. It highlights and emphasises the practical matters associated with the initiation and growth of a small business.

Topics covered include an overview; the requirements of establishing a business – the steps and structures; economic business cycles' growth and future; acquiring and/or financing the business; accounting – records, control, costing and pricing; financial analysis and management; appraisals and acquisitions; the growing trend towards franchising as a form of small business; taxation and tax planning; insurance and risk; business disaster planning and recovery; and business and financial planning and budgeting.

22567**Accounting for Small Business 2**

6cp; prerequisite(s): 22207 Accounting Transactions and Business Decisions
Undergraduate

This subject provides students with the skills and knowledge of the techniques used to analyse financial data for small and medium enterprises; how to apply these techniques with the aid of microcomputers and appropriate software; and how to develop integrated business plans to assist in the decision-making process in those enterprises.

Topics covered include an outline and a revision of basic spreadsheet terminology and function; data collection and analysis; cost-volume-profit relationships; budgeting and other planning models; cash-flow analysis and capital expenditure budgets; business valuation; and performance evaluation.

22605**Accounting Information Systems**

6cp
Undergraduate

This subject introduces the role of information systems in supplying both qualitative and quantitative financial information to management within large organisations. Sponsoring organisations assist by allowing students to investigate 'real life' information systems in

practice. Extensive practical experience on PCs allows students to be fully productive in their subsequent first Industrial Experience semester.

22610

Accounting for Insolvency

6cp

Undergraduate

This subject provides students with the accounting knowledge needed for businesses which are being liquidated; studies the characteristics and financial management mistakes leading to the failure of such businesses; and introduces the accounting requirements of deceased estates. Topics covered include executorship; bankruptcy; the practice of termination accounting; and case studies, including financial management aspects of failed businesses.

22746

Managerial Accounting

6cp

Postgraduate

Management accounting information systems are one of the main decision-support systems in organisations. This subject equips students with the skills and knowledge to design and use effective management accounting information for planning and controlling organisational activities. Topics include absorption costing, cost behaviour and cost-volume-profit analysis, budgetary planning and control, differential costs, activity-based costing, and standard costing and variance analysis.

22747

Accounting for Managerial Decisions

6cp; prerequisite(s): four years' work experience

Postgraduate

This subject introduces students to the basics of financial and management accounting. Topics include the nature and purpose of accounting, accounting reports (balance sheets, profit and loss statements, cash flow statements) and analysing accounting; accounting reports and financial reports; the nature of management accounting and cost concepts; strategic planning and budgeting; cost accumulation systems (traditional costing systems and activity-based costing systems); and responsibility accounting (the management control structure, and analysing and reporting on performance).

24108

Marketing Foundations

6cp

Undergraduate

This subject covers the basic principles of marketing. It develops an understanding of the overall process of marketing planning, implementation and control in the contemporary business environment and also develops a basic understanding of marketing information systems; market research and marketing ethics; market segmentation; buyer behaviour; product development; and the development of product, distribution, promotion and pricing strategies for both goods and services domestically and internationally.

24202

Consumer Behaviour

6cp; prerequisite(s): 24108 Marketing Foundations

Undergraduate

This subject provides a basic theoretical grounding in the field of consumer behaviour, by drawing upon the contributing disciplines of psychology, social psychology, sociology, anthropology, communication and economics. It develops a better understanding and awareness of consumers as the central focus of marketing action and encourages students to appreciate the value of models as tools of conceptual analysis. Marketing strategy is considered within a broader social framework involving public policy formulation and embracing such issues as ethics, regulations and consumerism as necessary considerations in an increasingly competitive and constrained social, political and economic environment.

24205

Business Marketing

6cp; prerequisite(s): 24108 Marketing Foundations

Undergraduate

This subject focuses on the buying and selling of goods and services between firms, which constitutes 60-80 per cent of all marketing activity. It develops the special skills and concepts needed to function effectively in this setting, including personal selling, negotiation, preparation of bids, the sales-purchasing interface, relationship marketing and relationship management. It introduces the wider context in which business marketing sits – the distribution channel and network of connected firms in the wider domestic and international markets.

24210

Advertising and Promotions Management

6cp; prerequisite(s): 24108 Marketing Foundations; 24202 Consumer Behaviour
Undergraduate

This subject examines advertising, promotion and other marketing mix communications decisions from an applied viewpoint based on theory and current practice. It provides students who might be potential brand managers, advertising managers or executives with systematic approaches to setting advertising and promotion objectives, establishing budgets, identifying relevant target audiences, formulating and testing strategies, and evaluating campaign results. It considers contemporary issues in advertising, together with reference to complementary aspects such as publicity, sponsorship and direct marketing.

24220

International Marketing

6cp; prerequisite(s): 24108 Marketing Foundations
Undergraduate

This subject introduces international marketing using the marketing concept, and considers how international marketing strategies are affected by environmental factors. Students are expected to develop international marketing strategies for Australian firms which reflect the way marketing concepts and marketing mix elements need to be modified when applied to overseas markets because of differences in the political, economic, legal and cultural environments.

24307

Electronic Business

6cp; prerequisite(s): 24108 Marketing Foundations
Undergraduate

This subject introduces students to emerging electronic business environments. It presents an overview of the technological elements of electronic environments using the Internet as an exemplar for emerging electronic business initiatives within the World Wide Web. It emphasises the ways in which organisations are rethinking their building of customer relationships and explores, at an introductory level, the legal, social and organisational issues related to the development of virtual communities and corporations within emerging electronic environments.

24309

Introductory Marketing Research

6cp; prerequisite(s): 24108 Marketing Foundations; 26133 Business Information Analysis
Undergraduate

This subject introduces students to the concepts and practices of marketing research. Topics covered range from research problem definition to research design, implementation and finally interpretation of research results. The subject specifically focuses on Australian practices, procedures and ethics. Considerable focus is placed upon the microcomputer and its role in modern research. Skill development in both spreadsheet and statistical applications software is a key aim.

24726

Economics and Marketing in the New Economy

6cp
Undergraduate

This subject introduces the factors shaping the new economy in the Internet age. Global economics, emerging business models, intermediation and e-markets are covered together with marketing fundamentals, marketing to consumers and marketing to an online audience. The concepts of Customer Relationship Management (CRM) and Supply Chain Management (SCM) are introduced.

25115

Economics for Business

6cp
Undergraduate

This subject develops an understanding of basic economic principles and their application to business decision making and business strategy. It provides a foundation for further studies in business, economics and finance. It provides students with the ability to read and understand analyses presented in the financial and business media and be able to effectively participate in the formulation of business strategies.

25210

Microeconomic Theory and Policy

6cp; prerequisite(s): 25115 Economics for Business
Undergraduate

This subject shows how and why governments become involved in private sector activity. It emphasises the theoretical justification for regulation, the nature of market

failure justifying the regulation and the consequences. Topics include cost-benefit analysis, public enterprise, deregulation and privatisation, competition policy, trade and industry theory and policy.

25303

Industry Economics

6cp; prerequisite(s): 25115 Economics for Business
Undergraduate

This subject examines the changing structure, conduct and performance of Australian industry within the context of international restructuring. Issues include barriers to entry, oligopoly pricing, vertical integration, market structures and technological change, and mergers and takeovers in a theoretical and empirical context. Emphasis is placed on practical analysis of firm behaviour in a market.

25309

Macroeconomic Theory and Policy

6cp; prerequisite(s): 25115 Economics for Business
Undergraduate

This subject traces the development of classically-oriented and Keynesian-oriented theory and seeks to identify how these theoretical developments have affected the way policies are put into practice when addressing key macroeconomic issues. These issues include the operation of monetary and fiscal policy; inflation and unemployment; business cycle theory; and international influences on the domestic economy.

25559

New Start Financing and Valuation

6cp; prerequisite(s): 25300 Fundamentals of Business Finance
Undergraduate

This subject introduces students to the concepts of entrepreneurship and explores the practical issues facing a new company as it develops and grows. Topics include the funding options for new businesses, the valuation of such firms and the sources of advice and assistance that are available to the new business owner/manager.

25705

Financial Modelling and Forecasting

6cp
Postgraduate

This subject introduces students to various models and tools used in financial planning. Students learn basic forecasting techniques as well as the fundamentals of risk analysis and how risk may be incorporated into financial simulation models. The subject develops students' ability to implement theoretical concepts developed and used in other subjects.

25742

Financial Management

6cp; prerequisite(s): four years' work experience
Postgraduate

This subject provides the analytical framework for corporate financial decisions. It introduces students to financial theory and to the tools of financial decision making and is concerned primarily with investment project evaluation and determining the financing mix necessary to achieve the firm's financial objectives. Topics include the conceptual basis of financial decisions, accounting statements and cash flow, net present value, the valuation of debt and equity, capital budget issues, risk and return, the capital asset pricing model (CAPM), and capital structure – determinants of the optimal balance of debt and equity, dividend policy, and leasing.

33190

Mathematical Modelling for Science

6cp; 6hpw; prerequisite(s): no formal prerequisite but a knowledge of 2 units of HSC Mathematics is assumed

Semester offered: Autumn, Spring
Offered at: City campus

Topics covered in this subject include: functions and their relationship to scientific experiments; differentiability; differential equations arising from scientific problems; solution by series; radioactive decay and exponential functions; oscillatory motion and trigonometric functions; integration; the logarithm function; inverse functions; inverse trigonometric functions; and solution of differential equations by integration and inverse functions. The computer algebra system *Mathematica* is used for symbolic, graphical and numerical computations.

33290**Computing and Mathematics for Science**

6cp; 6hpw; prerequisite(s): 33190 Mathematical Modelling for Science

Semester offered: Spring, Summer

Offered at: City campus

In the computing component of this subject students study a range of computing modules designed to give them basic computing application skills and some more advanced modules appropriate to their particular discipline. The mathematics component includes studies of simultaneous linear equations and their occurrence in scientific problems; methods for solving these equations using matrices and determinants; eigenvalues and eigenvectors; vectors in two and three dimensions; products of vectors; spatial geometry and coordinate systems; functions of several variables; partial derivatives; optimisation; and method of least squares. The computer algebra system *Mathematica* is used for symbolic, graphical and numerical computations.

33401**Introductory Mathematical Methods**

6cp; 3hpw

Topics covered include: matrices and determinants; gaussian reduction; solution of linear equations; eigenvalues and eigenvectors; vectors; products of vectors; equations of lines and planes; complex numbers; polar form and de Moivre's theorem; linear independence of vectors; rank of a matrix; symmetric matrices; quadratic forms; differentiation and integration of functions of one variable; functions of several variables; partial derivatives; maxima and minima; Taylor's theorem; gradient and Hessian; and classification of critical points.

35140**Operations Research Modelling**

6cp; 4hpw

This subject is an introduction to operations research methodology. A variety of problems from manufacturing, construction, transportation and finance are considered, together with approaches to the formulation of the corresponding mathematical models. Solutions for the models are obtained using decision support software with particular emphasis on spreadsheets and their uses in business applications. The art of model building is discussed in conjunction with an introductory description of several important solution

methods and notions of matrices, determinants and vectors.

35151**Statistics 1**

6cp; 6hpw

Topics covered include: describing and exploring data; producing data; probability; random variables; introduction to inference; inference for distributions; inference for categorical data; regression; analysis of variance; and distribution-free inference.

35241**Optimisation 1**

6cp; 4hpw; prerequisite(s): 35102 Mathematics 2; 35140 Operations Research Modelling

Topics covered include: fundamental ideas of optimisation; the two-phase simplex method and the revised simplex method; duality theory; the dual simplex method and the cutting plane method; sensitivity analysis; and first- and second-order optimality conditions for nonlinear programming.

35252**Statistics 2**

6cp; 4hpw; prerequisite(s): 35102 Mathematics 2; 35151 Statistics 1

Topics in this subject include: probability; random variables and their probability distributions; multivariate probability distributions; functions of random variables; sampling distributions and the Central Limit Theorem; applications to estimation; and multivariate normal distribution.

35281**Numerical Methods¹**

6cp; 4hpw; prerequisite(s): 35102 Mathematics 2; 35151 Statistics 1; 35170 Introduction to Computing or 31465 Object-oriented Programming

This subject is an introduction to numerical analysis, including the study of: solution methods for nonlinear equations, systems of linear equations (LU factorisation and iterative methods), interpolation, numerical differentiation and integration, orthogonal polynomials and approximation theory, the Euler and Runge-Kutta methods for initial value problems, and finite difference methods for boundary value problems. Further work on the use of spreadsheet modelling, including coverage of command macros is also dealt with.

¹ This subject was formerly called Numerical Analysis 1.

35342**Optimisation 2**

6cp; 4hpw; prerequisite(s): 35241 Optimisation 1

This subject covers the following topics: branch-and-bound methods and column generation for integer programming; parametric linear programming; numerical methods for unconstrained nonlinear optimisation; Newton's method; conjugate direction method; numerical methods for constrained nonlinear optimisation, feasible direction methods, penalty and barrier methods; and introduction to stochastic programming.

35344**Network Optimisation**

6cp; 4hpw; prerequisite(s): 35241 Optimisation 1

Topics covered include: transportation problems; the transportation simplex method; assignment problems; trans-shipment problems; shortest path problems; maximum flow problems; project planning and scheduling; CPM cost models; network simulation models; minimum-cost network flow problems; network simplex method; out-of-kilter algorithms; algorithm analysis; auction algorithm; and solution of problems using commercially available software.

35353**Regression Analysis**

6cp; 4hpw; prerequisite(s): 35252 Statistics 2

Topics in this subject include: simple and multiple linear regression; general linear models; weighted regression; diagnostics and model building; analysis of covariance; regression graphics; and introduction to nonlinear regression.

35355**Quality Control**

6cp; 4hpw; prerequisite(s): 35252 Statistics 2

This subject covers the following topics: total quality management; process control for attributes and variables, introducing Shewhart, Cusum, and EWMA control charts and covering regular, short, multiple-stream and serially correlated processes; acceptance sampling for attributes and variables; process capability analysis, including nonconforming ppm, capability ratios and Taguchi quality loss; tolerance analysis covering linear and nonlinear combinations of components, and Taguchi's method; and reliability analysis, including reliability measures, bounds and

estimation for individual components and systems, and spare parts provisioning.

35356**Design and Analysis of Experiments**

6cp; 4hpw; prerequisite(s): 35212 Linear Algebra, 35252 Statistics 2

Topics covered include: introduction to general concepts of the design of experiments; completely randomised, randomised complete block and Latin square designs; multiple comparisons; factorial designs; and introduction to Taguchi designs and response surface designs.

35361**Probability and Stochastic Processes**

6cp; 4hpw; prerequisite(s): 35252 Statistics 2

Topics in this subject include: probability; random variables and expectations; limit theorems; Markov chains; the Poisson process; and birth and death processes.

35363**Simulation Modelling**

6cp; 4hpw; prerequisite(s): 35170 Introduction to Computing

General principles of Monte Carlo and discrete event simulation. Simulation software and languages. Poisson process, birth-and-death models, queuing models with one and several servers. Pseudorandom number generation and the corresponding statistical tests, evaluation of integrals using random numbers. Generation of continuous and discrete random variables, inverse transform technique, convolution method, acceptance-rejection technique. Verification and validation of simulation models. Output analysis for a single simulation model, analysis of terminating simulations, analysis of steady-state performance. Comparison and evaluation of alternative system designs. Variance reduction techniques.

35383**High Performance Computing**

6cp; 4hpw; prerequisite(s): 35281 Numerical Methods

This subject examines some of the main aspects of high performance computing, particularly as applied to problems arising in scientific and technological applications. The solution of such problems is often computationally intensive, and the use of parallel

computer systems and programs in their solution can provide substantial benefits. Topics include: the modern Fortran 95 programming language, the use of MPI (in distributed memory environments) and OpenMP (in shared memory environments) to implement parallel programs.

48210

Engineering for Sustainability

6cp

Undergraduate

Upon completion of this subject, students should be able to demonstrate development in the following areas:

- orientation to university study
- ability to read critically and write appropriately in a variety of academic contexts
- appreciation of the social and historical contexts of engineering
- awareness of different definitions of 'progress'
- awareness of what is 'professionalism'
- appreciation of the role of codes of ethics, and
- appreciation of the principles of sustainability.

This subject takes students on a journey into the past, present and future of engineering and its relationship to society and the environment. They choose one of several module groups based around broad engineering-related themes.

Within these modules, students examine the contributions made by engineers in their respective areas, how they were received by and benefited different groups in society, and what impact they had on the environment. Current and historical case studies from our local communities as well as from other parts of the world are used to illustrate the different ways in which technologies have evolved and have been valued.

The subject is taught by an interdisciplinary team who will present lectures, and facilitate interactive workshops.

50140

Comparative Social Change

8cp

The aim of this subject is to provide students with an understanding of the processes of modernisation and social change in a comparative context using case studies in

countries of Western Europe, Latin America, East and South-East Asia. The lectures highlight a number of key issues, e.g. whether the processes of social change are universal or specific; the consequences of modernisation in and for the economy, politics, society, culture and ideology of non-Western societies and whether the established Eurocentric analytical models are still useful in understanding the modern world. Students gain an understanding of differing interpretations of modernisation flowing from various relations of power and the multiplicity of views regarding the meaning and significance of modernisation.

50293

Community Research Elective (UG)

6cp

This subject provides single or multidisciplinary-based learning options for students in all courses in a flexible learning environment. The subject is carried out with a community partner, organised and administered through UTS Shopfront and supervised by relevant academics. The subject aims to give students the opportunity to develop their intellectual and professional skills to a high degree of excellence in a real-life environment. Through this elective students are able to put their research skills to the test, establishing the relevance of academic frameworks and research methodologies. While having access to an academic supervisor and to advice from UTS Shopfront staff, students are required to be substantially self-motivating. They must be capable of bridging the divide between university and community, bringing to bear theoretical or policy debates in what are often very specific social settings. The elective offers a challenging but highly rewarding experience, and has been used as a way of opening up options for more in-depth social research, e.g. through the Social Inquiry Honours program.

50294

Community Research Elective (UG)

8cp

This subject provides single or multidisciplinary-based learning options for students in all courses in a flexible learning environment. The subject is carried out with a community partner, organised and administered through UTS Shopfront and supervised by relevant academics. The subject aims to give students the opportunity to develop their intellectual

and professional skills to a high degree of excellence in a real-life environment. Through this elective students are able to put their research skills to the test, establishing the relevance of academic frameworks and research methodologies. While having access to an academic supervisor and to advice from UTS Shopfront staff, students are required to be substantially self-motivating. They must be capable of bridging the divide between university and community, bringing to bear theoretical or policy debates in what are often very specific social settings. The elective offers a challenging but highly rewarding experience, and has been used as a way of opening up options for more in-depth social research, e.g. through the Social Inquiry Honours program.

50295

Community Research Elective (PG)

6cp

This subject provides single or multidisciplinary-based learning options for students in all courses in a flexible learning environment. The subject is carried out with a community partner, organised and administered through UTS Shopfront and supervised by relevant academics. The subject aims to give students the opportunity to develop their intellectual and professional skills to a high degree of excellence in a real-life environment. Through this elective students are able to put their research skills to the test, establishing the relevance of academic frameworks and research methodologies. While having access to an academic supervisor and to advice from UTS Shopfront staff, students are required to be substantially self-motivating. They must be capable of bridging the divide between university and community, bringing to bear theoretical or policy debates in what are often very specific social settings. The elective offers a challenging but highly rewarding experience, and has been used as a way of opening up options for more in-depth social research, e.g. through the Social Inquiry Honours program.

50296

Community Research Elective (PG)

8cp

This subject provides single or multidisciplinary-based learning options for students in all courses in a flexible learning environment. The subject is carried out with a community partner, organised and administered through UTS Shopfront and supervised by relevant

academics. The subject aims to give students the opportunity to develop their intellectual and professional skills to a high degree of excellence in a real-life environment. Through this elective students are able to put their research skills to the test, establishing the relevance of academic frameworks and research methodologies. While having access to an academic supervisor and to advice from UTS Shopfront staff, students are required to be substantially self-motivating. They must be capable of bridging the divide between university and community, bringing to bear theoretical or policy debates in what are often very specific social settings. The elective offers a challenging but highly rewarding experience, and has been used as a way of opening up options for more in-depth social research, e.g. through the Social Inquiry Honours program.

59304

English for Academic Purposes 1

8cp; prerequisite(s): IELTS score 5.0 (students with an IELTS of 6.0 and above are exempt from this subject)

This is the first of two subjects specifically for international students. The aim of these subjects is to ensure that students' language and study skills have developed sufficiently to enable them to successfully participate in classes alongside other UTS students.

The subjects focus on developing the language and learning skills required for tertiary study in Australia. They integrate the four macro-skills – reading, writing, listening and speaking – into a thematic approach which looks at a variety of contemporary issues in Australian culture and society. These issues are linked to subjects which may be studied in subsequent years at UTS. Students take a critical/analytical approach to understanding and producing written and spoken texts appropriate for an Australian tertiary context.

59305

English for Academic Purposes 2

8cp; prerequisite(s): IELTS score 6.0 or 59304 English for Academic Purposes 1

This is the second of two subjects specifically for international students. The aim of these subjects is to ensure that students' language and study skills have developed sufficiently to enable them to successfully participate in classes alongside other UTS students.

The subjects focus on developing the language and learning skills required for tertiary study

in Australia. They integrate the four macro-skills – reading, writing, listening and speaking – into a thematic approach which looks at a variety of contemporary issues in Australian culture and society. These issues are linked to subjects which may be studied in subsequent years at UTS. Students take a critical/analytical approach to understanding and producing written and spoken texts appropriate for an Australian tertiary context.

59306**Researching Australia 1 – Ethnography**

8cp; prerequisite(s): IELTS score 5.0

This is the first of two subjects specifically for international students in the Advanced Diploma in Australian Language and Culture. The aim of these subjects is to introduce students to a range of intercultural issues and to investigate the cultural norms of Australian society through the application of specific research methods. At this level, students use ethnographic techniques to investigate aspects of contemporary Australian experience.

59307**Researching Australia 2 – Researching for Study**

8cp; prerequisite(s): IELTS score 6.0 or 59306

Researching Australia 1 – Ethnography

This is the second of two subjects specifically for international students in the Advanced Diploma in Australian Language and Culture. The aim of these subjects is to introduce students to a range of intercultural issues and to investigate the cultural norms of Australian society through the application of specific research methods. At this level, students use questionnaire and interview techniques to investigate aspects of contemporary student life and present their research both orally and in written report form.

59308**Australian Society and Culture 1**

8cp; prerequisite(s): IELTS score 5.0

This is the first of two subjects specifically for international students in the Advanced Diploma in Australian Language and Culture. In these subjects students are introduced to several aspects of Australian society and culture: the indigenous experience; aspects of rural and urban Australia; the history of migration; and the development of multiculturalism. Students explore these aspects through film, documentaries, literature,

music, art, sport events, etc. Visits to cultural institutions as well as presentations and guest lectures from experts are key features of these subjects.

59309**Australian Society and Culture 2**

8cp; prerequisite(s): IELTS score 6.0 or 59308

Australian Society and Culture 1

This is the second of two subjects specifically for international students in the Advanced Diploma in Australian Language and Culture. In these subjects students are introduced to several aspects of Australian society and culture: the indigenous experience; aspects of rural and urban Australia; the history of migration; and the development of multiculturalism. Students explore these aspects through film, documentaries, literature, music, art, sport events, etc. Visits to cultural institutions as well as presentations and guest lectures from experts are key features of these subjects.

59310**Postgraduate Study in Australia**

8cp; prerequisite(s): IELTS score 5.5 (minimum of 5.5 in writing); corequisite(s): enrolled in a postgraduate research degree at UTS

This is the first of three compulsory subjects in the Graduate Certificate in English for Academic Purposes (GCEAP) specifically for international students enrolled in a postgraduate research degree at UTS. The aim of this intensive subject is to provide students with a foundation in academic literacy and oracy skills required to start postgraduate studies at UTS.

This subject focuses on developing the language and learning skills required for tertiary study in an Australian university. It integrates the four macro-skills – reading, writing, listening and speaking – into a thematic approach which looks at a variety of contemporary issues in Australian culture and society. The subject also provides students with an understanding of studying at an Australian university and living in Australia.

59311**Academic English for Postgraduate Study**

8cp; prerequisite(s): 59310 Postgraduate Study in Australia or equivalent; corequisite(s): enrolled in a postgraduate research degree at UTS

This is the second of three compulsory subjects in the Graduate Certificate in English for Academic Purposes (GCEAP) specifically for international students enrolled in a postgraduate research degree at UTS. The aim of this intensive subject is to provide students with academic literacy and oracy skills required to be effective postgraduate students.

This subject focuses on developing the academic written and spoken language skills required for postgraduate study in the students' disciplines. These academic skills are developed in the context of students' areas of study and in conjunction with staff from faculties across UTS. Students take a critical/analytical approach to understanding and producing written and spoken texts appropriate for the Australian context. The subject focuses in particular on critical reading skills, paraphrasing and summarising, selecting, evaluating and using a variety of sources of information, developing written arguments, presenting seminars, etc. In this subject, texts are selected and assessment prepared jointly by academic literacy experts and postgraduate coordinators and supervisors in students' faculties.

59312**Postgraduate Academic Writing in Context**

8cp; prerequisite(s): 59311 Academic English for Postgraduate Study or equivalent; corequisite(s): enrolled in a postgraduate research degree at UTS

This is the final of three compulsory subjects in the Graduate Certificate in English for Academic Purposes (GCEAP) specifically aimed at international students enrolled in a postgraduate research degree at UTS. The aim of this subject is to provide students with ongoing integrated academic literacy and oracy support during the first semester of their postgraduate studies at UTS.

This subject focuses on consolidating postgraduate international students' academic literacy and oracy skills while they complete the first semester of postgraduate studies at UTS. The subject focuses on advanced skills in reading, text drafting and editing, the development of critical writing skills and the preparation of postgraduate assignments or research documents (articles, conference papers, etc.).

59314**Australian English Language and Culture 1**

24cp; 20hpw

This subject enables international students from language backgrounds other than English to develop their English language skills through the study of aspects of contemporary Australian society and culture. Through both class activities and excursions, it introduces students to a range of intercultural issues and provides them with opportunities to interact with native speakers in order to develop the cultural understanding, skills, knowledge and confidence required to use English and participate actively in a variety of settings. The subject focuses particularly on oral skills and includes some participation in mainstream University classes. Students complete a major project using ethnographic research techniques.

59315**Australian English Language and Culture 2**

24cp; 20hpw; prerequisite(s): 59314 Australian English Language and Culture 1 or equivalent

This subject continues the language skill development of 59314 Australian English Language and Culture 1 and extends student participation in mainstream University classes. Students complete a number of field projects on topics relating to their own interests or study areas. Lecturers coordinate student progression through these projects through individual and group meetings, presentations by guest speakers, excursions and readings.

59318**Seminar Presentation**

6cp; over 10 weeks

This elective is one of five subjects offered by the ELSSA Centre and it is aimed at non-English-speaking-background students who need to develop their seminar presentation skills. It focuses on the analysis of topics relevant to different academic areas of study and the development of seminar presentation skills.

59319**Communication for Employment**

6cp; over 10 weeks

This elective is one of five subjects offered by the ELSSA Centre and it is aimed at non-English-speaking-background students who

need to develop their employment-seeking skills. It focuses on the analysis of recruitment advertisements relevant to different academic areas of study, and the development of writing and speaking skills required for gaining employment. It also covers work-related communication skills.

59320**English for Business**

6cp; over 10 weeks

This elective is one of five subjects offered by the ELSSA Centre and it is aimed at non-English-speaking-background business students who need to develop their written and spoken communication skills. It focuses on the critical analysis of topics relevant to business study, the development of essay outlines, report outlines, seminar structures and the final preparation of an essay, a report and a seminar.

68101**Foundations of Physics**

6cp; 6hpw

This is a foundation physics subject primarily for students in the physical sciences. It covers the fundamentals of dynamics and statics, fluid mechanics, thermal physics, waves and electricity. A strong emphasis is placed on the investigative nature of physics research with an integrated laboratory program developing further the problem-solving skills of the lecture and tutorial material to an appreciation of good experimental design and significance in information obtained under real-life modelling situations.

68201**Physics in Action (Physics 2)**

6cp; 6hpw; prerequisite(s): 68101 Foundations of Physics

This subject extends the material studied in 68101 Foundations in Physics, with statics and dynamics extended to a study of rotation, thermal physics extended to the first two laws of the thermodynamics, and waves extended to a study of geometrical optics and optical devices. At the same time, students are introduced to electric circuitry and electromagnetism and commence a historical study of atomic and nuclear physics.

68311**Atoms, Photons and Orbits (Physics 3)**

6cp; 5hpw; prerequisite(s): 33190 Mathematical Modelling for Science or equivalent; 68201 Physics in Action [Physics 2]; corequisite(s): 33290 Computing and Mathematics for Science

First-year mathematical techniques enable students in this subject to extend the understanding and modelling of mechanics and optics to more real-world situations and at the same time explores the exciting evolution from Newtonian Physics to Quantum Physics. It provides the foundation for later core physics subjects, the emphasis of the subject being mainly theoretical, but it has an experimental component applying the explorative first year techniques to optical experimentation, a study of radioactivity and computer simulation of dynamical systems.

Mechanics topics include the generalisation of kinematics to 3D motion and orbital mechanics. Optics studies include refraction, lenses, photography, the dispersion of light, aberrations, polarisation and scattering phenomena. 'Modern' physics studies the basic properties of the atom, radioactivity and relativity and lead into an introductory segment on Quantum Physics.

68312**Electrotechnology and Data Analysis**

6cp; 5hpw; prerequisite(s): 68201 Physics in Action [Physics 2]; 33290 Computing and Mathematics for Science

Scientific writing, rigorous analysis and a command of methods of presentation are essential tools for the physicist of the 21st century. In this subject, students study the concepts of electricity, electromagnetism and electrical measurements and their application to dynamical systems, and at the same time explore contemporary techniques of analysis of experimental data. These two areas are integrated into a project component which develops further the skills of experimental design developed in 68101 Foundations of Physics in an electromagnetic context, and enables the students to become critical analysers of their own and others' experimental work.

68314**Electronics**

6cp; 5hpw; prerequisite(s): 68201 Physics in Action (Physics 2); 33290 Computing and Mathematics for Science

This subject develops students' understanding of the basic building blocks of electronic circuits. Review of circuit theory, semiconductor theory, diodes and bipolar transistors, transistors as switches and linear devices, introduction to digital electronics, logic gates, latches and counters, frequency characteristics and feedback in amplifiers, operational amplifiers. Hands on learning, guided discovery activities in laboratory context are a key feature. The subject is equivalent to the Engineering subject 48520 Electronics.

68411**Vibrations, Quanta and Nucleons (Physics 4)**

6cp; 5hpw plus 1hr flexible; prerequisite(s): 68311 Atoms, Photons and Orbits (Physics 3); 33290 Computing and Mathematics for Science; 33390 Mathematics and Scientific Software or equivalent

This subject aims to complete the basic core physics training for Applied Physics students by applying the treatment of mechanics to vibrations, variable mass and fluid flow and to the special features of the mechanics of the atom. Students learn the basic techniques of quantum mechanics to begin to understand the findings of atomic theory introduced in 68311 Atoms, Photons and Orbits (Physics 3). Processes involving the considerable forces associated with the inner structure of the nucleus are studied to provide an understanding of the power of nuclear applications in the fields of medicine and forensic science. This is core material, providing the foundation for a study of the solid-state and leads directly into the subject 68511 Quantum and Solid-state Physics.

68514**Electronics and Interfacing**

6cp; 5hpw; prerequisite(s): 68314 Electronics; 48520 Electronics and Circuits or equivalent instrumentation experience

The subject further develops students' understanding of computer interfacing in applied physics and science in general. Students learn how to construct functioning interfaces and the role of digital electronics. Digital electronics, computer interfacing, and the use of the LabView package are the main

components of the subject. A sequence of small projects involves the design and construction of circuits and interfaces and is a key feature of the subject. This subject is useful to students in science courses who have an interest in developing their skills in the instrumentation and interfacing areas, with project work oriented to students' needs and interests.

70105**Legal Research**

4cp; corequisite(s): 70217 Criminal Law; 70211 Law of Contract

Undergraduate and Postgraduate

This subject aims to familiarise students with the basic tools available to engage in legal research. It includes an introduction to various paper-based resources (citations, digests, etc.).

Students are also introduced to the use of computerised systems as an aid to legal research. The emphasis is on Internet-based systems such as AustLII, Scale Plus and Butterworths Online. CD-ROM products are also briefly covered.

70113**Legal Process and History**

10cp; corequisite(s): 70217 Criminal Law; 70211 Law of Contract

Undergraduate and Postgraduate

This subject aims to introduce students to, and to provide students with, a sound working knowledge of the Australian legal and constitutional environment. The subject also aims to equip students with certain legal skills – in particular, the skills of case analysis, statutory interpretation, legal problem solving and critical analysis – which are essential to the study and practice of the law. Students are asked to consider what is law, who makes law, and how and why the law has developed in the way that it has. They also examine the institutions that make up our legal system – the legislature, the Crown and the executive, the courts and the 'legal players' (the judge, the jury and the legal practitioner) – and explore the principles and doctrines that underpin our legal system. Further, they are asked to consider why our legal system is so different from that of some of our regional neighbours, and to evaluate the strengths and weaknesses of the common law legal system. Valuable insight into the way our legal system operates may be gained through using a

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historical approach, and this means delving back into English, as well as Australian, legal and constitutional history. Such an approach also facilitates refinement of critical analysis skills. At the end of the subject, students should have a fully developed understanding of the western legal tradition, the place of common law in that system, and the ramifications of living under a Westminster parliamentary system as well as a federal system.

70211

Law of Contract

8cp; prerequisite(s): 70113 Legal Process and History; corequisite(s): 70105 Legal Research Undergraduate and Postgraduate

This subject deals with the legal principles related to binding promises, the difficulties arising out of their interpretation, how they may become defeasible, issues relating to their performance, and how they may be discharged. Topics covered include the formation of contracts (agreement, consideration, intention, writing); content and construction; vitiating factors (capacity, privity, mistake, misrepresentation, illegality, duress, undue influence, unconscionability); discharge by performance and non-performance of contractual obligations (breach and frustration); and contractual remedies.

70217

Criminal Law

6cp; corequisite(s): 70113 Legal Process and History; 70105 Legal Research Undergraduate and Postgraduate

This subject deals with the substantive criminal law, the doctrines and rules that define the conditions of criminal liability and some aspects of the procedural law. Australian common law doctrine and the Crimes Act 1900 (NSW) are considered. Topics include the nature of crime; the doctrine of mens rea and actus reus; presumption of innocence; offences against the person; property offences; strict liability; complicity; criminal defences; criminal investigation and procedure; and drug law.

70311

Law of Tort

8cp; prerequisite(s): 70113 Legal Process and History; corequisite(s): 70105 Legal Research Undergraduate and Postgraduate

This subject discusses the functions and aims of the tort. It then examines the nature of tortious liability in the light of a selection of specific torts, namely, trespass to the person, goods and land; the action on the case for wilful injuries; conversion; negligence; nuisance; and defamation. Reference is also made to defences, vicarious liability and contribution between tortfeasors.

Attention is drawn to the relevance of the type of conduct complained of (intentional, reckless, careless); the nature of the various interests protected (personal security, chattels, land, reputation, economic interests, domestic relations); the adaptability of tort law to changing needs and values of society (thus the introduction, dominance and current perceived limitations of the fault concept); and the element of policy expressed or implied in judicial decisions.

70317

Real Property

8cp; prerequisite(s): 70211 Law of Contract; corequisite(s): 70311 Law of Tort Undergraduate and Postgraduate

Topics covered include agreements for sale of land; time for completion; Torrens title and priorities; old system, possessory, qualified and limited title; fixtures; trespass to land; co-ownership; easements; covenants; mortgages; and leases.

70318

Personal Property

4cp; prerequisite(s): 70211 Law of Contract; corequisite(s): 70311 Law of Tort Undergraduate and Postgraduate

Topics covered include classifications of personal property, choses in action and choses in possession; acquisition of title to goods; law of bailment; insurance; securities interests in chattels; and law of negotiable instruments, with particular reference to cheques.

70417**Corporate Law**

8cp; corequisite(s): 70317 Real Property
Undergraduate and Postgraduate

The response of the law to the activities of business entities is dealt with in this subject. Although the emphasis is on corporations, there is a brief discussion of the manner in which non-corporate entities including partnerships are regulated. The study of corporations law includes an overview of the historical developments, the current method of regulation and the proposals for reform.

70516**Equity and Trusts**

8cp; prerequisite(s): 70317 Real Property;
corequisite(s): 70417 Corporate Law 71116
Remedies
Undergraduate and Postgraduate

Equity is a body of rules or principles developed in the Court of Chancery before 1873. The doctrines of equity developed as a response to defects in the English common law system, defects which had resulted in rigidity and inflexibility. A knowledge of the principles of equity is therefore crucial to a complete understanding of the law in those areas of private law, particularly property and contract, where equity intervened to modify the operation of the rules of the common law. In that sense, the doctrines of equity form part of the law of contract and property. The doctrine has also reached into other subject areas including taxation law, corporate law and succession. Equity also developed remedies, such as the injunction, which were unknown to the common law and which have a continuing influence in public law as well as private law.

70616**Federal Constitutional Law**

8cp; prerequisite(s): 70113 Legal Process and History; 70105 Legal Research; corequisite(s): 70211 Law of Contract
Undergraduate and Postgraduate

This subject examines the effect of the Australian Constitution on the legal and fiscal relationship of the Commonwealth, States, and Territories. In order that students develop an understanding of the techniques of judicial review in the constitutional context, a range of powers given to the Commonwealth is examined. These include trade and commerce, corporations, taxation and external affairs.

Other areas examined are explicit and implicit restrictions of power, the questions of inconsistency and intergovernmental relations. The general role of the High Court in Australian constitutional law is considered, along with the Separation of Powers Doctrine as it relates to the independence of the judiciary.

70617**Administrative Law**

8cp; prerequisite(s): 70616 Federal Constitutional Law
Undergraduate and Postgraduate

This subject deals with the supervision of the executive arm of government by the courts and by other statutory mechanisms. Topics include the grounds of review of administrative decisions, in particular natural justice; ultra vires; jurisdictional error and error of law; remedies available at common law upon judicial review, including the prerogative writs and equitable remedies; judicial review under the Administrative Decision (Judicial Review) Act 1976 (Cwlth); a review of Commonwealth decisions under the Administrative Appeals Tribunal Act 1976 (Cwlth); and the role and function of the Ombudsman. If time permits, freedom of information and privacy legislation will also be touched upon, and the role of the Independent Commission Against Corruption (ICAC).

71005**Practice and Procedure**

4cp; corequisite(s): 70516 Equity and Trusts
Undergraduate and Postgraduate

Practice and Procedure is a core subject that develops the student's understanding of the process of litigation from the commencement of proceedings through to the final hearings. Topics include statements of claim in contracts and torts; defence, cross-claims and replies; equitable proceedings; particulars; discovery, inspection and interrogatories; notice of motion; drafting affidavits; subpoenas; and advocacy skills.

71116**Remedies**

6cp; corequisite(s): 70516 Equity and Trusts
Undergraduate and Postgraduate

This subject deals with the range of court-ordered remedies available to a plaintiff in civil proceedings. The more common remedies are those administered at either common law

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or in equity: damages; equitable remedies (declarations, specific performance, injunctions, Anton Pillar orders, account, equitable damages); and statutory and common law remedies for deceptive conduct. Bankruptcy and insolvency is also considered.

71216

Law of Evidence

6cp; prerequisite(s): 70217 Criminal Law; corequisite(s): 70516 Equity and Trusts Undergraduate and Postgraduate

This subject deals with adjectival law and the determination of how information may be presented to the court in litigation, when such information is admissible in evidence, and how the rules of proof are applied. The inclusionary rule of relevance, the various exclusionary rules (such as hearsay, opinion, tendency, coincidence, credibility, character, privilege), and the judicial discretion to exclude are studied, as well as the incidence of the burden of proof.

85208

Reconciliation Studies

6cp
Undergraduate

Reconciliation is a key strategy for a sustainable future for Australia. By reconciliation we mean creating 'a united Australia which respects this land of ours; values the Aboriginal and Torres Strait Islander heritage; and provides justice and equity for all' (Council for Aboriginal Reconciliation, 1992). Reconciliation Studies introduces students to the challenges of this process. Core reconciliation issues are investigated and discussed, drawing on relevant life experiences, academic research and professional practice. Skills in applying reconciliation principles in a professional field, industry or community are developed, including the use of cultural plurality and diversity of perspectives found in reference material and the classroom.

85209

Reconciliation Studies

8cp
Undergraduate

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(Council for Aboriginal Reconciliation, 1992). Reconciliation Studies introduces students to the challenges of this process. Core reconciliation issues are investigated and discussed, drawing on relevant life experiences, academic research and professional practice. Skills in applying reconciliation principles in a professional field, industry or community are developed, including the use of cultural plurality and diversity of perspectives found in reference material and the classroom.

85210

Reconciliation Studies

6cp
Postgraduate

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85211

Reconciliation Studies

8cp
Postgraduate

Reconciliation is a key strategy for a sustainable future for Australia. By reconciliation we mean creating 'a united Australia which respects this land of ours; values the Aboriginal and Torres Strait Islander heritage; and provides justice and equity for all' (Council for Aboriginal Reconciliation, 1992). Reconciliation Studies introduces students to the challenges of this process. Core reconciliation issues are investigated and discussed, drawing on relevant life experiences, academic research and professional practice. Skills in applying reconciliation principles in a professional field, industry or community are developed, including the use of cultural plurality and diversity of perspectives found in reference material and the classroom.

95556**Technology, Society and Change**

6cp; prerequisite(s): 48cp of a degree must be completed

This subject examines and illustrates the interdependence and tensions between society, technology and change. It addresses the question of what is technology, and how this has influenced and has been influenced by social values and institutions.

Some of the following issues are looked at: How have many different societies valued and defined social justice? How are the tensions between technological and communal interests understood? How has technology been an instrument and product of society's struggle with power and control? How have different societies perceived progress? How have these perceptions shaped their past? How might they shape their future? How do different societies come to define and deal with risk? How have different societies valued and strived for the sustainability of life on earth? This subject provides an opportunity for students to recognise what new ways of thinking a transdisciplinary approach can offer. It also engages students in grappling with some of the tensions between discipline-specific discourses and transdisciplinary thinking.

95563**Digital Media Development Process**

6cp

This subject examines the nature of the interactive multimedia development process. It explores job specifications, multimedia development teams and roles, interactive media project methods, costs associated with development, and significant environmental issues affecting digital media production such as government policies and legislation, including copyright and intellectual property.

95564**Digital Media Technologies**

6cp

This subject contributes to the core sequence as an overview of some of the software and hardware technologies utilised in the development and maintenance of moderately complex websites exhibiting sophisticated interactivity and which require a more systematic approach to management. It provides an opportunity for students to

demonstrate an understanding of the skills and issues relevant to the creation and management of websites of moderate complexity. These skills may include simple HTML authoring, browser scripting with Javascript, interaction with back-end database environments using scripting engines such as ColdFusion, ASP, PHP and WebObjects, and other skills as appropriate.

95565**Digital Graphics and the Still Image**

6cp

This subject introduces students to the uses of typographic text, still images and graphic design in the production of online communications. Students are expected to master the core skills in these activities, and to produce several projects for assessment demonstrating their command of visual and written literacy in online communication.

95566**Digital Information and Interaction Design**

6cp

This subject is concerned with the planning and implementation of digital texts and environments. It explores the use and integration of visual, textual and aural components of these environments aimed at producing specific reactions or effects in targeted users. Includes issues in information and interaction design which contribute to building digital systems through which users can more effectively communicate, interact and learn.

95567**Digital Media in Social Context**

6cp

This subject uses the interdisciplinary approach of media studies to explore the debates around the role of the media in society, and the changes that digital media are reflecting and contributing to that role. It takes some of the common terms associated with the new media, such as information revolution, global village, collapse of time and space, globalisation, constant change and new forms of democracy, and analyses their usage in an historical context to facilitate an informed and critical view of the issues.

95568

Digital Sound and the Moving Image

6cp

This subject introduces students to the uses of sound and the moving image in the production of online communications. Students are expected to master the core production skills of recording, editing, interviewing and scripting in these media, and to produce several projects for assessment demonstrating their command of aural and visual literacy in online communication.

95569

Digital Media Project

12cp; prerequisite[s]: 48 credit points in the Master of Interactive Multimedia

This is the capstone project subject where students consolidate their knowledge and skills acquired in their studies. It involves the planning, development and production of a multimedia project by individuals or teams of students, and may incorporate work-based project work and/or work experience.

INTERNATIONAL STUDIES SUBJECTS

Language and Culture programs

97x111

Chinese Language and Culture

4 x 8cp

971111, 972111, 973111, 974111

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

The Chinese program is open to students who are either complete beginners, who first learnt Chinese at secondary school level in Australia or who already have a working knowledge of Chinese characters and communicative competence in a Chinese language other than Modern Standard Chinese. There are three points of entry into this program: Chinese Unit 1 for complete beginners; Chinese Unit 3 for students who have successfully completed HSC 2/3-unit Chinese; and Chinese Unit 7 for students who have a working knowledge of Chinese characters, as well as communicative competence in a Chinese language other than Modern Standard Chinese. Students in the combined degree take four consecutive units in the program, usually either units 1–4, 3–6 or 7–10, determined by their point of entry. Other programs may be negotiated according to the student's level of proficiency.

The Chinese language program is designed to provide students with the communicative skills necessary to undertake In-country Study in China. A communicative approach is adopted for classroom instruction and students are expected to participate fully in class activities in the process of acquiring practical language skills. The teaching incorporates an introduction to Chinese culture and helps students to appreciate the wider cultural

ramifications of Chinese in various contexts. The program lays a solid foundation for further cultural studies in Chinese.

Chinese Unit 1

8cp; 6hpw; prerequisite: nil

Chinese Unit 1 aims to develop in students a survival communicative ability in basic social interactions. It teaches students Pinyin, the official transcription system, as a guide to the pronunciation of the Chinese language, and some basic structures and devices of the language. Students are expected to know about 300 Chinese characters by the end of this unit.

Chinese Unit 2

8cp; 6hpw; prerequisite: Chinese Unit 1

Chinese Unit 2 continues to develop in students a survival communicative ability in basic social interactions. It also introduces students to some of the basic structures and devices of the language. Students are expected to know about 600–800 Chinese characters by the end of this unit.

Chinese Unit 3

8cp; 6hpw; prerequisite: Chinese Unit 2 or HSC 2/3-unit Chinese

Chinese Unit 3 is the entry point for students who have completed HSC 2/3-unit Chinese and who first learnt Chinese at school in Australia.

Chinese Unit 3 aims to further develop students' oral communicative competence in basic social interactions. More written texts are gradually introduced to enhance the ability of students to use Chinese characters. The basic structures and devices of the language are reinforced. Students are expected to know about 1,200 Chinese characters by the end of this unit.

Chinese Unit 4

8cp; 6hpw; prerequisite: Chinese Unit 3

Chinese Unit 4 is the second unit for students who have completed HSC 2/3-unit Chinese.

Chinese Unit 4 aims to further develop students' communicative competence in basic social interactions. More written texts are introduced to enhance the ability of students to use Chinese characters. The basic structures and devices of the language are also reinforced. Students are expected to know about 1,600 Chinese characters by the end of this unit.

Chinese Unit 5

8cp; 6hpw; prerequisite: Chinese Unit 4

Chinese Unit 5 is the third unit for students who first learnt Chinese at school in Australia and obtained HSC 2/3-unit Chinese.

Chinese Unit 5 aims to further develop students' communicative competence in general social interactions. While reinforcing the macro-skills of reading, writing, listening and speaking, this unit focuses on practical writing skills. Students are expected to know about 2,000 Chinese characters by the end of this unit.

Chinese Unit 6

8cp; 6hpw; prerequisite: Chinese Unit 5

Chinese Unit 6 is the fourth subject for students who have obtained HSC 2/3-unit Chinese with basic communicative skills and the ability to undertake In-country Study in China.

Chinese Unit 6 aims to further develop students' communicative competence in general social interactions. While reinforcing basic structures and devices of the language, this unit further develops students' writing skills. Students are expected to know about 2,500 Chinese characters by the end of this unit.

Chinese Unit 7

8cp; 4hpw; prerequisite: a working knowledge of Chinese characters as well as communicative competence in a Chinese language other than Modern Standard Chinese.

Chinese Unit 7 is for students who have a working knowledge of Chinese characters as well as communicative competence in a Chinese language other than Modern Standard Chinese.

This unit aims to develop communicative competence to meet students' needs in social and professional interactions where Modern Standard Chinese (also known as Mandarin, Putonghua or Guoyu) is used. Simplified characters, pronunciation, intonation and situational Chinese usages are the focus of class instruction.

Chinese Unit 8

8cp; 4hpw; prerequisite: Chinese Unit 7 or equivalent

This unit aims to develop a communicative competence at a more sophisticated level. Students are exposed to a range of Chinese texts in varied sociocultural contexts in order to master the use of Chinese for different purposes, and are provided with opportunities

to further improve speaking and listening skills through discussions of the texts and making cross-cultural comparisons.

Chinese Unit 9

8cp; 4hpw; prerequisite: Chinese Unit 8 or equivalent

This unit aims to develop in students a high level of communicative competence required for understanding various electronic and published media articles, correspondence and texts related to contemporary society where Modern Standard Chinese (also known as Mandarin, Putonghua or Guoyu) is used. Students are exposed to a range of Chinese texts in order to master the use of Chinese for different purposes, and are provided with opportunities to maintain speaking and listening skills through discussion of the texts.

Chinese Unit 10

8cp; 4hpw; prerequisite: Chinese Unit 9 or equivalent

This unit aims to further develop in students a high level of communicative competence in reading and writing to meet students' needs in social and professional interactions. Modern Standard Chinese (also known as Mandarin, Putonghua or Guoyu) is used. Students are exposed to a range of diverse texts from modern Chinese literature, history, language and culture in order to master the use of written Chinese for different purposes, and are provided with further opportunities to maintain speaking and listening skills through discussion of the texts.

97x411

French Language and Culture

4 x 8cp

971411, 972411, 973411, 974411

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

The French language program is for students who are either complete beginners or who first

learnt French at school. There are two points of entry: the first for complete beginners; the second for students who have successfully completed HSC 2/3-unit French, or its equivalent. Students in the combined degree take four units in the program, either units 1–4 (beginners) or 3–6 (post-HSC), determined by their point of entry. Students with a language competence in French that is higher than the program may be able to undertake further studies in French at other universities in the Sydney area through arrangements made by the Institute.

The language program covers a broad range of communicative situations relevant to daily interaction in French. The focus is on the development of speaking, listening, reading and writing skills appropriate to the situations that students are likely to encounter. Vocabulary and grammar cover a range of themes and are presented using written and audiovisual materials.

Upon successful completion of the program, students are expected to be able to communicate about familiar things, events and opinions and to have developed skills and strategies for continuing their learning of the language in French-speaking environments. Those students with prior knowledge of French entering the program at a higher level are expected to communicate comfortably on a wide range of topics, with the ability to adjust their language according to social variables such as formality, age and status. Each unit is covered in 13 weeks in one semester. There are six hours of language classes per week. Some of the class time may be conducted in the Learning Resources Centre using computers and the language laboratory.

French Unit 1

8cp; 1st semester, 6hpw; prerequisite: nil

French Unit 1 is the first in a series of four units designed to provide students who have no prior knowledge of the French language with basic survival skills in language and culture, and the ability to undertake In-country Study in France.

By the end of the unit, students are expected to have achieved 'elementary proficiency' and be able to satisfy immediate communication needs required in basic social interaction, using expressions and phrases they have learnt. The program allows for the development of listening, speaking, reading and writing skills, and an understanding of the sociocultural contexts in which the language is used. In

particular, students gain an awareness of the background of French-speaking countries. Students also develop strategies for predicting the meaning of new expressions and anticipating ways to express new meanings.

The approach adopted is communicative and provides students with many opportunities to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

French Unit 2

8cp; 2nd semester, 6hpw; prerequisite: French Unit 1 or equivalent

French Unit 2 is the second in a series of four units designed to provide students who have no prior knowledge of the French language with basic survival skills in language and culture, and the ability to undertake In-country Study in France.

By the end of the unit, students are expected to have achieved 'minimum survival proficiency' in speaking, listening, reading and writing and be able to satisfy immediate communication needs and minimum courtesy requirements required in basic social interaction. Students also develop an understanding of the sociocultural contexts in which the language is used and develop further communication strategies.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

French Unit 3

8cp; 1st semester, 6hpw; prerequisite: French Unit 2, HSC French, or equivalent

French Unit 3 is the third in a series of four units for students with no prior knowledge of the French language, or the first in a series of four units for students who have successfully completed HSC 2/3-unit French, or its equivalent. It provides students with basic survival skills in French language and culture, and the ability to undertake In-country Study in France.

By the end of the unit, students are expected to have achieved communicative competence in speaking, listening, reading and writing skills to be able to satisfy all 'survival' needs and limited social needs. They are also expected to have developed an awareness of the various social and cultural contexts in which

the language is used. In this unit, students develop the ability to understand the general content of magazine and newspaper articles.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

French Unit 4

8cp; 2nd semester, 6hpw; prerequisite: French Unit 3 or equivalent

French Unit 4 is the fourth in a series of four units for students with no prior knowledge of the French language, or the second in a series of four units for students who have successfully completed French Unit 3, HSC 2/3-unit French, or its equivalent; and equips these students with basic survival skills in French language and culture and the ability to undertake In-country Study in France.

By the end of the unit, students are expected to have begun to develop the communication skills required to satisfy limited routine social or work demands related to the situation covered. Students would also have developed an awareness of the various social and cultural contexts in which the language is used. Students learn to express opinions, discuss education, entertainment and travel, and develop the language skills and background knowledge required to find accommodation.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

French Unit 5

8cp; 1st semester, 6hpw; prerequisite: French Unit 4 or equivalent

French Unit 5 is the third in a series of four units designed to provide students who have successfully completed French Unit 4, HSC 2/3-unit French, or its equivalent, with the ability to consolidate and extend their knowledge during a period of In-country Study in France.

By the end of the unit, students are expected to have achieved the communicative competence required to satisfy routine social demands and limited work requirements in speaking, listening, reading and writing skills. They are also expected to have developed an awareness of the various social and cultural contexts in which the language is used. Students learn to communicate in French and

to compare lifestyles, university life and education and practice interview techniques in preparation for In-country Study.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. There are discussions and debates on set topics. Audiovisual equipment and computers are used to facilitate learning.

French Unit 6

8cp; 2nd semester, 6hpw; prerequisite: French Unit 5 or equivalent

French Unit 6 is the fourth in a series of four units designed to provide students who have successfully completed French Unit 5, or its equivalent, with the ability to consolidate and extend their knowledge during a period of In-country Study in France.

By the end of the unit, students are expected to have achieved the communicative competence required for limited formal and informal conversations on practical and social topics. Students are also expected to have developed the ability to read and write with sufficient accuracy to meet a limited range of social needs and limited work needs. Language development focuses on topics such as economy, class and social stratification, gender roles, religion and beliefs, literature and the arts.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. There are discussions and debates on set topics. Audiovisual equipment and computers are used to facilitate learning.

French Unit 7

8cp; 1st semester, 4hpw; prerequisite: French Unit 6

French Unit 7 is designed to provide students who have successfully completed French Unit 6, or its equivalent, with the ability to consolidate and extend their knowledge of French in preparation for a period of In-country Study in France.

By the end of the unit, students are expected to be able to communicate confidently in French in a wide variety of everyday situations, and to have comprehension skills which enable them to read a wide variety of authentic materials in French. Students are expected to extend their knowledge of present-day French society and culture and to have acquired the

vocabulary and linguistic structures necessary to participate in formal and informal conversations with considerable accuracy.

The classroom approach provides students with opportunities to further develop their vocabulary, fluency and accuracy as they use French to respond to authentic texts and to discuss set topics. Students are required to read extensively in preparation for classroom presentations and discussions.

French Unit 8

8cp; 2nd semester, 4hpw; prerequisite: French Unit 7

French Unit 8 is designed to provide students who have successfully completed French Unit 7, or its equivalent, with the ability to consolidate and extend their knowledge of French in preparation for a period of In-country Study in France.

By the end of the unit, students are expected to demonstrate the linguistic skills and cultural awareness required to engage appropriately in a range of formal and informal discussions in social, professional and educational contexts.

The classroom approach provides students with opportunities to further develop their vocabulary, fluency and accuracy as they use French to discuss set topics and to respond to authentic texts, television programs and films. Students are required to read extensively in preparation for classroom presentations and discussions.

97x421

German Language and Culture

4 x 8cp

971421, 972421, 973421, 974421

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

The German language program is for students who are either complete beginners or who first learnt German at school. There are two points of entry: the first for complete beginners; the

second for students who have successfully completed HSC 2/3-unit German, or its equivalent. Students in the combined degree take four units in the program, either units 1–4 (beginners) or 3–6 (post-HSC), determined by their point of entry. Students with a language competence in German that is higher than the usual level accepted in the program may be able to undertake further studies in German at other universities in the Sydney area through arrangements made by the Institute.

The language program covers a broad range of communicative situations relevant to daily interaction in German. The focus is on the development of speaking, listening, reading and writing skills appropriate to the situations that students are likely to encounter. Vocabulary and grammar cover a range of themes.

Upon successful completion of the program, students are expected to be able to communicate about familiar things, events and opinions and to have developed skills and strategies for continuing their learning of the language in German-speaking environments. Those students with prior knowledge of German entering the program at a higher level are expected to communicate comfortably on a wide range of topics, with the ability to adjust their language according to social variables such as formality, age and status. Each unit is covered in 13 weeks in one semester. There are six hours of language classes per week. Some of the class time may be conducted in the Learning Resources Centre using computers and the language laboratory.

German Unit 1

8cp; 1st semester, 6hpw; prerequisite: nil

German Unit 1 is the first in a series of four units designed to provide students who have no prior knowledge of the German language with basic survival skills in German language and culture, and the ability to undertake In-country Study in Germany.

By the end of the unit, students are expected to have achieved 'elementary proficiency' and be able to satisfy immediate communication needs required in basic social interaction, using expressions and phrases they have learnt. The program allows for the development of listening, speaking, reading and writing skills, and an understanding of the sociocultural contexts in which the language is used. Students gain, in particular, an awareness of the background of German-speaking countries. Students also develop strategies for predicting the meaning of new expressions

and anticipating ways of expressing new meanings.

The approach adopted is communicative and provides students with many opportunities to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

German Unit 2

8cp; 2nd semester, 6hpw; prerequisite: German Unit 1 or equivalent

German Unit 2 is the second in a series of four units designed to provide students with no prior knowledge of the German language with basic survival skills in German language and culture, and the ability to undertake In-country Study in Germany.

By the end of the unit, students are expected to have achieved 'minimum survival proficiency' in speaking, listening, reading and writing and be able to satisfy immediate communication needs and minimum courtesy requirements required in basic social interaction. Students also develop an understanding of the sociocultural contexts in which the language is used and further communication strategies.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. Audiovisual equipment and computers may be used to facilitate learning.

German Unit 3

8cp; 1st semester, 6hpw; prerequisite: German Unit 2, HSC German, or equivalent

German Unit 3 is the third in a series of four units for students with no prior knowledge of the German language, or the first in a series of four units for students who have successfully completed HSC 2/3-unit German, or its equivalent. It provides students with basic survival skills in German language and culture and the ability to undertake In-country Study in Germany.

By the end of the unit, students are expected to have achieved the communicative competence in speaking, listening, reading and writing skills to be able to satisfy all 'survival' needs and limited social needs. They are also expected to have developed an awareness of the various social and cultural contexts in which the language is used. In this unit, students also develop the ability to understand

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the general content of magazine and newspaper articles.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

German Unit 4

8cp; 2nd semester, 6hpw; prerequisite: German Unit 3 or equivalent

German Unit 4 is the fourth in a series of four units for students with no prior knowledge of the German language, or the second in a series of four units for students who have successfully completed German Unit 3, HSC 2/3-unit German, or its equivalent. It provides them with basic survival skills in German language and culture and the ability to undertake In-country Study in Germany.

By the end of the unit, students are expected to have begun to develop the communication skills required to satisfy limited routine social and work demands related to the situation covered. Students would also have developed an awareness of the various social and cultural contexts in which the language is used. Students learn to express opinions, discuss education, entertainment and travel, and develop the language skills and background knowledge required to find accommodation.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

German Unit 5

8cp; 1st semester, 6hpw; prerequisite: German Unit 4 or equivalent

German Unit 5 is the third in a series of four units designed to provide students who have successfully completed German Unit 4, HSC 2/3-unit German, or its equivalent, with the ability to consolidate and extend their knowledge during a period of In-country Study in Germany.

By the end of the unit, students are expected to have achieved the communicative competence required to satisfy routine social demands and limited work requirements in speaking, listening, reading and writing skills. Students would have developed an awareness of the various social and cultural contexts in which the language is used. Students learn to communicate in German when comparing lifestyles, university life and education and

to practice interview techniques in preparation for In-country Study.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. There are discussions and debates on set topics. Audiovisual equipment and computers are used to facilitate learning.

German Unit 6

8cp; 2nd semester, 6hpw; prerequisite: German Unit 5 or equivalent

German Unit 6 is the fourth in a series of four units designed to provide students who have successfully completed German Unit 5, or its equivalent, with the ability to consolidate and extend their knowledge during a period of In-country Study in Germany.

By the end of the unit, students are expected to have achieved the communicative competence required to speak the language with reasonable accuracy, and to be able to participate readily in limited formal and informal conversations on practical and social topics. Students are also expected to have developed the ability to read and write with sufficient accuracy to meet a limited range of social needs and limited work needs. Language focuses on topics such as the economy, class and social stratification, gender roles, religion and beliefs, and literature and the arts.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. There are discussions and debates on set topics. Audiovisual equipment and computers are used to facilitate learning.

German Unit 7

4cp; 1st semester, 4hpw; prerequisite: German Unit 6

German Unit 7 is designed to provide students who have successfully completed German Unit 6, or its equivalent, with the ability to consolidate and extend their knowledge of the German language in preparation for a period of In-country Study in Germany.

By the end of the unit, students are expected to be able to communicate confidently and with a high level of accuracy in German in a wide range of formal and informal conversations, and to have comprehension skills which enable them to read a wide variety of authentic materials in German. Students are expected to be able to read and write for academic and

general purposes with sufficient accuracy to meet a wide range of social and academic needs.

The classroom approach provides students with opportunities to further develop their vocabulary, fluency and accuracy as they use German to respond to authentic texts and to discuss set topics. Students are required to read extensively in preparation for classroom presentations and discussions.

German Unit 8

4cp; 2nd semester, 4hpw; prerequisite: German Unit 7

German Unit 8 is designed to provide students who have successfully completed German Unit 7, or its equivalent, with the ability to consolidate and extend their knowledge of German in preparation for a period of In-country Study in Germany.

By the end of the unit, students are expected to have achieved a high level of proficiency and speak the language with a high level of accuracy. They are able to participate in a wide range of formal, informal and academic conversations on topics such as the economy, gender roles, social life, politics and current issues. They also learn about academic writing and develop academic skills such as note taking and essay writing in German. They are expected to read and write academic and general texts with a high degree of accuracy to meet a wide range of social and academic needs.

The classroom approach provides students with opportunities to further develop their vocabulary, fluency and accuracy as they use German to discuss set topics and to respond to authentic texts, television programs and films. Students are required to read extensively in preparation for classroom presentations and discussions.

97x710

Greek

4 x 8cp

971710, 972710, 973710, 974710

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The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

Greek is offered to UTS students through arrangements with other universities. Students are placed in classes appropriate to their level of competence. The program focuses on furthering writing and oral skills in contemporary Greek and learning about Hellenic literature, society and culture.

97x311

Indonesian Language and Culture

4 x 8cp

971311, 972311, 973311, 974311

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

Indonesian is offered to UTS students through arrangements with other universities. Students are placed in classes appropriate to their level of competence. The aim of the Indonesian language program is to give students a good working knowledge of modern written and spoken Indonesian and to enable them to express themselves in the language correctly and with reasonable clarity.

97x431

Italian Language and Culture

4 x 8cp

971431, 972431, 973431, 974431

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture

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subject. To determine the level at which you study, contact the Institute for International Studies.

The Italian language program is for students who are either complete beginners or who first learnt Italian at school. There are two points of entry: the first for complete beginners; the second for students who have successfully completed HSC 2/3-unit Italian, or its equivalent. Students in the combined degree take four units in the program, either units 1–4 (beginners) or 3–6 (post-HSC), determined by their point of entry. Students with a language competence in Italian that is higher than the program may be able to undertake further studies in Italian at other universities in the Sydney area through arrangements made by the Institute.

The language program covers a broad range of communicative situations relevant to daily interaction in Italian. The focus is on the development of speaking, listening, reading and writing skills appropriate to the situations that students are likely to encounter. Vocabulary and grammar cover a range of themes and are presented using written and audiovisual materials.

Upon successful completion of the program, students are expected to be able to communicate about familiar things, events and opinions and to have developed skills and strategies for continuing their learning of the language in Italian-speaking environments. Those students with prior knowledge of Italian, who are entering the program at a higher level, are expected to communicate comfortably on a wide range of topics, with the ability to adjust their language according to social variables such as formality, age and status. Each unit is covered in 13 weeks in one semester. There are six hours of language classes per week.

Italian Unit 1

8cp; 1st semester, 6hpw; prerequisite: nil

Italian Unit 1 is the first in a series of four units designed to provide students who have no prior knowledge of the Italian language with basic survival skills in Italian language and culture, and the ability to undertake In-country Study in Italy.

By the end of the unit, students are expected to have achieved 'minimum creative proficiency' and be able to satisfy immediate communication needs required in basic social interaction, using expressions and phrases they have learnt. The program allows for the development of listening, speaking, reading

and writing skills, and an understanding of the sociocultural contexts in which the language is used. In particular, students gain an awareness of the background of Italian-speaking countries. Students also develop strategies for predicting the meaning of new expressions and anticipating ways of expressing new meanings.

The approach adopted is communicative and provides students with many opportunities to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

Italian Unit 2

8cp; 2nd semester, 6hpw; prerequisite: Italian Unit 1 or equivalent

Italian Unit 2 is the second in a series of four units designed to provide students who have no prior knowledge of the Italian language with basic survival skills in Italian language and culture, and the ability to undertake In-country Study in Italy.

By the end of the unit, students are expected to have achieved 'basic transactional proficiency' in speaking, listening, reading and writing, and be able to satisfy immediate communication needs and minimum courtesy requirements for basic social interaction. Students also develop an understanding of the sociocultural contexts in which the language is used and further communication strategies.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

Italian Unit 3

8cp; 1st semester, 6hpw; prerequisite: Italian Unit 2, HSC Italian, or equivalent

Italian Unit 3 is the third in a series of four units for students with no prior knowledge of the Italian language, or the first in a series of four units for students who have successfully completed HSC 2/3-unit Italian, or its equivalent. It provides them with basic survival skills in Italian language and culture and the ability to undertake In-country Study in Italy.

By the end of the unit, students are expected to have achieved the communicative competence in speaking, listening, reading and writing skills to be able to satisfy all 'survival' needs and limited social needs. They are also expected to have developed an awareness of

the various social and cultural contexts in which the language is used. In this unit, students also develop the ability to understand the general content of magazine and newspaper articles.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

Italian Unit 4

8cp; 2nd semester, 6hpw; prerequisite: Italian Unit 3 or equivalent

Italian Unit 4 is the fourth in a series of four units for students with no prior knowledge of Italian language, or the second in a series of four units for students who have successfully completed Italian Unit 3, HSC 2/3-unit Italian, or its equivalent. It provides them with basic survival skills in Italian language and culture and the ability to undertake In-country Study in Italy.

By the end of the unit, students are expected to have begun to develop the communication skills required to satisfy limited routine social and work demands related to the situation covered. Students would also have developed an awareness of the various social and cultural contexts in which the language is used. Students learn to express opinions, discuss education, entertainment and travel, and develop the language skills and background knowledge required, e.g. to find accommodation.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

Italian Unit 5

8cp; 1st semester, 6hpw; prerequisite: Italian Unit 4 or equivalent

Italian Unit 5 is the third in a series of four units designed to provide students who have successfully completed Italian Unit 4, HSC 2/3-unit Italian, or its equivalent, with the ability to consolidate and extend their knowledge of the Italian language and culture during a period of In-country Study in Italy.

By the end of the unit, students are expected to have achieved the communicative competence required to satisfy routine social demands and limited work requirements in speaking, listening, reading and writing skills. They are also expected to have developed an awareness of the various social and cultural

contexts in which the language is used. Students learn to communicate in Italian while comparing lifestyles, university life and education and practice interview techniques in preparation for In-country Study.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. There are discussions and debates on set topics. Audiovisual equipment and computers are used to facilitate learning.

Italian Unit 6

8cp; 2nd semester, 6hpw; prerequisite: Italian Unit 5 or equivalent

Italian Unit 6 is the fourth in a series of four units designed to provide students who have successfully completed Italian Unit 5, or its equivalent, with the ability to consolidate and extend their knowledge of the Italian language and culture during a period of In-country Study in Italy.

By the end of the unit, students are expected to have achieved the communicative competence required to speak the language with sufficient accuracy for limited formal and informal conversations on practical and social topics. Students are also expected to be able to read and write with sufficient accuracy to meet a limited range of social needs and limited work needs. Language focuses on topics such as the economy, class and social stratification, gender roles, religion and beliefs, literature and the arts.

The approach adopted is communicative and provides many opportunities for students to interact and use the language in a meaningful way in various social and cultural contexts. There are discussions and debates on set topics. Audiovisual equipment and computers are used to facilitate learning.

97x211

Japanese Language and Culture

4 x 8cp

971211, 972211, 973211, 974211

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

The Japanese language program comprises six units offered in two main streams: beginners and post-HSC. There are two main points of entry into the Japanese Language and Culture program. Students with no prior experience of the language enter the program at Japanese Unit 1, while students with HSC-level Japanese or equivalent are required to enter the program at the post-HSC level (Japanese 3).

The program enables students to develop the skills to communicate in everyday situations in order to live, study and work in a Japanese-speaking environment; or interact with Japanese people in a social, university or work-related context. The emphasis is on the development of communication skills, particularly speaking and listening, with an increased focus on reading and writing skills at the post-HSC level. The study of sociocultural aspects of Japan is an integrated and essential part of the language program.

Japanese Unit 1

8cp; 6hpw; prerequisite: nil

This is the first subject in the Japanese Language and Culture program. It is designed as the first step in providing students who have no prior knowledge of Japanese with the basic language survival skills and sociocultural awareness to enable them to undertake In-country Study in Japan.

While focusing primarily on the development of speaking and listening skills, this subject also provides a working knowledge of the hiragana and katakana scripts and approximately 50 kanji. Sociocultural aspects are integrated into the program as they relate to the need for students to learn to use the language appropriately in various social and cultural contexts.

Japanese Unit 2

8cp; 6hpw; prerequisite: Japanese Unit 1

This is the second in a series of four units for students with no prior knowledge of the Japanese language. By the completion of this unit, the student should be able to demonstrate the language and sociocultural skills required to establish and maintain relationships in social or work-related spheres, and fulfil basic survival needs in a Japanese-speaking environment.

Emphasis is given to the development of speaking and listening skills, but students also further develop their reading and writing skills. Besides kana, they will know approximately 150 kanji by the end of the unit. Sociocultural aspects are integrated into the program as they relate to the need for students to learn to use the language appropriately in various social and cultural contexts.

Japanese Unit 3

8cp; 6hpw; prerequisite: Japanese Unit 2 or HSC Japanese

Japanese 3 is the third in a series of four units for students with no prior knowledge of the Japanese language, or the first in a series of four units for students who have successfully completed HSC-level Japanese. By the end of the unit, students are expected to have achieved 'survival proficiency' in the use of the language, and be able to satisfy survival needs and limited social demands relating to topics and situations covered.

At the end of the subject, students are expected to have developed their listening, speaking, reading and writing skills to a level where they can communicate in everyday situations, and are able to demonstrate an awareness of the social implications of language and behaviour.

It is expected that students know approximately 250 kanji by the end of the unit.

Japanese Unit 4

8cp; 6hpw; prerequisite: Japanese Unit 3

Japanese 4 is the fourth in a series of four units for beginners. It is also the second in a series of four units for those who have successfully completed HSC-level Japanese, or its equivalent, and aim to further develop Japanese listening, speaking, reading and writing skills. By the end of the unit, students are expected to have achieved 'limited social proficiency', and be able to interact in limited social, study and work contexts with Japanese speakers in Japan or Australia. They will also have learnt approximately 350 kanji.

Japanese Unit 5

8cp; 6hpw; prerequisite: Japanese Unit 4

Japanese 5 is the third in a series of four units in the post-HSC series, and is for those who have successfully completed either Japanese Unit 4, or its equivalent, and aim to further develop listening, speaking, reading, writing and cultural skills. By the end of the unit, students are expected to have achieved 'limited social proficiency', and be able to satisfy

routine social and limited work demands. The emphasis is on the development of the language and of the cultural sensitivity required in both formal and informal situations. By the end of the subject, students are expected to be able to read and write approximately 470 kanji.

Japanese Unit 6

8cp; 6hpw; prerequisite: Japanese Unit 5

Japanese Unit 6 is the fourth in a series of four units in the post-HSC series and is for those who have successfully completed either Japanese Unit 5, or its equivalent. By the end of this subject, students are expected to have achieved 'minimal vocational proficiency', and be able to speak the language with sufficient structural accuracy and vocabulary to participate effectively in many formal and informal conversations on practical, social and limited vocational topics. The emphasis is on the development of the language and of the cultural sensitivity required in both formal and informal situations. By the end of the subject, students should be able to read simple prose and read and write approximately 600 kanji.

Japanese Unit 7

8cp; 4hpw; prerequisite: Japanese Unit 6

Japanese Unit 7 is designed to provide students who have successfully completed Japanese Unit 6 or its equivalent with the ability to consolidate and extend their knowledge of Japanese.

Students are expected to continue to develop communication skills required to function effectively in academic and vocational contexts in Japan. In the first half of the unit, the focus is on the development of academic reading and writing skills and the acquisition of vocabulary based on reading, understanding and discussing various topics and viewpoints on the interrelationship between Japanese language and culture. In the second half of the unit, the focus is on workplace communication and the comprehension of university lectures in Japan, with an emphasis on the development of listening and note-taking skills. In terms of literacy development, students will be expected to be able to recognise and pronounce the kanji introduced in the prescribed texts, to have increased their pace of reading as a result of regular and habitual reading and improved dictionary skills, and to be able to write an increasing number of kanji as required for specific academic tasks.

97x331

Malaysian Language and Culture

4 x 8cp

971331, 972331, 973331, 974331

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

Malaysian is offered to UTS students through arrangements with other universities. Students are placed in classes appropriate to their level of competence. The aim of the Malaysian language program is to give students a good working knowledge of modern written and spoken Malaysian and to enable them to express themselves in the language correctly and with reasonable clarity.

97x734

Russian

4 x 8cp

971734, 972734, 973734, 974734

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

Russian is offered to UTS students through an arrangement with other universities. Students are placed in classes appropriate to their level of competence. The aim of the Russian language program is to give students a good working knowledge of modern written and spoken Russian and to enable them to express themselves in the language correctly and with reasonable clarity.

97x501

Spanish Language and Culture

4 x 8cp

971501, 972501, 973501, 974501

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

The Spanish language program is designed for students who are either complete beginners or who first learnt Spanish at school in Australia. There are two points of entry: the first for complete beginners and the second for students who have successfully completed HSC-level Spanish or its equivalent. Students in the combined degree take four units in the program, either units 1–4 (beginners) or 3–6 (post-HSC), determined by their point of entry.

The language program covers a broad range of communicative situations relevant to daily interaction in Spanish. The focus is on the development of speaking, listening, reading and writing skills appropriate to the situations that students are likely to encounter. Vocabulary and grammar are taught using written and audiovisual materials that cover a range of themes and situations.

Upon successful completion of the program, students are expected to be able to communicate about familiar things, events and opinions, and to have developed skills and strategies for continuing their learning of the language in Spanish-speaking countries. Those students with prior knowledge of Spanish, who enter the program at a higher level, are expected to be able to communicate comfortably on a wide range of themes, with the ability to adjust their language according to social variables such as formality, age and status. Each subject is covered in 13 weeks in one semester. There are six hours of language classes per week.

Spanish Unit 1

8cp; 1st semester, 6hpw; prerequisite: nil

Spanish Unit 1 is the first in a series of four units designed to provide students who have no prior knowledge of the Spanish language with basic survival skills in the language and culture, and the ability to undertake In-country Study in Latin America or Spain.

By the end of the subject, students are expected to have achieved 'elementary proficiency' and be able to satisfy immediate communication needs required in basic social interaction, using expressions and phrases they have learnt. The program allows for the development of listening, speaking, reading and writing skills, and an understanding of the sociocultural contexts in which the language is used. Students gain, in particular, an awareness of the background of Hispanic countries. Students also develop strategies for predicting the meaning of new expressions and anticipating ways they might express new meanings.

Spanish Unit 1 consists of 78 hours of classroom instruction. The approach adopted is communicative and provides students with many opportunities to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

Spanish Unit 2

8cp; 2nd semester, 6hpw; prerequisite: Spanish Unit 1

Spanish 2 is the second in a series of four units designed to provide students who have no prior knowledge of the Spanish language with basic survival skills in the language and culture, and the ability to undertake In-country Study in Latin America or Spain.

By the end of the subject, students are expected to have achieved 'minimum survival proficiency' in speaking, listening, reading and writing, and be able to satisfy immediate communication needs and minimum courtesy requirements in basic social interactions. Students also develop an understanding of the sociocultural contexts in which the language is used and further communication strategies.

Spanish Unit 2 consists of 78 hours of classroom instruction. The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

Spanish Unit 3

8cp; 1st semester, 6hpw; prerequisite: Spanish Unit 2 or HSC Spanish

Spanish Unit 3 is the third in a series of four units for students with no prior knowledge of the Spanish language, or the first in a series of four units for students who have successfully completed HSC-level Spanish, or its equivalent. It provides students with basic survival skills in the language and culture, and the ability to undertake In-country Study in Latin America or Spain.

By the end of the unit, students are expected to have achieved a communicative competence in speaking, listening, reading and writing skills in order to be able to satisfy all 'survival' needs and limited social needs. They are also expected to have developed an awareness of the various social and cultural contexts in which the language is used. In this unit, students also develop the ability to understand the general content of magazine and newspaper articles.

Spanish Unit 3 consists of 78 hours of classroom instruction. The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

Spanish Unit 4

8cp; 2nd semester, 6hpw; prerequisite: Spanish Unit 3

Spanish Unit 4 is the fourth in a series of four units for students with no prior knowledge of the Spanish language, or the second in a series of four units for students who have successfully completed Spanish Unit 3 and HSC-level Spanish, or its equivalent. It provides students with basic survival skills in the language and culture, and the ability to undertake In-country Study in Latin America or Spain.

By the end of the unit, students are expected to have begun to develop the communication skills required to satisfy limited routine social and work demands. They are also expected to have developed an awareness of the various social and cultural contexts in which the language is used. In this subject, students learn to express opinions, discuss education, entertainment and travel, and develop the language skills and background knowledge required, e.g. to find accommodation.

Spanish Unit 4 consist of 78 hours of classroom instruction. The approach adopted is

communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. Audiovisual equipment and computers are used to facilitate learning.

Spanish Unit 5

8cp; 1st semester, 6hpw; prerequisite: Spanish Unit 4

Spanish Unit 5 is the third in a series of four units designed to provide students who have successfully completed Spanish Unit 4 and HSC-level Spanish, or its equivalent, with the ability to consolidate and extend their knowledge during a period of In-country Study in Latin America or Spain.

By the end of the unit, students are expected to have achieved communicative competence in speaking, listening, reading and writing, and to be able to satisfy routine social demands and limited work requirements. They would have developed an awareness of the various social and cultural contexts in which the language is used. Students learn to communicate in Spanish to compare lifestyles, university life and education, and practise interview techniques in preparation for In-country Study.

Spanish Unit 5 consists of 78 hours of classroom instruction. The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. There are discussions and debates on set topics. Audiovisual equipment and computers are used to facilitate learning.

Spanish Unit 6

8cp; 2nd semester, 6hpw; prerequisite: Spanish Unit 5

Spanish Unit 6 is the fourth in a series of four units designed to provide students who have successfully completed Spanish Unit 5 and HSC-level Spanish, or its equivalent, with the ability to consolidate and extend their knowledge during a period of In-country Study in Latin America or Spain.

By the end of the unit, students are expected to be able to speak the language with sufficient accuracy, and to participate in limited formal and informal conversations on practical and social topics. Students are also expected to be able to read and write with sufficient accuracy to meet a limited range of social and work needs. Language focuses on topics such as the economy, class and social stratification,

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gender roles, religion and beliefs, literature and the arts.

Spanish Unit 6 consists of 78 hours of classroom instruction. The approach adopted is communicative and provides many opportunities for students to interact and use the language in various social and cultural contexts. There are discussions and debates on set topics. Audiovisual equipment and computers are used to facilitate learning.

Spanish Unit 7

8cp; 1st semester, 6hpw; prerequisite: Spanish Unit 6

Spanish Unit 7 is designed to provide students who have successfully completed Spanish Unit 6, or its equivalent, with the ability to consolidate and extend their knowledge during a period of In-country Study in Latin America or Spain.

By the end of the unit students are expected to be able to communicate confidently in Spanish within a wide range of everyday situations, and to have further improved their comprehension skills by reading a wide variety of authentic materials in Spanish. Students are also expected to have extended their knowledge of today's world-wide Hispanic society and culture and to have acquired the vocabulary and structures necessary to be able to discuss and write about the cultural context of texts with considerable accuracy.

The approach provides students with opportunities to further develop their vocabulary, fluency and accuracy as they use the language to respond to authentic texts and to discuss set topics. Students are required to read extensively during self-study periods in preparation for classroom presentation and discussion.

Spanish Unit 8

8cp; 2nd semester, 6hpw; prerequisite: Spanish Unit 7

Spanish Unit 8 is designed to provide students who have successfully completed Spanish Unit 7, or its equivalent, with a higher level of communicative and cultural competence, and the ability to consolidate and extend their knowledge during a period of In-country Study in Latin America or Spain.

By the end of the unit, students are expected to have further developed the linguistic and cultural awareness skills required to engage appropriately in a range of formal and informal discussions at a social and professional

level on topics such as employment, job applications, academic presentations and university life, social welfare, human rights, leisure and sport, the media, family roles and relationships, etiquette, and immediate concerns such as arranging accommodation and banking.

The approach provides students with opportunities to further develop their vocabulary, fluency and accuracy in speaking and writing as they use the language in response to authentic texts such as newspaper, and magazine articles and television programs in Spanish. Students are required to read extensively during self-study periods in preparation for classroom presentations, debates and discussions.

97x320

Thai

4 x 8cp

971320, 972320, 973320, 974320

The above subject numbers indicate the sequence order of language and culture subjects studied at UTS. The first language and culture subject studied, regardless of the level at which you study it, has 1 as the third digit of the subject number; the second subject studied has 2 as the third digit of the subject number; and so on.

The subject number does not indicate the level at which you study the language and culture subject. To determine the level at which you study, contact the Institute for International Studies.

Thai is offered to UTS students through the language program offered by the University of Sydney. The aim of the Thai language program is to give students a good working knowledge of modern written and spoken Thai and to enable them to express themselves in the language correctly and with reasonable clarity.

Contemporary Society subjects

976111

Contemporary China

8cp; 4hpw

Semester offered: 2nd semester

This subject deals with the politics of 'reading and writing' the People's Republic of China (PRC). The first half of the subject examines the history of the PRC, from the Chinese Communist Party's (CCP) rise to power in 1949 to the death of Chairman Mao Zedong in 1976. A key focus is how the early CCP leadership attempted to resolve an issue that stalks the Chinese government even today, namely, the question of how to modernise China and still keep faith with the ethical imperatives of socialist transition. The course examines how Western commentators and mainland Chinese scholars have chosen to evaluate the Chinese revolution in different historical periods. The second half of the course outlines some of the enormous changes that have taken place in the PRC since the introduction of market-based reforms in 1979. With the implementation of Deng Xiaoping's economic reforms and Open Door policy, China entered the postmodern, global community and now faces similar social concerns to those that inform Western societies – inflation, unemployment, growing crime rates, HIV/AIDS, prostitution and drugs, etc. However, following the Chinese government's brutal suppression of the student protest movement in 1989, the PRC's response to many of these issues has been accompanied by Western accusations of human rights abuses and claims that the CCP has failed to abandon the 'totalitarian' politics of the now denigrated Maoist era. The subject concludes by asking students to determine whether such claims are justifiable or whether it might be more analytically productive to read and write present-day China differently.

976211

Contemporary Japan

8cp; 4hpw

Semester offered: 2nd semester

This subject provides an introduction to the dynamics of political, social and economic systems in modern Japan. Central themes are the causes and consequences of social change and continuity in the context of Japan's emergence as an economic superpower. In the

process, it offers a general introduction to Japan's culture. This subject requires no prior knowledge of Japan or of Japanese.

976301

Contemporary South-East Asia

8cp; 4hpw

Semester offered: 2nd semester

This subject provides an introduction to the countries of Indonesia, Malaysia, Thailand and Vietnam. The themes of modernity and identity are examined at a political-economic level and also at an individual level. Issues which are explored include: migration patterns in the context of regional interrelationships; increasing urbanisation; legacies of colonialism; the commodification of culture and the growing impact of tourism; new creative forms in the visual, literary and performing arts; the beliefs about and behaviour of women in the region; and ways in which religion and social practice intersect.

976401

Contemporary Europe

8cp; 4hpw

Semester offered: 2nd semester

This subject is an introduction and an overview laying the groundwork for the study of contemporary Europe and individual countries within Europe. It aims to provide students with a basic understanding of contemporary European history, politics, society and culture, as well as national convergences and divergences in these areas. In particular, it aims to provide students with the critical skills that allow them to identify major contemporary issues in the European region of the world, and beyond it. Insights are gained into Europe's national and regional diversity and heterogeneity in national, continental and international contexts. This gives students the opportunity to develop a critical appreciation for societies outside Australia. Students are exposed to ideas that challenge Eurocentric modes of thinking, and that also draw attention to the legacies of imperialism, colonisation, and transnational capitalism and their impact on contemporary European peoples, wherever they may reside. Students develop critical thinking skills relevant to the multidisciplinary nature of the subject.

976501

Contemporary Latin America

8cp; 4hpw

Semester offered: 2nd semester

Latin America has been a crucible for social, political and economic change in the 19th and 20th centuries. Intense struggles for nationhood, democracy, economic modernisation and secularisation have all resonated in the countries of Latin America. During the middle of the 20th century, Latin America's primary concerns were focused on national self-determination, inward industrialisation and populist authoritarian efforts to legitimise elite rule. In the late 20th century, the emphasis shifted towards economic growth, internationalisation, and pressures to improve the capacity and accountability of governments. The unit aims to provide students with the historical background, cultural awareness and analytic skills to interpret everyday social, political and economic reality during their period of In-country Study. The subject requires no prior knowledge of Latin America or of Spanish.

In-country Study subjects

977xxx

In-country Study 1

24cp; prerequisite(s): completion of relevant subjects appropriate to the student's International Studies major

In-country Study subjects are only available to students doing the Bachelor of Arts in International Studies.

As part of the International Studies combined degrees, students spend two semesters of In-country Study at a university or institution of higher education overseas. The location is determined by the student's International Studies major.

In the International Studies program, students focus on one of the following countries or majors: Canada (Quebec), Chile, China, France, Germany, Indonesia, Italy, Japan, Latino Studies (USA), Malaysia, Mexico, Spain, Switzerland and Thailand. There is also a Heritage major that permits students with previous exposure to a language and culture to continue their study in countries such as Croatia, Greece, Hong Kong, Korea, Poland, Russia, Taiwan, the Philippines, Vietnam and others. Australia and the Asia-Pacific is only available as a major to international students. International students may access one of the other majors offered provided that the country they choose as their major is able to grant them a visa to study there. This needs to be determined prior to commencing subjects within the International Studies major. If a visa cannot be granted, then it will not be possible to undertake the chosen major.

978xxx

In-country Study 2

24cp; prerequisite(s): 977xxx In-country Study 1

For subject description, see 977xxx In-country Study 1.

NUMERICAL LISTS OF SUBJECTS

The following tables indicate the number and name of each subject, the semester or semesters in which it is offered, the credit-point value, and the prerequisites and corequisites (indicated by c). The letters A and S refer to the Autumn and Spring semesters respectively, and Y is used to indicate a year-long subject. All prerequisites are in terms of current undergraduate offerings. See the Subject Descriptions section for details of other possible prerequisites.

Undergraduate

Core subjects in Bachelor of Science in Information Technology

Subject number	Subject name	Credit points	Prerequisites
31465	Object-oriented Programming	6	Nil
31466	Principles of Distributed Computing	6	Nil
31467	Networking 1	6	Nil
31468	Information, Classification and Control	6	Nil
31469	Object-oriented Design	6	31465
31470	Distributed Computing Architecture	6	31465, 31466
31471	Networking 2	6	31467
31472	Introduction to Collaborative Systems	6	Nil
31473	Data Structures and Procedural Programming	6	31469
31474	Database Fundamentals	6	Nil
31475	Requirements Engineering	6	31472
31476	Systems Development Project	12	31474, 31475
31478	Project Management and Quality Assurance	6	31476
31479	Information Technology Professional and Society	6	31476
31480	Strategic Information Technology Planning Project	6	31478

Note: Refer to the timetable for detailed information as to when subjects are offered.

Core subjects in Diploma of Information Technology Professional Practice

Subject number	Subject name	Credit points	Prerequisites
31136	Preparation and Review of IT Experience	6	Refer to the DiplInfTechProfPrac entry on page xx
31137	IT Experience 1	0	31136c
31138	Review of IT Experience	6	31136, 31137, 31139c
31139	IT Experience 2	0	31136, 31137, 31138c

Note: Refer to the timetable for detailed information as to when subjects are offered.

Bachelor of Science in Information Technology IT sub-major subjects

Currently approved IT sub-major subjects are listed below. Additional sub-majors may be approved by the Faculty in the future. Sub-majors may be withdrawn if there is insufficient demand.

Subject number	Subject name	Credit points	Prerequisites
31040	Data Mining and Knowledge Discovery	6	31474 or 31061
31049	Computer Vision and Image Processing	6	31473 or equivalent
31074	Advanced Database Concepts and Techniques	6	31474 or 31061
31077	Software Engineering Fundamentals	6	31475

Bachelor of Science in Information Technology IT sub-major subjects (cont.)

Subject number	Subject name	Credit points	Prerequisites
31078	Software Architecture	6	31079
31079	Software Engineering Processes	6	31475
31080	Digital Multimedia	6	to be advised
31081	Digital Media Programming and Communication	6	31099
31083	Multimedia Data Mining	6	to be advised
31084	VLANs and WANs	6	to be advised
31085	Internetwork Design	6	to be advised
31086	Network Security	6	to be advised
31087	Network Management	6	to be advised
31088	Mobile Networks	6	31467
31089	Mobile IP and Wireless LANs	6	31088
31090	Mobile Programming	6	31470
31091	Mobile Computing Project	6	31089, 31090
31092	IS Development Approaches	6	31469, 31475c
31093	Quality Assurance and Process Improvement	6	31475
31095	IS Theory and Research Methods	6	31472
31096	Managing Client/Vendor Relations	6	to be advised
31097	IT Operations Management	6	31466, 31468
31098	Software Metrics and Testing	6	to be advised
31099	Database Programming and Administration	6	to be advised
31140	Introduction to Computer Graphics	6	31425, 31429
31334	Distributed Virtual Worlds	6	31748
31335	Extreme Programming	6	31473 or 31476 (for BInfTech)
31336	Internet Middleware Programming	6	31470
31337	Advanced Internet Technologies	6	31470
31338	Network Servers	6	31467, 31470
31443	Distributed Databases and Client/Server Computing	6	31434
31460	Computer Graphics Project	6	to be advised
31603	3D Computer Animation	6	31140
31605	Computer Graphics Rendering Techniques	6	31140
31606	Virtual Communities	6	Nil
31735	Information Systems and Organisation Development	6	Nil
31736	Business Processes and IT Strategy	6	at least 36 cp
31743	Machine Learning	6	31428
31749	Internet Commerce	6	Nil
31750	Intelligent Agents in Java	6	31748 or equivalent knowledge of Java programming
31777	Human-Computer Interaction	6	31444 or equivalent
31916	Cognitive Modelling	6	Nil
31921	Objectbases	6	31434
31927	Applications Development with Visual Basic	6	31414, 31415 or 31429, 31424c or 31434c
31928	Applications Development with Delphi	6	31414, 31415 or 31429, 31424c or 31434c
95556	Technology, Society and Change	6	48 credit points of degree

Note: Refer to the timetable for detailed information as to when subjects are offered.

Core subjects in Bachelor of Science (Honours) in Information Technology

Subject number	Subject name	Credit points	Prerequisites
31481	Honours Project A	6	Nil
31482	Honours Project B	6	31481, 32931
32931	Information Technology Research Methods	6	Nil

Note: Refer to the timetable for detailed information as to when subjects are offered.

Elective subjects in Bachelor of Science (Honours) in Information Technology

Subject number	Subject name	Credit points	Prerequisites
31054	Honours Seminar 1	6	specified by Subject Coordinator
31055	Honours Seminar 2	6	specified by Subject Coordinator
31056	Honours Seminar 3	6	specified by Subject Coordinator
31057	Honours Seminar 4	6	specified by Subject Coordinator

Core subjects in Bachelor of Information Technology

Subject number	Subject name	Credit points	Prerequisites
31465	Object-oriented Programming	6	Nil
31466	Principles of Distributed Computing	6	Nil
31467	Networking 1	6	Nil
31468	Information, Classification and Control	6	Nil
31469	Object-oriented Design	6	31465
31470	Distributed Computing Architecture	6	31465, 31466
31474	Database Fundamentals	6	Nil
31475	Requirements Engineering	6	31472
31476	Systems Development Project	12	31474, 31475
31479	Information Technology Professional and Society	6	31476
31480	Strategic Information Technology Planning Project	6	31478
31489	Industry Study 1	6	one semester of BInfTech
31490	Industry Study 2	6	four semesters of BInfTech
31491	Industry Project 1	9	one semester of BInfTech
31492	Industry Project 2	9	four semesters of BInfTech
31735	Information Systems and Organisation Development	6	Nil
31736	Business Processes and IT Strategy	6	Nil

Note: Refer to the timetable for detailed information as to when subjects are offered.

Core subjects in Bachelor of Science in Information Technology Innovation

Subject number	Subject name	Credit points	Prerequisites
21126	Capstone Project in Business Planning	6	completion of foundation core and discipline theme subject
21193	Introduction to Corporate Strategy	6	to be advised
21227	Innovation and Small Venture Management	6	Nil
22107	Accounting for Business	6	Nil
24108	Marketing Foundations	6	Nil
24307	Electronic Business	6	24108
25559	New Start Financing and Valuation	6	Nil (for IT Innovation students)
31060	Information Systems Principles	6	Nil

Core subjects in Bachelor of Science in Information Technology Innovation (cont.)

Subject number	Subject name	Credit points	Prerequisites
31062	Entrepreneurial Experience	0	four semesters of BSc (InfTech) Innovation
31465	Object-oriented Programming	6	Nil
31466	Principles of Distributed Computing	6	Nil
31467	Networking 1	6	Nil
31469	Object-oriented Design	6	31465
31470	Distributed Computing Architecture	6	31465, 31466
31473	Data Structures and Procedural Programming	6	31469
31474	Database Fundamentals	6	Nil
31475	Requirements Engineering	6	31060
31476	Systems Development Project	12	31474, 31475
31478	Project Management and Quality Assurance	6	31476
31479	Information Technology Professional and Society	6	31476
48210	Engineering for Sustainability	6	Nil

Undergraduate electives

Subject number	Subject name	Credit points	Prerequisites
31027	Building e-Market Negotiators	6	ability to program in Java
31028	Project 2cp	2	by consent of supervisor
31029	Project 4cp	4	by consent of supervisor
31030	Project 6cp	6	by consent of supervisor
31043	Principles of Data Mining and Visualisation of Knowledge	6	31474
31044	Advanced Topics in Computer Networks	6	31471 or equivalent
31045	Mobile Computing	6	31471 or equivalent
31512	Networking 1	6	31509
31513	Networking 2	6	31436 or 31512
31601	Programming for Performance	6	31425, 31429
31744	Case-based Reasoning	6	Nil
31745	Knowledge-based Systems	6	31743 or 31744
31746	Artificial Intelligence Applications	6	31743 or 31744
31748	Programming on the Internet	6	31436 and an OO programming language
31778	Resource Management for IT Professionals	6	Nil
31860	Object-oriented Programming and C++	6	31424, 31429 or equivalent
31876	Operating Systems Facilities	6	31436
31904	Systems Programming	6	31429
31919	Distributed Software Programming	6	31436, 31904
31922	Object-oriented Methodologies	6	31424
31925	Smalltalk	6	31415, 31424
31931	Software Quality Assurance	6	31424
31950	Networked Enterprise Design	6	Nil

Notes:

1. Refer to the timetable for detailed information as to when subjects are offered.
2. Students may undertake any Bachelor of Science in Information Technology IT sub-major subject as an elective.

Core subjects in Bachelor of Information Technology – pre-2002 program

Subject number	Subject name	Credit points	Prerequisites
22615	Accounting Information Systems	6	Nil
24108	Marketing Foundations	4	Nil
31414	Information Systems	6	Nil
31415	Principles of Software Development A	6	31718c
31416	Computer Systems Architecture	6	Nil
31424	Systems Modelling	6	Nil
31434	Database Design	6	31771
31436	Systems Software and Networks	8	31416
31443	Distributed Databases and Client/Server Computing	6	31434
31444	Systems Design and Development	10	31434, 31436
31464	Information Technology Planning and Design	6	31756
31718	Contemporary Information Technology 1	6	Nil
31722	Commercial Programming	5	one semester of BInfTech
31735	Information Systems and Organisation Development	6	31414 or equivalent
31736	Business Processes and IT Strategy	6	at least 36 credit points
31756	Project Management	5	four semesters of BInfTech
31769	Contemporary Information Technology 2	4	five semesters of BInfTech
31770	Industry Project 1	5	one semester of BInfTech
31771	Business Requirements Analysis	5	one semester of BInfTech
31779	Applications of Information Technology 1	5	one semester of BInfTech
31781	Business Systems Design	5	four semesters of BInfTech
31789	Applications of Information Technology 2	5	four semesters of BInfTech
31790	Industry Project 2	5	four semesters of BInfTech

Note: These subjects or a nominated replacement subject will continue to be timetabled while there are students who are required to undertake a given subject as a compulsory component of the degree.

Core subjects in Bachelor of Computing

Subject number	Subject name	Credit points	Prerequisites
22615	Accounting Information Systems	6	Nil
31414	Information Systems	6	Nil
31417	Computing Practice	6	Nil
31424	Systems Modelling	6	Nil
31425	Principles of Software Development B	6	31508
31428	Quantitative Modelling	6	31508
31429	Procedural Programming	6	31508
31434	Database Design	6	31424
31454	Project Management and the Professional	6	31511
31464	Information Technology Planning and Design	6	31454
31507	Australian IT Industry	6	Nil
31508	Programming Fundamentals	6	Nil
31509	Computer Fundamentals	6	Nil
31510	Operating Systems	6	31509
31511	Systems Design	6	31424
31512	Networking 1	6	31509
31514	Computing Theory	6	Nil
31515	Introduction to Australian IT Industry	6	Nil
31931	Software Quality Assurance	6	31429

Note: These subjects or a nominated replacement subject will continue to be timetabled while there are students who are required to undertake a given subject as a compulsory component of the degree.

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Core subjects in Bachelor of Science in Computing Science

Subject number	Subject name	Credit points	Prerequisites
22615	Accounting Information Systems	6	Nil
31136	Preparation and Review of IT Experience ¹	6	Please refer to the DiplInfTechProfPrac entry on page 63.
31137	IT Experience 1 ¹	0	31136c
31138	Review of IT Experience ¹	6	31136, 31137, 31139c
31139	IT Experience 2 ¹	0	31136, 31137, 31138c
31414	Information Systems	6	Nil
31415	Principles of Software Development A	6	31417c
31416	Computer Systems Architecture	6	Nil
31417	Computing Practice	6	Nil
31424	Systems Modelling	6	Nil
31425	Principles of Software Development B	6	31415
31428	Quantitative Modelling	6	Nil
31429	Procedural Programming	6	31415
31434	Database Design	6	31424
31436	Systems Software and Networks	8	31429, 31416
31444	Systems Design and Development	10	31434, 31436
31454	Project Management and the Professional	6	31444
31455	Software Development Case Study	12	31444
31464	Information Technology Planning and Design	6	31428, 31436, 31444, 31454
31696	Industrial Training [FT]	0	31414, 31415, 31416, 31417, 31424, 31429, 31434, 31436
31697	Industrial Training [FT]	0	31696
31698	Industrial Training [PT] ²	0	31414, 31415, 31416, 31417
31699	Industrial Training [PT] ²	0	31698

¹ Post-2000 subjects

² The subjects 31698 Industrial Training and 31699 Industrial Training are pre-2000 subjects and must be taken for two semesters.

Note: These subjects or a nominated replacement subject will continue to be timetabled while there are students who are required to undertake a given subject as a compulsory component of the degree.

Postgraduate

Master of Science in Computing subjects

Subject number	Subject name	Credit points	Prerequisites
32106	Object-oriented Process	6	32536
32108	Applications of Artificial Intelligence	6	Nil
32115	Requirements Engineering Research and Practice	6	A good understanding of software development process
32130	Principles and Practice of Data Mining	6	Knowledge of database technologies
32131	Data Mining and Visualisation in e-Business	6	Knowledge of database technologies
32204	Advanced Data Management	6	Nil
32208	Information Processing Strategy	6	Nil
32509	Interaction Design	6	Nil
32510	Principles of Object-oriented Programming in C++	6	32106
32517	Commerce on the Internet	6	Nil
32531	Global Information Systems	6	Nil
32532	Conducting Business Electronically	6	Nil
32533	Networking Communities	6	Nil

Master of Science in Computing subjects (cont.)

Subject number	Subject name	Credit points	Prerequisites
32534	Knowledge Management	6	Nil
32535	Databases in Distributed Environments	6	Nil
32536	Object-oriented Modelling	6	Nil
32541	Project Management	6	Nil
32545	Multi-agent Systems	6	Nil
32546	Business Process Engineering	6	Nil
32902	Recent Advances in Information Systems	6	Nil
32xxx	Virtual Worlds: Programming and Design	6	32516
32931	Information Technology Research Methods	6	to be undertaken in final year of study
32932	Project A1	6	32930 or 32931
32933	Project B1	6	32932
32934	Project B2	12	32932

Note: Refer to the timetable for detailed information as to when subjects are offered.

Core subjects in the Information Technology Management Program

Subject number	Subject name	Credit points	Prerequisites
21788	Effective People Management	6	Nil
21789	Contemporary Management Practices	6	Nil
21806	Managing Organisational Change	6	Nil
21808	Strategic Business Management	6	Grad Cert InfTechM, 21806
32601	Advanced Project Management	6	Nil
32930	Information Technology Management Research Methods	6	to be undertaken in final year of study
32932	Project A1	6	32930
32933	Project B1	6	32932
32934	Project B2	12	32932

Note: Refer to the timetable for detailed information as to when subjects are offered.

Elective subjects in the Information Technology Management Program

Subject number	Subject name	Credit points	Prerequisites
22746	Managerial Accounting	6	Nil
22747	Accounting for Managerial Decisions	6	Nil
24704	Managing Client Relations	6	Nil
25705	Financial Modeling and Forecasting	6	Nil
25742	Financial Management	6	Nil
32604	Systems Integration	6	32601
32702	Contemporary Telecommunications	6	Nil
32703	Information Technology Strategy	6	Nil
32704	Strategic IT Contract Management	6	GradCert InfTechM

Note: Refer to the timetable for detailed information as to when subjects are offered.

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Internetworking Program subjects

Subject number	Subject name	Credit points	Prerequisites
32009	Advanced Routing Principles ¹	6	32521 or completion of CCNA preparation or Certification
32010	Wide Area Network Implementation ¹	6	32521 or completion of CCNA preparation or Certification
32011	Multilayer Switched Networks ¹	6	32521 or completion of CCNA preparation or Certification
32109	Network Analysis and Troubleshooting	6	32009, 32010, 32011
32118	Mobile Communications and Computing	6	32524
32516	Internet Programming	6	Nil
32520	UNIX Systems Administration	6	32547 Unix Systems Programming
32521	WANs and VLANs	6	32524
32523	Operating Systems for Internetworking	6	Nil
32524	LANS and Routing	6	Nil
32525	Distributed Software Programming	6	32516
32527	Internetwork Design	6	32524
32528	Network Management	6	32524
32547	UNIX Systems Programming	6	Nil
32548	Network Security	6	32521 WANs and VLANs or equivalent
32549	Advanced Internet Programming	6	32516 or equivalent
32702	Contemporary Telecommunications	6	Nil
32931	Information Technology Research Methods	6	to be undertaken in final year of study
32932	Project A1	6	32931c
32933	Project B1	6	32932
32934	Project B2	12	32932

¹ Or completion of CCNA preparation in another Cisco Networking Academy or the holding of the CCNA industry certificate and relevant industrial experience.

² Or completion of CCNA preparation in another Cisco Networking Academy or the holding of the CCNA industry certificate and relevant industrial experience plus 32009 Advanced Routing Principles.

Note: Refer to the timetable for detailed information as to when subjects are offered.

Core subjects in the e-Business Technology Program

Subject number	Subject name	Credit points	Prerequisites
24726	Economics and Marketing in the New Economy	6	32120c
32120	Evolution of the Internet	6	24726c
32122	Business to Consumer: Fundamental Principles and Technologies	6	32120
32123	Business to Business: Fundamental Principles and Technologies	6	32120
32124	e-Business Project Management	6	Nil
32125	Enterprise Application Integration: Principles and Technologies	6	32120
32126	Web Content Design and Management	6	Nil
32931	Information Technology Research Methods	6	to be undertaken in final year of study
32932	Project A1	6	32931c

Note: Refer to the timetable for detailed information as to when subjects are offered.

Elective subjects in the e-Business Technology Program

Subject number	Subject name	Credit points	Prerequisites
32127	Business to Consumer: Advanced Principles	6	32122
32128	Business to Business: Advanced Principles	6	32123
32131	Data Mining and Visualisation in e-Business	6	knowledge of database technologies
32524	LANs and Routing	6	Nil
32549	Advanced Internet Programming	6	32516 or equivalent
32933	Project B1	6	32932
32934	Project B2	12	32932

Note: Refer to the timetable for detailed information as to when subjects are offered.

Core subjects in Graduate Certificate in Information Technology and Graduate Diploma in Information Technology

Subject number	Subject name	Credit points	Prerequisites
31484	Information Systems Foundations	6	Nil
31485	Systems Development	6	31484 desirable
31486	Data Communications	6	Nil
31487	Database Management Systems	6	Nil
31488	Programming Foundations	6	Nil

Note: Refer to the timetable for detailed information as to when subjects are offered.

Core subjects in Master of Information Technology

Subject number	Subject name	Credit points	Prerequisites
32113	Advanced Database	6	31487
32114	Advanced Data Communications	6	31486

Note: Refer to the timetable for detailed information as to when subjects are offered.

Core subjects in the Interactive Multimedia Program

Subject number	Subject name	Credit points	Prerequisites
95563	Digital Media Development Process	6	Nil
95564	Digital Media Technologies	6	Nil
95565	Digital Graphics and the Still Image	6	Nil
95566	Digital Information and Interaction Design	6	Nil
95567	Digital Media in Social Context	6	Nil
95568	Digital Sound and the Moving Image	6	Nil
95569	Digital Media Project	12	48 credit points in Master of Interactive Multimedia

Note: Refer to the timetable for detailed information as to when subjects are offered.

ALPHABETICAL LISTS OF SUBJECTS

SUBJECTS OFFERED BY INFORMATION TECHNOLOGY

3D Computer Animation	31603	Contemporary Information Technology 2	31769
Advanced 3D Computer Animation	32543	Contemporary Telecommunications	32702
Advanced Cognitive Modelling	32542	Data Communications	31486
Advanced Data Communications	32114	Data Mining and Knowledge Discovery	31040
Advanced Data Management	32204	Data Mining and Visualisation in e-Business	32131
Advanced Database	32113	Data Structures and Procedural Programming	31473
Advanced Database Concepts and Techniques	31074	Database	32606
Advanced Image Synthesis Techniques	32544	Database Design	31434
Advanced Internet Programming	32549	Database Fundamentals	31474
Advanced Internet Technologies	31337	Database Management Systems	31487
Advanced Machine Learning	32513	Database Programming and Administration	31099
Advanced Project Management	32601	Databases in Distributed Environments	32535
Advanced Routing Principles	32009	Digital Media Programming and Communication	31081
Advanced Topics in Computer Networks	31044	Digital Multimedia	31080
Applications Development with Delphi	31928	Distributed Computing Architecture	31470
Applications Development with Visual Basic	31927	Distributed Databases and Client/Server Computing	31443
Applications of Artificial Intelligence	32108	Distributed Software Programming	31919
Applications of Information Technology 1	31779	Distributed Software Programming	32525
Applications of Information Technology 2	31789	Distributed Virtual Worlds	31334
Artificial Intelligence Applications	31746	e-Business Project Management	32124
Building e-Market Negotiators	31027	Enterprise Application Integration: Principles and Technologies	32125
Building Intelligent Agents	32530	Enterprise Wide Software Systems	32537
Business Process Engineering	32546	Entrepreneurial Experience	31062
Business Processes and IT Strategy	31736	Evolution of the Internet	32120
Business Requirements Analysis	31771	Extreme Programming	31335
Business Systems Design	31781	Global Information Systems	32531
Business to Business: Advanced Principles	32128	Honours Project A	31481
Business to Business: Fundamental Principles and Technologies	32123	Honours Project B	31482
Business to Consumer: Advanced Principles	32127	Honours Seminar 1	31054
Business to Consumer: Fundamental Principles and Technologies	32122	Honours Seminar 2	31055
Case-based Reasoning	31744	Honours Seminar 3	31056
Cognitive Modelling	31916	Honours Seminar 4	31057
Commerce on the Internet	32517	Human-Computer Interaction	31777
Commercial Programming	31722	Industrial Training (FT)	31696
Computer Fundamentals	31509	Industrial Training (FT)	31697
Computer Graphics	32501	Industrial Training (PT)	31698
Computer Graphics Project	31460	Industrial Training (PT)	31699
Computer Graphics Rendering Techniques	31605	Industry Project 1	31491
Computer Vision and Image Processing	31049	Industry Project 1	31770
Computing Theory	31514	Industry Project 2	31492
Conducting Business Electronically	32532	Industry Project 2	31790
Contemporary Information Technology 1	31718	Industry Study 1	31489
		Industry Study 2	31490
		Information, Classification and Control	31468
		Information Processing Strategy	32208

Information Systems and Organisation		Operating Systems	31510
Development	31735	Operating Systems	32307
Information Systems Foundations	31484	Operating Systems Facilities	31876
Information Systems Principles	31060	Operating Systems for Internetworking	32523
Information Technology Management		Preparation and Review of IT Experience	31136
Research Methods	32930	Principles and Practice of Data Mining	32130
Information Technology Professional and Society	31479	Principles of Data Mining and Visualisation for Knowledge Discovery	31043
Information Technology Research Methods	32931	Principles of Distributed Computing	31466
Information Technology Strategy	32703	Principles of Object-oriented Programming in C++	32510
Intelligent Agents in Java	31750	Principles of Object-oriented Programming in Smalltalk	32511
Interaction Design	32509	Programming for Performance	31601
Internet Commerce	31749	Programming Foundations	31488
Internet Middleware Programming	31336	Programming Fundamentals	31508
Internet Programming	32516	Programming on the Internet	31748
Internetwork Design	32527	Project 2cp	31028
Internetwork Design	31085	Project 4cp	31029
Introduction to Collaborative Systems	31472	Project 6cp	31030
Introduction to Computer Graphics	31140	Project A1	32932
IS Development Approaches	31092	Project B1	32933
IS Theory and Research Methods	31095	Project B2	32934
IT Experience 1	31137	Project Management	31756
IT Experience 2	31139	Project Management	32541
IT Operations Management	31097	Project Management and Quality Assurance	31478
Knowledge Management	32534	Quality Assurance and Process Improvement	31093
Knowledge-based Systems	31745	Recent Advances in Information Systems	32902
LANs and Routing	32524	Requirements Engineering	31475
Machine Learning	31743	Requirements Engineering Research and Practice	32115
Managing Client/Vendor Relations	31096	Resource Management for IT Professionals	31778
Mobile Communications and Computing	32118	Review of IT Experience	31138
Mobile Computing	31045	Smalltalk	31925
Mobile Computing Project	31091	Software Architecture	31078
Mobile IP and Wireless LANs	31089	Software Engineering Fundamentals	31077
Mobile Networks	31088	Software Engineering Processes	31079
Mobile Programming	31090	Software Metrics and Testing	31098
Multi-agent Systems	32545	Software Quality Assurance	31931
Multilayer Switched Networks	32011	Strategic Information Technology Planning Project	31480
Multimedia Data Mining	31083	Strategic IT Contract Management	32704
Network Analysis and Troubleshooting	32109	Systems Analysis	32607
Network Management	32528	Systems Design	31511
Network Management	31087	Systems Development	31485
Network Security	32548	Systems Development Project	31476
Network Security	31086	Systems Integration	32604
Network Servers	31338	Systems Modelling	31424
Networked Enterprise Design	31950	Systems Programming	31904
Networking 1	31467	UNIX Systems Administration	32520
Networking 1	31512	UNIX Systems Programming	32547
Networking 2	31471	Virtual Communities	31606
Networking 2	31513	Virtual Worlds: Programming and Design	32xxx
Networking Communities	32533	VLANs and WANs	31084
Networking Fundamentals	31516	WANs and VLANs	32521
Object-oriented Design	31469	Web Content Design and Management	32126
Object-oriented Methodologies	31922	Wide Area Network Implementation	32010
Object-oriented Modelling	32536		
Object-oriented Process	32106		
Object-oriented Programming	31465		
Object-oriented Programming and C++	31860		
Objectbases	31921		

SUBJECTS OFFERED BY OTHERS

Aboriginal Cultures and Philosophies	015110	Electrotechnology and Data Analysis	68312
Aboriginal Social and Political History	015395	Employment Relations in the Global Context	21306
Academic English for Postgraduate Study	59311	Engineering for Sustainability	48210
Accounting for Business	22107	English for Academic Purposes 1	59304
Accounting for Business Combinations	22320	English for Academic Purposes 2	59305
Accounting for Insolvency	22610	English for Business	59320
Accounting for Managerial Decisions	22747	Equity and Trusts	70516
Accounting for Small Business 1	22566	Federal Constitutional Law	70616
Accounting for Small Business 2	22567	Financial Management	25742
Accounting Information Systems	22605	Financial Modelling and Forecasting	25705
Accounting Standards and Regulations	22420	Foundations of Physics	68101
Accounting Transactions and Business Decisions	22207	French Language and Culture	97x411
Administrative Law	70617	German Language and Culture	97x421
Advertising and Promotions Management	24210	Greek	97x710
Atoms, Photons and Orbits (Physics 3)	68311	High Performance Computing	35383
Australian English Language and Culture 1	59314	In-country Study 1	977xxx
Australian English Language and Culture 2	59315	In-country Study 2	978xxx
Australian Society and Culture 1	59308	Indonesian Language and Culture	97x311
Australian Society and Culture 2	59309	Industry Economics	25303
Business Marketing	24205	Innovation and Small Venture Management	21227
Capstone Project in Business Planning	21126	International Accounting	22240
Chinese Language and Culture	97x111	International Business	21128
Communication for Employment	59319	International Management	21591
Community Research Elective (PG)	50295	International Marketing	24220
Community Research Elective (PG)	50296	Introduction to Corporate Strategy	21193
Community Research Elective (UG)	50293	Introductory Marketing Research	24309
Community Research Elective (UG)	50294	Introductory Mathematical Methods	33401
Comparative Social Change	50140	Italian Language and Culture	97x431
Computing and Mathematics for Science	33290	Japanese Language and Culture	97x211
Consumer Behaviour	24202	Law of Contract	70211
Contemporary China	976111	Law of Evidence	71216
Contemporary Europe	976401	Law of Tort	70311
Contemporary Japan	976211	Legal Process and History	70113
Contemporary Latin America	976501	Legal Research	70105
Contemporary South-East Asia	976301	Macroeconomic Theory and Policy	25309
Corporate Law	70417	Malaysian Language and Culture	97x331
Cost Management Systems	22321	Managerial Accounting	22746
Criminal Law	70217	Managing People and Organisations	21129
Design and Analysis of Experiments	35356	Marketing Foundations	24108
Digital Graphics and the Still Image	95565	Mathematical Modelling for Science	33190
Digital Information and Interaction Design	95566	Microeconomic Theory and Policy	25210
Digital Media Development Process	95563	Network Optimisation	35344
Digital Media in Social Context	95567	New Start Financing and Valuation	25559
Digital Media Project	95569	Numerical Methods	35281
Digital Media Technologies	95564	Operations Research Modelling	35140
Digital Sound and the Moving Image	95568	Optimisation 1	35241
Economics and Marketing in the New Economy	24726	Optimisation 2	35342
Economics for Business	25115	Personal Property	70318
Electronic Business	24307	Physics in Action (Physics 2)	68201
Electronics	68314	Postgraduate Academic Writing in Context	59312
Electronics and Interfacing	68514	Postgraduate Study in Australia	59310
		Practice and Procedure	71005
		Probability and Stochastic Processes	35361
		Quality Control	35355
		Real Property	70317
		Reconciliation Studies	85208
		Reconciliation Studies	85209

Reconciliation Studies	85210
Reconciliation Studies	85211
Regression Analysis	35353
Remedies	71116
Researching Australia 1 – Ethnography	59306
Researching Australia 2 – Researching for Study	59307
Russian	97x734
Seminar Presentation	59318
Simulation Modelling	35363
Spanish Language and Culture	97x501
Statistics 1	35151
Statistics 2	35252
Strategic Human Resource Management	21407
Technology, Society and Change	95556
Thai	97x320
Vibrations, Quanta and Nucleons (Physics 4)	68411

SUBJECT CODE CHANGES

In December 2002, a number of subject codes were merged across UTS. This was undertaken to consolidate the university's records. These subjects are listed in the table below (in numeric order), with the corresponding new code and name (where applicable). The new details will now appear on results notification and transcripts.

Old	New	Subject name
77833	77737	Carriage of Goods By Sea
77834	77706	Advanced Administrative Law (PG)
77835	77709	Planning and Development Law 1
77836	77934	Pollution Law
77838	77719	Capital Gains Tax: Fundamentals
77839	77924	Superannuation Law
77841	77707	Advanced Constitutional Law (PG)
77851	77734	Law and Medicine
77855	77785	Law of Futures and Derivatives
77858	77789	Law of Prescribed Interests
77859	77793	Information Technology Law
77860	77794	International Environmental Law
77866	77796	Taxation of Partnerships and Trusts
77870	70113	Legal Process and History
77871	70105	Legal Research
77872	70211	Law of Contract
77873	70217	Criminal Law
77874	70311	Law of Tort
77875	70317	Real Property
77876	70318	Personal Property
77877	70417	Corporate Law
77878	70516	Equity and Trusts
77879	70616	Federal Constitutional Law
77880	70617	Administrative Law
77881	71005	Practice and Procedure
77882	71116	Remedies
77883	71216	Law of Evidence
77905	77886	Telecommunications and Media Law
77907	77903	Copyright Law 1
77908	77904	Copyright Law 2
77909	77820	Corporations, Finance and Securities (LS)
77949	77935	International Business Law
77958	77896	Legal Process and Intellectual Property
77960	77889	Trade Marks Law
77961	77890	Trade Marks Practice
77962	77898	Patent Law (LP)
77963	77891	Patent Systems
77964	77893	Designs Law And Practice
77965	77894	Drafting Of Patent Specifications
77966	77895	Interpretation and Validity of Patent Specifications
77987	77989	PhD (Law) (PT)
83320	83332	Print Technology
83520	83552	Digital Fashion and Textiles Elective
83530	83553	Research Project F&T
83620	83662	Design and Industry
83630	83663	Professional Practice F&T
92865	92813	Dissertation
779871	77989	PhD (Law) (PT)
K80206	16351	Introduction to Valuation
K80207	16854	Real Estate Law
K80227	24730	Advanced Marketing Management
K80504	21720	Employment Relations
34987	34988	PhD Thesis (Mathematics) (FT)
48111	48271	Aerospace Operations 1
48401	48271	Aerospace Operations 1
48402	48272	Aerospace Operations 2
48403	48273	Aerospace Operations 3
48404	48274	Aerospace Maintenance Management
52203	50129	News and Current Affairs
54351	50359	Screenwriting
54364	50178	Soundtrack
73401	75401	Litigation
73402	75402	Property Transactions (Law)
73403	75403	Commercial and Estate Practice
73411	75411	Practical Experience
73412	75412	Legal Skills and Professional Awareness
73415	75415	Professional Conduct
73416	75416	Professional Conduct 2
76080	76065	Finance Law
77780	77740	Research Paper
77781	77725	Research Project
77787	77788	Doctoral Dissertation (SJD) (FT)
77791	77790	Thesis (Law) (FT)
77800	77725	Research Project
77801	77716	International Trade Law (PG)
77802	77701	International Economic Law (PG)
77804	77703	International Business Transactions
77805	77729	Chinese Trade and Investment Law
77806	77733	Chinese Law and Legal Systems
77809	77927	International Monetary Law
77811	77712	Deceptive Trade Practices
77812	77721	Restrictive Trade Practices (PG)
77813	77730	Corporate Insolvency and Restructuring
77814	77751	International Commercial Arbitration
77818	77744	Franchising Law
77821	77715	Banking Law (PG)
77822	77724	International Banking and Finance Law
77823	77754	Advanced Corporate Insolvency and Restructuring
77824	77704	European Union Law
77828	77926	Private International Law
77829	77931	Advanced European Union Law

BOARDS AND COMMITTEES

FACULTY BOARD IN INFORMATION TECHNOLOGY

Ex officio members

Dean of Faculty

Professor M Fry (Chair)

Associate Dean (Education)

Associate Professor D N Wilson

Associate Dean (Research, Policy and Planning)

Associate Professor C B Jay

Head, Department of Computer Systems

Associate Professor T B Hintz

Head, Department of Information Systems

Dr J Underwood

Head, Department of Software Engineering

Mr R Raban

The Professoriate

Professor J K Debenham

Professor J J Edwards

Professor E Edmonds

Professor I T Hawryszkiewicz

Professor J M Hughes

Professor B Henderson-Sellers

Professor M-A Williams

Professor C Zhang

Director, Software Engineering Unit

Associate Professor J Leaney

Faculty Manager

Mr G C Goodwin-Moore

Student Liaison Manager

Ms S D Clarke

Nominated members

Dr G Caprarelli, Faculty of Science

Dr P Tooth, University Library

Vacant, Nominee of the Pro-Vice-Chancellor (Education and Quality)

Vacant, Nominee of the Faculty of Business

Elected staff members

Department of Computer Systems

Dr W Brookes

Ms K Felix Navarro

Dr E Lawrence

Dr A Solomon

Mr U Szewcow

Department of Information Systems

Mr P Bebbington

Dr D Chandran

Ms G Culjak

Ms K-S Kang

Dr C Lueg

Department of Software Engineering

Dr P Kennedy

Dr R Lister

Dr R Rist

Dr K Suffern

Dr D Zowghi

Faculty of Information Technology

Support Staff

Ms I Chu

Ms J H Donovan

Elected student members

Mr A Malaviya

Mr E Sillence

Official Observers

Ms J Houghton, Faculty of Humanities and Social Sciences

Associate Professor A S Mowbray, Faculty of Law

Note: The Faculty Board in Information Technology is to be reconstituted in Spring semester 2002 in line with the Recommendation of Council COU/02/056. Details of the revised membership will be published on the Faculty of Information Technology website and will be available from the Faculty Student Centre.

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- UTS Northshore Conference Centre

St Leonards campus

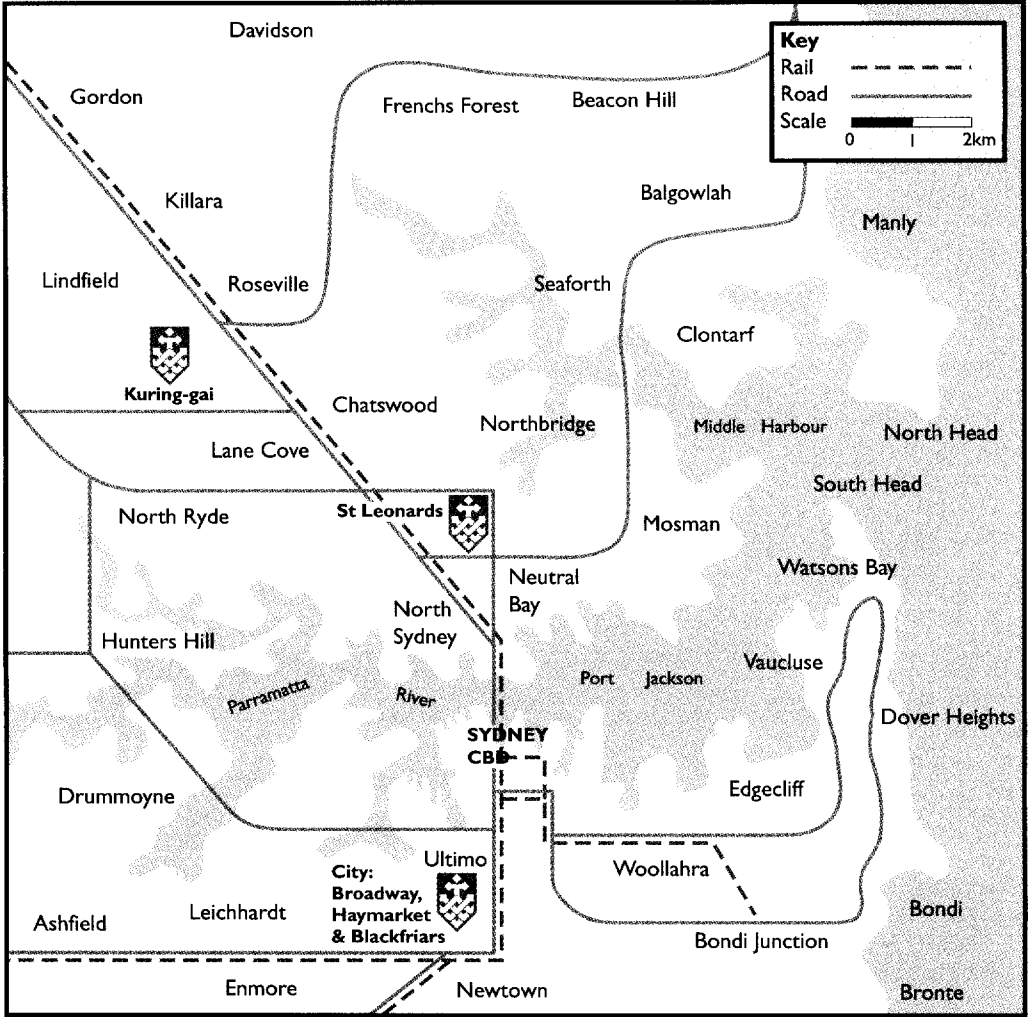
- SL01, Dunbar Building
Corner Pacific Highway and
Westbourne Street, Gore Hill
- SH52, Clinical Studies Building
SH51, Centenary Lecture Theatre
SH11A, West Wing, Reserve Road
Royal North Shore Hospital
- SH44, Gore Hill Research Centre
and SH44A, Biology Annexe
Royal North Shore Hospital

Yarrawood conference and research centre

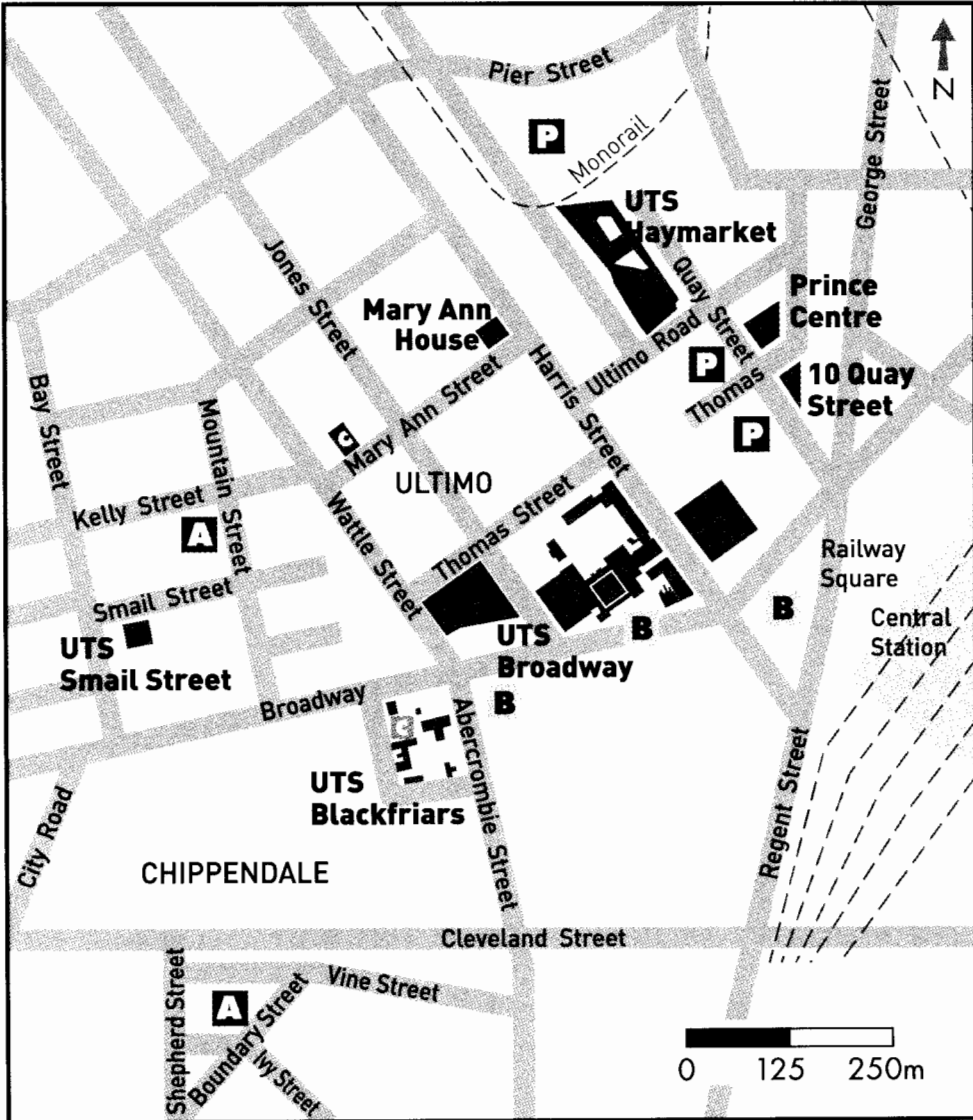
- YW01–15
689 Springwood Road
Yarramundi NSW 2753

UTS MAPS

Sydney regional map

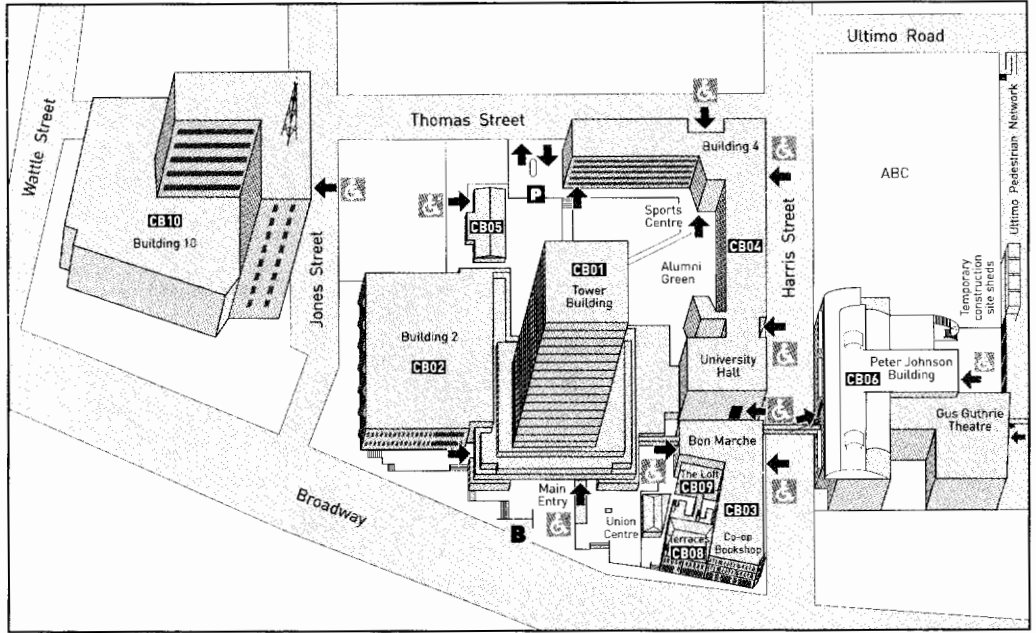


City campus

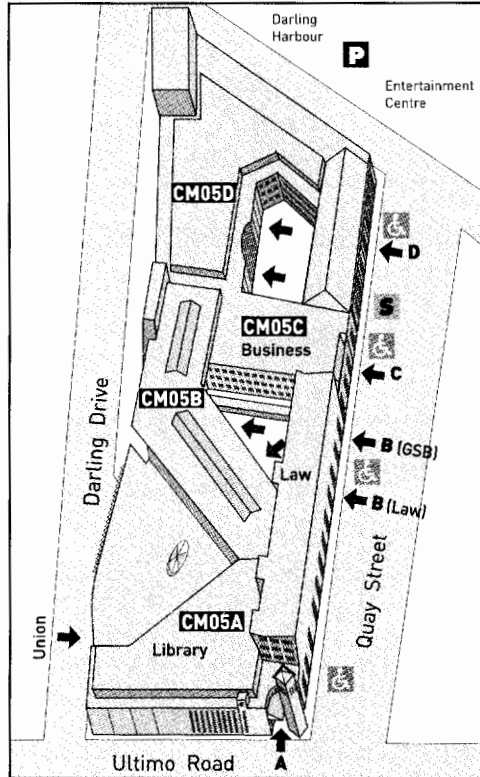


KEY	
	Entry / Exit
	Disabled access
	Main bus stop
	UTS shuttle bus
	Parking
	Child care
	Student accommodation
	Building numbers

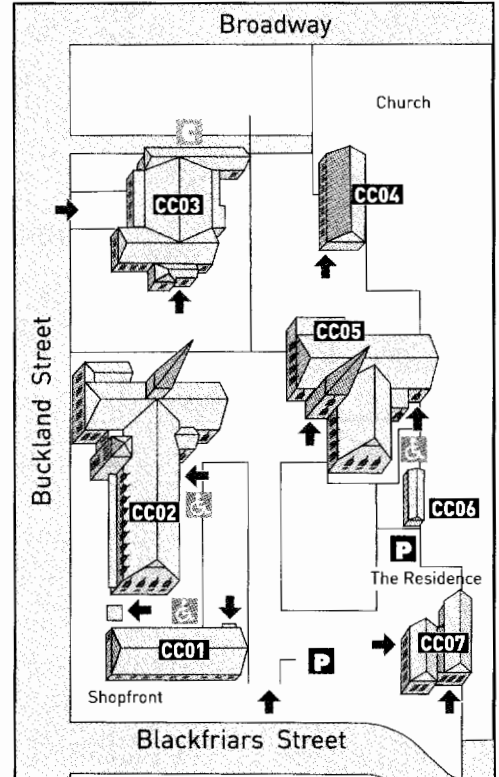
Broadway



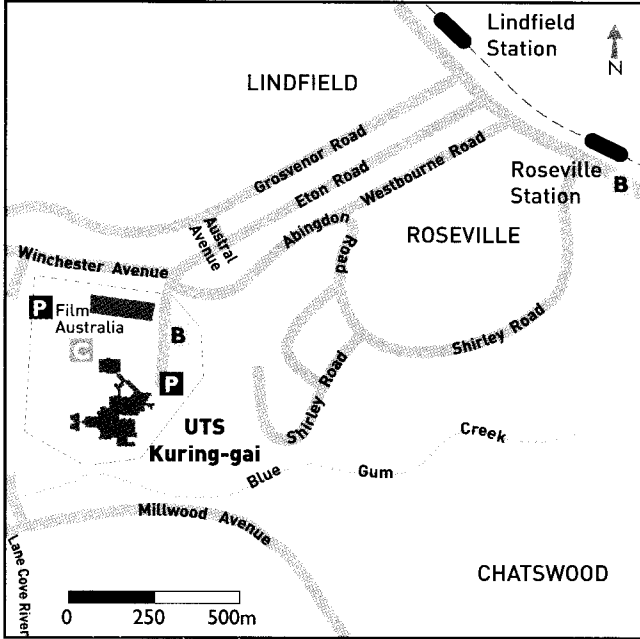
Haymarket



Blackfriars

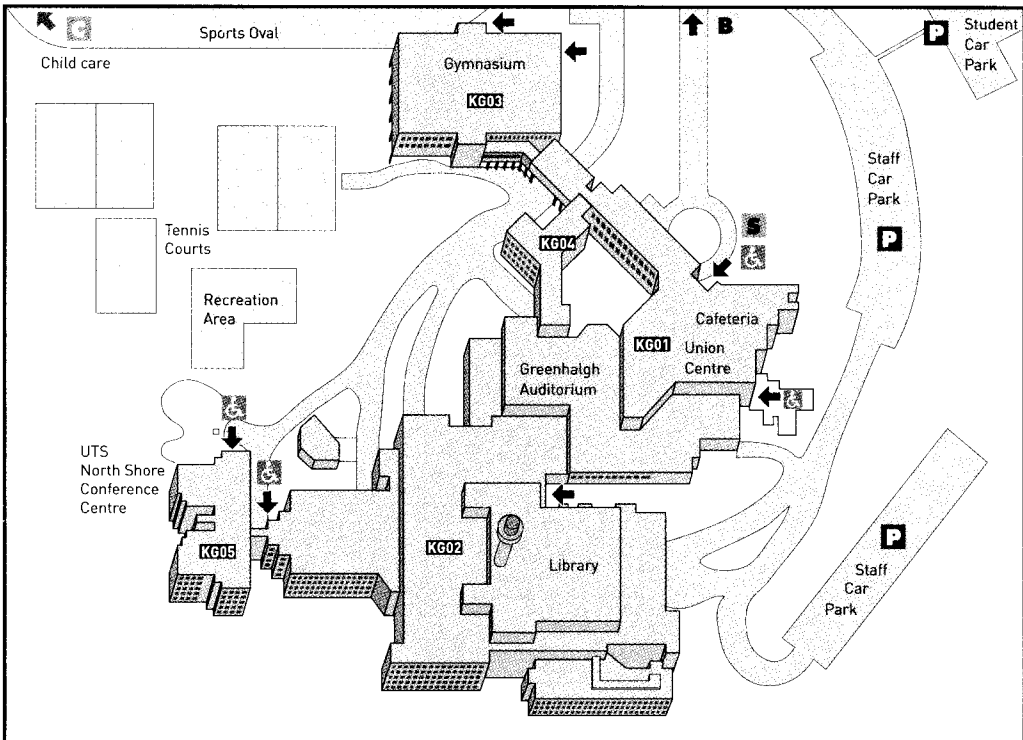


Kuring-gai campus

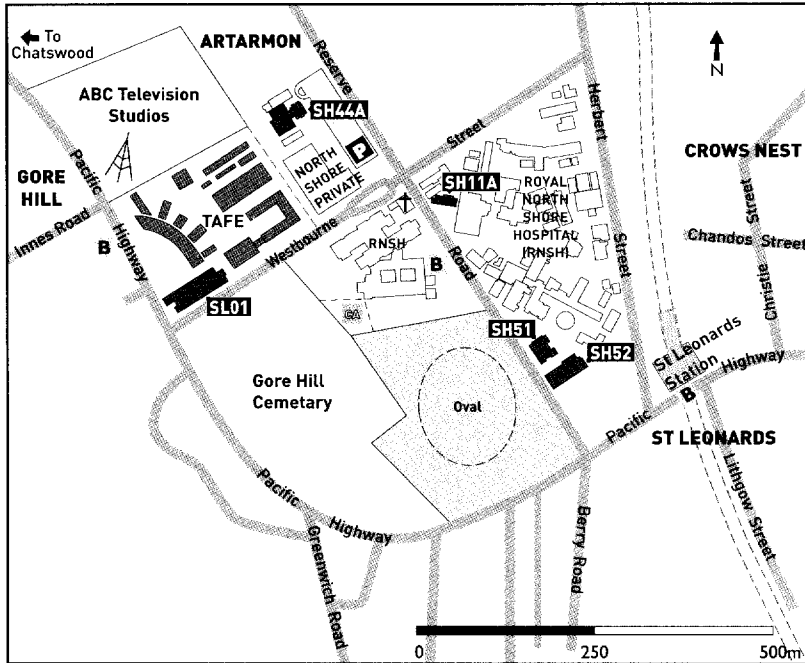


KEY

- ➔ Entry / Exit
- ♿ Disabled access
- B** Main bus stop
- S** UTS shuttle bus
- P** Parking
- 👶 Child care
- A** Student accommodation
- CB01** Building numbers



St Leonards campus



KEY TO MAP

Building colours indicate:

UTS buildings

Hospital buildings

TAFE buildings

UTS building numbers indicate:

Biology Annexe

Clinical Studies

Dunbar

Centenary Lecture Theatre

West Wing

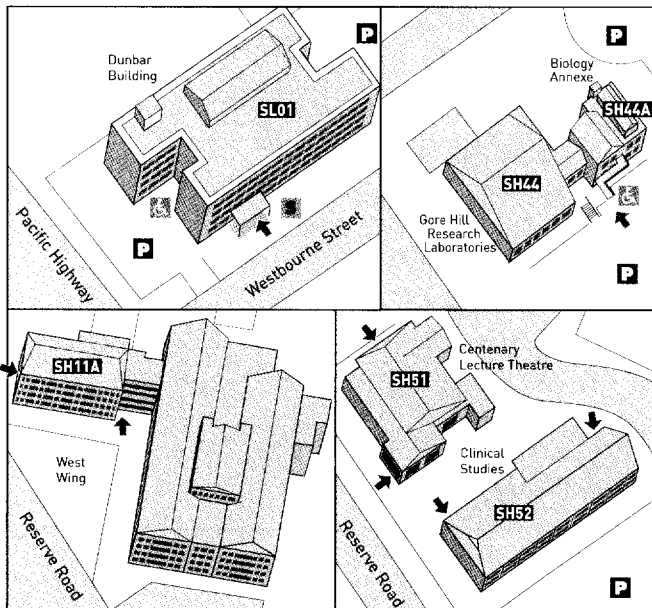
Other symbols indicate:

Bus Stop

Chapel

Construction area

Parking



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