

FACULTY OF INFORMATION TECHNOLOGY

Courses

- Information for all Information Technology students 505
- Master of Applied Science (Research) (IT84) 505
- Master of Information Technology (IT40)/Graduate Diploma
in Information Technology (IT35) 506
- Graduate Diploma in Library and Information Studies (IS25) 511
- Bachelor of Information Technology (Honours) (IT30) 512
- Bachelor of Information Technology (IT20)..... 514
- Block 1: Foundation Year 515
- Block 2: Primary Majors 516
- Block 3: Options 521
- Cooperative Education Program 530

FACULTY OF INFORMATION TECHNOLOGY

Information for all Information Technology students

Rules and regulations

Students undertaking courses in the Faculty of Information Technology should acquaint themselves with Faculty policy on assessment, deferred examinations, and plagiarism. In many cases, Faculty policy is more explicit than University policy. Students should make sure they obtain a copy of the Faculty's Student Information Booklet, which is distributed at the beginning of each semester.

Note that from first semester 1995 a minimum grade of 4 is normally required to fulfil the prerequisite requirement for all units in courses offered by the Faculty of Information Technology.

Faculty policy regarding use of University computer facilities

Access to computer accounts, E-mail, and bulletin board facilities via QUT equipment is provided solely to assist students in education and research. Use of such facilities by students for matters unrelated to their course of study or approved research represents misuse. Any misuse may result in fines, suspension of use of computer accounts, and/or strict disciplinary action. Students will be required to sign a code of conduct on the use of these facilities.

■ Master of Applied Science (Research) (IT84)

See entry under University-wide and Interfaculty Courses.

Location: Gardens Point campus

Course Duration: 2 years full-time, 4 years part-time

Total Credit Points: 192

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Associate Professor George Mohay

The units below have been devised to represent the EFTSU (Effective Full-Time Student Unit) and attendance type of graduate research students.

Students should enrol in the relevant Masters Research units in **each** semester of their masters enrolment. At the end of each semester, results in those units will be shown as T – Assessment Continues. A final grade (Satisfactory/Unsatisfactory) will be given once the thesis has been examined according to the degree rules.

Students may also be required to undertake some coursework early in their degree. These coursework units will be assessed in the normal manner at the end of semester.

Full-Time Course Structure

Credit Points

Full-time students will enrol in:

IFN100 Full-time Masters Research 48

unless they are candidates who either:

- (i) have exceeded the normal course duration and an extension of time has been approved, in which case they will enrol in

IFN101 Full-time Masters Research (extension) 48

OR

- (ii) are required to enrol in coursework units in addition to their research, in which case they may be required to enrol in one of the following units, so that their semester enrolment totals as close as possible 48 credit points:

IFN300 Masters Research 36

IFN301 Masters Research 24

IFN302 Masters Research 12

IFN303 Masters Research 8

Part-Time Course Structure

Part-time students will enrol in:

IFN200 Part-time Masters Research 24

unless they are candidates who either:

- (i) have exceeded the normal course duration and an extension of time has been approved, in which case they will enrol in

IFN201 Part-time Masters Research (extension) 24

OR

- (ii) are required to enrol in coursework units in addition to their research, in which case they may be required to enrol in one of the following units, so that their semester enrolment totals as close as possible 24 credit points:

IFN302 Masters Research 12

IFN303 Masters Research 8

■ Master of Information Technology (IT40)/ Graduate Diploma in Information Technology (IT35)

Location: Gardens Point campus

Course Duration: 1.5 years full-time, 3 years part-time¹

Total Credit Points: 144¹

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Mr Mike Roggenkamp

Entry Requirements

Applicants are required to have completed either:

- (i) a bachelor's degree which contains a major component in information technology or a bachelor's degree in any discipline area followed by a graduate diploma in

¹ Students will be enrolled, initially, in the Graduate Diploma in Information Technology, IT35. On successful completion of the 96 credit points of this course, students can leave with the award of Graduate Diploma in Information Technology. Or, if students have achieved a GPA of at least 5 on a 7 point scale, they may remain in the Program to complete the final 48 credit points for the award of Master of Information Technology.

information technology; students entering under this category are considered to be information technology graduates;

or

- (ii) a bachelor's degree in a discipline other than information technology and, at degree level, an introductory programming unit in a block structured language like Pascal; students entering under this category are considered to be non-information technology graduates.

Selection may be determined on an individual basis.

Professional Recognition

This course will be accredited by the Australian Computer Society as meeting the knowledge requirements associated with the grade of 'Member' of the Society.

Course Structure

The course structure will consist of three 48 credit point modules:

- Non-Information Technology graduates (see Category ii above) will complete the Introductory Module and two other modules, not including the Distributed Systems Module or the Project.
- Information Technology graduates (see Category i above) will complete three modules or two modules and a 48 credit point project. They will not be permitted to do the Introductory Module.

NON-INFORMATION TECHNOLOGY GRADUATES

Full-time Course Structure (IT35)

		Credit Points	Contact Hrs/Wk
Year 1, Semester 1			
ITN210	Foundations of Information Modelling	12	3
ITN410	Software Principles	12	3
ITN510	Data Networks	12	3
Select one unit from the following:			
ITN211	Systems Analysis and Design	12	3
ITN411	Systems Architecture & Operating Systems	12	3
MAB177	Mathematics for Data Communications	12	3

Year 1, Semester 2

Select one of the following modules:

Computing Science Module 1

ITN420	Comparative Programming Languages	12	3
ITN421	Software Specification	12	3
	Elective Unit – Selected from List A	12	3
	Elective Unit – Selected from List A	12	3

Data Communications Module 1

ITN520	Internetworking	12	3
ITN521	Network Applications	12	3
	Elective Unit – Selected from List B	12	3
	Elective Unit – Selected from List B	12	3

Information Systems Module 1

ITN220	Major Issues in Information Systems	12	3
ITN221	Object-Oriented Analysis and Design	12	3
	Elective Unit – Selected from List D	12	3
	Elective Unit – Selected from List D	12	3

Full-Time Course Structure (IT40)

Year 1, Semester 1

Continue studies in module area undertaken in IT35:

Computing Science Module 2

ITN430	Advanced Operating Systems	12	3
ITN431	Distributed Systems	12	3
	Elective Unit – Selected from List A	12	3
	Elective Unit – Selected from List A	12	3

Data Communications Module 2

ITN530	Corporate Telecommunications	12	3
ITN531	Network Security	12	3
	Elective Unit – Selected from List C	12	3
	Elective Unit – Selected from List C	12	3

Information Systems Module 2

ITN230	Current Advances in Database Technology	12	3
ITN231	Knowledge-based Systems	12	3
	Elective Unit – Selected from List E	12	3
	Elective Unit – Selected from List E	12	3

NON-INFORMATION TECHNOLOGY GRADUATES

Part-time Course Structure (IT35)

Year 1, Semester 1

ITN210	Foundations of Information Modelling	12	3
ITN410	Software Principles	12	3

Year 1, Semester 2

ITN510	Data Networks	12	3
Select one from the following:			
ITN211	Systems Analysis and Design	12	3
ITN411	Systems Architecture & Operating Systems	12	3
MAB177	Mathematics for Data Communications	12	3

Year 2, Semester 1

Select one of the following modules:

Computing Science Module 1

ITN420	Comparative Programming Languages	12	3
ITN421	Software Specification	12	3

Data Communications Module 1

ITN520	Internetworking	12	3
ITN521	Network Applications	12	3

Information Systems Module 1

ITN220	Major Issues in Information Systems	12	3
ITN221	Object-Oriented Analysis and Design	12	3

Year 2, Semester 2

Continue with module selected:

Computing Science Module 1

	Elective Unit – Selected from List A	12	3
	Elective Unit – Selected from List A	12	3

Data Communications Module 1

	Elective Unit – Selected from List B	12	3
	Elective Unit – Selected from List B	12	3

Information Systems Module 1

	Elective Unit – Selected from List D	12	3
	Elective Unit – Selected from List D	12	3

Part-Time Course Structure (IT40)

Year 1, Semester 1

Continue studies in module area undertaken in IT35:

Computing Science Module 2

ITN430	Advanced Operating Systems	12	3
ITN431	Distributed Systems	12	3

Data Communications Module 2

	Elective Unit – Selected from List C	12	3
	Elective Unit – Selected from List C	12	3

Information Systems Module 2

ITN100	Research Methodologies	12	3
ITN230	Current Advances in Database Technology	12	3

Year 1, Semester 2

Continue with chosen module:

Computer Science Module 2

	Elective Unit – Selected from List A	12	3
	Elective Unit – Selected from List A	12	3

Data Communications Module 2

ITN530	Corporate Telecommunications	12	3
ITN531	Network Security	12	3

Information Systems Module 2

ITN231	Knowledge-based Systems	12	3
	Elective Unit – Selected from List E	12	3

INFORMATION TECHNOLOGY GRADUATES

Consult the Course Coordinator for actual program from:

Computing Science Modules 1 and 2

Data Communications Modules 1 and 2

Information Systems Modules 1 and 2²

Distributed Systems Module – see below for module program
Project (48 credit points)

Distributed Systems Module

ITN250	Distributed Database Systems	12	3
ITN431	Distributed Systems	12	3
ITN531	Network Security	12	3

Select one unit from the following:

ITN242	Distributed Transaction Management Systems	12	3
ITN444	Parallel Processing	12	3
ITN553	OS Security and Management	12	3

Project

For Full-Time Information Technology Graduates

ITN140	Project	48	
--------	---------	----	--

For Part-time Information Technology Graduates

ITN150/1	Project (Part-time) ³	24	
ITN150/2	Project (Part-time) ³	24	

² ITN100 Research Methodologies must replace an Elective Unit in Module 2 for students intending to undertake the Project.

³ Unit extends over two semesters.

Electives

The offering of elective units in any semester depends on sufficient minimum enrolments in the unit and the availability of staff. The choice of all elective units is subject to the approval of the Course Coordinator. Full-time students should note that many electives may be offered in the evenings only.

List A: Computing Science Modules 1 and 2 – Elective Units

First Semester

ITN442	Compiler Construction	12	3
ITN444	Parallel Processing	12	3
ITN445	Pattern Recognition	12	3
ITN446	Project	12	3
ITN447	Special Studies	12	3

Second Semester

ITN440	Advanced Graphics	12	3
ITN441	Artificial Intelligence	12	3
ITN443	Neurocomputing	12	3
ITN446	Project	12	3
ITN447	Special Studies	12	3

Advanced undergraduate units in Software Engineering can be chosen, subject to the approval of the Course Coordinator.

Note: Students expecting to graduate with major studies in Software Engineering must include at least two Software Engineering units as electives in Computing Science Modules 1 and 2.

List B: Data Communications Module 1 – Elective Units

Recommended electives are:

ITB542	Network Programming	12	3
ITB548	Introduction to Cryptology	12	3

With the approval of the Course Coordinator, either elective unit may be replaced with a unit from the following:

ITB533	Comparative Network Systems	12	3
ITB543	Data Security	12	3
ITB549	Error Control and Data Compression	12	3

List C: Data Communications Module 2 – Elective Units

Recommended electives are:

ITB532	Laboratory 4 (Network Management)	12	3
ITN540	Advanced Network Technologies	12	3

With the approval of the Course Coordinator, either elective unit may be replaced with a unit from the following:

ITB548	Introduction to Cryptology	12	3
ITN553	OS Security and Management	12	3
ITN554	Special Topic	12	3
ITN556	Advanced Topics in Cryptology	12	3

List D: Information Systems Module 1 – Elective Units

Recommended electives are:

ITB220	Database Design	12	3
ITB232	Database Management	12	3
ITB233	File Structures	12	3
ITN241	Advanced Topics in Human-Computer Interaction	12	3
ITN243	Access Methods for Information Systems	12	3
ITN244	Special Topic	12	3

List E: Information Systems Module 2 – Elective Units

ITN242	Distributed Transaction Management Systems	12	3
ITN244	Special Topic	12	3
ITN245	Special Topic	12	3
ITN250	Distributed Database Systems	12	3

■ Graduate Diploma in Library and Information Studies (IS25)

Location: Gardens Point campus

Course Duration: 1 year full-time, 2 years part-time

Total Credit Points: 96

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Dr Jeanne Owen

Entry Requirements

To be eligible for admission to the Graduate Diploma in Library and Information Studies, applicants are required to have a degree or a three-year diploma from a recognised tertiary institution in a discipline other than library science and to have successfully completed a degree level introductory computing unit (the equivalent of at least three hours per week for one semester).

Professional Recognition

Graduates are eligible to become 'Associates' (that is, professional members) of the Australian Library and Information Association.

Full-Time Course Structure

		Credit Points	Contact Hrs/Wk
Semester 1			
ITP310	Systems Analysis	12	3
ITP311	Collection Building & Acquisitions	12	3
ITP312	Organisation of Knowledge	12	3
ITP313	Information Sources & Services	12	3
Semester 2			
ITP314	Online Information Services	12	3
ITP315	Library Programs Management	12	3
ITP316	Field Experience	4	
	Elective Unit	12	3
	Elective Unit	8	2

Part-Time Course Structure

Year 1, Semester 1

ITP310	Systems Analysis	12	3
ITP311	Collection Building & Acquisitions	12	3

Year 1, Semester 2

ITP314	Online Information Services	12	3
ITP315	Library Programs Management	12	3

Year 2, Semester 1

ITP312	Organisation of Knowledge	12	3
ITP313	Information Sources & Services	12	3

Year 2, Semester 2

ITP316	Field Experience	4	
	Elective Unit	12	3
	Elective Unit	8	2

Semester Elective Units

The offering of elective units depends on sufficient minimum enrolments in the unit and the availability of staff. Full-time students should note that electives may be offered in the evenings only. Elective units may be chosen from the list below. Alternatively, students may choose from any of the units offered in the Graduate Diploma in Education (Teacher-Librarianship) subject to the approval of that Course Coordinator; or units from the Information Management major in the Bachelor of Information Technology (IT20) on the advice of the Course Coordinator; or any other appropriate unit may be taken with the approval of the Course Coordinator.

ITP317	Library Services to Young People	12	3
ITP318	Advanced Organisation of Knowledge	12	3
ITP319	Government Documents	12	3
ITP320	Special Topic – Library Science	12	3
ITP321	Special Topic – Library Science	8	2
ITP322	Individual Study	8	2
ITP323	Introduction to Records Management	8	2
ITP324	Library Programs & Services	8	2
ITP325	Preservation Management of Materials	12	3
ITP326	Individual Study	12	3

■ Bachelor of Information Technology (Honours) (IT30)

Location: Gardens Point campus

Course Duration: 1 year full-time, 2 years part-time

Total Credit Points: 96

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Ms Alison Anderson

Entry Requirements

To be eligible for admission, students should have completed QUT's Bachelor of Information Technology or equivalent and normally should have attained a grade point average (GPA) of at least 5.0 on a 7 point scale (or its equivalent), having completed the relevant pre-honours extended major (or equivalent).

Application for admission should be made at the end of the final year of the pass degree, or within 18 months of completing that degree.

Applicants who do not satisfy the above conditions but who have demonstrated outstanding performance in only the final year of a degree, or whose application is based on other factors, including work experience or involvement in research, may be admitted at the discretion of the Dean.

Professional Recognition

This course will be accredited by the Australian Computer Society as meeting the knowledge requirements associated with the grade of 'Member' of the Society.

Full-time Course Structure

		Credit Points	Contact Hrs/Wk
Semester 1			
ITN100	Research Methodologies	12	3
ITN110	Project (Honours)	12	3
	Elective	12	3
	Elective	12	3

Semester 2

ITN120	Dissertation	24	
	Elective	12	3
	Elective	12	3

Part-time Course Structure

Semester One

ITN100	Research Methodologies	12	3
	Elective	12	3

Semester Two

ITN110	Project (Honours)	12	
	Elective	12	3

Semester Three

ITN130/1	Dissertation (Part-time) ³	12	
	Elective	12	3

Semester Four

ITN130/2	Dissertation (Part-time) ³	12	
	Elective	12	3

Elective Units

Elective units may be chosen from the following specified units in the areas of Computing Science, Data Communications, Information Management, Information Systems or Software Engineering, each of which is subject to undergraduate prerequisite requirements. With the agreement of the Course Coordinator students may also choose as electives Masters level units offered by any School of the Faculty, or by other Faculties. In any variation from the standard course outlined here, students must justify elective choices in terms of their overall plan for the Honours course. Students should note also that the offering of elective units in any semester depends on sufficient minimum enrolments in the unit and the availability of staff. Full-time students should note that many electives may be offered in the evenings only.

Semester 1 Electives

Computing Science/Software Engineering

ITN421	Software Specification	12	3
ITN430	Advanced Operating Systems	12	3
ITN431	Distributed Systems	12	3
ITN441	Artificial Intelligence	12	3
ITN442	Compiler Construction	12	3
ITN444	Parallel Processing	12	3
ITN445	Pattern Recognition	12	3

Data Communications

ITN540	Advanced Network Technologies	12	3
ITN553	OS Security and Management	12	3
ITN554	Special Topic	12	3
ITN556	Advanced Topics in Cryptology	12	3

Information Systems

ITN221	Object-Oriented Analysis & Design	12	3
ITN241	Advanced Topics in Human-Computer Interaction	12	3
ITN243	Access Methods for Information Systems	12	3
ITN244	Special Topic	12	3

Information Management

ITN340	Information Agencies	12	3
--------	----------------------	----	---

³ Unit extends over two semesters.

Semester 2 Electives

Computing Science/Software Engineering

ITN420	Comparative Programming Languages	12	3
ITN421	Software Specification	12	3
ITN440	Advanced Graphics	12	3
ITN441	Artificial Intelligence	12	3
ITN443	Neural Computing	12	3
ITN444	Parallel Processing	12	3

Data Communications

ITN530	Corporate Telecommunications	12	3
ITN531	Network Security	12	3
ITN555	Special Topic	12	3

Information Systems

ITN230	Current Advances in Database Technology	12	3
ITN231	Knowledge-based Systems	12	3
ITN245	Special Topic	12	3
ITN250	Distributed Database Systems	12	3

Information Management

ITN341	Information Policy and Planning	12	3
ITN342	Information Science	12	3

■ Bachelor of Information Technology (IT20)

Location: Gardens Point Campus

Course Duration: 3 years full-time, 6 years part-time

Total Credit Points: 288

Standard Credit Points/Full-Time Semester: 48

Course Coordinator: Associate Professor Alan Underwood

Course Structure

The course structure is divided into three blocks of equal weight (96 credit points each).

Block 1

All students undertake the Foundation Year, the first full-time year or first two years part-time, of the course. This block is worth 96 credit points.

Block 2

At the end of the Foundation Year, students choose a Primary Major in either:

- A: Computing Science
- B: Data Communications
- C: Information Management
- D: Information Systems
- E: Software Engineering

The Primary Major is worth 96 credit points and extends over the second and third years of the course for full-time students, and the third to sixth years for part-time students.

Block 3

Students choose the makeup of the third block of the course, which also extends over the later years of the course and is worth 96 credit points. Choices are:

(i) Extended Major and a Minor

An extended major consists of 48 credit points of further study in the area of the primary major.

A minor consists of a cohesive set of units of approved study equal to 48 credit points. Examples of minors are given at the end of this section on IT20, Block 3, Section 4.

(ii) Pre-Honours Extended Major and a Minor

The pre-honours extended major is available for selected students who have performed well in the Foundation Year and the first half of the primary major. The pre-honours extended major consists of 48 credit points of advanced study in the area of the primary major and prepares students for the Honours course and higher-level studies.

A minor (see above) is taken with this extended major to make up the 96 credit points of Block 3.

(iii) Secondary Major

A secondary major consists of 96 credit points of study in an area of relevance and interest. Examples of secondary majors are given at the end of this section on IT20.

(iv) Two Minors

Students can undertake two minors, worth 48 credit points each, to complete Block 3; see above for explanation of minors.

Course Requirements

Year 1	BLOCK 1 (96 credit points)	Foundation Year
Years 2 & 3	BLOCK 2 (96 credit points)	Primary Major
	BLOCK 3 (96 credit points)	ONE OF THE FOLLOWING: <input type="checkbox"/> Extended Major and a Minor <input type="checkbox"/> Pre-Honours Extended Major and a Minor <input type="checkbox"/> Secondary Major <input type="checkbox"/> Two Minors

Cooperative Education Program

An optional one-year paid work experience is available to eligible students at the end of the second year of full-time study. Students participating in this program enrol in ITB904 – Industrial Training Experience, a 24 credit point unit.

Note: A minimum grade of 4 is normally required to fulfil the prerequisite requirements for all units in the course.

□ Block 1: Foundation Year

First Year Coordinator: Ms Ruth Christie

Full-Time Course Structure

Year 1, Semester 1

		Credit Points	Contact Hrs/Wk
ITB101	Laboratory 1 (Computing Environments)	12	3
ITB210	Formal Representation	12	3
ITB310	Information Management 1	12	3
ITB410	Software Development 1	12	3

Year 1, Semester 2

BSB103	Business Communications & Applications	12	3
ITB102	Laboratory 2 (Computer Applications)	12	3
ITB411	Software Development 2	12	3
ITB412	Technology of Information Systems	12	3

Part-Time Course Structure

Year 1, Semester 1

ITB101	Laboratory 1 (Computing Environments)	12	3
ITB210	Formal Representation	12	3

Year 1, Semester 2

BSB103	Business Communications & Applications	12	3
ITB410	Software Development 1	12	3

Year 2, Semester 1

ITB310	Information Management 1	12	3
ITB412	Technology of Information Systems	12	3

Year 2, Semester 2

ITB102	Laboratory 2 (Computer Applications)	12	3
ITB411	Software Development 2	12	3

□ Block 2: Primary Major

Primary majors are available in the following areas:

- A: Computing Science
- B: Data Communications
- C: Information Management
- D: Information Systems
- E: Software Engineering

A: Computing Science Primary Major

Major Coordinator:

Mr Trevor Chorvat, First Semester 1995

Dr Gerard Finn, Second Semester 1995

Full-Time Course Structure

		Credit Points	Contact Hrs/Wk
Year 2, Semester 1			
ITB420	Computer Architecture	12	3
ITB421	Data Structures & Algorithms	12	3
ITB422	Laboratory 3 (ADTS in a Unix environment)	12	3
ITB520	Data Communications	12	3
Year 2, Semester 2			
ITB424	Software Engineering Principles	12	3
ITB431	Programming Language Paradigms	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 3, Semester 1			
ITB423	Laboratory 4 (Software Development)	12	3
ITB430	Concurrent Systems	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 3, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3

Part-Time Course Structure

Year 3, Semester 1

ITB520	Data Communications	12	3
	Block 3 Unit	12	3

Year 3, Semester 2			
ITB421	Data Structures & Algorithms	12	3
ITB422	Laboratory 3 (ADTS in a Unix environment)	12	3
Year 4, Semester 1			
ITB424	Software Engineering Principles	12	3
	Block 3 Unit	12	3
Year 4, Semester 2			
ITB423	Laboratory 4 (Software Development)	12	3
	Block 3 Unit	12	3
Year 5, Semester 1			
ITB431	Programming Language Paradigms	12	3
	Block 3 Unit	12	3
Year 5, Semester 2			
ITB420	Computer Architecture	12	3
	Block 3 Unit	12	3
Year 6, Semester 1			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 6, Semester 2			
ITB430	Concurrent Systems	12	3
	Block 3 Unit	12	3

B: Data Communications Primary Major

Major Coordinator: Mr Neville Richter

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 2, Semester 1			
ITB520	Data Communications	12	3
MAB177	Mathematics for Data Communications	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 2, Semester 2			
ITB521	Laboratory 3 (Computer Networks)	12	3
ITB522	Advanced Data Communications	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 3, Semester 1			
ITB530	Transport Protocols	12	3
ITB531	Applications Services	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 3, Semester 2			
ITB532	Laboratory 4 (Network Management)	12	3
	Data Communications Elective Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Part-Time Course Structure			
Year 3, Semester 1			
ITB520	Data Communications	12	3
MAB177	Mathematics for Data Communications	12	3
Year 3, Semester 2			
ITB521	Laboratory 3 (Computer Networks)	12	3
ITB522	Advanced Data Communications	12	3

Year 4, Semester 1			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 4, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 5, Semester 1			
ITB530	Transport Protocols	12	3
ITB531	Applications Services	12	3
Year 5, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 6, Semester 1			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 6, Semester 2			
ITB532	Laboratory 4 (Network Management)	12	3
	Data Communications Elective Unit	12	3

Elective Unit

Subject to the approval of the major coordinator, students may choose the elective from Data Communications extended majors or minors or, depending on the course program choice, from other Schools within the Faculty.

C: Information Management Primary Major

Major Coordinator: Mr Michael Middleton

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 2, Semester 1			
ITB220	Database Design	12	3
ITB320	Laboratory 3 (Database Applications)	12	3
ITB321	Systems Analysis	12	3
ITB322	Information Resources	12	3
Year 2, Semester 2			
ITB323	Laboratory 4 (Information Support Methods)	12	3
ITB520	Data Communications	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 3, Semester 1			
ITB330	Information Issues & Values	12	3
ITB331	Information Management 2	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 3, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Part-Time Course Structure			
Year 3, Semester 1			
ITB321	Systems Analysis	12	3
ITB322	Information Resources	12	3

Year 3, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 4, Semester 1			
ITB220	Database Design	12	3
ITB320	Laboratory 3 (Database Applications)	12	3
Year 4, Semester 2			
ITB323	Laboratory 4 (Information Support Methods)	12	3
ITB520	Data Communications	12	3
Year 5, Semester 1			
ITB331	Information Management 2	12	3
	Block 3 Unit	12	3
Year 5, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 6, Semester 1			
ITB330	Information Issues & Values	12	3
	Block 3 Unit	12	3
Year 6, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3

D: Information Systems Primary Major

Major Coordinator: Associate Professor Alan Underwood

Full-Time Course Structure

		Credit Points	Contact Hrs/Wk
Year 2, Semester 1			
ITB220	Database Design	12	3
ITB221	Laboratory 3 (Commercial Programming)	12	3
ITB222	Systems Analysis & Design 1	12	3
ITB520	Data Communications	12	3
Year 2, Semester 2			
ITB223	Laboratory 4 (4GL Programming)	12	3
ITB224	Systems Analysis & Design 2	12	3
ITB233	File Structures	12	3
	Block 3 Unit	12	3
Year 3, Semester 1			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Select one of the following units:			
ITB230	Project	12	3
ITB231	Applications Development	12	3
Year 3, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3

Part-Time Course Structure

Year 3, Semester 1			
ITB222	Systems Analysis & Design 1	12	3
ITB520	Data Communications	12	3

Year 3, Semester 2			
ITB221	Laboratory 3 (Commercial Programming)	12	3
ITB224	Systems Analysis & Design 2	12	3
Year 4, Semester 1			
ITB220	Database Design	12	3
	Block 3 Unit	12	3
Year 4, Semester 2			
ITB223	Laboratory 4 (4GL Programming)	12	3
	Block 3 Unit	12	3
Year 5, Semester 1			
ITB233	File Structures	12	3
Select one of the following units:			
ITB230	Project	12	3
ITB231	Applications Development	12	3
Year 5, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 6, Semester 1			
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 6, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3

E: Software Engineering Primary Major

Major Coordinator: Mr Richard Thomas

Full-Time Course Structure		Credit Points	Contact Hrs/Wk
Year 2, Semester 1			
ITB222	Systems Analysis & Design 1	12	3
ITB421	Data Structures & Algorithms	12	3
ITB422	Laboratory 3 (ADTS in a Unix environment)	12	3
	Block 3 Unit	12	3
Year 2, Semester 2			
ITB424	Software Engineering Principles	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
Year 3, Semester 1			
ITB423	Laboratory 4 (Software Development)	12	3
ITB448	Object Technology	12	3
ITB454	Software Quality Assurance	12	3
	Block 3 Unit	12	3
Year 3, Semester 2			
ITB455	Integrated Software Engineering Environment	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3
	Block 3 Unit	12	3

Part-Time Course Structure

Year 3, Semester 1			
ITB222	Systems Analysis & Design 1	12	3
ITB421	Data Structures & Algorithms	12	3

Year 3, Semester 2			
ITB422	Laboratory 3 (ADTS in a Unix environment)	12	3
	Block 3 Unit	12	3
Year 4, Semester 1			
ITB424	Software Engineering Principles	12	3
	Block 3 Unit	12	3
Year 4, Semester 2			
ITB423	Laboratory 4 (Software Development)	12	3
	Block 3 Unit	12	3
Year 5, Semester 1			
ITB448	Object Technology	12	3
	Block 3 Unit	12	3
Year 5, Semester 2			
ITB455	Integrated Software Engineering Environment	12	3
	Block 3 Unit	12	3
Year 6, Semester 1			
ITB454	Software Quality Assurance	12	3
	Block 3 Unit	12	3
Year 6, Semester 2			
	Block 3 Unit	12	3
	Block 3 Unit	12	3

□ Block 3: Options

Block 3 options

Either:

- 1 Extended Major (48 credit points)
plus a Minor (48 credit points)
- OR
- 2 Pre-Honours Extended Major (48 credit points)
for selected primary major students only plus
a Minor (48 credit points)
- OR
- 3 Secondary Major (96 credit points)
- OR
- 4 Two Minors (48 credit points each)

Extended Major and Pre-Honours Extended Majors are detailed below by Primary Major heading. Examples of Secondary Majors and Minors follow.

Extended and Pre-Honours Extended Majors

A: COMPUTING SCIENCE EXTENDED MAJOR

(for Computing Science primary major students only)

ITB440	Language & Language Processing	12	3
ITB446	Project ⁴	12	
	Computing Science Elective Unit ⁴	12	3
	Computing Science Elective Unit ⁴	12	3

⁴ ITB446 Project and one Elective Unit may, subject to the approval of the major coordinator, be replaced with a 24 credit point project which may be undertaken across two semesters (ITB451 Project) or in one semester (ITB453 Project) subject to approval from the major coordinator.

Computing Science Electives

First Semester Electives

ITB441	Graphics	12	3
ITB442	Foundations of Artificial Intelligence	12	3
ITB443	Systems Programming	12	3
ITB444	Special Studies 1	12	3
ITB447	Project	12	
ITB448	Object Technology	12	3
ITB451	Project ⁵	24	
ITB454	Software Quality Assurance	12	3
ITB457	Functional Programming	12	3
ITB461	Foundations of Neurocomputing	12	3
ITB463	Pattern Recognition	12	3

Second Semester Electives

ITB443	Systems Programming	12	3
ITB445	Special Studies 2	12	3
ITB449	Expert Systems	12	3
ITB451	Project ⁵	24	
ITB453	Project ⁵	24	
ITB455	Integrated Software Engineering Environment	12	3
ITB456	Intelligent Graphic User Interfaces	12	3
MAB172	Statistical Methods	12	3

PRE-HONOURS EXTENDED MAJOR

(for selected Computing Science primary major students only)

ITB440	Languages & Language Processing	12	3
ITB450	Advanced Computer Architecture	12	3
ITB452	Project Work	24	

B: DATA COMMUNICATIONS EXTENDED MAJOR

(for Data Communications primary major students only)

Students may select one of the following three extended majors:

1a: Data Communications Extended Major (Network Systems)

ITB442	Foundations of Artificial Intelligence	12	3
ITB533	Comparative Network Systems	12	3
ITB542	Network Programming	12	3
ITB544	Project	12	

1b: Data Communications Extended Major (Telecommunications)

ITB534	Telecommunications Modelling	12	3
ITB541	Transmission Techniques	12	3
ITB544	Project	12	
MAB178	Mathematics for Telecommunications	12	3

1c: Data Communications Extended Major (Information Security)

ITB543	Data Security	12	3
ITB544	Project	12	
ITB548	Introduction to Cryptology	12	3
ITB549	Error Control & Data Compression	12	3

PRE-HONOURS EXTENDED MAJOR

(for selected Data Communications primary major students only)

The Data Communications Pre-Honours Extended Major consists of one of the above Data Communications extended majors.

⁵ A 24 credit point project may be undertaken across two semesters (ITB451 Project) or in one semester (ITB453 Project), subject to the approval of the major coordinator.

C: INFORMATION MANAGEMENT EXTENDED MAJOR

(for Information Management primary major students only)

ITB340	Project	12	
ITB341	Information Management 3	12	3
MAB172	Statistical Methods	12	3
SSB937	Applied Cognitive Psychology	12	3

PRE-HONOURS EXTENDED MAJOR

(for selected Information Management primary major students only)

ITB350	Project – H	12	
ITB351	Information Management 3H	12	3
ITB352	Laboratory 4H (Information Support Method & Evaluation)	12	3
MAB272	Research Methods	12	3

D: INFORMATION SYSTEMS EXTENDED MAJOR

(for Information Systems primary major students only)

Students may select one of the following two extended majors:

INFORMATION SYSTEMS EXTENDED MAJOR 1

ITB232	Database Management	12	3
ITB240	Project	12	
ITB241	Information Systems Management	12	3
	Information Systems Elective Unit	12	3

Information Systems Electives**First Semester Electives**

ITB231	Applications Development	12	3
ITB236	Object-oriented Analysis & Design	12	3
ITB242	Decision Support Systems	12	3
ITB244	Special Topic 1	12	3
ITB247	Project	12	

Second Semester Electives

ITB235	Multimedia Systems Technologies	12	3
ITB243	Knowledge-Based Systems	12	3
ITB245	Special Topic 2	12	3
ITB246	Unix and C	12	3
ITB249	Theoretical Foundations of Database Systems	12	3
MAB172	Statistical Methods	12	3

INFORMATION SYSTEMS EXTENDED MAJOR 2

ITB232	Database Management	12	3
ITB236	Object-oriented Analysis & Design	12	3
ITB243	Knowledge-based Systems	12	3
ITB249	Theoretical Foundations of Database Systems	12	3

PRE-HONOURS EXTENDED MAJOR

(for selected Information Systems primary major students only)

ITB240	Project	12	
ITB241	Information Systems Management	12	3
ITB249	Theoretical Foundations of Database Systems	12	3
MAB272	Research Methods	12	3

E: SOFTWARE ENGINEERING EXTENDED MAJOR

(for Software Engineering primary major students only)

ITB446	Project ⁶	12	
ITB456	Intelligent Graphic User Interfaces	12	3
	Software Engineering Elective Unit	12	3
	Software Engineering Elective Unit	12	3

⁶ Project and one elective may be replaced with ITB451, a 24 credit point project taken over 2 semesters or with ITB453, a 24 credit point project taken in one semester.

Software Engineering Electives

First Semester Electives

ITB220	Database Design	12	3
ITB420	Computer Architecture	12	3
ITB430	Concurrent Systems	12	3
ITB431	Programming Language Paradigms	12	3
ITB441	Graphics	12	3
ITB451	Project ⁶	24	
ITB520	Data Communications	12	3

Second Semester Electives

ITB223	Laboratory 4 (4GL Programming)	12	3
ITB224	Systems Analysis & Design 2	12	3
ITB420	Computer Architecture	12	3
ITB430	Concurrent Systems	12	3
ITB431	Programming Language Paradigms	12	3
ITB440	Language & Language Processing	12	3
ITB450	Advanced Computer Architecture	12	3
ITB451	Project ⁶	24	
ITB453	Project ⁶	24	

PRE-HONOURS EXTENDED MAJOR

(for selected Software Engineering primary major students only)

ITB452	Project	24	
ITB456	Intelligent Graphic User Interfaces	12	3
	Software Engineering Elective Unit	12	3
	Software Engineering Elective Unit	12	3

For choice of elective units – see Software Engineering Extended Major above.

Secondary Majors (96 Credit Points)

POSSIBLE SECONDARY MAJORS: It is the responsibility of the student to check prerequisite requirements and availability of secondary majors prior to enrolment. The choice of a secondary major is subject to the approval of the relevant primary major coordinator and/or the IT20 Course Coordinator.

FACULTY OF ARTS

Secondary majors are available in Humanities, Psychology and in Sociology/Social Policy. See Faculty Noticeboards for more details.

FACULTY OF BUSINESS

BUSINESS PRINCIPLES SECONDARY MAJOR

(for Computing Science, Data Communications, Information Systems, Software Engineering primary major students)

ALB110	Business Law	12	3
AYB110	Accounting	12	4
BSB102	Management and Organisation	12	3
COB102	Consulting for Organisational Change	12	3
EPB116	Economic Principles 1	12	3
FNB123	Managerial Accounting 1	12	4
HRB131	Personnel Management & Industrial Relations	12	3
MKB140	Principles of Marketing	12	3

⁶ Project and one elective may be replaced with ITB451, a 24 credit point project taken over 2 semesters or with ITB453, a 24 credit point project taken in one semester.

BUSINESS PRINCIPLES SECONDARY MAJOR
(for Information Management primary major students)

ALB110	Business Law	12	3
AYB110	Accounting	12	4
BSB102	Management and Organisation	12	3
COB102	Consulting for Organisational Change	12	3
HRB131	Personnel Management & Industrial Relations	12	3
MAB172	Statistical Methods	12	3
MKB140	Principles of Marketing	12	3
SSB937	Applied Cognitive Psychology	12	3

FACULTY OF EDUCATION

CPB342	Education in Context	12	3
CUB365	Introduction to Professional Practice in Education	12	3
LAB340	Language, Technology and Education	12	3
LEB335	Human Development and Education	12	3
LEB336	Psychology of Learning and Teaching	12	3
MDB329	Computing Curriculum Studies 1	12	3
Group A unit (see Faculty of Education entry)		12	3
Group B unit (see Faculty of Education entry)		12	3

FACULTY OF INFORMATION TECHNOLOGY

COMPUTING SCIENCE SECONDARY MAJOR
(for Software Engineering primary major students)

ITB420	Computer Architecture	12	3
ITB430	Concurrent Systems	12	3
ITB431	Programming Language Paradigms	12	3
ITB520	Data Communications	12	3

Select one of the following options:

Option 1

Electives to the value of 48 credit points

Option 2

Relevant minor (48 credit points)

DATA COMMUNICATIONS SECONDARY MAJOR
(for Information Management primary major students)

BSB102	Management and Organisation	12	3
ITB521	Laboratory 3 (Computer Networks)	12	3
ITB522	Advanced Data Communications	12	3
ITB530	Transport Protocols	12	3
ITB531	Applications Services	12	3
ITB532	Laboratory 4 (Network Management)	12	3
MAB172	Statistical Methods	12	3
MAB177	Mathematics for Data Communications	12	3

INFORMATION MANAGEMENT SECONDARY MAJOR
(for Computing Science, Data Communications, Information Systems and Software Engineering primary major students)

BSB102	Management and Organisation	12	3
ITB322	Information Resources	12	3
ITB323	Laboratory 4 (Information Support Methods)	12	3
ITB330	Information Issues and Values	12	3
ITB331	Information Management 2	12	3
SSB937	Applied Cognitive Psychology	12	3

Select two of the following units:

ITB241	Information Systems Management	12	3
ITB242	Decision Support Systems	12	3
ITB320	Laboratory 3 (Database Applications)	12	3
ITB340	Project	12	
ITB341	Information Management 3	12	3
MAB172	Statistical Methods	12	3

INFORMATION SYSTEMS SECONDARY MAJOR
(for Computing Science, Data Communications, Software Engineering primary major students)

ITB220	Database Design	12	3
ITB222	Systems Analysis & Design 1	12	3
ITB223	Laboratory 4 (4GL Programming)	12	3
ITB224	Systems Analysis & Design 2	12	3
ITB241	Information Systems Management	12	3
	Information Systems Elective Unit	12	3
	Information Systems Elective Unit	12	3

INFORMATION SYSTEMS SECONDARY MAJOR
(for Information Management primary major students)

BSB102	Management and Organisation	12	3
ITB221	Laboratory 3 (Commercial Programming)	12	3
ITB224	Systems Analysis & Design 2	12	3
ITB232	Database Management	12	3
ITB240	Project	12	
ITB241	Information Systems Management	12	3
MAB172	Statistical Method	12	3
SSB937	Applied Cognitive Psychology	12	3

LIBRARY AND INFORMATION STUDIES SECONDARY MAJOR
(for Information Management primary major students, wishing to work in the Library field)

BSB102	Management and Organisation	12	3
ITB340	Project	12	
ITP311	Collection Building and Acquisitions	12	3
ITP312	Organisation of Knowledge	12	3
ITP313	Information Sources and Services	12	3
ITP315	Library Programs Management	12	3
MAB172	Statistical Method	12	3
SSB937	Applied Cognitive Psychology	12	3

SOFTWARE ENGINEERING SECONDARY MAJOR
(for Computing Science primary major students)

ITB222	Systems Analysis & Design 1	12	3
ITB448	Object Technology	12	3
ITB454	Software Quality Assurance	12	3
ITB455	Integrated Software Engineering Environment	12	3

Select one of the following options:

Option 1

Electives to the value of 48 credit points

Option 2

Relevant Minor (48 credit points)

SOFTWARE ENGINEERING SECONDARY MAJOR
(for Data Communications and Information Management primary major students)

ITB222	Systems Analysis & Design 1	12	3
ITB421	Data Structures & Algorithms	12	3
ITB422	Laboratory 3 (ADTS in a Unix Environment)	12	3
ITB423	Laboratory 4 (Software Development)	12	3
ITB424	Software Engineering Principles	12	3
ITB448	Object Technology	12	3
ITB454	Software Quality Assurance	12	3
ITB455	Integrated Software Engineering Environment	12	3

SOFTWARE ENGINEERING SECONDARY MAJOR
(for Information Systems primary major students)

ITB421	Data Structures & Algorithms	12	3
ITB422	Laboratory 3 (ADTS in a Unix Environment)	12	3
ITB423	Laboratory 4 (Software Development)	12	3

ITB424	Software Engineering Principles	12	3
ITB448	Object Technology	12	3
ITB454	Software Quality Assurance	12	3
ITB455	Integrated Software Engineering Environment	12	3
ITB456	Intelligent Graphic User Interfaces	12	3

FACULTY OF SCIENCE

Secondary majors are available in Biochemistry, Biology, Chemistry, Geology, Mathematics, Microbiology, Molecular Biology and Physics. Students need to check prerequisite requirements with relevant Course Coordinator. The Mathematics Secondary Major is detailed below.

MATHEMATICS SECONDARY MAJOR

ITB548	Introduction to Cryptology	12	3
MAB172	Statistical Methods	12	3
MAB212	Mathematics 1	12	4
MAB232	Discrete Mathematics	12	4
MAB620	Finite Mathematics	12	4
MAB637	Operations Research 1A	12	4
Select two of the following units:			
MAB272	Research Methods	12	3
MAB618	Computational Mathematics 2	12	4
MAB630	Linear Algebra & its Applications	12	4
MAB638	Operations Research 1B	12	4

Two Minors (48 Credit Points each)

Minors are available from other Faculties as well as from the Faculty of Information Technology. It is the responsibility of the student to check prerequisite requirements and the availability and suitability of minors prior to enrolment. The choice of minors is subject to the approval of the IT20 Course Coordinator.

FACULTY OF ARTS

Minors are available in Applied Psychology, Humanities, Music, and Visual Arts; see Faculty of Information Technology noticeboards.

FACULTY OF BUSINESS

Minors are available in:

Accounting, Advanced Economics, Advertising, Business Law and Taxation, Communication Technology, Creative Communication, Economic History, Economic Policy, Economics and Public Policy, Film & TV Production, Finance, Financial Maths, Government A, Government B, Human Resources Development A, Human Resources Development B, Human Resource Management, Industrial Relations A, Industrial Relations B, Industrial Relations C, International Business, International Economy, International Marketing, Journalism Broadcast, Journalism Print, Management A, Management B, Managerial Accountancy, Marketing, Marketing Research and Science, Media Studies, Organisational Behaviour, Organisational Change and Development, Organisational Communication, Organisational Design, Professional Accounting, Professional Writing, Editing & Publishing, Promotional Management, Public Policy, Public Relations, Public Sector Management, Retailing, Speech Communication.

COMMUNICATIONS MINOR

BSB102	Management & Organisation	12	3
COB134	Speech Communication: Theory & Practice	12	3
COB138	Written Communication: Theory & Practice	12	3

Select one of the following units:

COB106	Group Communication: Theory & Practice	12	3
COB166	Technical & Scientific Writing	12	3

ECONOMICS MINOR

BSB102	Management & Organisation	12	3
EPB124	Government	12	3
	Business Economics Elective Unit	12	3

Select one of the following units:

EPB140	Macroeconomics	12	3
EPB150	Microeconomics	12	3

MANAGEMENT MINOR

BSB102	Management & Organisation	12	3
HRB131	Personnel Management & Industrial Relations	12	3
MKB140	Principles of Marketing	12	3
	Business Management Elective Unit	12	3

PRODUCTION MINOR

BSB102	Management & Organisation	12	3
	Business Production Elective Unit	12	3

Select one of the following units:

COB134	Speech Communication: Theory & Practice	12	3
COB138	Written Communication: Theory & Practice	12	3

Select one of the following units:

MJB118	Fundamentals of Photography	12	3
MJB126	Video Production	12	3

FACULTY OF EDUCATION

EDUCATION MINOR

CPB342	Education in Context	12	3
CUB365	Introduction to Professional Practice in Education	12	3
LAB340	Language, Technology and Education	12	3
LEB335	Human Development and Education	12	3

FACULTY OF INFORMATION TECHNOLOGY

Computing Science Minors

COMPUTING SCIENCE MINOR 1

(for Data Communications primary major students)

ITB421	Data Structures & Algorithms	12	3
ITB422	Laboratory 3 (ADTS in an Unix Environment)	12	3
	Computing Science Elective Unit	12	3
	Computing Science Elective Unit	12	3

COMPUTING SCIENCE MINOR 2

(for Information Management primary major students)

BSB102	Management & Organisation	12	3
ITB421	Data Structures & Algorithms	12	3
ITB422	Laboratory 3 (ADTS in an Unix Environment)	12	3
	Computing Science Elective Unit	12	3

COMPUTING SCIENCE MINOR 3

(for Information Systems primary major students)

ITB421	Data Structures & Algorithms	12	3
ITB431	Programming Language Paradigms	12	3
	Computing Science Elective Unit	12	3
	Computing Science Elective Unit	12	3

COMPUTING SCIENCE MINOR 4

(for Software Engineering primary major students)

ITB420	Computer Architecture	12	3
--------	-----------------------	----	---

ITB430	Concurrent Systems	12	3
ITB431	Programming Language Paradigms	12	3
	Computing Science Elective Unit	12	3

Computational Intelligence Minor

ITB442	Foundations of Artificial Intelligence	12	3
ITB461	Foundations of Neurocomputing	12	3

plus two of:

ITB456	Intelligent Graphic User Interfaces	12	3
ITB462	Cognitive Systems	12	3
ITB463	Pattern Recognition	12	3

Data Communications Minor

(for non-Data Communications primary major students)

ITB521	Laboratory 3 (Computer Networks)	12	3
ITB522	Advanced Data Communications	12	3
	Data Communications Elective Unit	12	3
	Data Communications Elective Unit	12	3

Information Management Minors

INFORMATION MANAGEMENT MINOR

(for non-Information Management primary major students)

BSB102	Management & Organisation	12	3
ITB331	Information Management 2	12	3
ITB341	Information Management 3	12	3
SSB937	Applied Cognitive Psychology	12	3

LIBRARY SERVICES MINOR

BSB102	Management & Organisation	12	3
ITP311	Collection Building & Acquisitions	12	3
ITP312	Organisation of Knowledge	12	3
ITP315	Library Programs Management	12	3

RECORDS MANAGEMENT MINOR

BSB102	Management & Organisation	12	3
ITP312	Organisation of Knowledge	12	3
ITP316	Field Experience	4	
ITP323	Introduction to Records Management	8	2
	Information Systems elective	12	3

Information Systems Minors

INFORMATION SYSTEMS MINOR 1

(for Computing Science, Data Communications and Software Engineering primary major students)

ITB220	Database Design	12	3
ITB222	Systems Analysis & Design	12	3
ITB241	Information Systems Management	12	3
	Information Systems Elective Unit	12	3

INFORMATION SYSTEMS MINOR 2

(for Information Management primary major students)

BSB102	Management & Organisation	12	3
ITB242	Decision Support Systems	12	3
	Information Systems Elective Unit	12	3
	Information Systems Elective Unit	12	3

INFORMATION SYSTEMS MINOR 3

(for Computing Science and Software Engineering primary major students)

ITB232	Database Management	12	3
ITB236	Object-oriented Analysis & Design	12	3
ITB243	Knowledge-based Systems	12	3
ITB249	Theoretical Foundations of Database Systems	12	3

SOFTWARE ENGINEERING MINOR

(for Computing Science primary major students)

ITB448	Object Technology	12	3
ITB454	Software Quality Assurance	12	3
ITB455	Integrated Software Engineering Environment	12	3
ITB456	Intelligent Graphic User Interfaces	12	3

SOFTWARE ENGINEERING MINOR

(for Data Communications, Information Management or Information Systems primary major students)

ITB424	Software Engineering Principles	12	3
ITB448	Object Technology	12	3
ITB454	Software Quality Assurance	12	3

Select one of the following units:

ITB423	Laboratory 4 (Software Development)		
ITB455	Integrated Software Engineering Environments	12	3
ITB456	Intelligent Graphic User Interfaces	12	3

INFORMATION SYSTEMS/SOFTWARE ENGINEERING MINOR

(for Data Communications primary major students)

ITB220	Database Design	12	3
ITB222	Systems Analysis & Design	12	3
ITB420	Computer Architecture	12	3
ITB448	Object Technology	12	3

FACULTY OF SCIENCE

Minors are available in Biochemistry, Biology, Chemistry, Geology, Mathematics, Microbiology, Physiology and Physics.

MATHEMATICS MINOR

MAB212	Mathematics 1	12	4
MAB232	Discrete Mathematics	12	4

Select two of the following units:

ITB548	Introduction to Cryptology	12	3
MAB172	Statistical Methods	12	3
MAB620	Finite Mathematics	12	4
MAB637	Operations Research 1A	12	4

Cooperative Education Program (Elective Unit ITB904 – Industrial Training Experience)

Aims

The purpose of the Cooperative Education Program is to provide students within the Bachelor of Information Technology experience of a real world environment prior to the study of the more advanced aspects of the course. This experience:

- (i) enables the student to place the concepts learned in the first two years in context, and
- (ii) provides an experience that will enhance the benefits obtained from early study.

The Cooperative Education period necessarily involves reorientation and on-the-job training but students are expected to apply study skills to the acquisition of the necessary knowledge and, in general, employers are not expected to provide formal training.

Selection Criteria

The Cooperative Education program is available to full-time students enrolled in the fourth semester of the Bachelor of Information Technology degree (IT20), ie will have credit points in the range of 144-192 by the end of the year prior to the commencement

of the program. Students are eligible to participate in the program if they have passed all units, or have a GPA (Grade Point Average) of at least 4.5. Students entering the course with exemptions for prior studies must have been exempted from no more than 96 credit points.

Features

The Cooperative Education Program is offered under the guise of the 24 credit point unit ITB904 Industrial Training Experience and has the following features:

- The Faculty assists students to obtain suitable employment for the one-year period and also discusses the nature of the work to be undertaken with the employer. As employers choose their placements from interviews, the Faculty also arranges for students to attend sessions on interview techniques conducted by the Counselling Centre.
- An academic member of staff normally visits the student once per semester and discusses progress with the student and a representative of the employer.
- During the training period the student writes two reports on the experience, submits them to the employer for endorsement and comment, and then hands them to the Administration Officer (Academic) for assessment. The reports should highlight different aspects of the period, and include comments and recommendations.
- Students will be assessed as either satisfactory or unsatisfactory in this unit. A satisfactory grade will be granted on the basis of:
 - (i) satisfactory completion of an approved period of cooperative education, and
 - (ii) submission of satisfactory reports on the year's experience. The reports must be submitted not later than the due dates specified in the study guides.
- A salary is paid to the student by the employer during this training period.
- The Faculty carefully monitors all cooperative education placements and keeps a list of employers prepared to offer training. The Faculty makes its best endeavour to find suitable training places for all students who meet the selection criteria and elect to undertake this option.
- It is intended that full-time students on the scheme will devote their prime efforts to the Industrial Training Experience and will not, therefore, be permitted to register for more than one other unit per semester during that year.

Notes

- (i) Where there has been significant evidence of plagiarism or computer misuse by a student at any time during the course, no placement will be available to that student.
- (ii) Part-time students may be eligible for credit for industry experience, subject to certain conditions. Students should consult the Administration Officer (Academic) in the Faculty for further information.

