Bachelor of Information Technology (BITC) - BIT

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 903741; Distance education: 903745

CRICOS code (International applicants): 007490J

	On-campus	Distance education
Semester intake:	Semester 1 (February) Semester 2 (July)	Semester 1 (February) Semester 2 (July) Semester 3 (November)
Campus:	Toowoomba	-
Fees:	Commonwealth supported place Domestic full fee paying place International full fee paying place	Commonwealth supported place Domestic full fee paying place International full fee paying place
Standard duration:	3 years full-time, up to 6 years part-tim	ne

Contact us

Future Australian and New Zealand students	Future International students	Current students			
Ask a question Freecall (within Australia): 1800 269 500 Phone (from outside Australia): +61	Ask a question Phone: +61 7 4631 5543 Email: international@usq.edu.au	Ask a question Freecall (within Australia): 1800 007 252 Phone (from outside Australia): +61			
Email: studybusiness@usq.edu.au		Email usq.support@usq.edu.au			

Applied Computer Science major

The Applied Computer Science major equips the graduate with fundamental skills in computer science, applied to the domain of modern web applications and services. Graduates will be well-prepared to solve generic problems in the broad area of computing. They will be ideally placed to design and implement software systems, database structures and applications, and web services and interfaces.

Achievement of the objectives will result in a graduate of high academic and scientific standard, who is capable of competing for employment in a professional area and pursuing career development in government institutions and IT industries.

Career opportunities

Computer Programmer, Systems Analyst, Software Developer, Project Leader, Web Application Developer, Web Services Specialist, IT manager, Database Administrator, Database Designer

Information Systems Development major

The Information Systems Development major serves as a gateway to a wide range of dynamic careers in Information Technology. The major strives to produce highly versatile and adaptable graduates who are equally adept at addressing technical and business issues. The major incorporates a significant analysis and design component and remains firmly based within a business context while fostering an understanding of the broader architecture of Information Systems and the principles of modern software engineering practice. The ISD graduate is optimally placed to leverage the vast array of IT careers on offer, ranging from highly technical roles such as Enterprise Architect to roles focused on business processes. A deep understanding of IT

infrastructure is achieved via detailed study of the .NET framework and Java development environments and network management in tandem with a one-year database sequence. The database sequence provides interested students with the opportunity to pursue two Oracle certifications.

Career opportunities

Business Information Systems Developer, Business Applications Designer, Enterprise Architect, Information Systems Developer, Database Administrator, Database Designer.

Information Technology Management major

The Information Technology Management major is highly focused on Information Systems (IS) as a key strategic enabler of business success and teaches students how to leverage IS to identify and solve business problems. The major serves as a pathway into a variety of rapidly emerging IS career paths where business skills, for example communication, problem-solving and teamwork, are most important. Information Technology Management students develop skills in electronic commerce, systems analysis, database design and implementation, security, network management, service management and enterprise resource systems. Students study leading-edge business packages and tools such as Oracle, SAP and ISO20000 and are provided with the opportunity to pursue professional certification in a number of these areas.

Career opportunities

Business analyst, systems analyst, data architect, business process/data modeller, enterprise resource planning (ERP) analyst, computer trainer/support, help desk support, IT manager, IT sales and marketing specialist, change manager, business process engineer, IT project manager, consultant, business continuity (BCM) specialist, IT security specialist, service management.

Networking and Security major

The Networking and Security major equips the graduate with state-of-the-art skills in network design, network management, security and system development and administration. Graduates will be familiar with problem solving in computer networks, VoIP, video conferencing, network services administration, and the professional skills to apply them in the communication sector, healthcare, government institutions, and IT firms.

Achievement of the objectives will result in a graduate of high academic and scientific standard, who is capable of competing for employment in a professional area and pursuing career development in IT industries and government institutions.

Career opportunities

System Administrator, Systems Analyst, Web Administrator, Network Analyst, Network Designer, Network Administrator, Database Administrator, Database Designer.

Professional accreditation

The Bachelor of Information Technology program is accredited at professional level by the Australian Computer Society and, through the Seoul Accord, is recognised in other countries.

Program aims

The Bachelor of Information Technology is a vocationally oriented program emphasising the resolution of technological problems leading to the effective management and analysis of information in both private and public sectors. The program's foundation is designed to provide students with knowledge and skills in key areas of IT as well as professionally relevant knowledge, qualities and skills in such areas as problem solving, communication, ethics and teamwork.

Program objectives

The objectives of the Bachelor of Information Technology are to enable graduates to:

• work as a professional in the Information Technology industry

- demonstrate a sound understanding of the principles of information technology
- demonstrate sound presentation and communication skills within the computing industry
- develop appropriate intellectual, ethical, professional and personal attributes
- become good problem-solvers and innovative thinkers, who are able to learn new skills independently and efficiently and consequently to succeed in a competitive professional environment
 - be capable of working with people from other disciplines towards the solution of common problems
- identify information needs appropriate to their area of specialisation and apply the techniques required to gather and interpret such information
- satisfy academic admission requirements for membership of relevant professional bodies
- proceed to higher studies.

Major objectives

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Applied Computer Science major

On completion of the Applied Computer Science major, graduates should be able to:

- display detailed knowledge of and be competent in the fundamentals of structured programming, and the application of basic algorithms and data structures
- understand the difference between the major programming language paradigms, and be able to select the paradigm best suited to solve a problem
- demonstrate sound knowledge of operating systems principles and display familiarity with various modern operating systems
- demonstrate a sound knowledge of web technology and techniques both at the client and the server side
- be able to design and implement web-based user interfaces in accordance to technical, stylistic, and open access standards
- understand and apply methods for planning and managing large software projects, including design, development and maintenance aspects
- display a detailed knowledge of the fundamental principles of database systems and be able to apply these using database software.

Information Systems Development major

On completion of the Information Systems Development major, graduates should be able to:

- demonstrate an understanding of the electronic business framework for areas such as marketing, supply chains and mobile commerce
- demonstrate an ability to design and analyse business systems including database design and use, network architectures, organization and human-computer interaction issues
- demonstrate abilities with object-oriented development of systems, particularly Internet applications and enterprise systems in .NET and Java
- demonstrate expertise with the Oracle (SQL) environment

Information Technology Management major

On completion of the Information Technology Management major, graduates should be able to:

- demonstrate an understanding of the electronic business framework for areas such as marketing, supply chains and mobile commerce
- demonstrate an ability to design and analyse business systems including database design and use, network architectures, organization and human-computer interaction issues
- demonstrate an understanding of information systems security and control issues
- recognize the importance of IT service management and demonstrate understanding of the important best practice frameworks
- identify information needs appropriate to their area of specialisation, and apply the techniques required to gather and interpret such information
- demonstrate skills in the analysis and determination of technological issues at management level

Networking and Security major

On completion of the Networking and Security major, graduates should:

- be able to design, install, configure, troubleshoot, and maintain networks and their operating systems
- be able to install, configure and manage network, system, user, and security services
- have acquired skills in development of new systems to operate networks
- be able to interface networks with wide area networks such as the Internet and newer network architectures
- have a sound understanding of the operating systems that are used to provide services on networks, including at least Linux and Windows
- display a detailed knowledge of the fundamental principles of database systems and be able to apply these using database software.

Admission requirements

- Year 12 English [4 SA] or equivalent.
- Candidates wishing to complete either the Applied Computer Science major or the Networking and Security major are recommended to study Mathematics at least to the level of Sound Achievement over four semesters in Queensland Senior (Year 12) Mathematics A or equivalent.
- Candidates for admission to this program must satisfy the normal USQ entry requirements for undergraduate programs. Please refer to Section 2.2 of the Admissions Policy, Section 2.2.1 (for Australian students) and Section 2.2.3 (for international students).
- International applicants must have met the University's English language requirements or have completed the University's ELICOS/EAP programs.

How to apply

Domestic students

Application for undergraduate programs may be made through the Queensland Tertiary Admissions Centre (QTAC). The same procedure applies whether you plan to study on-campus or by distance education.

If you completed Year 12 at a Queensland secondary school you will be assessed for entry on the basis of your Overall Position (OP) or equivalent score. Year 12 students from other states or territories are considered for entry on the basis of their UAI, ENTER or TER and the subject prerequisites indicated. Other applicants will be based on their overall Rank.

International students

This program is offered to international students. An international student is a person who is not an Australian or New Zealand citizen and not an Australian permanent resident. Please refer to USQ International for information about entry requirements, visa arrangements and how to apply.

Program fees

Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of your higher education and you as a student pay a student contribution amount, which varies depending on the courses undertaken. You are able to calculate the fees for a particular course via the Course Fee Finder. Commonwealth Supported students may be eligible to defer their fees through a Government loan called HECS-HELP.

Domestic full fee paying place

Domestic full fee paying places are funded entirely through the full fees paid by the student. Full fees vary depending on the courses that are taken. You are able to calculate the fees for a particular course via the Course Fee Finder.

Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who reside outside Australia pay full tuition fees.

Domestic full fee paying students may be eligible to defer their fees through a Government loan called FEE-HELP.

International full fee paying place

International students pay full fees. Full fees vary depending on the courses that are taken and whether they are studied on-campus, via distance education/online. You are able to calculate the fees for a particular course via the Course Fee Finder.

Program structure

The Bachelor of Information Technology is comprised of 24 units as follows:

Area of study	Number of units
Core Courses	8 units
 5 compulsory courses 3 chosen from a defined list * * Students taking the Applied Computer Science major or Networking and Security major must take MAT1101 and CSC2406 	
as two of the three courses Bachelor of Information Technology major (select one): Applied Computer Science Information Systems Development Information Technology Management Networking and Security	8 units
 Plus one of the following: Second major (8 units) or 2 x 4-unit minors or 1 x 4-unit minor and 4 elective units or 8 elective units 	8 units
Total	24 units

Footnotes

* Students taking the Applied Computer Science major or Networking and Security major must take MAT1101 and CSC2406 as two of the three courses

Required time limits

Students have a maximum of 9 years to complete this program.

Core courses

Compulsory courses
CIS1000 Information Systems Concepts
CIS3002 Business Analysis
CMS1000 Communication and Scholarship
CSC1401 Foundation Programming
CSC2407 Introduction to Software Engineering
Plus select 3 courses from the following:*
ACC1101 Accounting for Decision-Making
CSC2402 Object-Oriented Programming in C++

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CSC2406 Web Technology
ECO1000 Economics
ELE1301 Computer Engineering
FIN1101 Introduction to Corporate Finance
LAW1101 Introduction to Law
MAT1100 Foundation Mathematics
MAT1101 Discrete Mathematics for Computing
MGT1000 Organisational Behaviour
MKT1001 Introduction to Marketing
POL1000 Government, Business and Society
STA2300 Data Analysis

Footnotes

* Students taking the Applied Computer Science major or Networking and Security major must take MAT1101 and CSC2406 as two of the three courses.

Major studies

All students in the Bachelor of Information Technology must complete at least one major study. A major study is a set of courses that make up a coherent, in-depth study of a specific discipline.

Double Major Studies

Students may choose to complete two majors from the Bachelor of Information Technology or they may choose to complete a second 8-unit major from the undergraduate degree programs in the Faculty of Business and Law or the Faculty of Sciences. Alternately they may choose a major from the undergraduate degree programs in another faculty at the University of Southern Queensland. A program in which there is a first and second major is known as a 'double major'. Where a second major from another faculty contains less than 8 units, students must complete extra elective units, chosen from undergraduate courses offered at the University of Southern Queensland to ensure that their program contains 24 units in total. The sets of courses that make up each major in the Bachelor of Information Technology are summarised in the following tables:

Applied Computer Science major

Course	Semester/Mode of Offer Toowoomba Campus				
CSC2401 Algorithms and Data Structures	S2 (ONC, EXT)				
CSC2402 Object-Oriented Programming in C++	S1 (ONC, EXT)				
CSC2404 Operating Systems	S2 (ONC, EXT)				
CSC2408 Software Development Tools	S1 (ONC, EXT), S2 (ONC, EXT)				
CSC3400 Database Systems	S1 (ONC, EXT)				
CSC3403 Comparative Programming Languages	S1 (ONC, EXT)				
CSC3412 System and Security Administration	S1 (ONC, EXT)				
CSC3419 XML and the Web	S2 (ONC, EXT)				

Information Systems Development major

Course	Semester/Mode of Offer Toowoomba Campus
CIS1101 Business Online	S2 (ONC, EXT), S3 (EXT)
CIS2000 Systems Analysis and Design	S1 (ONC, EXT), S3 (EXT)
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CIS2002 Database Design and Implementation	S1 (ONC, EXT), S3 (EXT)
CIS2003 Component Based Software Development	S2 (ONC, EXT)
CIS3001 Object-Oriented Programming with Java	S1 (ONC, EXT)
CIS3003 Networks and Distributed Systems	S1 (ONC, EXT)
CIS3007 Enterprise Systems Development and Architecture	S2 (ONC, EXT)
CIS3010 Oracle Development	S2 (ONC, EXT)

Information Technology Management major

Course	Semester/Mode of Offer	Semester/Mode of Offer			
	Toowoomba Campus	Springfield Campus			
CIS1101 Business Online	S2 (ONC, EXT), S3 (EXT)				
CIS2000 Systems Analysis and Design	S1 (ONC, EXT), S3 (EXT)				
CIS2002 Database Design and Implementation	S1 (ONC, EXT), S3 (EXT)				
CIS2005 Principles of Information Security	S2 (ONC, EXT)				
CIS3003 Networks and Distributed Systems	S1 (ONC, EXT)				
CIS3008 Information Technology Service Management	S1 (ONC, EXT)				
CIS3009 Enterprise Systems in Practice	S2 (ONC, EXT), S3 (EXT)				
Select one of the following course	es:				
BUS3000 Work Integrated Learning	S1 (ONC, EXT), S2 (ONC, EXT)	S1 (ONC), S2 (ONC)			
CIS3011 Information Systems Project*	S2 (ONC, EXT)				

Footnotes

*

CIS3011 replaces CIS2200 Advanced Office Applications: Access and Word from semester 1, 2011.

Networking and Security major

Course	Semester/Mode of Offer Toowoomba Campus					
CSC2404 Operating Systems	S2 (ONC, EXT)					
CSC2408 Software Development Tools	S1 (ONC, EXT), S2 (ONC, EXT)					
CSC3400 Database Systems	S1 (ONC, EXT)					
CSC3407 Network Fundamentals and Routing	S1 (ONC, EXT)					
CSC3412 System and Security Administration	S1 (ONC, EXT)					
CSC3413 Network Design and Analysis	S2 (ONC, EXT)					
CSC3420 Mobile Internet Technology	S1 (ONC, EXT)					
CSC3427 Switching, Wireless and WAN Technologies	S2 (ONC, EXT)					

Minor studies

A minor study is a coherent group of four units of courses that provides students with an appropriate breadth of study in their program. All students, except those undertaking a second major, must complete a 4-unit minor study. Students who wish to take a minor study not listed in the recommended minors must obtain permission from the Program Coordinator. Before undertaking any course, the pre-requisite courses must be completed or exempted.

Please note:

When students select a minor(s), courses will only count towards that minor(s) if they have not already counted towards another selected major or minor. Not all minors are available on-campus at all campuses. Students may choose courses from those listed in the Minor Studies section of this Handbook. Enrolment requirements must be satisfied for any course selected.

Elective courses

Students not completing a double major must select 4 units of elective courses from courses offered at undergraduate level from Faculty of Business and Law or Faculty of Sciences undergraduate programs or, with the approval of the Program Coordinator, from undergraduate programs offered by other faculties at the University of Southern Queensland. Prerequisite enrolment requirements must be satisfied for any course selected. For various reasons, the following course will not be approved as an elective: CSC1402 Foundation Computing.

IT requirements

For information technology requirements please refer to the minimum computing standards. Students completing either the Applied Computer Science major or the Networking and Security major will be required to install the Linux operating system as well as a Microsoft Windows operating system. A Linux installation DVD, together with instructions, is available from the USQ Bookshop.

Other program requirements

Students must maintain good standing in this program. Please refer to Section 2 of the Academic Standing, Progression and Exclusion Policy.

Articulation

Students enrolled in the joint Diploma of Information Technology/Bachelor of Information Technology program must complete the Diploma at the Southern Queensland Institute of TAFE before continuing enrolment at USQ.

Exemptions

Candidates for admission to the Bachelor of Information Technology program may be eligible for up to 16 units of exemption on the basis of successful completion of relevant, equivalent undergraduate study from a recognised university or institution offering equivalent study. Exemptions approved in this program will not automatically apply to other programs offered by USQ. Claims for exemptions for previous study should be submitted prior to or at the time of enrolment. Each claim will be assessed on individual merit in line with the Faculty's Exemptions policies.

Note: Where exemptions are granted, maximum and minimum duration will be adjusted in the same proportion as exemptions, e.g. where 8 exemptions are granted, maximum time will be 6 years and minimum time will be 4 terms.

Recommended Enrolment Patterns

Students should plan their enrolment making sure that they have fulfilled all core, major, minor and elective requirements as shown in the program structure information. Enrolment requirements must be satisfied before enrolling in a course.

As a guide, full-time students should plan to undertake 8 courses per year and external students, who are in employment, a maximum of 6 courses per year, with a minimum of 4 courses per year. This is exclusive of any semester 3 enrolments. Students wishing to enrol in more than 4 courses per semester or more than 2 courses in semester 3 must obtain permission from the program coordinator.

Courses are normally offered on-campus and externally in the same semester. If a course is offered twice in one year, the second offering will normally be on an external basis only. Students undertaking the Bachelor of Information Technology may not enrol in any postgraduate courses.

Recommended Enrolment Pattern - Applied Computer Science

Course	Course Year of program and semester in which course is normally studied			course	Enrolment requirements		
		On-campus (ONC)		External (EXT)		line EB)	
	Year	Sem	Year	Sem	Year	Sem	
Year 1							
CSC1401 Foundation Programming	1	1, 2	1	1, 2			
CIS1000 Information Systems Concepts	1	1, 2	1	1, 2			
Core course	1	12	1	1, 2			
MAT1101 Discrete Mathematics for Computing	1	1	2	1			
CMS1000 Communication and Scholarship	1	1, 2	1	1, 2, 3			
Elective/second major course*	1	2	2	2			
CSC2408 Software Development Tools	1	1, 2	1	1, 2			
CSC2407 Introduction to Software Engineering	1	2	2	2			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
Year 2							
Elective/second major course	2	1, 2	2	1, 2, 3			
Elective/second major course	2	1	3	1			
CSC2406 Web Technology	2	2	4	2			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
CSC2402 Object-Oriented Programming in C++	2	1	4	1			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
CSC2404 Operating Systems	2	2	3	2			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
CSC3412 System and Security Administration	2	1	3	1			
CSC2401 Algorithms and Data Structures	2	2	4	2			Pre-requisite: (CSC1401 or CSC2402) or USQIT16 or Students must be enrolled in one of the following Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or MCTE or MCOP or MPIT or MSBN or MSMS
Elective/second major course*	2	2	4	2			
Year 3				I			
CSC3403 Comparative Programming Languages	3	1	5	1			Pre-requisite: CSC2402 or USQIT16 or Stu dents must be enrolled in one of the follow

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Course	Year of program and semester in which course is normally studied					Enrolment requirements	
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
							ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
CSC3400 Database Systems	3	1	5	1			
CIS3002 Business Analysis	3	1	5	1			Pre-requisite: CIS2000 or CSC2407
Elective/second major course*	3	1	5	1			
CSC3419 XML and the Web	3	2	6	2			
Elective/second major course*	3	2	5	2			
Elective/second major course*	3	2	6	2			
Elective/second major course*	3	2	6	2			

Footnotes

* One of the elective/second major courses should be chosen from the list of elective courses shown in the core courses section.

Recommended Enrolment Pattern - Information Systems Development

Course	Year of	progran is	n and se norma	emester Ily studi	in whicł ed	Enrolment requirements	
		On-campus (ONC)		External (EXT)		line EB)	
	Year	Sem	Year	Sem	Year	Sem	
CIS1000 Information Systems Concepts	1	1	1	1			
CSC1401 Foundation Programming	1	1	1	1			
Core course	1	1	2	1			
Core course	1	1	2	1			
CMS1000 Communication and Scholarship	1	2	1	2			
CIS1101 Business Online	1	2	1	2			
Core course	1	2	2	2			
Elective/second major course	1	2	2	2			
CIS2002 Database Design and Implementation	2	1	3	1			
CIS2000 Systems Analysis and Design	2	1	3	1			
Elective/second major course	2	1	4	1			
Elective/second major course	2	1	4	1			
CIS3010 Oracle Development	2	2	3	2			
CSC2407 Introduction to Software Engineering	2	2	3	2			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
Elective/second major course	2	2	4	2			
CIS2003 Component Based Software Development	2	2	4	2			
CIS3002 Business Analysis	3	1	5	1			Pre-requisite: CIS2000 or CSC2407
CIS3001 Object-Oriented Programming with Java	3	1	5	1			
Elective/second major course	3	1	6	1			
CIS3003 Networks and Distributed Systems	3	1	6	1			
CIS3007 Enterprise Systems Development and Architecture	3	2	5	2			
Elective/second major course	3	2	5	2			
Elective/second major course	3	2	6	2			
Elective/second major course	3	2	6	2			

Recommended Enrolment Pattern - Information Technology Management

Course	Course Year of program and semester in which cours is normally studied						Enrolment requirements
		On-campus (ONC)		External (EXT)		line EB)	
	Year	Sem	Year	Sem	Year	Sem	
CIS1000 Information Systems Concepts	1	1	1	1			
CSC1401 Foundation Programming	1	1	1	1			
Core course	1	1	2	1			
Core course	1	1	2	1			
CMS1000 Communication and Scholarship	1	2	1	2			
Core course	1	2	1	2			
CIS1101 Business Online	1	2	2	2			
Elective/second major course	1	2	2	2			
CIS2000 Systems Analysis and Design	2	1	3	1			
CIS2002 Database Design and Implementation	2	1	3	1			
Elective/second major course	2	1	4	1			
Elective/second major course	2	1	4	1			
CIS2005 Principles of Information Security	2	2	3	2			
CSC2407 Introduction to Software Engineering	2	2	3	2			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
Elective/second major course	2	2	4	2			
CIS3009 Enterprise Systems in Practice	2	2	4	2			
Elective/second major course	3	1	5	1			
CIS3008 Information Technology Service Management	3	1	5	1			
CIS3002 Business Analysis	3	1	6	1			Pre-requisite: CIS2000 or CSC2407
CIS3003 Networks and Distributed Systems	3	1	6	1			
Elective/second major course	3	2	5	2			
Select one of the following two courses:						1	
BUS3000 Work Integrated Learning	3	2	5	2			
CIS3011 Information Systems Project*							Pre-requisite: CIS3002
Elective/second major course	3	2	6	2			
Elective/second major course	3	2	6	2			

Footnotes

* CIS3011 replaces CIS2200 Advanced Office Applications: Access and Word from 2011.

Recommended Enrolment Pattern - Networking and Security

Course	Year of	Enrolment requirements					
	On-campus (ONC)		External (EXT)		Online (WEB)		
	Year	Sem	Year	Sem	Year	Sem	
Year 1							
CSC1401 Foundation Programming	1	1, 2	1	1, 2			
CIS1000 Information Systems Concepts	1	1, 2	1	1, 2			
Core course*	1	1, 2	1	1, 2			
MAT1101 Discrete Mathematics for Computing	1	1	2	1			
CMS1000 Communication and Scholarship	1	1, 2	1	1, 2, 3			
Elective/second major course	1	2	2	2			
CSC2408 Software Development Tools	1	1, 2	1	1, 2			

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Course	Year of	progran is	n and se normal	mester ly studio	in which ed	Enrolment requirements	
		On-campus (ONC)		External (EXT)		line EB)	
	Year	Sem	Year	Sem	Year	Sem	
CSC2407 Introduction to Software Engineering	1	2	2	2			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
Year 2							
CIS3002 Business Analysis	2	1	3	1			Pre-requisite: CIS2000 or CSC2407
CSC2406 Web Technology	2	2	3	2			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
CSC3407 Network Fundamentals and Routing	2	1	4	1			
CSC3400 Database Systems	2	1	4	1			
CSC3412 System and Security Administration	2	1	3	1			
CSC2404 Operating Systems	2	2	2	2			Pre-requisite: CSC1401 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
Elective/second major course	2	2	2	2			
Elective/second major course	2	2	2	2			
Year 3							
CSC3420 Mobile Internet Technology	3	1	5	1			Pre-requisite: CSC3407 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
Elective/second major course	3	1	5	1			
Elective/second major course	3	1	6	1			
Elective/second major course	3	1	6	1			
CSC3413 Network Design and Analysis	3	2	5	2			
CSC3427 Switching, Wireless and WAN Technologies	3	2	5	2			Pre-requisite: CSC3407 or USQIT16 or Stu dents must be enrolled in one of the follow ing Programs: GDTI or GCSC or GDGS or GCEN or GDET or METC or MCOT or M CTE or MCOP or MPIT or MSBN or MSMS
Elective/second major course	3	2	6	2			
Elective/second major course	3	2	6	2			

Footnotes

* This core course should be chosen from the list of non-compulsory core courses.