Bachelor of Information Technology - Dean's Scholars Program (IT22)

Year offered: 2010
Admissions: No
CRICOS code: 012656E / 017323G
Course duration (full-time): 3 years
Domestic fees (indicative): 2010: CSP $3,780 (indicative) per semester
International Fees (indicative): 2010: $11,000 (indicative) per semester
QTAC code: 416002
Past rank cut-off: 96. Also see entry requirements
Past OP cut-off: 3. Also see entry requirements
Assumed knowledge: English (4, SA) and Maths A, B or C (4, SA)
Preparatory studies: For information on acquiring assumed knowledge visit http://www.studentservices.qut.edu.au/apply/ug/info/knowledge.jsp
Course coordinator: Richard Thomas
Campus: Gardens Point

Financial Support
Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Students are responsible for all other costs associated with their program.

Cooperative Education Program
The School of IT’s Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you’re learning in your degree. Students wishing to participate in the Cooperative Education Program should be aware that they will not receive financial support as a Dean’s Scholar for the duration of the placement.

Find out more about the Cooperative Education Program.

Professional Recognition
As a graduate of the Dean's Scholars Program you will be qualified for professional accreditation and employment in fields relevant to your specialisation.

Deferment
QUT’s deferment policy does not apply to this course.

International Student Entry
To be eligible to enrol in the Honours program, students must demonstrate appropriate levels of achievement in the Bachelor of Information Technology course. Offers in the Honours program will be made conditionally on the student maintaining a GPA of 5.5 in the Bachelor of Information Technology component to be eligible to continue to the Bachelor of Information Technology (Honours). It is expected that many Dean’s Scholars will proceed to PhD studies. However, students have the option of exiting after the Bachelor of Information Technology (2.5yrs).

New Unit Translations/Incompatibility Table
Details on the translation and incompatibility of old and new units is located here: Undergraduate Translation Table and Postgraduate Translation Table
If you have completed the unit(s) listed under the “Translation Unit Codes” column you are not permitted to enrol in the listed new code.

Further Information
For further information about this course, please contact the following:
Richard Thomas
Phone: +61 7 3138 2782
Email: enquiry.scitech@qut.edu.au

Bachelor of Information Technology

Course Structure

Recommended Core Unit Progression

Year 1, Semester 2
INB270 Programming
INB251 Networks
INB271 The Web
Intermediate Level Elective

Year 2, Semester 1
Block B or Block C Unit
### Year 2, Semester 2

| Block B or Block C Unit
| Block B or Block C Unit
| Block B or Block C Unit
| Block B or Block C Unit

**INB301** The Business of IT

| Block B or Block C Unit
| Block B or Block C Unit
| Block B or Block C Unit
| Block B or Block C Unit

**INB302** Capstone Project

Undertaken over four (4) weeks.

### Year 3, Semester 1

| Block B or Block C Unit
| Block B or Block C Unit
| Block B or Block C Unit
| Block B or Block C Unit

**INN Unit**

### Year 3, Semester 2

| Block B or Block C Unit
| Block B or Block C Unit
| Block B or Block C Unit
| Block B or Block C Unit

**INN700** Introduction To Research

**INN401** Honours Dissertation 1

**INN402** Honours Dissertation 2

**INN403** Honours Dissertation 3

**INN404** Honours Dissertation 4

### Software Architecture Major

**Compulsory Units**

| INB340 | Database Design |
| INB371 | Data Structures and Algorithms |
| INB372 | Agile Software Development |

**Electives**

Choose 3 Electives

| INB341 | Software Development With Oracle |
| INB311 | Enterprise Systems |
| INB312 | Enterprise Systems Applications |
| INB272 | Interaction Design |
| INB313 | Electronic Commerce Site Development |
| INB322 | Information Systems Consulting |
| INB320 | Business Process Modelling |
| INB365 | Systems Programming |
| INB370 | Software Development |
| INB373 | Web Application Development |
| INB374 | Enterprise Software Architecture |
| INB381 | Modelling and Animation Techniques |
| INB382 | Real Time Rendering Techniques |

MA82 is only to be used as a prereq for INB381

**Information Systems Major**

**Compulsory Units**

| INB311 | Enterprise Systems |
| INB340 | Database Design |
| INB220 | Business Analysis |

**IS Elective Units**

| INB312 | Enterprise Systems Applications |
| INB342 | Enterprise Data Mining |
| INB313 | Electronic Commerce Site Development |
| INB322 | Information Systems Consulting |
| INB320 | Business Process Modelling |
| INB124 | Information Systems Development |
| INB221 | Technology Management |

**Network Systems Major**

**Compulsory Units**

| INB350 | Internet Protocols and Services |
| INB351 | Computer Network Administration |
| INB352 | Network Planning and Deployment |
| INB255 | Security |

**Electives**

| INB312 | Enterprise Systems Applications |
INB365 Systems Programming
INB353 Wireless and Mobile Networks
INB355 Cryptology and Protocols

Potential Careers:
Computer Game Programmer, Computer Games Developer, Computer Salesperson/Marketer, Computer Systems Engineer, Data Communications Specialist, Database Manager, Electrical and Computer Engineer, Information Officer, Information Security Specialist, Internet Professional, Manager, Multimedia Designer, Network Administrator, Network Manager, Programmer, Project Manager, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, Web Designer.

UNIT SYNOPSISES

INB124 INFORMATION SYSTEMS DEVELOPMENT
IT professionals work with a wide variety of information systems and are increasingly required to interact with other professionals and understand business domains. In many cases it is necessary to develop custom systems to satisfy business requirements. Problem solving and communication skills and an understanding of programming concepts and logic are required to effectively work with information systems developers. In this dynamic industry, self-managed learning is necessary to remain abreast of technology innovations.

Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

INB220 BUSINESS ANALYSIS
This unit is aimed to give you an introduction to the role, knowledge, and skills required of a business analyst. This unit focuses on both the trades—tools and methods used by a business analyst, as well as the soft skills—creativity and communication, both of which are critical to successful business and requirements analysis. Through lectures, case studies and role playing activities, you will develop basic knowledge and skills required for introductory business analysis (BA).

Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

INB221 TECHNOLOGY MANAGEMENT
This unit presents operational, tactical and strategic insights that support the activities central to the leadership and management of technology. These insights include project management, organisational leadership, outsourcing, planning, governance and millennium technologies. Such insights are used to inform decision-making - the core skill of any manager. Technology managers must understand the factors influencing any decision point. This unit equips students for the challenges of management and to contribute to the decision-making faced by managers and the staff who advise on these issues.

Prerequisites: INB103 or ITB002 or INB120 or ITB360 Antirequisites: ITN241, ITN251 and ITN366 Equivalents: ITB366, ITB241  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

INB251 NETWORKS
Computer systems and communications networks are essential to the activities of modern organisations. When you graduate from a course in Information Technology, employers expect you to have a sound understanding of the terminology and concepts of computer systems, communications networks, and network services. This unit provides you with an introductory study of communications network technologies and network applications. The unit serves as an entry point to further specialised studies in the field of computer network systems.

Antirequisites: ITB006  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

INB255 SECURITY
This unit aims to give you an understanding of the major issues in information security. You will be able to identify critical information security concepts and determine the information security implications of interactions between entities. You will have knowledge of a range of techniques for protecting information, and understand the limitations of these techniques. You will be aware of international information security management standards.

Antirequisites: ITB161, ITB523, ITB623 and ITN161 Equivalents: ITB730  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

INB270 PROGRAMMING
This unit aims to give you a positive introduction to the skills required in solving computational problems and implementing solutions in a programming or scripting language. Although some theoretical aspects of computer programming are introduced briefly, the overall emphasis of the unit is programming practice. The unit emphasises generic programming concepts and related problem-solving strategies. The skills you learn in this unit will be applicable to a wide variety of commonly-used, industrially-significant programming and scripting languages.
INB271 THE WEB
The aims of the unit are to give you a thorough understanding of what the web is, how it works and what it has to offer. Additionally, the unit aims to give you a general understanding and basic skills in developing dynamic web applications, including an appreciation of the variety of implementation technologies available. Through an understanding of how web technologies have evolved to date, you will appreciate the necessity for lifelong learning and become an insightful predictor of future developments in this area. You will learn to critically analyse technological alternatives in order to adapt to and innovate with technologies that presently do not exist. You will appreciate the business or organizational context within which web applications exist and be skilled in communicating within that environment. You will appreciate the social and ethical issues relating to web based systems including accessibility, globalization, privacy, and piracy.

Prerequisites: INB104 or ENB246  Antirequisites: ITB003, ITB112, ITB411, INN270  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

INB272 INTERACTION DESIGN
The aim of this unit is to provide you with an understanding of the theory, practices and challenges associated with the development of creative interactive design and human computer interaction.

Prerequisites: INB104  Antirequisites: INB373 and INN373 and ITB007 and ITB227 and ITN007 and ITN227  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

INB302 CAPSTONE PROJECT
Students are to work together in a team of 4-5 on a project that addresses one of the following three types of problems: real business problems, real market needs, real research problems. This unit extends students’ development of the professional, technical and teamwork skills required by IT professionals in practice. Students will extend their knowledge and skills in the areas of IT project management through completing professional project documentation and managing the team project. Students will also gain a greater understanding and skill level in analysis and design, and their significance in delivering successful business or research outcome. The unit also focuses on furthering students’ professional skills in report writing, oral communication, and visual communication.

Prerequisites: INB301  Assumed knowledge: Students are expected to have a solid IT background knowledge (e.g., completion of at least 192 credit points)  Equivalents: ITB010  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

INB311 ENTERPRISE SYSTEMS
The unit presents and discusses the Enterprise Systems Lifecycle model, orienting students to the requirements of addressing total cost of ownership, change management requirements and process modelling requirements in order to achieve business benefits. Concepts of Enterprise Systems success and associated enablers and barriers are also introduced. This unit introduces the technical architecture of complex 3-tiered client server environments. It seeks to show how an integrated complex database environment meets common business needs, and yet fails to meet the total Information Systems requirements.

Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

INB312 ENTERPRISE SYSTEMS APPLICATIONS
The aim of this unit is to introduce one of the more complex and comprehensive Enterprise Systems applications. This unit introduces the business perspective and application processes of modules (such as FI, CO, PP, MM and S&D) and investigates the support provided by these systems and the integration between modules by following some of the
major processes in a business. The unit enables you to experience both the business analyst view and the user's view of the system across a number of business processes.

Antirequisites: ITB233, INN312  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-1

INB313 ELECTRONIC COMMERCE SITE DEVELOPMENT
This unit will enable you to specify, design, implement and maintain effective e-commerce applications. You will obtain a broad understanding of the potential of e-commerce and how it can be employed to benefit an organisation. You will get direct experience of creating an e-commerce storefront following a business to business (B to B) or business to consumer (B to C) model. You will also have an understanding of the computer systems that underpin e-commerce including payment systems and secure transactions.

Equivalents: ITB260  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2

INB320 BUSINESS PROCESS MODELLING
The aim of this unit is to introduce you to modern methods and tools of business process management. These skills will be applied to the most complex, comprehensive and relevant IT applications. This unit also seeks to develop logical thinking and the capability to understand and deal with complex systems, within a business management framework. The content will focus strongly on business process modelling, as a fundamental technique to manage the complexity associated with process management tasks within various contexts.

Equivalents: ITB298  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2

INB322 INFORMATION SYSTEMS CONSULTING
The aim of the unit is to develop your skills in the consulting engagement process. This unit will give you an appreciation of the management of consulting practices and an understanding of the consulting sector generally. This unit presents the tactical and strategic issues involved in management consulting, and in particular: client engagement. In the unit there is an emphasis on Information Systems (IS) related work. IS constitutes a substantial portion of consulting activity and cuts across all areas of business expertise. The unit examines the dynamics of IS consulting within the context of large consulting firms and familiarises students with the consulting engagement lifecycle.

Antirequisites: ITB264, ITN264  
Assumed knowledge: Completion of 96 credit points of an Undergraduate study is assumed knowledge  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-1

INB340 DATABASE DESIGN
The aim of this unit is to help you develop your knowledge, understand a formal specification tool (ORM) for modelling information systems unambiguously and to apply this formal technique to conceptualise information systems found in many real world application domains.

Prerequisites: INB210 or ITB004  
Antirequisites: ITB229  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-1

INB341 SOFTWARE DEVELOPMENT WITH ORACLE
Oracle Corporation is the leading supplier of database software. This unit aims to develop a sound understanding of database creation, installation, administration, management, security, back up/recovery and application development. The unit aims to develop practical skills in each of these elements, using appropriate Oracle software.

It is expected that students undertaking this unit will have prior knowledge of relational database terminology and concepts, be thoroughly able to develop SQL for querying, updating and creating tables, and have a sound knowledge of database design.

Prerequisites: INB210 or ITB004 or INB122  
Equivalents: ITB223  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2

INB342 ENTERPRISE DATA MINING
This unit will provide a comprehensive theoretical coverage of various topics in data and web mining. In addition there will be a significant practical component using hands on tools to solve real-world problems. Specifically, we will consider techniques from machine learning, data mining, text mining, and information retrieval to extract useful knowledge from data which are used for business intelligence, document databases, site management, personalization, and user profiling. This unit will first cover a detailed overview of the mining process and techniques, and then concentrate on applications of these techniques to web, e-commerce, document databases and data from advanced applications.

Prerequisites: INB122 or INB210 or INB340 or AYB114  
Antirequisites: INN342  
Equivalents: ITB239  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2

INB314 E-BUSINESS MANAGEMENT
This unit will provide an overview of the business process of e-commerce. Its aim is to introduce students to the new concepts and business models that have resulted from the growth of the internet. It will cover the business models that underpin e-commerce and examine how they can be employed to benefit an organisation. You will learn about how to engage with customers and online business process activities to improve their business processes. You will also learn about the information systems that underpin e-commerce including payment systems and secure transactions.

Equivalents: ITB260  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2
INB350 INTERNET PROTOCOLS AND SERVICES
An understanding of the theoretical and practical concepts of network protocols and services is highly useful and relevant to network engineers and others working in the Information Processing industries. This unit introduces you to Internet protocols and the design, implementation and operation of network based applications. Theory and practical skills taught in this unit will be useful if you intend undertaking further networking units.

Prerequisites: INB251 or ITB006 or ITB510
Antirequisites: ITB264, ITB629, ITB720, ITN525, ITN667, ITN720
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2010 SEM-1

INB351 COMPUTER NETWORK ADMINISTRATION
The aim of this unit is to provide students with a working knowledge of the technical aspects and theory of network administration and management. The unit uses the Unix environment as the learning platform for attaining technical skills and for the development of problem solving skills necessary to be a successful networking professional.

Prerequisites: INB350
Equivalents: ITB721, ITB625, ITB535, ITB525
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2010 SEM-2

INB352 NETWORK PLANNING AND DEPLOYMENT
The unit draws together subject matter from a number of different networking-related areas. The aim of the unit is to assemble the previously acquired knowledge and techniques and apply it in a cohesive fashion to the task of network planning.

Prerequisites: INB350
Antirequisites: ITB551, ITB628, ITB722, INN352, ITN551, ITN722
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2010 SEM-2

INB353 WIRELESS AND MOBILE NETWORKS
This unit provides you with the skills to be able to design and understand the issues involved with different types of wireless communications systems. It develops your knowledge of Wide Area Networks (WANs), Local Area Networks (LANs) and Personal Area Networks (PANs) as well as skills in programming for mobile handsets. You will also develop knowledge of the different types of wireless communications technologies available and when each is most applicable in a particular situation.

Prerequisites: INB270 or ITB003 or INN270
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2010 SEM-1
INB371 DATA STRUCTURES AND ALGORITHMS
The purpose of this unit is to ensure that you have a sound knowledge of modern programming techniques and their use in providing medium-scale software solutions. This unit will teach you to decompose a problem and produce a modular solution to a programming task. The principles to analyse algorithms for efficiency will also be introduced. In addition, you will acquire the necessary skills for you to use the tools available in common development environments, such as Microsoft Visual Studio.

Prerequisites: INB270 or ITB003  Antirequisites: ITB711, ITB702, INN371  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

INB372 AGILE SOFTWARE DEVELOPMENT
This unit introduces you to the software development process. You will look at each of the major activities involved in developing a software system. You will also learn how to manage and control the software development process for a large project when a number of team members are involved in the development. This unit develops the professional practice of working on large software systems.

Prerequisites: INB370  Antirequisites: INN372, ITB612, ITB712  Assumed knowledge: Good programming, debugging, testing and software development skills.  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

INB373 WEB APPLICATION DEVELOPMENT
This unit will provide you with an understanding of the issues, structure and technologies used for developing web-based systems. The unit will provide you with the theoretical and practical skills needed to develop enterprise critical applications designed with an n-tier architecture using state of the art technologies. A comparative technology approach is taken, including an analysis of how web technologies have evolved to date, in order to identify common themes and to better enable you to comprehend and critically evaluate future web technology offerings.

Prerequisites: INB271 or ITB007  Antirequisites: INN373  Equivalents: ITB716 and ITN716  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

INB374 ENTERPRISE SOFTWARE ARCHITECTURE
This unit aims to introduce you to the field of enterprise architecture. It attempts to give you a grounding in the basic knowledge and skills required by an enterprise architect. This includes a solid understanding of the IT challenges currently facing medium to large size organizations, the theory and technologies currently used to address them and an appreciation of the business imperative for which they are utilized.

Prerequisites: INB270 or ITB003  Equivalents: ITB717  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

INB381 MODELLING AND ANIMATION TECHNIQUES
The unit will provide you with the knowledge and skills to use an industry standard graphics API to implement graphics applications and to develop a basic real time animation system using an industry standard language.

Prerequisites: INB371 and MAB281  Equivalents: ITB746  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1 and 2010 SEM-2

INB382 REAL TIME RENDERING TECHNIQUES
This unit will provide you with knowledge and skills in basic to advanced techniques in real-time rendering using shading languages. You will be able to implement a high-quality real-time rendering system in an industry standard API.

Prerequisites: INB371, INB381 and MAB281  Antirequisites: ITB648 and ITB649  Equivalents: ITB747  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

INN401 HONOURS DISSERTATION 1
Research is about contributing to scientific knowledge. You will be expected to make such a contribution in your honours dissertation, although the size of that contribution will probably be relatively small as this is likely to be your

Prerequisites: INB371 and MAB281  Credit points: 12  Campus: Gardens Point  Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

INN402 HONOURS DISSERTATION 2
Research is about contributing to scientific knowledge. You will be expected to make such a contribution in your honours dissertation, although the size of that contribution will probably be relatively small as this is likely to be your
first research project. The principle aim, however, is to provide you with basic research skills that you will be able to apply again in the future in other contexts, be they in a higher research degree, or applied to real-world problems in an industry setting. You will learn the types of processes, creativity and analytical thinking that leads to such scientific advances and how to communicate such findings in a rigorous scientific manner.

Credit points: 12  Campus: Gardens Point  Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

INN403 HONOURS DISSERTATION 3
Research is about contributing to scientific knowledge. You will be expected to make such a contribution in your honours dissertation, although the size of that contribution will probably be relatively small as this is likely to be your first research project. The principle aim, however, is to provide you with basic research skills that you will be able to apply again in the future in other contexts, be they in a higher research degree, or applied to real-world problems in an industry setting. You will learn the types of processes, creativity and analytical thinking that leads to such scientific advances and how to communicate such findings in a rigorous scientific manner.

Credit points: 12  Campus: Gardens Point  Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

INN404 HONOURS DISSERTATION 4
Research is about contributing to scientific knowledge. You will be expected to make such a contribution in your honours dissertation, although the size of that contribution will probably be relatively small as this is likely to be your first research project. The principle aim, however, is to provide you with basic research skills that you will be able to apply again in the future in other contexts, be they in a higher research degree, or applied to real-world problems in an industry setting. You will learn the types of processes, creativity and analytical thinking that leads to such scientific advances and how to communicate such findings in a rigorous scientific manner.

Credit points: 12  Campus: Gardens Point  Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

INN700 INTRODUCTION TO RESEARCH
This unit is aimed at those seeking to undertake a major research project. Except in unusual circumstances, you should have a project in mind and have organised a supervisor.

Assumed knowledge: Must be con-currently enrolled in either full-time or part-time Higher Research Degree (i.e. PhD, ProDoc, Research Masters, or Honours) or, if coursework masters then a 48cp research project. In all instances, must have a formal Principle Supervisor

Equivalents: ITN100  Other requisites: Unit Coordinator Approval and a course GPA of at least 5.5 is required to enrol.  Credit points: 12  Campus: Gardens Point  Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

MAB281 MATHEMATICS FOR COMPUTER GRAPHICS
This unit introduces students to the mathematics involved in computer graphics, computer games and virtual reality. It is heavily reliant on analytic, Euclidean and projective geometries in 2D and 3D, elementary trigonometry, elementary linear algebra and elementary calculus. The unit will develop the mathematical concepts and where practicable show how these concepts are then applied in the field of computer graphics. Students must have completed four semesters of Senior Mathematics B with an exit level of Sound Achievement, or have passed MAB105 (or equivalent).

Assumed knowledge: Grade of at least Sound Achievement in Senior Mathematics B (or equivalent) or MAB105 is assumed knowledge.  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2