Bachelor of Games and Interactive Entertainment (IT04)

Year offered: 2010
Admissions: Yes
CRICOS code: 059710E
Course duration (full-time): 3 years
Domestic fees (indicative): 2010: CSP $3,720 (indicative) per semester
International Fees (indicative): 2010: $11,000 (indicative) per semester
Domestic Entry: February
International Entry: February
QTAC code: 416102
Past rank cut-off: 74
Past OP cut-off: 13
OP Guarantee: Yes
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
Total credit points: 288
Course coordinator: Dr Peta Wyeth
Campus: Gardens Point

Course Overview
The Bachelor of Games and Interactive Entertainment gives you the opportunity to join the growing industry of digital entertainment and electronic games by acquiring expertise in the development of computer games and other forms of interactive media. The course has a strong foundation in both entertainment technology and creative skills. You can choose your primary area of study, also known as your major, from:

- **Animation**: animation and motion graphics, 3D computer graphics and computer generated art
- **Digital Media**: mixing graphics, video, animation and sound to meet the increasingly complex world of digital entertainment
- **Game Design**: game design tools and design processes, narrative and immersion, architecture and interior design
- **Software Technologies**: technical aspects of computer games, games engine and tools development

You will gain experience in the whole process of game and interaction development, from identification and evaluation of ideas, creation of design concepts, critique of existing and potential products, analysis of cultural impact and industry trends, right through to the development and delivery of a final product.

Career Outcomes
Depending on your specialisation, graduates may find employment as a games/digital media programmer, game designer, simulation developer or designer, animator, film and television special effects developer, quality assurance tester, games/digital media reviewer, video game tester, sound designer, mobile entertainment and communications developer, web developer or digital product strategist.

Scholarships
If you wish to enrol in the Bachelor of Information Technology, you may like to consider our Dean's Scholars Program for OP1-2 students. If you are a female high school student, you may also apply for our 'go for IT gURL' merit scholarships.

Find out more about the range of scholarships available.

Cooperative Education Program
The Cooperative Education Program gives students the opportunity of 10-12 months paid industry placement during your course where they can integrate real experience with what they are learning in their degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments.

Students participating in this program enrol in INS011 Cooperative Education 1 and INS012 Cooperative Education 2 in the second semester of the program. The cooperative education program and its mentoring and assessment requirements make up the required contact and assessment of both units. Eligibility criteria apply. International students are not eligible due to visa restrictions.

Part-time students who are working in a professional position related to the BGIE may be able to use their current employment to meet the criteria for completing INS011 Cooperative Education 1, after completion of 168 credit points in the Bachelor of Games and Interactive Entertainment, subject to meeting eligibility criteria. Further information about this option is available from Student Services, Level 3, O Block Podium, Gardens Point Campus.

Find out more about the Cooperative Education Program.

Professional Recognition
No professional accreditation is currently available for courses in the games and entertainment area.

Students completing the Software Technologies Major
would be eligible for membership of the Australian Computer Society (ACS).

Credit for Previous Study
Domestic and international applicants may claim credit for part of the degree, on the basis of completed or partially completed studies, related to the Bachelor of IT.

International students can access advanced standing arrangements on QUT’s international site.

Domestic applicants should view the credit information on the Student Services site.

Deferment
QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances. Find out more on deferment.

Unit Incompatibility/Translation Information
Details on the translation and incompatibility of old and new units is located here:
Undergraduate 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:
Peta Wyeth  
Phone: +61 7 3138 2782  
Email: enquiry.scitech@qut.edu.au

Bachelor of Games & Interactive Entertainment Course Structure 2010
The course consists of four blocks of studies
Block A: Core Studies (8 units including a 36 credit point Project completed over Semesters 5 & 6)
Block B: Major (8 units) selected from Animation; Digital Media; Games Design; Software Technologies
Block C: Minor (4 units)
Block D: Electives (4 units)
The Cooperative Education Programs are replacements for general IT electives

Year 1, Semester 1
INB180 Computer Games Studies
INB104 Building IT Systems
INB103 Industry Insights
INB182 Introducing Design

Year 1, Semester 2
INB181 Introduction to Games Production
Block B or Block C or Block D Unit
Block B or Block C or Block D Unit
Block B or Block C or Block D Unit

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

Year 2, Semester 2
Block B or Block C or Block D Unit
Block B or Block C or Block D Unit
Block B or Block C or Block D Unit
Block B or Block C or Block D Unit

Year 3, Semester 1
INB379 Game Project Design
Block B or Block C or Block D Unit
Block B or Block C or Block D Unit
Block B or Block C or Block D Unit

Year 3, Semester 2
INB380 Games Project
Block B or Block C or Block D Unit
Block B or Block C or Block D Unit
Note: Coop Ed students replace INB380 with INS011 and INS012

Bachelor of Games & Interactive Entertainment Majors
Course structure (Block B)
Animation
KIB105 Animation and Motion Graphics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIB108</td>
<td>Animation History and Practices</td>
</tr>
<tr>
<td>KVB105</td>
<td>Drawing for Design</td>
</tr>
<tr>
<td>KVB106</td>
<td>Drawing for Animation</td>
</tr>
<tr>
<td>KIB220</td>
<td>Animation Production</td>
</tr>
<tr>
<td>KIB203</td>
<td>Introduction to 3D Computer Graphics</td>
</tr>
<tr>
<td>KIB225</td>
<td>Character Development, Conceptual Design and Animation Layout</td>
</tr>
<tr>
<td>KIB325</td>
<td>Real-Time 3D Computer Graphics</td>
</tr>
<tr>
<td>KIB101</td>
<td>Visual Communication</td>
</tr>
<tr>
<td>KIB102</td>
<td>Visual Interactions</td>
</tr>
<tr>
<td>INB345</td>
<td>Mobile Devices</td>
</tr>
<tr>
<td>INB386</td>
<td>Advanced Multimedia Systems</td>
</tr>
<tr>
<td>KIB309</td>
<td>Embodied Interactions</td>
</tr>
<tr>
<td>KIB230</td>
<td>Interface and Information Design</td>
</tr>
<tr>
<td>INB385</td>
<td>Multimedia Systems</td>
</tr>
<tr>
<td>KIB314</td>
<td>Tangible Media</td>
</tr>
<tr>
<td>INB280</td>
<td>Fundamentals of Game Design</td>
</tr>
<tr>
<td>INB272</td>
<td>Interaction Design</td>
</tr>
<tr>
<td>KIB201</td>
<td>Concept Development for Game Design and Interactive Media</td>
</tr>
<tr>
<td>KIB202</td>
<td>Enabling Immersion</td>
</tr>
<tr>
<td>INB281</td>
<td>Advanced Game Design</td>
</tr>
<tr>
<td>KIB214</td>
<td>Design for Interactive Media</td>
</tr>
<tr>
<td>AND</td>
<td>Two units selected from the following:</td>
</tr>
<tr>
<td>DAB110</td>
<td>Architectural Design 1</td>
</tr>
<tr>
<td>DEB201</td>
<td>Digital Communication</td>
</tr>
<tr>
<td>DTB101</td>
<td>Interior Design 1</td>
</tr>
<tr>
<td>DNB101</td>
<td>Industrial Design 1</td>
</tr>
<tr>
<td>CIB109</td>
<td>Information technology</td>
</tr>
</tbody>
</table>

**Digital Media**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB365</td>
<td>Systems Programming</td>
</tr>
<tr>
<td>INB372</td>
<td>Agile Software Development</td>
</tr>
<tr>
<td>INB374</td>
<td>Enterprise Software Architecture</td>
</tr>
<tr>
<td>INB382</td>
<td>Real Time Rendering Techniques</td>
</tr>
<tr>
<td>INB383</td>
<td>AI for Games</td>
</tr>
<tr>
<td>KIB101</td>
<td>Visual Communication</td>
</tr>
<tr>
<td>KIB102</td>
<td>Visual Interactions</td>
</tr>
<tr>
<td>INB385</td>
<td>Multimedia Systems</td>
</tr>
<tr>
<td>INB386</td>
<td>Advanced Multimedia Systems</td>
</tr>
</tbody>
</table>

**Software Technologies**

- Requirements for this Major is a SA or better in Queensland Maths B (or equivalent)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB270</td>
<td>Programming</td>
</tr>
<tr>
<td>MAB281</td>
<td>Mathematics for Computer Graphics</td>
</tr>
<tr>
<td>INB210</td>
<td>Databases</td>
</tr>
<tr>
<td>INB250</td>
<td>Systems Architecture</td>
</tr>
<tr>
<td>INB370</td>
<td>Software Development</td>
</tr>
<tr>
<td>INB371</td>
<td>Data Structures and Algorithms</td>
</tr>
<tr>
<td>INB381</td>
<td>Modelling and Animation Techniques</td>
</tr>
<tr>
<td>INB382</td>
<td>Real Time Rendering Techniques</td>
</tr>
<tr>
<td>MAB281</td>
<td>Mathematics for Computer Graphics</td>
</tr>
<tr>
<td>INB210</td>
<td>Databases</td>
</tr>
<tr>
<td>INB250</td>
<td>Systems Architecture</td>
</tr>
<tr>
<td>INB370</td>
<td>Software Development</td>
</tr>
<tr>
<td>INB371</td>
<td>Data Structures and Algorithms</td>
</tr>
<tr>
<td>INB381</td>
<td>Modelling and Animation Techniques</td>
</tr>
<tr>
<td>INB382</td>
<td>Real Time Rendering Techniques</td>
</tr>
</tbody>
</table>

**Entrepreneurship**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB115</td>
<td>Management</td>
</tr>
<tr>
<td>MGB223</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>MGB324</td>
<td>Managing Business Growth</td>
</tr>
</tbody>
</table>

Students select a Minor from the following

**Animation**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIB105</td>
<td>Animation and Motion Graphics</td>
</tr>
<tr>
<td>KVB105</td>
<td>Drawing for Design</td>
</tr>
<tr>
<td>KVB106</td>
<td>Drawing for Animation</td>
</tr>
<tr>
<td>KIB108</td>
<td>Animation History and Practices</td>
</tr>
</tbody>
</table>

**Advanced Animation**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIB221</td>
<td>Animation: CG Toolkit</td>
</tr>
<tr>
<td>KIB320</td>
<td>Advanced Concepts in Computer Animation 1</td>
</tr>
<tr>
<td>KIB321</td>
<td>Advanced Concepts in Computer Animation 2</td>
</tr>
<tr>
<td>KIB316</td>
<td>Virtual Environments</td>
</tr>
</tbody>
</table>

**Digital Media**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB115</td>
<td>Management</td>
</tr>
<tr>
<td>MGB223</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>MGB324</td>
<td>Managing Business Growth</td>
</tr>
</tbody>
</table>

# Only available to students doing the Software Technologies major

**Entrepreneurship**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB115</td>
<td>Management</td>
</tr>
<tr>
<td>MGB223</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>MGB324</td>
<td>Managing Business Growth</td>
</tr>
</tbody>
</table>

#Entry into this minor is limited to IT04 students enrolled in the Animation Major, who have completed at least 96 credit points of study, and have gained an average grade of 5.0 or above across the following units from the Animation Major: KIB105, KIB108, KVB105, KVB106.
### Bachelor of Games & Interactive Entertainment Part-time structure

The course consists of four blocks of studies:

- **Block A**: Core Studies (6 units plus a 24 credit point Project completed in Semester 6)
- **Block B**: Major (8 units) selected from Animation; Digital Media; Games Design; Software Technologies
- **Block C**: Minor (4 units)
- **Block D**: Electives (4 units)

The Cooperative Education Programs are replacements for general IT electives.

#### Year 1, Semester 1
- INB180 Computer Games Studies
- INB182 Introducing Design

#### Year 1, Semester 2
- INB181 Introduction to Games Production
- INB104 Building IT Systems

#### Year 2, Semester 1
- INB103 Industry Insights
<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>INB180 Computer Games Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 2</td>
<td>INB181 Introduction to Games Production</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 4, Semester 1</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 4, Semester 2</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 5, Semester 1</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 5, Semester 2</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 6, Semester 1</td>
<td>INB379 Game Project Design</td>
</tr>
<tr>
<td>Year 6, Semester 2</td>
<td>INB380 Games Project</td>
</tr>
</tbody>
</table>

**Bachelor of Games & Interactive Entertainment Course structure 2008**

The course consists of four blocks of studies

- Block A: Core Studies (6 units plus a 24 credit point Project completed in Semester 6)
- Block B: Major (8 units) selected from Animation; Digital Media; Games Design; Software Technologies
- Block C: Minor (4 units)
- Block D: Electives (4 units)

The Cooperative Education Programs are replacements for general IT electives
Bachelor of Games & Interactive Entertainment Course

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>ITB750 Computer Game Studies</th>
<th>ITB001 Problem Solving and Programming</th>
<th>ITB002 IT Professional Studies</th>
<th>DEB101 Introducing Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 2</td>
<td>ITB751 Games Production</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td>ITB009 Core Project Management</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td>ITB020 Project</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
</tr>
</tbody>
</table>

**structure 2007**

The course consists of four blocks of studies

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>ITB750 Computer Game Studies</th>
<th>ITB001 Problem Solving and Programming</th>
<th>ITB002 IT Professional Studies</th>
<th>DEB101 Introducing Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 2</td>
<td>ITB751 Games Production</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td>ITB009 Core Project Initiation</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td>ITB020 Project</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
<td>Block B or Block C or Block D Unit</td>
</tr>
</tbody>
</table>
IT Elective Units

INB123  Project Management Practice
INB221  Technology Management
INB311  Enterprise Systems
INB312  Enterprise Systems Applications
INB313  Electronic Commerce Site Development
INB373  Web Application Development
INB374  Enterprise Software Architecture
INB385  Multimedia Systems
INB386  Advanced Multimedia Systems
INB320  Business Process Modelling
INB321  Business Process Management
INB322  Information Systems Consulting
INB323  Smart Services
INB330  Information Management
INB331  Management Issues for Information Professionals
INB333  Information Programs
INB334  Information Issues and Values
INB335  Information Resources
INB340  Database Design
INB341  Software Development With Oracle
INB342  Enterprise Data Mining
INB350  Internet Protocols and Services
INB351  Computer Network Administration
INB352  Network Planning and Deployment
INB353  Wireless and Mobile Networks
INB370  Software Development
INB371  Data Structures and Algorithms
INB372  Agile Software Development
INB374  Enterprise Software Architecture
INB204  Special Topic 1
INB205  Special Topic 2
INB300  Professional Practice in IT
INB305  Special Topic 4
INB304  Special Topic 3
INS352  CCNP1: Building Scalable Internetworks
INS350  CCNA 1&2 Network Fundamentals and Routing
INS351  CCNA 3&4 Lan Switching
INS353  CCNP 2: Building Multi Layered Switched Networks

INS354  CCNP3: Building Multi Layered Switched Networks
INS355  CCNP 4: Optimising Converged Networks
INB306  Project 1
INB307  Project 2
INB308  Project 3
INB355  Cryptology and Protocols
INB365  Systems Programming
INB860  Computational Intelligence for Control and Embedded Systems
INB345  Mobile Devices
INB346  Enterprise 2.0
INB347  Web 2.0 Applications
INB334  Information Issues and Values

Potential Careers:

UNIT SYNOPSES

AMB201 MARKETING AND AUDIENCE RESEARCH
This unit provides an introduction to the conduct and evaluation of marketing and audience research across the disciplines of advertising, marketing and public relations. Class members explore how field studies, survey and experimental research are employed to support advertising, marketing and public relations information needs. The unit provides an overview of research process, research design, methods of data collection and analysis, and the development of research proposals to support decision-making. Class members also explore issues related to research on media audiences, research ethics, and the management of client briefings.
Prerequisites: BSB126, CTB126, BSB116, or BSB117
Antirequisites: MIB305, MGB220, COB334
Equivalents: CTB201
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point and Caboolture
Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

AMB240 MARKETING PLANNING AND MANAGEMENT
This unit extends the student's knowledge of the fundamental marketing concepts and theories introduced in the Faculty Core unit in Marketing, by adding further breadth and depth of knowledge of marketing and developing skills in the application of this knowledge to marketing planning and management within the business environment.
Emphasis is on the role of the marketing manager at the product management level in undertaking analysis, planning, implementation and control of marketing activities.

**Prerequisites**: BSB126 or CTB126  
**Equivalents**: CTB240  
**Credit points**: 12  
**Contact hours**: 3 per week  
**Campus**: Gardens Point and Caboolture  
**Teaching period**: 2010 SEM-1 and 2010 SEM-2

**AMB251 INNOVATION AND BRAND MANAGEMENT**

This unit covers the dynamics of product and service innovation within the marketing function of an organisation. Products are defined in the broadest sense as both tangible and intangible and include the various categories of consumer and industrial products and services. The course covers product market analysis, the product/service development process, design, innovation, research and testing, new product financial analysis, branding and packaging, and new product commercialisation.

**Prerequisites**: BSB126, BSB116, or CTB126  
**Antirequisites**: MIB227  
**Credit points**: 12  
**Contact hours**: 3 per week  
**Campus**: Gardens Point  
**Teaching period**: 2010 SEM-2

**AMB359 STRATEGIC MARKETING**

Emphasis of the capstone Marketing unit is on the role of marketing manager at the corporate and strategic business unit/division levels. Students are exposed to a variety of strategic marketing techniques and issues, and learn how to apply these in corporate planning and management. Topics include: developing and critiquing strategic marketing planning models; recognising the importance of market focus; determining what marketing strategy can realistically be accomplished for a business; identifying underlying factors that must be considered in developing marketing strategy for a market-oriented organisation; discussing problems in successful implementation of marketing strategy; and organising for successful strategy implementation.

**Prerequisites**: AMB340, and AMB335 or AMB241  
**Equivalents**: AMB341  
**Credit points**: 12  
**Campus**: Gardens Point and Caboolture  
**Teaching period**: 2010 SEM-1 and 2010 SEM-2

**BSB115 MANAGEMENT**

The unit provides an introduction to the theories and practice of management and organisations. Emphasis is on the conceptual and people skills that are needed in all areas of management and in all areas of organisational life. The unit acknowledges that organisations exist in an increasingly international environment where the emphasis will be on knowledge, the ability to learn, to change and to innovate. Organisations are viewed from individual, group, corporate and external environmental perspectives.

**Antirequisites**: BSD115  
**Equivalents**: CTB115  
**Credit points**: 12  
**Contact hours**: 3 per week  
**Campus**: Gardens Point and Caboolture  
**Teaching period**: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

**BSB126 MARKETING**

This introductory subject examines the role and importance of marketing to the contemporary organisation. Emphasis is placed on understanding the basic principles and practices of marketing such as the marketing concept, market segmentation, management information systems and consumer behaviour. The unit explores the various elements of the marketing mix, with special reference to product, price, distribution, and promotion, including advertising and public relations. By way of introduction only, key issues relating to services marketing, e-marketing and strategic marketing are also canvassed.

**Antirequisites**: BSB116  
**Equivalents**: CTB126  
**Credit points**: 12  
**Contact hours**: 4 per week  
**Campus**: Gardens Point and Caboolture  
**Teaching period**: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

**DAB110 ARCHITECTURAL DESIGN 1**

This unit offers a broad introduction to the field of design as applied to architecture. It uses developmental exercises to enhance student perceptions of the natural and human made environments in a problem based learning environment. Analysis of the constructed environment leads to a number of design projects that engage with issues of context, tectonics, planning, form, and spatial quality. Orthogonal drawing exercises, freehand sketching, presentation graphics and model making all form part of the unit content. Teaching and learning activities are spread across lectures, tutorials, and studio based activities.

**Prerequisites**: DEB103 or DLTB130 or DNB101 or DTLB101. DEB103 can be studied in the same teaching period as DAB110  
**Equivalents**: ADB001  
**Credit points**: 12  
**Contact hours**: 4 per week  
**Campus**: Gardens Point  
**Teaching period**: 2010 SEM-1

**DEB101 INTRODUCING DESIGN**

Please note: this unit is only available to First Year DE40 and IT04 students.

This unit offers a uniquely broad introduction to the field of design as applied across the design disciplines. It uses exercises to enhance student perceptions of the natural and human made environments in a problem based learning context. The unit is block taught over several weeks during the semester and will include students from a range of design disciplines participating in a four day field trip (students unable to attend participate in an alternative program). Students work individually and in cross-disciplinary teams in a stimulating and immersive environment. This unit covers content of problem solving, team work, visualisation and communication, and environmental awareness.
Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2007 SEM-1

DEB101 INTRODUCING DESIGN
Please note: this unit is only available to First Year DE40 and IT04 students.

This unit offers a uniquely broad introduction to the field of design as applied across the design disciplines. It uses exercises to enhance student perceptions of the natural and human made environments in a problem based learning context. The unit is block taught over several weeks during the semester and will include students from a range of design disciplines participating in a four day field trip (students unable to attend participate in an alternative program). Students work individually and in cross-disciplinary teams in a stimulating and immersive environment. This unit covers content of problem solving, team work, visualisation and communication, and environmental awareness.

Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2008 SEM-1

DEB201 DIGITAL COMMUNICATION
This unit introduces students to the foundational aspects of digital design communication, placing generic design in context and focusing on multidisciplinarity in the stages of the design process. This unit is an approach to the theory and practice of digital media, exploring the translation from manual to digital media in design communication and presentation.

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

DNB101 INDUSTRIAL DESIGN 1
Industrial design revolves around the creation of products that satisfy human needs within the constraints of industrial and commercial production. This involves the manipulation of form with an understanding of structure, function, and beauty. Through projects students will be exposed to: basic design elements and principles; introduction to product visualisation techniques including concept sketching and marker rendering; design process and concept development; basic model making techniques; design presentation.

Prerequisites: DEB103 or DAB110 or DLB130 or DTB101. DEB103 can be studied in the same teaching period as DAB201  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

DTB101 INTERIOR DESIGN 1
This unit provides foundational material for the study of interior design. Students will be introduced to design theory, methodology and aesthetics. Design will be explored as an interpretive process. Topics covered in the context of projects for the unit include: The studio as a way of learning; Introductory design exercises exploring two and three dimensional elements as they relate to the interior design context; Freehand sketching, principles of perspective; Mechanical drawing, principles of scaled drawing; Presentation and visual communication skills; Environmental issues and sustainability.

Prerequisites: DEB103 or DAB110 or DLB130 or DNB101. DEB103 can be studied in the same teaching period as DTB101  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

INB102 EMERGING TECHNOLOGY
The aim of this unit is to provide you with a conceptual framework so that you clearly identify Information Technologies and their purpose. This task will be fun as it covers a wide spectrum of ideas and allows us to examine some currently popular technologies. Information Technology has become so entwined with everyday life that identifying its scope is difficult, which also makes it difficult to identify opportunities where it might further infiltrate into our daily lives for work and play. To achieve these aims, the unit introduces you to some of the theories and engineering practicalities that have already resulted in technological advances in the area of information technology. Concepts leading to existing technologies are introduced during lectures, which are followed by laboratory sessions where students will be encouraged to discuss social change, future information tools and explore the concepts required for constructing these technologies.

Antirequisites: ITB005  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1 and 2010 SEM-2

INB103 INDUSTRY INSIGHTS
This unit aims to develop your awareness of the career possibilities in the ICT industry and to equip you with some of the essential skills required of an ICT professional. The

Antirequisites: ITB002  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1 and 2010 SEM-2

INB103 INDUSTRY INSIGHTS
This unit aims to develop your awareness of the career possibilities in the ICT industry and to equip you with some of the essential skills required of an ICT professional. The
unit helps you to derive a roadmap for your career; to enable you to identify the qualities, skills and interests you need to possess, to plan your career path. The unit will also introduce you the inter-disciplinary nature of ICT careers.

Prerequisite(s): Nil Corequisite(s): Nil Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2009 SEM-1 and 2009 SEM-2 Incompatible with: ITB002

INB104 BUILDING IT SYSTEMS
This team-based unit is an integrated introduction to information technology designed to engage, inspire and inform and will demonstrate the important role that technical system design and development plays in achieving robust operation of a large variety of technological solutions. This unit will give you substantial hands-on, practical learning experiences and will motivate you through engagement in the creative, explorative and meaningful development of technological artefacts that operate in real world contexts.

Prerequisite(s): ITB001 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2010 SEM-1 and 2010 SEM-2

INB104 BUILDING IT SYSTEMS
This team-based unit is an integrated introduction to information technology designed to engage, inspire and inform and will demonstrate the important role that technical system design and development plays in achieving robust operation of a large variety of technological solutions. This unit will give you substantial hands-on, practical learning experiences and will motivate you through engagement in the creative, explorative and meaningful development of technological artefacts that operate in real world contexts.

Prerequisite(s): ITB001 and ITB002

INB123 PROJECT MANAGEMENT PRACTICE
Successful businesses use Project Management (PM) processes to structure the implementation, upgrades and process improvement activities undertaken within organisations. This unit investigates project management processes and analyses, combines and applies the basic elements and tools of successful projects to ICT cases. With a focus on contemporary organisations, the unit covers activities such as communication and risk management, change management, recording keeping and project reporting. The unit covers practical, relevant and topical PM issues delivered as a complex project activity.

Antirequisites: INN500 Assumed knowledge: Completion of 48 credit points of an Undergraduate study is assumed knowledge. Credit points: 3 per week Campus: Gardens Point Teaching period: 2010 SEM-2

INB180 COMPUTER GAMES STUDIES
This unit is designed to give you a clear understanding of the socio-cultural issues that affect the computer game industry. Through critical review of games and games industry literature, playing games and actively participating in classroom discussion you will develop your capacity to join in the discourse about the design, impact and future direction of computer games in our society.

Antirequisites: INN180, ITB750 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2010 SEM-1

INB180 COMPUTER GAMES STUDIES
This unit is designed to give you a clear understanding of the socio-cultural issues that affect the computer game industry. Through critical review of games and games industry literature, playing games and actively participating in classroom discussion you will develop your capacity to join in the discourse about the design, impact and future direction of computer games in our society.

Prerequisite(s): Nil Corequisite(s): Nil Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2009 SEM-1 Incompatible with: ITB750

INB181 INTRODUCTION TO GAMES PRODUCTION
This subject will provide you with knowledge and skills in games production. By gaining an overview of the production process, you will learn how the technology and the people involved integrate into a coherent and efficient manufacturing process. By the end of this subject you will have the knowledge to conceive, create, integrate and optimise tools and personnel into a complete games production system.

Prerequisite(s): Nil Corequisite(s): Nil Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2009 SEM-2 Incompatible with: Nil

INB181 INTRODUCTION TO GAMES PRODUCTION
This subject will provide you with knowledge and skills in games production. By gaining an overview of the production process, you will learn how the technology and the people involved integrate into a coherent and efficient manufacturing process. By the end of this subject you will have the knowledge to conceive, create, integrate and optimise tools and personnel into a complete games production system.
Antirequisites: INN181  Equivalents: ITB751, ITN751
Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

INB182 INTRODUCING DESIGN
TBA
Antirequisites: DEB101  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2010 SEM-1

INB204 SPECIAL TOPIC 1
This unit gives you the opportunity to apply, under appropriate guidance, the knowledge and skills gained in your course to date and to execute a substantial development project. The ability to apply technical knowledge and skills to real-life situations is essential for information technology professionals. A substantial project, under academic supervision, will develop your initiative and ability to apply your knowledge and skills in a professional capacity. Completing the project will also enable you to appreciate the complementary nature of the course material in total, particularly the need for careful project management.

Prerequisite(s): Nil  Corequisite(s): Nil  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2009 SEM-1 and 2009 SEM-2  Incompatible with: Nil

INB204 SPECIAL TOPIC 2
This unit gives you the opportunity to apply, under appropriate guidance, the knowledge and skills gained in your course to date and to execute a substantial development project. The ability to apply technical knowledge and skills to real-life situations is essential for information technology professionals. A substantial project, under academic supervision, will develop your initiative and ability to apply your knowledge and skills in a professional capacity. Completing the project will also enable you to appreciate the complementary nature of the course material in total, particularly the need for careful project management.

Prerequisites: INB371  Assumed knowledge: Knowledge of programming in Java, C# or C++. Knowledge of basic data structures (stacks, queues, trees, linked lists, hash tables), complexity analysis  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point

INB210 DATABASES
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.

Assumed knowledge: Students are expected to have solid IT background knowledge (e.g., completion of at least 192 credit points)  Equivalents: ITB004, ITB115  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2010 SEM-2

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

INB250 SYSTEMS ARCHITECTURE
Contemporary computer-based systems are built from a wide range of technologies working at different levels of abstraction, from microprocessor hardware, to operating system and application software, to entire communications
networks. At each abstraction level different techniques are needed to understand emergent properties of the system. This unit introduces some of the foundational principles commonly used to reason about the behaviour of computer-dependent systems at different levels of abstraction. Such techniques are especially important in the context of safety-, security- or mission-critical systems.

**Assumed knowledge:** Basic familiarity with set theory (Venn diagrams and set operators), elementary algebra (polynomial and summation expressions, exponents and logarithms, etc) and simple probability concepts (permutations and combinations). **Credit points:** 12  
**Contact hours:** 3 per week **Campus:** Gardens Point **Teaching period:** 2010 SEM-2

**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

**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.

**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:** INB103 or INB181  
**Equivalents:** ITB254  
**Credit points:** 12  
**Contact hours:** 3 per week **Campus:** Gardens Point **Teaching period:** 2010 SEM-2

**INB280 FUNDAMENTALS OF GAME DESIGN**

Modern games production is a complex process involving various businesses and organisations, working with budgets in the tens of millions. One of the roles within a game production team is that of the game designer. It is crucial that a game designer understands how to create a game world, the rules that govern game play and other high level design tasks. This subject provides an introduction to game design, by starting with high level conceptual design tasks before moving to more concrete tasks.

**Prerequisites:** INB180  
**Equivalents:** ITB016, ITN016  
**Credit points:** 12  
**Contact hours:** 3 per week **Campus:** Gardens Point **Teaching period:** 2010 SEM-2

**INB281 ADVANCED GAME DESIGN**

This unit will provide you with theoretical and practical knowledge of advanced games design concepts; that is, specific activities undertaken by game designers and their purpose. By the end of this unit you will have the knowledge to identify problems and suggest solutions for innovative game designs, as well as understand how to carry out the process of designing a game yourself. You will possess practical and theoretical knowledge of game design issues such as: how to design a game level, how to design a task and reward a player for completing it, how to ensure that the player knows how to progress through the game and how to design characters whose behaviour and dialogue provide clues and prompts to the player.

**Prerequisites:** INB280  
**Equivalents:** ITB017  
**Credit points:** 12  
**Contact hours:** 3 per week **Campus:** Gardens Point **Teaching period:** 2010 SEM-1

**INB300 PROFESSIONAL PRACTICE IN IT**

In this unit you will have the opportunity to experience real world work experiences and to reflect on how your studies have prepared you for the work environment. This will give you the opportunity to plan on how to best take advantage of your remaining studies to prepare for your planned career. To help you to understand your future career you will be working in a team and/or group environments, seeing firsthand the challenges and constraints that arise during professional practice in a real world industry environment. You will develop a richer appreciation of the graduate capabilities required of all information technology professionals, particularly skills such as communication, negotiation and problem-solving strategies.

**Antirequisites:** ITS020, INS010, INS011, INS012, INS020  
**Assumed knowledge:** Completion of 168 credit points
within BIT is assumed

**Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1, 2010 SEM-2 and 2010 SUM

**INB304 SPECIAL TOPIC 3**
Traditional Artificial Intelligence (AI) aims at satisfying the Turing test, that is, it aims at making computers indistinguishable from humans. Computer games AI aims at giving Non-Player Characters (NPC) behavioural artefacts that complement a game narrative. Computer game AI is a special area of study that deals with algorithmic approaches to entertainment affects in NPC. Students will develop in this unit an understanding of problems, solutions and algorithms that generally defines the current state of computer game AI. The aim of this unit is to provide students with an intermediate level course in computer game AI that involves a set of the most relevant algorithms and their applications in the interactive entertainment and game industries.

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

**INB305 SPECIAL TOPIC 4**
INB305 BGIE Project Design Phase (P1) extends your work on the role, design, and plan of a computer game concept. The unit covers the conceptualisation and game design stages up to the game design pitch. If the project is given a green light by the assessment panel, it may be developed later in the P2 unit.

**Prerequisites:** INB371  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-2

**INB306 PROJECT 1**
This unit gives you the opportunity to apply, under appropriate guidance, the knowledge and skills gained in your course to date and to execute a substantial development project. The ability to apply technical knowledge and skills to real-life situations is essential for information technology professionals. A substantial project, under academic supervision, will develop your initiative and ability to apply your knowledge and skills in a professional capacity. Completing the project will also enable you to appreciate the complementary nature of the course material in total, particularly the need for careful project management.

**Prerequisites:** INB101, INB102, INB103, INB104 and INB201  **Assumed knowledge:** As a minimum requirement you must have completed at least 132 credit points of IT units, including INB101, INB102, INB103, INB104, INB201, four breadth units, and at least two specialisation units.  **Equivalents:** ITB230  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1, 2010 SEM-2 and 2010 SUM

**INB307 PROJECT 2**
This unit gives you the opportunity to apply, under appropriate guidance, the knowledge and skills gained in your course to date and to execute a substantial development project. The ability to apply technical knowledge and skills to real-life situations is essential for information technology professionals. A substantial project, under academic supervision, will develop your initiative and ability to apply your knowledge and skills in a professional capacity. Completing the project will also enable you to appreciate the complementary nature of the course material in total, particularly the need for careful project management.

**Assumed knowledge:** Assumed knowledge is completion of 192cp of which at least 144cp must be IT units  **Equivalents:** ITB791  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1, 2010 SEM-2 and 2010 SUM

**INB308 PROJECT 3**
This unit gives you the opportunity to apply, under appropriate guidance, the knowledge and skills gained in your course to date and to execute a substantial development project. The ability to apply technical knowledge and skills to real-life situations is essential for information technology professionals. A substantial project, under academic supervision, will develop your initiative and ability to apply your knowledge and skills in a professional capacity. Completing the project will also enable you to appreciate the complementary nature of the course material in total, particularly the need for careful project management.

**Assumed knowledge:** Assumed knowledge is completion of 192 credit points of which at least 144 credit points must be for IT units  **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.

**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-2

**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 methodologies of Business Process Management. This unit seeks to develop logical thinking, an appreciation for conceptual models, and the capability to understand and deal with complex systems.

**Antirequisites:** INN321  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-2

**INB321 BUSINESS PROCESS MANAGEMENT**
The aim of this unit is to introduce you to modern methodologies of Business Process Management. A main objective is to increase your awareness of the close link between business requirements and IT capabilities, and the related fundamental role of business processes. This unit seeks to develop logical thinking, an appreciation for conceptual models, and the capability to understand and deal with complex systems.

**Antirequisites:** INN321  **Credit points:** 12  **Contact hours:** 3 per work  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1

**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

**INB323 SMART SERVICES**
This unit gives you the opportunity to apply, under appropriate guidance, the knowledge and skills gained in your course to date and to execute a substantial development project. The ability to apply technical knowledge and skills to real-life situations is essential for information technology professionals. A substantial project, under academic supervision, will develop your initiative and ability to apply your knowledge and skills in a professional capacity. Completing the project will also enable you to appreciate the complementary nature of the course material in total, particularly the need for careful project management.

**Prerequisite(s):** Nil  **Corequisite(s):** Nil  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2009 SEM-2  **Incompatible with:** Nil
INB330 INFORMATION MANAGEMENT
The aim of this unit is to provide you with an awareness of the activities in which IM professionals are engaged within various organisational contexts. You will use case studies and introduce yourself to the strategic and analytic elements that comprise information management activities. These activities include the alignment of enterprise information and business planning, enterprise information policy, evaluation of information resources & systems and applications of the information inventory.

Prerequisite(s): Nil    Corequisite(s): Nil    Credit points: 12    Contact hours: 3 per week    Campus: Gardens Point    Teaching period: 2009 SEM-2    Incompatible with: Nil

INB331 MANAGEMENT ISSUES FOR INFORMATION PROFESSIONALS
The overall aim is to enable you to identify and resolve selected key management issues within a particular type of organisation of your choice. Using an integrated approach the subject draws from the field of organisational behaviour, business management literature, IT-management, and other readings appropriate to your interest. A further emphasis will be on case studies of actual practices in the type of organisation or enterprise environment setting that you have chosen to investigate.

Equivalents: ITN274    Credit points: 12    Contact hours: 3 per week    Campus: Gardens Point

INB333 INFORMATION PROGRAMS
The unit encompasses the planning, implementation and evaluation of an information product or service for a particular community of use. The community may be anything from a specialised professional or business group, to community members with special needs etc. Emphasis is on identification of user needs, creating an information product or program and marketing or promoting its use. The unit also explores the impact of web 2.0 technologies (e.g. blogs, wikis, facebook, YouTube, flickr) and concepts such as creative commons and open access on program and product design and delivery are explored.

Prerequisite(s): Nil    Corequisite(s): Nil    Contact hours: 3 per week    Campus: Gardens Point    Incompatible with: ITN330

INB334 INFORMATION ISSUES AND VALUES
The overall aim is to enable you to identify and critically discuss key issues (ie social, economic, political, cultural, legal, psychological) that impact upon the role and use of information and IT in different contexts of the information society (ie academic, professional, personal). You will critically consider the role of information and IT professionals in dealing ethically and legally with the many issues evolving within the emerging information society. The unit draws from the fields of psychology, business, library and information science, IT, education, sociology and law.

Antirequisites: ITN330    Credit points: 12    Contact hours: 3 per week    Campus: Gardens Point    Teaching period: 2010 SEM-1

INB335 INFORMATION RESOURCES
This unit will help you to understand the structure of the information environment, to reflect upon the information resources you discover, and to develop the ability to find appropriate information for future problem solving. You will develop your skills in identifying, accessing, evaluating and retrieving information resources to meet specific information needs. The unit will also help you develop skills in teamwork and oral and written communication.

Equivalents: ITB322    Credit points: 12    Contact hours: 3 per week    Campus: Gardens Point    Teaching period: 2010 SEM-2

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

INB345 MOBILE DEVICES
This unit provides the opportunity for exploring new and emerging mobile devices and wireless technology including iPhone, Netbook, 3G, WiMax, and RFID. Students will critically review and understand how they can be used for current contexts such as government, business, education and social community, as well as emerging ‘wilderness’ environments with no power and wired communication. Students will appreciate the impacts of these devices and be inspired for the current and future opportunities in ICT usage trends.

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

INB346 ENTERPRISE 2.0
This unit will help you to acquire the skills and knowledge required to critically explore and utilise applications within diverse contexts and organisations.

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

INB347 WEB 2.0 APPLICATIONS
Web 2.0 applications enable the user to be control. The unit will provide the opportunity for students to explore web 2.0 applications including blogs, wikis, social networking, social tagging, podcasts, gaming, storytelling and virtual worlds such as second life. Students will critically consider the many and varied web applications and how they can be used in different contexts such as government, small and medium size businesses, non-profit organisations, educational institutions and community groups.

Credit points: 12   
Contact hours: 3 per week   
Campus: Gardens Point

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: INB251 or ITB006  
Antirequisites: ITN723
**Assumed knowledge:** Networks or equivalent networking knowledge is assumed knowledge  
Equivalent: ITB723  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-1

**INB355 CRYPTOLOGY AND PROTOCOLS**
Cryptographic techniques are widely used to implement computer and network security. As an IT security professional you may be required either to evaluate or implement information systems using cryptographic algorithms and protocols. This elective unit covers the main cryptographic technical concepts including encryption, digital signatures and cryptographic protocols.

**Antirequisites:** ITB646, ITB548, ITB566  
**Assumed knowledge:** Maths B or equivalent is assumed knowledge.  
Equivalent: ITB732  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-1

**INB365 SYSTEMS PROGRAMMING**
Systems programming is an essential part of any computer-science education. This unit uses operating system concepts to teach the foundations of systems programming and advanced concepts for producing softwares that provide services to computer hardware. Through this study, you will be able to demonstrate knowledge of the principles and techniques of process management, memory and file management, protection & security, and distributed systems.

**Prerequisites:** INB270  
**Antirequisites:** INN365, ITB745, ITB706  
**Assumed knowledge:** Fundamentals of computer architecture; high level programming languages (such as C, C++, Java Python) is assumed knowledge.  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-2

**INB370 SOFTWARE DEVELOPMENT**
Understanding software development is an integral part of the IT industry for software engineers. Software development relies on object technologies, programming techniques and numerous code libraries provided by language developers and third party vendors. Integrated Development Environments, unit testing frameworks, automated and continuous build tools and versioning systems are all becoming part of the tool set modern software developers must be familiar with. This unit is designed to introduce these technologies and techniques to show how software can be rapidly developed.

**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

**INB379 GAME PROJECT DESIGN**  
INB379 BGIE Game Project Design (P1) extends your work on the role, design, and plan of a computer game concept. The unit covers the conceptualisation and game design stages up to the game design pitch. If the project is given a green light by the assessment panel, it may be developed later in the P2 unit.

**Prerequisite(s):** 144 cp overall of acceptable Bachelor of Games and Interactive Entertainment units  
**Corequisite(s):** Nil  
**Credit points:** 12  **Contact hours:** 1 hour lecture - 2 hour supervisor meetings  
**Campus:** Gardens Point  **Teaching period:** 2009 SEM-2 and 2010 SEM-2

**INB379 GAME PROJECT DESIGN**  
INB379 BGIE Game Project Design (P1) extends your work on the role, design, and plan of a computer game concept. The unit covers the conceptualisation and game design stages up to the game design pitch. If the project is given a green light by the assessment panel, it may be developed later in the P2 unit.

**Prerequisite(s):** 144 cp overall of acceptable Bachelor of Games and Interactive Entertainment units  
**Corequisite(s):** Nil  
**Credit points:** 12  **Contact hours:** 1 hour lecture - 2 hour supervisor meetings  
**Campus:** Gardens Point  **Teaching period:** 2009 SEM-2 and 2010 SEM-2

**INB380 GAMES PROJECT**  
This unit seeks to give you the opportunity to apply, under appropriate guidance, the knowledge and skills gained in your course to date and to execute a substantial related project. The unit also aims to allow you to develop the critical professional skills of working within a cross-disciplinary team and, through implementation of your project, develop the understanding of the role of careful planning, scope control and task management in ensuring that the project is successful.

**Prerequisite(s):** Students undertaking this unit must be enrolled in the Bachelor of Games and Interactive Entertainment and have completed ITB009  
**Corequisite(s):** Nil  
**Credit points:** 24  **Contact hours:** 3 per week  
**Campus:** Gardens Point  **Teaching period:** 2009 SEM-1 and 2009 SEM-2  
**Incompatible with:** ITB020

**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

**INB383 AI FOR GAMES**  
The aim of this unit is to provide students with an intermediate to advanced level course in computer game AI, involving algorithmic and utility-based approaches to solving a wide range of problems in the interactive entertainment and game industries. You will gain both practical and theoretical knowledge about a range of AI techniques applied in computer games. You will be able to identify and explain different types of AI agents, describe their algorithms using a pseudo code convention, identify and...
explain different structures and algorithms used to represent and solve a range of problems in computer game AI.

**Prerequisites:** INB371 or MA6281  
**Antirequisites:** INB304 completed in semester 1 2009  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-1

### INB385 MULTIMEDIA SYSTEMS

This unit will explore the concepts underpinning multimedia systems and the role played by these technologies in the overall knowledge of a computer professional. You will learn to: design and develop different kinds of interactive multimedia applications; understand the bank of knowledge in cultural developments surrounding the emergence of multimedia technologies; analyse design and processes that contribute to the production of a creative work, using contemporary hardware and software technologies; develop the creative potential of temporal media forms and their placement and use within new media works; understand principles and conventions associated with the interpretation and production of meaning through interactive visual representation.

**Prerequisites:** INB103 or ITB002  
**Antirequisites:** ITB257  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-1

### INB386 ADVANCED MULTIMEDIA SYSTEMS

This advanced level unit will give you high level design and development skills in some of the current and emerging areas of the new media. Web delivered applications, stand-alone systems and installations will be included. It will endeavour to give you an in-depth understanding of interactive Multimedia Systems. You will be given the theoretical basis and practical skills to motivate you in the design and creation of a state-of-the-art system in this discipline. In the process it will encourage a professional team approach appropriate to the industry environment.

**Prerequisites:** INB385 (Special considerations may apply)  
**Equivalents:** ITB259, ITN259  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-2

### INB860 COMPUTATIONAL INTELLIGENCE FOR CONTROL AND EMBEDDED SYSTEMS

This is a specialisation unit in the area of Infomechatronics that introduces five methods from the field of computational intelligence and relates them to applications on real time control and embedded systems. The methods are: Knowledge Base Systems, Fuzzy Control, Neural Networks, Reinforcement Learning and Evolutionary Computation. The unit is also intended to teach the specific design and programming skills that will enable you to solve problems using computational intelligence methods in real-time embedded systems. It is assumed that you already have knowledge of programming.

**Antirequisites:** ITB847  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-1

### INS350 CCNA 1&2 NETWORK FUNDAMENTALS AND ROUTING

This unit provides in-demand Internet technology skills for designing, building and maintaining networks. Combining instructor-led, online education with hands-on laboratory exercises, the curriculum enables students to apply what they learn in class while working on actual networks. From building basic networking skills to advanced VLAN troubleshooting, the Networking Academy curriculum prepares students for industry certification that lead to lifelong opportunities. Particular emphasis is given to using decision-making and problem-solving techniques in the application of science, mathematics, communication and social studies concepts to solve networking problems.

**Antirequisites:** INS450  
**Equivalents:** IT5701, IT5601, ITB011, ITN011  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-1 and 2010 SEM-2

### INS351 CCNA 3&4 LAN SWITCHING

This unit is the second step to a Cisco career certification path. The aim of this unit is to prepare students for the topics covered in Interconnecting Cisco Networking Devices Part 2 (ICND2) v1.0 (640-816) and Cisco Certified Network Associate Exam (CCNA 640-802). The ICND exam is one of the two qualifying exams available to candidates pursuing a two-exam option for the Cisco Certified Network Associate (CCNA) certification and CCNA 640-802, single-exam option for the Cisco Certified Network Associate CCNA certification.

**Prerequisites:** INS350  
**Antirequisites:** ITB011, INS451  
**Equivalents:** IT5602 and IT5702 and ITB012  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-1 and 2010 SEM-2

### INS352 CCNP1: BUILDING SCALABLE INTERNETWORKS

This unit is the second step to a Cisco career certification path. It provides more knowledge and practical skills on Wide Area Network through various routing protocols and layer 2 related technologies. This unit provides you with advanced level of study on WAN technologies.

**Prerequisites:** INS351  
**Antirequisites:** INS452  
**Assumed knowledge:** INS350, CCNA 1/2/3/4 are
recommended prior study  

Equivalents: ITS703  
Credit points: 12  
Campus: Gardens Point  
Teaching period: 2010 SEM-1

**INS353 CCNP 2: BUILDING MULTI LAYERED SWITCHED NETWORKS**

This unit provides more knowledge and practical skills on building multi-layered switched networks. The aim of the unit is to provide professional knowledge and skills focusing on multi-layered switched networks.

**Prerequisites:** INS352  
**Antirequisites:** INS453

**Equivalents:** ITS704  
Credit points: 12  
Campus: Gardens Point  
Teaching period: 2010 SEM-2

**INS354 CCNP 3: BUILDING MULTI LAYERED SWITCHED NETWORKS**

This unit is the second step to a Cisco career certification path. It provides more knowledge and practical skills on securing enterprise networks with various security technologies. The aim of this unit is to provide professional knowledge and skills focusing on securing LANs and WANs environment.

**Prerequisites:** INS351  
**Antirequisites:** INS454

**Assumed knowledge:** INS350 and INS351 are recommended prior study  
**Equivalents:** ITS705  
Credit points: 12  
Campus: Gardens Point  
Teaching period: 2010 SEM-1

**INS355 CCNP 4: OPTIMISING CONVERGED NETWORKS**

This unit provides more knowledge and practical skills on optimising converged networks. The aim of the unit is to provide professional knowledge and skills focusing on converged networks.

**Prerequisites:** INS354  
**Antirequisites:** INS455

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

**ITB001 PROBLEM SOLVING AND PROGRAMMING**

This unit aims to give you a positive introduction to the analytical skills required in computer programming. It assumes you have little or no previous programming experience. The unit emphasises generic programming concepts and related problem-solving strategies. The skills you learn in the unit will be applicable to a wide variety of commonly-used, industrially-significant programming and scripting languages.

**Prerequisite(s):** Nil  
**Corequisite(s):** Nil  
Credit points: 12  
Campus: Gardens Point  
Teaching period: 2007 SEM-1 and 2007 SEM-2

**ITB002 IT PROFESSIONAL STUDIES**

This unit aims to develop your professional skills and capabilities by providing theoretical and practical opportunities in the following areas: how IT teams operate, effective oral and written communication, team meeting processes and procedures, ethical and social responsibilities of the IT professional, information literacy and traits for life long learning. Demonstrable competency in these areas will be an expectation in subsequent units and will be developed further in them.

**Prerequisite(s):** Nil  
**Corequisite(s):** Nil  
Credit points: 12  
Contact hours: 3  
Campus: Gardens Point and Carseldine  
Teaching period: 2007 SEM-1 and 2007 SEM-2

**ITB002 IT PROFESSIONAL STUDIES**

This unit aims to develop your professional skills and capabilities by providing theoretical and practical opportunities in the following areas: how IT teams operate, effective oral and written communication, team meeting processes and procedures, ethical and social responsibilities of the IT professional, information literacy and traits for life long learning. Demonstrable competency in these areas will be an expectation in subsequent units and will be developed further in them.

**Prerequisite(s):** Nil  
**Corequisite(s):** Nil  
Credit points: 12  
Contact hours: 3  
Campus: Gardens Point and Carseldine  
Teaching period: 2007 SEM-1 and 2007 SEM-2

**ITB009 CORE PROJECT INITIATION**

This unit extends your development of the professional, technical and teamwork skills required by IT professionals in practise. It enables you to understand the process of project initiation and to build on this base in the following ITB010 Project 2 (or your Co-op appointment the following year).

**Prerequisite(s):** 144 cp overall including 96 cp of IT units

Credit points: 12  
Contact hours: 3  
Campus: Gardens Point  
Teaching period: 2007 SEM-1 and 2007 SEM-2

**Incompatible with:** ITB111

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Prerequisite(s)</th>
<th>Corequisite(s)</th>
<th>Credit points</th>
<th>Contact hours</th>
<th>Campus</th>
<th>Teaching period</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITB111</td>
<td>ITB001 PROBLEM SOLVING AND PROGRAMMING</td>
<td>Nil</td>
<td>Nil</td>
<td>12</td>
<td>3</td>
<td>Gardens Point</td>
<td>2010 SEM-1</td>
</tr>
<tr>
<td></td>
<td>ITB002 IT PROFESSIONAL STUDIES</td>
<td>Nil</td>
<td>Nil</td>
<td>12</td>
<td>3</td>
<td>Gardens Point</td>
<td>2007 SEM-1</td>
</tr>
<tr>
<td></td>
<td>ITB002 IT PROFESSIONAL STUDIES</td>
<td>Nil</td>
<td>Nil</td>
<td>12</td>
<td>3</td>
<td>Gardens Point</td>
<td>2007 SEM-1</td>
</tr>
<tr>
<td></td>
<td>ITB009 CORE PROJECT INITIATION</td>
<td>144 cp overall</td>
<td>96 cp of IT</td>
<td>12</td>
<td>3</td>
<td>Gardens Point</td>
<td>2007 SEM-1</td>
</tr>
</tbody>
</table>

Page 20/27
ITB009 CORE PROJECT MANAGEMENT
This unit extends your development of the professional, technical and teamwork skills required by IT professionals in practice. It enables you to understand the process of project initiation and to build on the base in the following ITB010 Project 2 (or your Co-op appointment the following year).
Prerequisite(s): 144 cp overall including 96 cp of IT units
Credit points: 12  Contact hours: 3  Campus: Gardens Point  Teaching period: 2008 SEM-1 and 2008 SEM-2
Incompatible with: ITB613, ITB240

ITB020 PROJECT
The ability to apply knowledge and skills to real-life situations is essential for employment in the games industry. A substantial multi-discipline team-based project, under academic supervision will develop student initiative and ability to apply knowledge and skills in a professional capacity. Completing the project will enable students to appreciate the complementary nature of the different subjects that make up the Computer Games and Interactive Entertainment degree and provide the opportunity for the sharing of expertise between students from different specialist areas within the degree.
Prerequisite(s): ITB009  Credit points: 24  Campus: Gardens Point  Teaching period: 2008 SEM-2

ITB750 COMPUTER GAME STUDIES
This unit is designed to give you a clear understanding of the socio-cultural issues that affect the computer game industry. Through critical review of games and games industry literature, playing games and actively participating in classroom discussion you will develop your capacity to join in the discourse about the design, impact and future direction of computer games in our society.
Prerequisite(s): ITB002 or equivalent  Credit points: 12  Contact hours: 3  Campus: Gardens Point  Teaching period: 2007 SEM-1

ITB750 COMPUTER GAME STUDIES
This unit is designed to give you a clear understanding of the socio-cultural issues that affect the computer game industry. Through critical review of games and games industry literature, playing games and actively participating in classroom discussion you will develop your capacity to join in the discourse about the design, impact and future direction of computer games in our society.
Prerequisite(s): ITB002 or equivalent  Credit points: 12  Contact hours: 3  Campus: Gardens Point  Teaching period: 2008 SEM-1

ITB751 GAMES PRODUCTION
This subject will provide you with knowledge and skills in games production. By gaining an overview of the production process, you will learn how the technology and the people involved integrate into a coherent and efficient manufacturing process. By the end of this subject you will have the knowledge to conceive, create, integrate and optimise tools and personnel into a complete games production system.
Prerequisite(s): Nil  Corequisite(s): Nil  Credit points: 12  Contact hours: 3  Campus: Gardens Point  Teaching period: 2008 SEM-2

KIB101 VISUAL COMMUNICATION
Communication Design deals with visual communication and the creation of meaning through images. This unit will introduce you to the principles, production and presentation of visual design and communication.
Equivalents: KIB801  Credit points: 12  Contact hours: 4 per week  Campus: Kelvin Grove  Teaching period: 2010 SEM-1 and 2010 SEM-2

KIB102 VISUAL INTERACTIONS
This unit further develops interface design skills for communications technologies including design priorities, interaction, visual systems, refinement of concepts, project analysis and problem solving through presentation models.
Prerequisite(s): KIB101 or KIB801 or KPB101 or KPB150 or KPB155  Equivalents: KIB802  Credit points: 12  Contact hours: 3.5 per week  Campus: Kelvin Grove  Teaching period: 2010 SEM-2

KIB105 ANIMATION AND MOTION GRAPHICS
This unit provides an introduction to animation and motion graphics concepts and practices, with an emphasis on principles of design in motion
Equivalents: KIB804  Credit points: 12  Contact hours: 3 per week  Campus: Kelvin Grove  Teaching period: 2010 SEM-2

KIB108 ANIMATION HISTORY AND PRACTICES
This unit is an introductory examination of the development of animation. It addresses social, cultural, economic and technological themes that have shaped notable practitioners and established animation as a significant medium for the expression of popular culture, artistic experiment and philosophical, social and political comment.
Equivalents: KIB825  Credit points: 12  Contact hours: 3 per week  Campus: Kelvin Grove  Teaching period: 2010 SEM-1

KIB201 CONCEPT DEVELOPMENT FOR GAME DESIGN AND INTERACTIVE MEDIA
This unit addresses theoretical issues associated with non-linear story structures and interactive narratives through the analysis of game structures, the creation of original game ideas and the application of techniques of information design to the structuring of non-narrative content.
Addressing the creative and analytical roles of writers, conceptual designers and information designers in the context of interactive digital media and the Creative Industries.

**Equivalents:** KIB816  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2010 SEM-1

**KIB202 ENABLING IMMERSION**
As creative practitioners within a highly networked technological society, it is important to develop a critical understanding of how the application of technology influences modes of communication, production processes and creative practices, particularly within the Creative Industries. This unit provides an introductory overview of the philosophies underlying applications of technology, and critically examines current applications in order to explore creative visions of future technology.

**Prerequisites:** KIB201  **Equivalents:** KIB814  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2010 SEM-2

**KIB203 INTRODUCTION TO 3D COMPUTER GRAPHICS**
The field of 3D computer graphics has grown from being a highly specialist field, supported by large film studios, into a vast and growing industry. Throughout film and television, scientific visualization, industrial and architectural design, physical modelling, animation and gaming; 3D visualisation has become a significant contributor to the construction of virtual worlds and the simulation of physical environments. This unit provides an introduction to the world of 3D graphics, paying particular attention to pre-production techniques, project management, 3D modelling techniques, and designing virtual environments. It establishes a foundation for advanced study in subsequent units on Real-time Computer Graphics and Virtual Environments. Theoretical understandings gained through lectures will be supplemented with technical skills in workshops, and applied to the production of 3D environments in design studios.

**Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2010 SEM-1

**KIB214 DESIGN FOR INTERACTIVE MEDIA**
Designing for contemporary media requires a sophisticated understanding of how we effectively interact with new technologies, software applications, displays and environments. This unit focuses on the field of interaction design and user experience design. It develops an understanding of the theories, methods, and processes employed by Interaction Designers through a series of lectures and tutorials. These principles are then applied to authentic design briefs within design studios.

**Prerequisites:** KIB102 or KIB202 or KIB802 or KIP402  **Equivalents:** KIB210  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2010 SEM-1

**KIB220 ANIMATION PRODUCTION**
Animation employs a studio-based production process that introduces you to workflows, practice-based investigations, critical thinking and problem-based learning. Animation: Studio Production will support you to build animation studio production skills by introducing design briefs, networking, teamwork and collaboration This unit will focus particular attention on image-based solutions for the production of animated work. It will allow you to advance your skills and techniques in matte painting, image-based modeling, terrain and environment modeling, particle systems for environments, and 3D object creation and shading, as you develop an area of specialisation through personal investigation and self-directed inquiry.

**Prerequisites:** KIB105 and KVB106  **Credit points:** 12  **Contact hours:** 6 per week  **Campus:** Kelvin Grove  **Teaching period:** 2010 SEM-1

**KIB221 ANIMATION: CG TOOLKIT**
CG Toolkit offers an in-depth look at the tools of animated production from within a studio setting. Continuing from Animation Studio 1: Preproduction, this unit looks at the tools and the processes involved in creating high level successful 3d computer animations for game development, film or television production, web or emergent media.

**Prerequisites:** (KIB203 or KIB107) and KIB220  **Equivalents:** KIB213  **Credit points:** 12  **Contact hours:** Up to 6 per week  **Campus:** Kelvin Grove  **Teaching period:** 2010 SEM-2

**KIB225 CHARACTER DEVELOPMENT, CONCEPTUAL DESIGN AND ANIMATION LAYOUT**
This unit emphasizes production in practice. By considering type and generic attributes within a technological context, you will be guided through the key concepts involved in the development of working drawings and final artworks.

**Prerequisites:** KIB203 or KIB107  **Equivalents:** KIB106, KIB807  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2010 SEM-2

**KIB230 INTERFACE AND INFORMATION DESIGN**
With the advent of new technologies for communication, graphical user interfaces have become fundamental to the design of effective communication, and a key factor in the uptake, ease of use and experience of technology systems. This unit builds upon knowledge and skills acquired in units on visual communication and Web design to establish the knowledge and skills required to design and produce effective visual interfaces for technology applications such as Web, small screens in mobile media, and interactive displays. It will cover theories and principles of visual communication, information architecture and user
experience design, which will be applied in the production of interfaces for interactive media and digital projects. The unit will be taught through a combination of lectures, tutorials and practical classes, in which skills and knowledge will be applied.

Prerequisites: KIB101 or KIB801  
Equivalents: KIB211  
Credit points: 12  
Contact hours: 3 per week  
Campus: Kelvin Grove  
Teaching period: 2010 SEM-1

KIB309 EMBODIED INTERACTIONS
Interaction with technology has advanced beyond the desktop paradigm of mouse and keyboard to embodied interfaces that incorporate video tracking, audio input, and gestural interaction techniques. Applications range from wearable technology to tangible media installations. This unit introduces an experimental field of interactive media design through the practical application of the processes and techniques of tangible media applications. Lectures, which provide the theoretical grounding of the study area, methodologies and examples of the application of tangible media are complemented by practical classes which extend the technical skills acquired in Programming for Designers and Artists and support the development of tangible media outcomes within design studios.

Prerequisites: KIB205 or INB385  
Equivalents: KIB311  
Credit points: 12  
Contact hours: 3 per week  
Campus: Kelvin Grove  
Teaching period: 2010 SEM-1

KIB314 TANGIBLE MEDIA
This unit extends the understandings of tangible media interfaces and applications gained in the embodied media unit. In this unit students will develop a tangible media project from concept through to design, production, evaluation, and exhibition. Theoretical understandings on tangible media object design, interaction and installation gained through lectures will be supplemented with production skills in workshops, and applied to the development of tangible media works in design studios. Finished works will be displayed in a final exhibition where members of the public will interact with them.

Prerequisites: KIB309  
Equivalents: KIB311  
Credit points: 12  
Contact hours: 3 per week  
Campus: Kelvin Grove  
Teaching period: 2010 SEM-2

KIB316 VIRTUAL ENVIRONMENTS
The field of 3D virtual environments, simulation, and visualization are used to produce sophisticated approaches to interaction design, social networking and game-play. This unit is designed to cater for both creative and technical practitioners. Extending the knowledge and skills developed in 3D Computer Graphics and Real-time environments, this unit develops an advanced understanding of virtual environments and 3D spaces. You will apply and extend principals of real-time modeling, texture acquisition for real-time environments, and interaction design in the 3D context. Students enrolled in this unit will work in project teams to produce a significant 3D interactive environment within the context of a design studio.

Prerequisites: KIB325  
Equivalents: KIB310, KIB821  
Credit points: 12  
Contact hours: 3 per week  
Campus: Kelvin Grove  
Teaching period: 2010 SEM-2

KIB320 ADVANCED CONCEPTS IN COMPUTER ANIMATION 1
This unit allows you to consolidate your understanding of animation studio processes from previous units, and supports you to develop advanced skills and concepts in computer animation, character development, and cinematic narrative and storytelling. You will have the opportunity to pitch, critique and produce assets for an animated work for a show-reel and to engage in self-directed, independent study in a studio context. You will also develop skills in production management and direction for the production of a major work in Animation.

Prerequisites: KIB221 or KIB213  
Equivalents: KIB312  
Credit points: 12  
Contact hours: 3 per week  
Campus: Kelvin Grove  
Teaching period: 2010 SEM-1

KIB321 ADVANCED CONCEPTS IN COMPUTER ANIMATION 2
Animation Studio 4 consolidates the work completed in the previous animation studios. Concentrating on output, portfolio preparation, post production and transitioning between university and industry or into higher degrees, the studio offers the opportunity to produce and direct a final portfolio piece or to begin academic research in the field of computer animation.

Prerequisites: KIB320  
Equivalents: KIB313  
Credit points: 12  
Contact hours: 3 per week  
Campus: Kelvin Grove  
Teaching period: 2010 SEM-2

KIB325 REAL-TIME 3D COMPUTER GRAPHICS
This unit provides the opportunity for extending the principles of 3D computer graphics into the emerging field of virtual environments that respond to interaction in real time. In this unit you will cover the principals of real-time modeling; texture acquisition for real-time environments and interaction design in the 3D context. This unit provides an opportunity where students studying 3D computer graphics can apply animation and interactive design principles to real-time spaces. These principles can be applied to the fields of game design and interactive 3D environments.

Prerequisites: KIB225  
Equivalents: KIB310, KIB821  
Credit points: 12  
Contact hours: 3 per week  
Campus: Kelvin Grove  
Teaching period: 2010 SEM-1
KMB106 MUSIC AND SOUND FOR MULTIMEDIA
This unit deals with studio recording techniques, computer-assisted composition, the role of music in non-linear structures, the effect of sound in digital media productions, sound effects and foley techniques, musical acoustics, and digital sound theory.
Assumed knowledge: Sound recording and operation of audio editing software is assumed knowledge. Credit points: 12 Contact hours: 2.5 per week Campus: Kelvin Grove Teaching period: 2010 SEM-2

KMB107 SOUND, IMAGE, TEXT
This unit focuses on the rich and varied relationship between sound and image in a number of media and artforms, including film, music video, theatre, installation, mixed media performance and many more.
Equivalents: KMB638 Credit points: 12 Contact hours: 2.5 per week Campus: Kelvin Grove and Caboolture Teaching period: 2010 SEM-2

KMB119 MUSIC AND SOUND PRODUCTION 1
This unit introduces students to the fundamentals principles of music and sound production through a mix of theory and practice. Students gain an understanding of sound recording, sound production and live sound reinforcement and develop listening skills essential for music and sound production.
Equivalents: KMB108, KMB621 Credit points: 12 Contact hours: 3 per week Campus: Kelvin Grove Teaching period: 2010 SEM-1

KMB129 MUSIC AND SOUND PRODUCTION 2
This unit builds on Music and Sound Production 1. It introduces students to sound synthesis and signal processing and extends the students understanding of the approaches and aesthetics underpinning creative music and sound production. Students will further develop practical skills in music and sound composition and deepen their knowledge of the hardware and software commonly used in creative production.
Equivalents: KMB105, KMB619 Credit points: 12 Contact hours: 3 per week Campus: Kelvin Grove Teaching period: 2010 SEM-2

KVB105 DRAWING FOR DESIGN
This is a studio based unit that introduces you to media, processes, strategies and traditions of drawing and associated imagery for use in animated media. The development of critical/reflective frameworks of traditional and contemporary practice underpins studio development.
Equivalents: KVB755 Credit points: 12 Contact hours: 4 per week Campus: Kelvin Grove Teaching period: 2010 SEM-1

KVB106 DRAWING FOR ANIMATION
This unit develops individual knowledge, concepts and skills to enable you to articulate and present capabilities of motion through drawing for contemporary animation practices.
Equivalents: KVB756 Credit points: 12 Contact hours: 3 per week Campus: Kelvin Grove Teaching period: 2010 SEM-2

LWB136 CONTRACTS A
This unit includes the following: formation of contracts; equitable estoppel; privity of contract; formalities; express and implied terms; an examination of promises which are legally binding; how contractual promises may be characterised and the significance of that characterisation.
Credit points: 12 Contact hours: 3 per week Campus: Gardens Point and External Teaching period: 2010 SEM-1 and 2010 SEM-2

LWB137 CONTRACTS B
Legally binding promises pervade society, from uncomplicated bargains like riding on a bus to complex multi-million dollar transactions. The law of contract provides an understanding of promises which are legally binding, how contractual promises may be characterised and the significance of that characterisation, and how contractual promises may be discharged or invalidated. This is the second of two associated units which examine the law of contract, the focus of this unit being on the discharge of contracts, remedies for breach and the invalidation of contracts. The two units together provide the foundation for several units encountered later in the course.
Prerequisites: LWB136 Credit points: 12 Contact hours: 2.5 per week Campus: Gardens Point and External Teaching period: 2010 SEM-1 and 2010 SEM-2

LWB141 LEGAL INSTITUTIONS AND METHOD
This unit introduces students to the building blocks of law: fundamental principles; legal terminology; legal institutions; legal methodology; sources of the law; ways to interpret the law including an introduction to policy and international considerations. The material is presented as an integrated whole so that students obtain a broad perspective and an ability to ‘navigate the law’ without artificially dividing any particular aspect. The unit also emphasises the joint responsibility of the teacher and the student for learning and to foster the development of skills in communication, comprehension and analysis.
Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2008 SEM-1 and 2008 SEM-2 Incompatible with: LWB101, LWB135

LWB142 LAW, SOCIETY AND JUSTICE
This unit examines the basic tenets of our democratic liberal legal system, particularly the central concept, the rule of
law. The unit begins with an historical development of rights and the rule of law. It looks at how law and values intertwine and how society at a particular time shapes notions of legal personality, the recognition of 'family' and human rights in law. It finally addresses the limitations of democratic liberalism and the rule of law by examining the reality of equality before the law in relation to such topics as gender and cultural neutrality, equal access to justice, and lawyers and the adversarial system.

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

**LWB480 MEDIA LAW**

This unit examines the regulation and non-regulation of freedom of speech exercised by the media. In this regard various limitations imposed by the common law, statute and self-regulation will be examined, such as defamation, restrictions on reporting courts and politics, contempt, privacy and confidentiality.

**Prerequisites:** LWB147  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point and External  **Teaching period:** 2010 SEM-2

**LWB482 INTERNET LAW**

This unit addresses the idea that it is vital for any participant in the digital age to gain a thorough knowledge of the structure, governance and regulation of the Internet, digital intellectual property, and risk management strategies for stakeholders.

**Credit points:** 12  **Contact hours:** 2 per week  **Campus:** Gardens Point and External  **Teaching period:** 2010 SEM-1

**LWB486 INTELLECTUAL PROPERTY LAW**

There have been significant developments in the field of intellectual property law in recent years and the area is undoubtedly one perceived by the practising profession as growing in importance. This unit will provide a foundation to those areas of intellectual property law that legal practitioners may encounter in their everyday practice. In so doing, it will provide an examination of each of the intellectual property regimes. The course will also consider some of the broader more general policy matters as they relate to the field of intellectual property law.

**Prerequisites:** LWB244  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point and External  **Teaching period:** 2010 SEM-2

**MAB120 ALGEBRA AND CALCULUS**

This unit introduces and reviews the elementary concepts of function, calculus, matrices and vectors with special reference to applications in science, technology and business where appropriate. Topics covered include the algebra of complex numbers, elementary functions (polynomial, trigonometric, exponential and logarithmic) and their properties, differentiation and integration methods and principles, geometric and algebraic applications of vectors and the solution of linear systems using matrices.

**Assumed knowledge:** Grade of at least Sound Achievement in Senior Mathematics B (or equivalent) or MAB105 is assumed knowledge  **Equivalents:** MAB100, MAB125, MAB180  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1, 2010 SEM-2 and 2010 SUM

**MAB121 CALCULUS AND DIFFERENTIAL EQUATIONS**

This unit extends the areas of function and calculus introduced in MAB120 by introducing series representations for functions and more advanced methods of differentiation and integration for functions of one variable. A strong connection to real world problems is made by introducing the use of differential equations in modelling, and exploring appropriate methods of solution. Practical calculations of volumes and surface areas of solids of revolution extend your interpretations of the definite integral. Taylor and Fourier series are introduced as a means of approximating functions by sums of polynomials and periodic functions. Some more advanced methods for indefinite integrals, such as partial fraction decomposition, are also introduced.

**Assumed knowledge:** Grade of at least Sound Achievement in Senior Mathematics C (or equivalent) or MAB125 or MAB180 or MAB120 is assumed knowledge  **Equivalents:** MAB111, MAB126  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1, 2010 SEM-2 and 2010 SUM

**MAB122 ALGEBRA AND ANALYTIC GEOMETRY**

This unit extends your knowledge in the areas of functions, calculus, matrices and vectors introduced in MAB120 by introducing functions of more than one variable, partial derivatives and multiple integrals, vector valued functions, and matrix methods for the solution of large systems of linear equations.

**Equivalents:** MAB112, MAB127, MAB132  **Credit points:** 12  **Contact hours:** 4 per week  **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

MAB312 LINEAR ALGEBRA
This unit covers the following broad topics from linear algebra: matrix analysis; eigenvalues and eigenvectors; vector spaces; inner product spaces.

Prerequisites: (MAB111 or MAB121) and (MAB112 or MAB122)  
Credit points: 12  
Contact hours: 4 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-1

MGB200 LEADING ORGANISATIONS
This unit introduces you to a range of perspectives in understanding human behaviour and its context within organisation structures. The unit also enables you to interpret, analyse, evaluate and explain conditions and consequences of work in organisations with a view to understanding and appreciating complex management issues in day to day experiences in business.

Prerequisites: BSB115 or CTB115  
Antirequisites: MGB211, CTB211, MGB222, CTB232  
Credit points: 12  
Contact hours: 3  
Campus: Gardens Point  
Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM

MGB223 ENTREPRENEURSHIP AND INNOVATION
This unit introduces students to the nature and characteristics of entrepreneurship and innovation and explores the inter-relationship between the two within contemporary economies from managerial perspective. Learning will be directed towards developing the theoretical and applied knowledge, skills, and attitudes that will support and enhance innovation and enterprise creation activity, through the development of a business plan. The unit is designed for those individuals interested in creating a new venture or working in industries as employees of venture owners or those that serve this sector. Students will have opportunity to build a comprehensive plan of their business concept.

Prerequisites: BSB115 or CTB115  
Equivalents: CTB223  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point and Caboolture  
Teaching period: 2010 SEM-1 and 2010 SEM-2

MGB324 MANAGING BUSINESS GROWTH
This unit is designed to provide skills in the analysis, solutions and implementation of the general management issues that SME owners have to manage in their growing operations. The unit brings together the different functional aspects of managing an established SME and how they are best managed from the owner’s (general manager’s) point of view. It also provides opportunity to bring students into contact with real world SME owners and their venture management issues.

Prerequisites: MGB223  
Equivalents: MGB218  
Credit points: 12  
Contact hours: 3  
Teaching period: 2010 SEM-1

PCB593 DIGITAL IMAGE PROCESSING
This unit provides students with a basic understanding of the computer techniques used in image processing and reconstruction. Specific areas of study include the following: the structure of a digital image; image display techniques; grey scale palettes and look-up tables; Fourier transform theory; convolution theory; image processing hardware; image processing techniques, eg analysis, enhancement and restoration; spatial filtering; Fourier space filtering; methods of image reconstruction; 3D volume and surface rendering; applications of image processing in medicine, astronomy and remote sensing, etc.

Prerequisites: PCB375-2 or PCB496 or PQB250  
Credit points: 12  
Contact hours: 4 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-1

PQB250 MECHANICS AND ELECTROMAGNETISM
The experimental means by which we have arrived at our modern understanding of the universe is central to the scientific philosophy. Students of physics and physics related areas need to possess skills in quantitative handling, processing, communication and evaluation of data. Higher level studies in specialised areas of Physics require a familiarity with a range of fundamental topics in Physics and an ability to apply critical thinking and advanced mathematical techniques to the analysis and solution of Physical problems. This first-level unit lays the foundation for these higher level studies by introducing the fundamental topic areas of mechanics and electromagnetism.

Assumed knowledge: Senior Maths B is assumed knowledge.  
Credit points: 12  
Contact hours: 4.5 hours per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2

PQB251 WAVES AND OPTICS
Wave phenomena are used to describe and explain many of the physical processes in the universe. Sound and light are the most commonly experienced of these and have far-reaching human applications, including their use as experimental tools for science. The study of wave phenomena has led to the development of quantum mechanics, a cornerstone of modern scientific thought. This first-level unit lays the foundation for discussion of wave phenomena in higher level studies, but will also be relevant to those not considering progressing to a Physics major but wishing to understand more of the Physical world in which we live.

Assumed knowledge: Senior Maths B is assumed
knowledge.  

Credit points: 12  
Contact hours: 4.5 hours per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2

PQB450 ENERGY, FIELDS AND RADIATION
The common theme of the topics covered in this unit is fields, the energy contained in these fields and the transfer of this energy. This theme is addressed in the specific topics of classical mechanics, electromagnetism and radiation physics. The classical mechanics and electromagnetism components build on material presented in introductory units and apply this to complex real world problems. The unit is designed to prepare students for more advanced studies in these areas but the unit will also provide a useful background for students undertaking a comajor in Physics or preparing for a career in secondary education.

Prerequisites: PQB250 or PCB250, and MAB311  
Equivalents: PCB362  
Credit points: 12  
Contact hours: 4 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2

PQB460 ASTROPHYSICS 1
This second level unit is one of the key units in the astrophysics co-major and introduces students to most of the main aspects of astrophysics. This unit is essential as it defines the connections between the supporting units of the co-major. Students are required to use the knowledge and skills developed in first level physics, maths and natural resource units.

Prerequisites: PCB136 or PQB250 or SCB123  
Equivalents: PCB469  
Credit points: 12  
Contact hours: 4 per week  
Campus: Gardens Point  
Teaching period: 2010 SEM-2