Bachelor of Information Technology (Honours) (IT28)

Year offered: 2011
Admissions: Yes
CRICOS code: 017323G
Course duration (full-time): 1 year
Course duration (part-time): 2 years
Domestic Fees (indicative): 2011: CSP $3,878 (indicative) per semester
International Fees (indicative): 2011: $11,375 (indicative) per semester
Domestic Entry: February and July
International Entry: February and July
Total credit points: 96
Course coordinator: Ross Hayward
Campus: Gardens Point

Why Do Honours

The honours program will expand your career options through exposure to the world of research. Honours is also the perfect pathway to an academic career through PhD studies, where you can become an independent researcher in your own right.

An honours degree signals to potential employers that you are someone with exceptional ability, motivation and commitment to your field. It gives you the chance to integrate the practical and conceptual knowledge gained through your degree. As an honours graduate, you can clearly demonstrate an ability to undertake rigorous independent research. These skills are unique to the honours program and will differentiate you from your peers in the employment market.

Course Design

The core of the honours program is a 36, 48, or 60 credit-point project (depending on your study area) that will provide students with the opportunity to learn about research by conducting a research project with an experienced researcher who acts as both supervisor and mentor. Students will learn the types of processes, creativity and analytical thinking that lead to scientific and technological advances and how to communicate such findings in a rigorous, systematic manner.

Career Outcomes

Information technology is an integral part of all commercial, industrial, government, social and personal activities. In the long term, your career opportunities are unbounded. Some information technology graduates retain a technical focus in roles such as web developer, database manager, network administrator, electronic commerce developer, data communications specialist, software engineer, systems programmer, computer scientist, systems analyst or programmer. Others evolve into domain experts as chief technology officers, chief information officers, managers, executives, business analysts, entrepreneurs or researchers. Graduates have the opportunity to achieve the highest levels of their profession.

Professional Recognition

You will qualify for professional accreditation and employment in the field relevant to the specialisations chosen.

Pathways

You have the opportunity to choose a study pathway:

• professional pathway – you will learn how to think strategically, identify opportunities and solve problems that we don’t even know are problems yet. This pathway will enable you to acquire the business and IT skills to have a career as an IT professional within any industry.

• research pathway – if you are interested in shaping the future of the IT industry you can pursue a research career. You will have opportunities to work with researchers on projects and progress on to an honours degree. You will have access to world-leading researchers within the Faculty.

• entrepreneurship pathway – you now have the opportunity to gain the entrepreneurial skills to develop an idea into a commercial opportunity. You will be able to take advantage of the Faculty’s close relationship with local technology entrepreneurs to learn from their experiences.

In 2001, the Faculty introduced an accelerated Honours program to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake rigorous research by conducting a research project. Students will learn the types of processes, creativity and analytical thinking that lead to scientific and technological advances and how to communicate such findings in a rigorous, systematic manner.

The Dean’s Scholars program was introduced in Semester 1, 2006. This program provides a scholarship for OP 1 and 2 students throughout their Bachelor and Honours degrees. Students in the program are required to maintain a high GPA to continue to qualify for the scholarship each semester. Students in the Dean’s Scholars program will be able to take advantage of the Accelerated Honours
program. Students in the Dean’s Scholars program will have an option to follow an accelerated pathway through the Bachelor of Information Technology, allowing them to complete the Bachelor of Information Technology course plus the Bachelor of Information (Honours) course in a total of three years.

To encourage students to enter the Dean’s Scholars program, domestic students have their undergraduate HECS paid by the Faculty and those proceeding to Honour’s level will also receive full HECS support. International students who have completed a Year 12 education in Australia and meet the entry requirements for the program will have a third of their tuition fees paid by the Faculty for the undergraduate and Honours program.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete IT23 with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the re-designed postgraduate coursework Masters which has ten specialisations allowing students to either extend their area of interest or specialise in other areas at the Masters level.

**Important Information**

**Duration**
Except in special circumstances as approved by the Dean, the requirements for an Honours degree must be completed within two successive years following first enrolment.

**Unsatisfactory Progress**
Failure to make satisfactory progress with either the course work component of an Honours program or with the dissertation, or both, may lead to exclusion from the program.

Unsatisfactory progress consists of:
- receiving a grade of less than 4 (or Satisfactory, where applicable) in one unit of the course work component.
- failure to make sufficient progress with the dissertation component, in the opinion of the Dean.

A student who is excluded from or otherwise fails to complete an Honours program will not normally be readmitted to that program.

**Assessment**
The minimum grade which may be credited towards an Honours degree is 4 (or Satisfactory, where applicable). A minimum of three copies of a dissertation should be presented to the supervisor for examination. Dissertations should be temporarily bound in order to facilitate the making of any revisions and editorial changes required by the examiners before final printing and binding. Dissertations will be examined by an examining committee appointed by the Dean and consisting of a least two examiners, one of whom may be external to the University. The supervisor of the candidate's work may be a member of the committee but may not chair the committee or act as the primary examiner.

**Determination of Level of Honours Awards**
The Faculty Academic Board will determine the level of Honours awarded.

Honours degrees will be awarded at the following levels after account is taken of the candidate's performance in all units and appropriate weight applied to the dissertation:

- Honours 1 - First Class Honours
- Honours 2A - Second Class Honours, Division A
- Honours 2B - Second Class Honours, Division B
- Honours 3 - Third Class Honours

The level of Honours award is to be determined by guidelines, as follows:

- Honours 1 - GPA 6.50-7.00, or equivalent
- Honours 2A - GPA 5.50-6.49, or equivalent
- Honours 2B - GPA 4.50-5.49, or equivalent
- Honours 3 - GPA 4.00-4.49, or equivalent

A candidate who does not reach the standard required for Honours 3 remains with a pass degree.

**Note:**
The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

**Further Information**
For further information about this course, please contact:

Ross Hayward
Phone: +61 7 3138 2782
Email: enquiry.scitech@qut.edu.au

**IT28 - Bachelor of Information Technology (Honours) (2011)**

**FULL TIME**

**Year 1, Semester 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN700</td>
<td>Introduction To Research</td>
</tr>
<tr>
<td>INN401</td>
<td>Honours Dissertation 1</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
</tr>
<tr>
<td>INN701</td>
<td>Advanced Research Topics</td>
</tr>
</tbody>
</table>
### Year 1, Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN402</td>
<td>Honours Dissertation 2</td>
</tr>
<tr>
<td>INN403</td>
<td>Honours Dissertation 3</td>
</tr>
<tr>
<td>INN404</td>
<td>Honours Dissertation 4</td>
</tr>
</tbody>
</table>

**Electives**

### Year 1, Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN402</td>
<td>Honours Dissertation 2</td>
</tr>
<tr>
<td>INN403</td>
<td>Honours Dissertation 3</td>
</tr>
<tr>
<td>INN404</td>
<td>Honours Dissertation 4</td>
</tr>
</tbody>
</table>

**Electives**

### Part Time

#### Year 1, Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN700</td>
<td>Introduction To Research</td>
</tr>
<tr>
<td>INN401</td>
<td>Honours Dissertation 1</td>
</tr>
</tbody>
</table>

#### Year 1, Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN402</td>
<td>Honours Dissertation 2</td>
</tr>
</tbody>
</table>

**Electives**

#### Year 2, Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN403</td>
<td>Honours Dissertation 3</td>
</tr>
</tbody>
</table>

**Electives**

#### Year 2, Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN404</td>
<td>Honours Dissertation 4</td>
</tr>
</tbody>
</table>

**Electives**

---

**Elective Units** - Students should choose advanced level postgraduate units. Normally units are undertaken in the area of the student's undergraduate major. Students wishing to enrol in a unit that is not of an advanced level should contact the Course Coordinator.

INN701 enrolment - Though students are required to enrol in INN701 in their first semester of honours, the unit offers flexible enrolment through (a) a choice of modules on offer, and through (b) the option of undertaking the minimum necessary number of modules across more than one semester (see INN701 week 1 document for further details on enrolment flexibility).

Full-time students should be aware that many electives may be offered evenings only.

---

**IT28 - Bachelor of Information Technology (Honours) (2010)**

### FULL TIME

#### Year 1, Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN700</td>
<td>Introduction To Research</td>
</tr>
<tr>
<td>INN401</td>
<td>Honours Dissertation 1</td>
</tr>
<tr>
<td>INN701</td>
<td>Advanced Research Topics</td>
</tr>
</tbody>
</table>

---

**IT28 - Bachelor of Information Technology (Honours) (2009)**

### FULL TIME

#### Year 1, Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN700</td>
<td>Introduction To Research</td>
</tr>
<tr>
<td>INN401</td>
<td>Honours Dissertation 1</td>
</tr>
</tbody>
</table>
**Elective**

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INN402</td>
<td>Honours Dissertation 2</td>
<td></td>
</tr>
<tr>
<td>INN403</td>
<td>Honours Dissertation 3</td>
<td></td>
</tr>
<tr>
<td>INN404</td>
<td>Honours Dissertation 4</td>
<td></td>
</tr>
</tbody>
</table>

**Elective**

**Part Time**

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INN700</td>
<td>Introduction To Research</td>
</tr>
<tr>
<td>INN401</td>
<td>Honours Dissertation 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INN402</td>
<td>Honours Dissertation 2</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2, Semester 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INN403</td>
<td>Honours Dissertation 3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2, Semester 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INN404</td>
<td></td>
</tr>
</tbody>
</table>

**Elective Units**

The following electives are only suggestions:

- **Approved Honours Electives**
  - INN312 Enterprise Systems Applications
  - INN342 Enterprise Data Mining
  - INN272 Interaction Design
  - INN385 Multimedia Systems
  - INN313 Electronic Commerce Site Development
  - INN322 Information Systems Consulting
  - INN500 PRINCE2 (R) Project Management
  - INN321 Business Process Management
  - INN370 Software Development
  - INN373 Web Application Development
  - INN374 Enterprise Software Architecture
  - INN352 Network Planning
  - INN353 Wireless and Mobile Networks
  - INN381 Modelling and Animation Techniques
  - INN181 Introduction to Games Production

- **Advanced Honours Electives**
  - INN610 Case Studies in Business Process Management
  - INN386 Advanced Multimedia Systems
  - INN255 Security
  - INN355 Cryptology and Protocols
  - INN382 Real Time Rendering Techniques
  - INN652 Advanced Cryptology
  - INN570 Internationalisation of Software
  - INN650 Advanced Network Management
  - INN370 Software Development

**Potential Careers:**

- Computer Games Developer,
- Data Communications Specialist,
- Database Manager,
- Electronic Commerce Developer,
- Internet Professional,
- Journalist,
- Network Administrator,
- Network Manager,
- Programmer,
- Software Developer.
UNIT SYNOPSES

INN181 INTRODUCTION TO GAMES PRODUCTION
This unit 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: INB181, ITB751, ITN751
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-2

INN255 SECURITY
This unit aims to give you an understanding of the major issues in information security. You will be able to identify critical information security concepts and determine the information security implications of interactions between entities. You will have knowledge of a range of techniques for protecting information, and understand the limitations of these techniques. You will be aware of international information security management standards.

Antirequisites: INB255, ITB161, ITB523, ITB623, ITB730
Equivalents: ITN161, ITN511, ITN523, ITN663, ITN730
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1

INN272 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.

Antirequisites: INB272
Equivalents: ITN254
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-2

INN312 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: INN335, ITN332, INB322
Assumed knowledge: Good knowledge of professional oral and written communication practices and team work processes is assumed.
Equivalents: ITN273
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1

INN313 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.

Antirequisites: INN313 and ITB260
Equivalents: ITN260
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-2

INN321 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 also seeks to develop logical thinking, an appreciation for conceptual models, and the capability to understand and deal with complex systems.

Antirequisites: INN321
Equivalents: ITN298
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1

INN322 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: INN335, ITN332, INB322
Assumed knowledge: Good knowledge of professional oral and written communication practices and team work processes is assumed.
Equivalents: ITN273
Credit points: 12
INN342 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: INN210 or INN340 or INN122
Antirequisites: ITB239, INB342  Equivalents: ITN239
Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1

INN352 NETWORK PLANNING
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.

Antirequisites: INB352, ITN722, ITN551, ITB628, ITB551, ITB722, ENN523  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2

INN353 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.

Antirequisites: INB353  Assumed knowledge: INN251 is assumed knowledge.  Equivalents: ITB723, ITN723  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1

INN355 CRYPTOGRAPHY 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: INB355  Assumed knowledge: Maths B or equivalent (e.g. MAB105) is assumed knowledge.  Equivalents: ITB548, ITB566, ITB646, ITB732, ITN566, ITN512, ITN581, ITN732  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1

INN370 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.

Antirequisites: INB370  Assumed knowledge: INN270 is assumed knowledge.  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1

INN373 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 advanced applications. 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.

Antirequisites: INB371  Assumed knowledge: INN271 is assumed knowledge.  Equivalents: ITB716, ITN716, ITB548, ITB566, ITB646, ITB732, ITN566, ITN512, ITN581, ITN732  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1

INN374 ENTERPRISE SOFTWARE ARCHITECTURE
This unit introduces you to the field of enterprise and component-based architecture. It provides a grounding in the knowledge and skills required by a software architect to address the future needs of business IT systems. These include a solid understanding of the IT challenges currently facing medium to large organizations, the theory and
technologies used to address them, and an appreciation of the business needs that motivate their use. To enable you to address these challenges you will be exposed to system design methods, and the current technologies, that allow the resulting systems to be adaptive to changing business needs.

**Prerequisites:** INN270, INB270, ITN700, or ITB003  
**Antirequisites:** INB374 and ITB717  
**Equivalents:** ITN717

**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

### INN381 MODELLING AND ANIMATION TECHNIQUES

The development of computer graphics tools is a significant application within the IT, Games and related industries, relying heavily on software engineering methodologies. These tools, such as CAD systems, 3D modelling systems and games engines, are used in such industries as advertising, engineering, manufacturing, simulation for education and training, computer games, film special effects, etc. Modelling techniques are intrinsic to a 3D graphics system, especially one used for real-time animation. With increased CPU and GPU power, the ability to animate in real time is allowing more sophisticated interaction and the merger of games/simulation and film. 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 or INN371) and (MAB281 or MAN281)  
**Antirequisites:** INB381, ITB441, ITB460, ITB648, ITB649, ITB746  
**Equivalents:** ITN440, ITN460, ITN746  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

### INN382 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:** INN381 and MAB281  
**Antirequisites:** INB382  
**Equivalents:** ITN747  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

### INN385 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.

**Antirequisites:** INB385  
**Assumed knowledge:** INN271  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

### INN386 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, standalone 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:** INN385  
**Antirequisites:** INB386 and ITB259  
**Equivalents:** ITN259  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

### INN401 HONOURS DISSERTATION 1

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

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

### INN401 HONOURS DISSERTATION 1

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

Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

INN401 HONOURS DISSERTATION 1
Research is about contributing to scientific knowledge. You will be expected to make such a contribution in your honours dissertation, although the size of that contribution will probably be relatively small as this is likely to be your first research project. The principle aim, however, is to provide you with basic research skills that you will be able to apply again in the future in other contexts, be they in a higher research degree, or applied to real-world problems in an industry setting. You will learn the types of processes, creativity and analytical thinking that leads to such scientific advances and how to communicate such findings in a rigorous scientific manner.

Prerequisite(s): Nil  Corequisite(s): ITN100 Research Methodology  Credit points: 12  Campus: Gardens Point  Incompatible with: Nil

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

Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

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

Prerequisite(s): Nil  Corequisite(s): ITN100 Research Methodology  Credit points: 12  Campus: Gardens Point  Incompatible with: Nil

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

Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

INN403 HONOURS DISSERTATION 3
Research is about contributing to scientific knowledge. You will be expected to make such a contribution in your honours dissertation, although the size of that contribution will probably be relatively small as this is likely to be your first research project. The principle aim, however, is to provide you with basic research skills that you will be able to apply again in the future in other contexts, be they in a higher research degree, or applied to real-world problems in an industry setting. You will learn the types of processes, creativity and analytical thinking that leads to such scientific advances and how to communicate such findings in a rigorous scientific manner.
Credit points: 12    Campus: Gardens Point    Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

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

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

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

Prerequisite(s): Nil    Corequisite(s): ITN100 Research Methodology    Credit points: 12    Campus: Gardens Point    Incompatible with: Nil

INN500 PRINCE2 (R) PROJECT MANAGEMENT
The majority of information technology (IT) initiatives, such as systems developments and implementations, are introduced into organizations through projects, and the success of these projects depends on their effective management. This unit covers the integration of the multi-disciplinary skills that students would have acquired at stage one and two of the course required to manage IT projects successfully. Specifically, it covers the administrative, technical, communication and socio-political demands placed on modern IT project managers. The unit covers practical, relevant and topical IT project management issues delivered through workshops and lectures.

Prerequisites: Completion of 36 credit points of Postgraduate units (INN% or PUN% or GSN%)
Antirequisites: INB123, ITB365, ITB272    Equivalents: ITN272    Credit points: 12    Contact hours: 4 per week
Campus: Gardens Point    Teaching period: 2011 SEM-1 and 2011 SEM-2

INN570 INTERNATIONALISATION OF SOFTWARE
Software is now a global market, and developers need to be able to produce applications that can be used in many different cultures and nations. There is a significant body of enabling technology that allows efficient and cost effective development of applications that can be used in diverse contexts. Understanding the principles and the technologies involved in internationalisation and localisation is essential for companies seeking to go global or that are already global.

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

INN610 CASE STUDIES IN BUSINESS PROCESS MANAGEMENT
This unit seeks to develop business process analysts capable of working as consultants. It seeks to develop the generic skills expected in graduates and in particular to develop better interpersonal skills, better written and oral communication skills, skills in conflict resolution, negotiation, project planning and project management. You will learn to identify, analyse and consider interdependencies. You will increase your awareness for the challenges of teamwork. The projects also allow you to apply the theoretical knowledge gained in the pre-requisite unit to real practical problems. Overall, you will get insights into the skills, tools and services of consultants.

**Prerequisites:** INN320 or INN321 with a grade of 6 and a GPA of at least 6  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

### INN650 ADVANCED NETWORK MANAGEMENT

Computer networks are an essential component of modern civilization. Students undertaking this unit will have previously learned the fundamental theory and practical aspects of network administration and management. This unit builds upon that foundation and extends the knowledge and skills to enterprise wide networks which are significantly more complex than small networks. Security of enterprise wide networks is an important issue in this unit, along with network management systems.

**Prerequisites:** INB351 or INN351  
**Assumed knowledge:** INB351, INN351, ITN721 or ITB721 is assumed knowledge.  
**Equivalents:** ITN771  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

### INN652 ADVANCED CRYPTOLOGY

Cryptology forms a core discipline in the study of information security. This unit concentrates on the latest developments in cryptology. This is a specialised unit which prepares postgraduate students for research in cryptology. The aim of the unit is to explore and understand recent developments in the theory and practice of cryptology. The unit provides fundamental knowledge for students seeking to undertake postgraduate research or work in the area of information security, especially involving cryptology.

**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

### INN700 INTRODUCTION TO RESEARCH

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

**Prerequisite(s):** Min GPA 5  
**Corequisite(s):** Nil  
**Credit points:** 12  
**Campus:** Gardens Point  
**Incompatible with:** INN700 may be waived for invited, advanced, high-

### INN700 INTRODUCTION TO RESEARCH

This unit is aimed at students undertaking a major research project (see corequisites above). In order to pursue such a project, you must have some insight into the range of possible approaches to research available. Before commencing the research proper, it is necessary to review related literature in depth and prepare a detailed proposal outlining the research question, design and project plan. Quality control and good project management must be exercised throughout the research project. Main items of assessment pertain to each student's unique, research project being pursued in parallel. This unit aims to give you insight into the range of possible approaches to research, to develop the skills needed to prepare your literature review and research proposal and to assist you in planning and managing time and resources.

**Assumed knowledge:** Must be con-currently enrolled in either full-time or part-time Higher Research Degree (i.e. PhD, ProDoc, Research Masters, or Honours) or, if coursework masters then a 48cp research project. In all instances, must have a formal Principle Supervisor  
**Equivalents:** ITN100  
**Other requisites:** Unit Coordinator Approval and a course GPA of at least 5.5 is required to enrol.  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

### INN700 INTRODUCTION TO RESEARCH

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

**Assumed knowledge:** Must be con-currently enrolled in either full-time or part-time Higher Research Degree (i.e. PhD, ProDoc, Research Masters, or Honours) or, if coursework masters then a 48cp research project. In all instances, must have a formal Principle Supervisor  
**Equivalents:** ITN100  
**Other requisites:** Unit Coordinator Approval and a course GPA of at least 5.5 is required to enrol.  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

### INN701 ADVANCED RESEARCH TOPICS

This unit is designed to allow for the significant development of, or emphasis in, information systems not dealt with in other course units. Selected topics and study areas are offered as required and when the expertise is available. See School of Information Systems announcements for details of topics being offered.

**Prerequisites:** INN700 which can be studied in the same teaching period as INN701  
**Assumed knowledge:** INN700 may be waived for invited, advanced, high-
INN701 ADVANCED RESEARCH TOPICS
All research students need an appreciation of a wide variety of potential approaches to conducting research and an understanding of the key issues that bear on such approaches. INN701 is an advanced unit aimed at research students who are soon to complete a detailed, rigorous and defensible design of their intended research project (e.g. Stage 2). Research students, coursework masters students and honours students intending undertaking a major research project should pursue INN701 either subsequent to, or in parallel with INN700.

Prerequisites: INN700 which can be studied in the same teaching period as INN701  
Assumed knowledge: INN700 may be waived for invited, advanced, high-performing undergrads  
Equivalents: ITN269  
Other requisites: GPA of at least 5.5 is required to enrol  
Credit points: 12  
Campus: Gardens Point  
Teaching period: 2010 SEM-1, 2010 SEM-2 and 2010 SUM