Bachelor of Fine Arts (Interactive and Visual Design) / Bachelor of Information Technology (IX69)

Year offered: 2011
Admissions: Yes
CRICOS code: 064812A
Course duration (full-time): 4 years
Domestic Fees (indicative): 2011: CSP $3,300 (indicative) per semester
International Fees (indicative): 2011: $10,500 (indicative) per semester
Domestic Entry: February
International Entry: February
QTAC code: 409612
Past rank cut-off: 86
Past OP cut-off: 8
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.qut.edu.au/assumed-knowledge
Total credit points: 384
Course coordinator: Head, Undergraduate Studies (Creative Industries); Mr Mike Roggenkamp (Science and Technology)
Discipline coordinator: Mr Gavin Sade (Interactive and Visual Design)
Campus: Gardens Point and Kelvin Grove

Career Outcomes
This double degree will set you up for a career in the rapidly expanding fields of contemporary communication and the application of new media technologies.

Professional Recognition
This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Study Areas
The Bachelor of Information Technology will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduate’s parchment. Instead, it will have specialisations. The specialisation areas that will be available for students will include:
• Business Process Management
• Data Warehousing
• Digital Environments
• Enterprise Systems
• Information Management
• Network Systems
• Software Engineering
• Web Technologies

Course Structure
This course is made up of 384 credit points. Each component (i.e. Information Technology, and Interactive and Visual Design) comprises 192 credit points.

Pathways to Further Studies
In 2001, an accelerated Honours program was introduced 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 one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) 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.

Cooperative Education
The Faculty of Science and Technology’s Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you’re learning in your degree. 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. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Further Information
For Further information about this course, please contact the following:

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Creative Industries Coordinator
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OP Guarantee
The OP Guarantee will apply to this course from 2012 onwards.

Course structure for students who commenced in 2011

Year 1, Semester 1
INB101 Impact of IT
INB102 Emerging Technology
KIB103 Introduction to Web Design and Development
KKB101 Creative Industries: People and Practices

Year 1, Semester 2
INB103 Industry Insights
INB104 Building IT Systems
KIB101 Visual Communication
KKB102 Creative Industries: Making Connections

Year 2, Semester 1
IT Breadth Option Unit
KIB104 Digital Media
KVB105 Drawing for Design

Year 2, Semester 2
IT Breadth Option Unit
KIB102 Visual Interactions
KIB105 Animation and Motion Graphics

Year 3, Semester 1
INB201 Scalable Systems Development

Notes
From year 2, students are recommended to take one of the following pathways:
* Visual Communication (comprising KIB230, KVB204, KIB335 and KIB338); OR
* Interactive Media Design (comprising KKB216, KIB205, KIB309 and KIB314)

Year 3, Semester 2
KIB214 Design for Interactive Media
SELECT Either KIB230 or KKB216:
KIB230 Interface and Information Design
KKB216 Graphical Development Environments for Media Interaction

Year 4, Semester 1
INB300 Professional Practice in IT
KIB216 Advanced Web Design
SELECT Either KIB205 or KVB204:
KIB205 Programming for Visual Designers and Artists
KVB204 Graphic Design

Year 4, Semester 2
INB302 IT Capstone Project
KIB322 Design Project
SELECT Either KIB314 or KIB338:
KIB314 Tangible Media
KIB338 Print Media

Course structure for students who commenced in 2010

Notes
From year 2, students are recommended to take one of the following pathways:
* Visual Communication (comprising KIB230, KVB204, KIB335 and KIB338); OR
* Interactive Media Design (comprising KKB216, KIB205, KIB309 and KIB314)

Year 1, Semester 1
INB101 Impact of IT
INB102 Emerging Technology
KIB103 Introduction to Web Design and Development
KKB101 Creative Industries: People and Practices

Year 3, Semester 1
INB201 Scalable Systems Development

SELECT Either KIB230 or KKB216:
KIB230 Interface and Information Design
KKB216 Graphical Development Environments for Media Interaction

Year 4, Semester 1
INB300 Professional Practice in IT
KIB216 Advanced Web Design
SELECT Either KIB205 or KVB204:
KIB205 Programming for Visual Designers and Artists
KVB204 Graphic Design

Year 4, Semester 2
INB302 IT Capstone Project
KIB322 Design Project
SELECT Either KIB314 or KIB338:
KIB314 Tangible Media
KIB338 Print Media
Year 1, Semester 2
INB103  Industry Insights
INB104  Building IT Systems
KIB101  Visual Communication
KKB102  Creative Industries: Making Connections

Year 2, Semester 1
IT Breadth Option Unit
KIB104  Digital Media
KVB105  Drawing for Design

Year 2, Semester 2
IT Breadth Option Unit
KIB102  Visual Interactions
KIB105  Animation and Motion Graphics

Year 3, Semester 1
INB201  Scalable Systems Development
KIB214  Design for Interactive Media
SELECT Either KIB230 or KKB216:
KIB230  Interface and Information Design
KKB216  Graphical Development Environments for Media Interaction

Year 3, Semester 2
INB300  Professional Practice in IT
KIB216  Advanced Web Design
SELECT Either KIB205 or KVB204:
KIB205  Programming for Visual Designers and Artists
KVB204  Graphic Design

Year 4, Semester 1
INB301  The Business of IT
KIB315  Contemporary Issues in Digital Media
SELECT Either KIB309 or KIB335:
KIB309  Embodied Interactions
KIB335  Typography and Illustration

Year 4, Semester 2
INB302  IT Capstone Project
KIB322  Design Project
SELECT Either KIB314 or KIB338:
KIB314  Tangible Media
KIB338  Print Media

IT Breadth Option Unit List

You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.

INB120  Corporate Systems
INB210  Databases
INB220  Business Analysis
INB250  Foundations of Computer Science
INB251  Networks
INB255  Security
INB270  Programming
INB271  The Web
INB272  Interaction Design

IT Specialisation Option Unit List

You must complete four (4) units from the following list. Please ensure you have completed a minimum of 36 credit points (3 units) of IT Breadth Option Units before commencing these units. The units are grouped in areas to assist you in focusing your studies.

1. BUSINESS PROCESS MANAGEMENT:
   INB320  Business Process Modelling
   INB321  Business Process Management
   INB322  Information Systems Consulting
   INB123  Project Management Practice

2. DATA WAREHOUSING:
   INB340  Database Design
   INB341  Software Development With Oracle
   INB342  Enterprise Data Mining and Data Analysis
   INB343  Advanced Data Mining and Data Warehousing
   INB344  Search Engine Technology

3. DIGITAL ENVIRONMENTS:
   KIB314  Tangible Media
   KIB338  Print Media
INB345 Mobile Devices
INB346 Enterprise 2.0
INB347 Web 2.0 Applications
INB335 Information Resources

4. ENTERPRISE SYSTEMS:
INB123 Project Management Practice
INB221 Technology Management
INB311 Enterprise Systems
INB312 Enterprise Systems Applications

5. NETWORK SYSTEMS:
INB350 Internet Protocols and Services
INB351 Unix Network Administration
INB352 Network Planning
INB353 Wireless and Mobile Networks

6. SOFTWARE ENGINEERING:
INB370 Software Development
INB371 Data Structures and Algorithms
INB372 Agile Software Development
INB374 Enterprise Software Architecture

7. WEB TECHNOLOGIES:
INB313 Electronic Commerce Site Development
INB373 Web Application Development
INB374 Enterprise Software Architecture
INB385 Multimedia Systems
INB386 Advanced Multimedia Systems

8. UNGROUPED:
INB204 Special Topic 1
INB205 Special Topic 2
INB304 Special Topic 3
INB305 Special Topic 4
INB306 Project 1
INB307 Project 2
INB308 Project 3
INB355 Cryptology and Protocols
INB365 Systems Programming
INB381 Modelling and Animation Techniques
INB382 Real Time Rendering Techniques
INB860 Computational Intelligence for Control and Embedded Systems

UNIT SYNOPSES

INB101 IMPACT OF IT
You will gain an appreciation of the massive and positive impact that IT has had on a wide range of fields including business, science, engineering, education and health. You will learn about the benefits of increased productivity due to IT. You will consider ethical issues and possible negative impacts of IT. You will raise your awareness of the social implications of IT systems for society at the global, local and personal levels. You will develop an informed position on issues, and justify your reasoning with considered supportive arguments.

Antirequisites: INN101 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 SEM-1 and 2011 SEM-2

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.

Equivalents: ITB005 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 SEM-1 and 2011 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

Potential Careers:
introduce you the inter-disciplinary nature of ICT careers.

**Equivalents:** ITB002  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1 and 2011 SEM-2

**INB104 BUILDING IT SYSTEMS**

Today's modern integrated technology is built on IT systems which run in a range of contexts (e.g. mobile computing, robotics, and web-based systems) using a range of technological solutions such as programming and scripting, databases, web development and network programming. This 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.

**Equivalents:** ITB001  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1 and 2011 SEM-2

**INB120 CORPORATE SYSTEMS**

Corporate Systems Management is a growing area where people can make a difference to the way organisations and societies operate. In key business domains, such as Government, Health, Finance, Utilities and Primary Industries, Corporate Systems Managers play a vital role in directing the socio-technical systems that affect everyone's lives. This unit will help students to gain an overview of these major roles and key business domains in order to set the scene for their future studies and help them to match their emerging professional interests with potential career directions.

**Antirequisites:** ITB360  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**INB123 PROJECT MANAGEMENT PRACTICE**

In your information technology career it is very likely that you will work on and lead project teams to achieve business outcomes. You will achieve more effective outcomes by employing a project management method. The aim of this course is to familiarise you with the PRINCE2® method so that you could successfully work within and lead project teams. At the conclusion of this unit you will may be eligible to sit the externally provided PRINCE2® Foundation and Practitioner accreditation examinations.

**Antirequisites:** INN500  **Assumed knowledge:** Completion of 48 credit points of an Undergraduate study is

assumed knowledge.  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1 and 2011 SEM-2

**INB201 SCALABLE SYSTEMS DEVELOPMENT**

Information technology is a key enabling tool in a rapidly evolving global economy. IT systems underpin innovation across a range of application areas including business, economics, science, engineering, education and the arts. In order to educate graduates in this climate, Scalable Systems Development adopts an integrated approach to provide broad hands-on experiences designed to orient students to the range of possibilities within the IT discipline.

This team-based unit is an extension of project work introduced in Building IT Systems. Within a concrete, project-based context students will encounter the practical challenges of designing and implementing a substantial IT system. The unit aims to increase students' awareness of the potential of IT in enabling innovation through providing active, constructive and challenging problem-based learning experiences.

**Prerequisites:** (INB102 or ITB005) and (INB104 or ITB001)  **Assumed knowledge:** Completion of 36cp of Breadth units is assumed knowledge  **Equivalents:** ITB007  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2011 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.

**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  **Teaching period:** 2011 SEM-1 and 2011 SEM-2

**INB205 SPECIAL TOPIC 2**

This unit introduces computational techniques involving numerical simulations and visualization. These skills will be applied to solve problems in a range of application areas. The programming language MATLAB will be used, along with the simulation environment NetLogo.
INB210 DATABASES
Databases and database systems are essential items that support many aspects of everyday life in modern society. All graduates from a course in Information Technology will be expected by employers to understand the concepts and terminology of databases. The aim of this unit is to introduce you to the structure and role of databases in modern organisations.

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: 2011 SEM-1 and 2011 SEM-2

Antirequisites: INN210 Equivalents: ITB004

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

Assumed knowledge: Basic familiarity with set theory terminology of databases. The aim of this unit is to introduce

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

Antirequisites: INN220

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: 2011 SEM-1

INB250 FOUNDATIONS OF COMPUTER SCIENCE
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. Most of the techniques are derived from the field of Discrete Mathematics and are the foundation of the discipline called Computer Science.

 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: 2011 SEM-1 and 2011 SEM-2

Antirequisites: ITB004

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

Antirequisites: ITB161, ITB523, ITB623, ITN161 and INN255

Equivalents: ITB730

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

Teaching period: 2011 SEM-1

INB270 PROGRAMMING
This unit aims to give you a positive introduction to the skills required in solving computational problems and implementing solutions in a programming or scripting language. Although some theoretical aspects of computer programming are introduced briefly, the overall emphasis of the unit is programming practice. The unit emphasises generic programming concepts and related problem-solving
strategies. The skills you learn in this unit will be applicable to a wide variety of commonly-used, industrially-significant programming and scripting languages.

**Prerequisites:** INB104 or ENB246  
**Antirequisites:** INN270  
**Equivalents:** ITB003  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**INB271 THE WEB**  
The aims of the unit are to give you a thorough understanding of what the web is, how it works and what it has to offer. Additionally, the unit aims to give you a general understanding and basic skills in developing dynamic web applications, including an appreciation of the variety of implementation technologies available. Through an understanding of how web technologies have evolved to date, you will appreciate the necessity for lifelong learning and become an insightful predictor of future developments in this area. You will learn to critically analyse technological alternatives in order to adapt to and innovate with technologies that presently do not exist. You will appreciate the business or organizational context within which web applications exist and be skilled in communicating within that environment. You will appreciate the social and ethical issues relating to web based systems including accessibility, globalization, privacy, and piracy.

**Prerequisites:** INB104  
**Antirequisites:** INB373 and INN373 and ITB007 and ITB227 and ITN007 and ITN227  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

**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:** 2011 SEM-2

**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.

**Prerequisites:** INB201  
**Antirequisites:** ITS020, INS010, INS011, INS012, INS020  
**Assumed knowledge:** To be taken in your final year of the BIT. You must have completed at least 132 CPs of IT units, including at least two specialisation units. Normally you should have completed at least 192 CPs in a single degree or 288 CPs in a double degree  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1, 2011 SEM-2 and 2011 SUM

**INB301 THE BUSINESS OF IT**  
As an IT professional you are more and more evaluated in terms of the business value that you produce. This unit will prepare you for professional practice by making you "business savvy," i.e. giving you the business knowledge and skills that will help you with your future career and job. In particular the unit will address three themes: (1) career planning and job applications, (2) entrepreneurship & innovation, and (3) business and IT strategy. You will be introduced to career development tools that enable you to self-manage your career and life. You will learn how to critically think about the requirements of a job and reflect upon your own experiences and learn how to communicate them. You will also learn about the entrepreneurial process of identifying a business opportunity and how to take advantage of that opportunity. In addition, you will gain an understanding of core strategic concepts and models, discuss typical strategy tools and then apply them to the 'Business of IT'.

**Antirequisites:** ITB009  
**Assumed knowledge:** Completion of 120 credit points within BIT is assumed  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

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

**Prerequisites:** INB301  
**Assumed knowledge:** Students are expected to have a solid IT background knowledge
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.

Prerequisites: INB210 or ITB004 or INB122 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 SEM-2 and 2011 SUM

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: 2011 SEM-1 and 2011 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: 2011 SEM-2 and 2011 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: 2011 SEM-2 and 2011 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: 2011 SEM-1, 2011 SEM-2 and 2011 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.

**Antirequisites:** INN311  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2

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

**Antirequisites:** ITB233, INN312  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1

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

**Equivalents:** ITB260  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2

**INB320 BUSINESS PROCESS MODELLING**
The aim of this unit is to introduce you to modern methodologies of business process modelling. A main objective is to increase your awareness of the conceptual foundation of modelling and for the capabilities of BPMN and available tools. You will learn how to use grammars and tools to build, maintain and communicate practically relevant process models.

**Equivalents:** ITB298  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 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 also 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: 2011 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: 2011 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.

**Antirequisites:** INN335  Equivalents: ITB322  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 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: 2011 SEM-1

INB341 SOFTWARE DEVELOPMENT WITH ORACLE
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: 2011 SEM-2

INB342 ENTERPRISE DATA MINING AND DATA ANALYSIS
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  
Equivalents: ITB239  Credit points: 12  Contact hours: 3 per week  
Campus: Gardens Point  Teaching period: 2011 SEM-2

INB343 ADVANCED DATA MINING AND DATA WAREHOUSING
Data warehousing and mining have been well recognized as the dominating techniques for using databases in the future. This unit discusses the concepts, structures and algorithms of data warehousing and mining, e.g., data architecture and quality, data warehouse and data mart, data cubes, OLAP, patterns, association rules and decision tables. Through this study, students will be able to demonstrate knowledge and skills of designing, developing and implementing data warehousing components in SQL environments. It also enables students to design systems and tools that provide services to data management and analysis, such as data warehouses, data mining tools, business intelligence based systems, smart information use systems, and data processing systems.

Prerequisites: INB210  Antirequisites: INN343  
Credit points: 12  Contact hours: 3 per week  
Campus: Gardens Point  Teaching period: 2011 SEM-1

INB344 SEARCH ENGINE TECHNOLOGY
Prerequisites: INB371  Assumed knowledge: Intermediate programming experience with intermediate-level knowledge of data structures and algorithms  
Credit points: 12  Teaching period: 2011 SEM-1

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: 2011 SEM-1

INB346 ENTERPRISE 2.0
Web technologies and applications are reshaping contemporary organisations. By 2009 it has been predicted that more than 80% of organisations will have blogs and more than 50% of organisations will have wikis as part of their business solutions and strategies. Furthermore, with the advent of Cloud Computing, many companies are outsourcing key business functions to external web applications. The successful contemporary organisation requires expertise in not just business and management practice but in the critical design, use and consequences of new and emerging technologies. This unit will explore the ways in which IT has impacted on how organisations design and deliver activities and services internally and externally. The aim of this unit is to provide you with an understanding of how web 2.0 is changing the way contemporary organisations function.

Credit points: 12  Contact hours: 3 per week  
Campus: Gardens Point  Teaching period: 2011 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 Teaching period: 2011 SEM-1

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: ITB624, ITB629, ITB720, ITN525, ITN667, ITN720 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 SEM-1

INB351 UNIX 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: 2011 SEM-2

INB352 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.

Prerequisites: INB350 Antirequisites: ITB551, ITB628, ITB722, INN352, ITN551, ITN722, ENN523 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 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 Equivalents: ITB723 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 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. Equivalents: ITB732 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 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 or ITB003 or INB371 Antirequisites: ITB745, ITB706, INN365 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: 2011 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  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 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:** 2011 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:** 2011 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:** INN271, INN373  
**Equivalents:** ITB716 and ITN716  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 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:** 2011 SEM-2

**INB381 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 and MAB281  
**Equivalents:** ITB746  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 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:** 2011 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:** 2011 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:** 2011 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.

**Assumed knowledge:** Knowledge of a programming language like Python, Java or C is assumed.  **Equivalents:** ITB847  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**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 and Caboolture  **Teaching period:** 2011 SEM-1 and 2011 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.  **Prerequisites:** 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:** 2011 SEM-2

**KIB103 INTRODUCTION TO WEB DESIGN AND DEVELOPMENT**
This unit provides an introduction to theories and skills underpinning the application of multimedia technology with the Creative Industries, providing a foundation of conceptual and practical skills related to contemporary modes of electronic hypermedia production, communication and publishing.  **Antirequisites:** INB271, KIP403  **Equivalents:** KIB807, KKB007, KKB818  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2011 SEM-1

**KIB104 DIGITAL MEDIA**
This unit explores multimedia development and design concepts and practices and investigates the user and user interaction principles.  **Equivalents:** KIB808  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2011 SEM-1 and 2011 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:** 2011 SEM-2

**KIB205 PROGRAMMING FOR VISUAL DESIGNERS AND ARTISTS**
As part of a contemporary art and design production, practitioners often need to understand aspects of computer
programming. This unit provides artists and designers with an introduction to computer programming. It demonstrates how artists and designers use programming within their practices and introduces the principles of programming that will allow you to use computing as a tool for art and design innovation. The unit is presented in a manner that is suited to the learning styles of visual designers and artists, and requires no previous computer programming experience. These skills will developed and applied to the development of art and design outcomes in a studio setting.

**Antirequisites:** INB270  **Assumed knowledge:** Fluency in the use of typical multimedia software applications is assumed knowledge.  **Equivalents:** KIB210  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Kelvin Grove  **Teaching period:** 2011 SEM-2

### 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:** 2011 SEM-1

### KIB216 ADVANCED WEB DESIGN

Web Design has extended significantly from the concept of information delivery into social networking and other expanded modes of engagement. Web applications now appear in a range of delivery platforms from the desktop to personal and mobile technologies, such as media players and mobile phones. This unit will extend upon the knowledge and skills acquired in Introduction to Web Design, Interaction Design and Interface Design. It will introduce you to dynamic Web publishing employing contemporary open source content management systems. Theoretical understandings gained in lectures will be complemented by technical skills and applied to the development of authentic projects within design studios.

**Prerequisites:** KIB204 or KIB230  **Equivalents:** KIB211, KIB817  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2011 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:** 2011 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:** KIB216 or KIB205 or INB385  **Equivalents:** KIB311  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Kelvin Grove  **Teaching period:** 2011 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:** 2011 SEM-2
KIB315 CONTEMPORARY ISSUES IN DIGITAL MEDIA
The ubiquitous uptake of new technologies in communication, social interaction, and artistic expression has changed the way that we conceptualize art and design. Designing within a contemporary context requires a sophisticated understanding of new design practices, methods, and theoretical models. This theory unit is designed to create an awareness of contemporary design practices, theories, and historical and philosophical contexts; and to develop the critical, creative and analytical thinking that is required for design innovation. The unit will be taught through a combination of lectures, seminars and presentations.

Prerequisites: Completion of 168cp of study
Equivalents: KIB813 Credit points: 12 Contact hours: 4 per week Campus: Kelvin Grove Teaching period: 2011 SEM-1

KIB322 DESIGN PROJECT
Design Project is an advanced studio unit for interactive and visual designers. The second of two capstone units, it supports students to develop a final project which brings together the creative approaches, specialist design knowledge, and organizational skills that have been acquired through the Interactive and Visual Design course. In this unit, you will develop a design project based on proposals and prototypes produced in Design Project 1. The unit will be taught through presentations and seminars, critical reviews and design studio processes. The outcomes of this unit will contribute to a design portfolio and a graduate exhibition.

Prerequisites: Completion of 168 credit points of study
Equivalents: KIB806 Credit points: 12 Contact hours: 3 per week Campus: Kelvin Grove

KIB338 PRINT MEDIA
This unit builds on the visual communication and graphic design units to develop specialist skills in design layout and the creative production of print media. It will introduce the theory and principles involved in combining text, image and design elements into a coherent design layout and will extend this theory into practice through the development of advanced design publishing techniques. Theoretical understandings gained through lectures will be augmented with technical skills in workshops, and applied to the production of team-based, professional quality print projects in design studios.

Prerequisites: KIB120 or KVB204 Antirequisites: KCP361, KCP405 Credit points: 12 Contact hours: 3 per week, plus several workshops during semester Campus: Kelvin Grove Teaching period: 2011 SEM-2

KKB101 CREATIVE INDUSTRIES: PEOPLE AND PRACTICES
The development of the creative industries has been identified as a central element of the contemporary knowledge-based economy, which is informational, global and networked. This unit introduces concepts of the creative industries and the work of creative industries practitioners who explore and exploit the expression of creativity for commercial and artistic gain. In exploring the work of creative industries practitioners you will develop written communication skills for new media and academic contexts and reflect on your own emerging role as a creative industries practitioner. This unit is the first of two Creative Industries Foundations units which focus on building an understanding of creative industries practices and a diverse range of literacies essential to working in this new knowledge economy.

Equivalents: KKB009, KKB618 Credit points: 12 Contact hours: 3 per week Campus: Kelvin Grove and Caboolture Teaching period: 2011 SEM-1

KKB102 CREATIVE INDUSTRIES: MAKING CONNECTIONS
The ability to work collaboratively and to communicate effectively is essential for all Creative Industries professionals. In this unit you will have the opportunity to acquire and apply research, collaborative practices and project management skills through the collaborative development of a Creative Industries project proposal. This unit is a complement to KKB101 Creative Industries: People and Practices and examines the practical requirements of contributing to cultures and establishing connections with communities.

Assumed knowledge: KKB101 is assumed knowledge.
Equivalents: KKB007, KKB818 Credit points: 12 Contact hours: 3 per week Campus: Kelvin Grove and Caboolture Teaching period: 2011 SEM-2

KKB216 GRAPHICAL DEVELOPMENT ENVIRONMENTS FOR MEDIA INTERACTION
You will build interactive software systems for sampling, synthesising and manipulating media in real-time using graphical programming environments (also known as “patcher languages”). This will enable you to design and implement custom audio/video software for live performances and/or installations.
Credit points: 12 Contact hours: 3 per week Campus: Kelvin Grove Teaching period: 2011 SEM-1

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.
KVB204 GRAPHIC DESIGN
Graphic design is a long established field of study involving the presentation of aesthetic elements, image and text for the purpose of effective communication. New modes of reproduction, display and transmission are reshaping the way that text, images and messages are communicated. This unit will develop an understanding of enduring graphic design principles, emphasize the importance of targeted communication, and introduce new and innovative ways of approaching graphic design for contemporary media. You will apply these principles by articulating and graphically presenting design options for production in a range of mediums. Lectures will introduce graphic design principles, theory and practices and this knowledge will be applied in a range of contexts within design studios.

Prerequisites: KIB101 or KIB801 or KIP401
Antirequisites: KVP401
Credit points: 12
Contact hours: 4 per week
Campus: Kelvin Grove
Teaching period: 2011 SEM-1