Bachelor of Business / Bachelor of Engineering (Civil, Electrical or Mechanical) (IX28)

Year offered: 2011  
Admissions: Yes  
CRICOS code: 061649J  
Course duration (full-time): 5 years  
Domestic Fees (indicative): 2011: CSP $4,209 per semester (indicative)  
International Fees (indicative): 2011: $11,250 (indicative) per semester  
Domestic Entry: February  
International Entry: February  
QTAC code: 419532  
Past rank cut-off: 81  
Past OP cut-off: 10  
OP Guarantee: Yes  
Assumed knowledge: English (4, SA) and Maths B (4, SA)  
Preparatory studies: For information on acquiring assumed knowledge visit http://www.qut.edu.au/assumed-knowledge  
Course coordinator: Dr R. Mahalinga-Iyer (Engineering); Director of Undergraduate Studies, QUT Business School; email: bus@qut.edu.au  
Discipline coordinator: Dr Jasmine Banks (Engineering); Ms Sherrena Buckby (Accountancy); ASPRO Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr John Chen (Finance); Mr Greg Southey (Human Resource Management); Ms Amisha Mehta (Public Relations)  
Campus: Gardens Point  

Recommended Study  
Chemistry, Maths C and Physics.  

Career Outcomes  
Electrical and computer engineers design, install and maintain electrical, electronic, telecommunications and computing systems on behalf of governments and private companies. Graduates of the Bachelor of Business are skilled in many aspects of business including: accountancy, advertising, banking and finance, economics, electronic business, human resource management, international business, management, marketing and public relations.  

Overview  
Students combine engineering knowledge in electronics, computer systems, telecommunications and electric power with a business course majoring in one of accountancy, advertising, economics, finance, human resource management, international business, management, marketing or public relations.  

Professional Recognition  
This degree meets the requirements for membership of Engineers Australia.  

Business component: Students may be eligible for membership to a number of professional bodies depending on choice of major and unit selection. Details on professional recognition can be found under the individual majors of the Bachelor of Business (BS05).  

Special Course Requirements  
A candidate for the degree of Bachelor of Engineering must obtain at least 60 days of industrial employment/practice in an engineering environment as part of the Work Integrated Learning unit, before graduating.  

International Student Entry  
International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).  

Course Design  
Students are required to complete 480 credit points comprised of 288 credit points from the Bachelor of Engineering program and 192 credit points from the Bachelor of Business program. Students supplement the engineering component of this program with the 96 credit point Business School Core units in the Bachelor of Business program together with a 96 credit point Major in one of the following: Accountancy, Advertising, Economics, Finance, Human Resource Management, International Business, Management, Marketing or Public Relations.  

Deferment  
Domestic students can defer their offer in this course for one year. In exceptional circumstances up to 12 months of additional deferment may be granted.  

Find out more on deferment.  

Important Information  
QUT Business School rules and procedures are outlined in the Business Undergraduate Guidelines booklet. Other useful information can be found on Student Services website.
## Course structure - Civil Engineering - Students who commenced in 2011

### Year 1, Semester 1
- ENB110 Engineering Statics and Materials
- MAB125 Foundations of Engineering Mathematics
  OR
- MAB126 Mathematics for Engineering 1
  Business Unit
- MAB126 Mathematics for Engineering 1
  Business Unit

### Year 1, Semester 2
- ENB120 Electrical Energy and Measurements
- MAB126 Mathematics for Engineering 1
  OR
- MAB127 Mathematics for Engineering 2
  Business Unit
- MAB127 Mathematics for Engineering 2
  Business Unit

### Year 2, Semester 1
- ENB100 Engineering and Sustainability
- ENB130 Mechanical and Thermal Energy
- ENB270 Engineering Mechanics of Materials
- ENB273 Civil Materials

### Year 2, Semester 2
- ENB150 Introducing Engineering Design
- ENB200 Introducing Engineering Systems
  Business Unit
  Business Unit

### Year 3, Semester 1
- ENB272 Geotechnical Engineering 1
- MAB233 Engineering Mathematics 3
  Business Unit
  Business Unit

### Year 3, Semester 2
- ENB275 Project Engineering 1

## Course structure - Electrical Engineering - Students who commenced in 2011

### Year 1, Semester 1
- ENB130 Mechanical and Thermal Energy
- MAB125 Foundations of Engineering Mathematics
  OR
- MAB126 Mathematics for Engineering 1
  Business Unit
- MAB126 Mathematics for Engineering 1
  Business Unit

### Year 1, Semester 2
- ENB120 Electrical Energy and Measurements
- MAB126 Mathematics for Engineering 1
  OR
- MAB127 Mathematics for Engineering 2
  Business Unit
- MAB127 Mathematics for Engineering 2
  Business Unit

### Year 2, Semester 1
- ENB150 Introducing Engineering Design
- ENB200 Introducing Engineering Systems
  Business Unit
  Business Unit

### Year 3, Semester 1
- ENB272 Geotechnical Engineering 1
- MAB233 Engineering Mathematics 3
  Business Unit
  Business Unit

### Year 3, Semester 2
- ENB275 Project Engineering 1

## Year 4, Semester 1
- ENB276 Structural Engineering 1
- ENB280 Hydraulic Engineering
- ENB371 Geotechnical Engineering 2

## Year 4, Semester 2
- ENB376 Transport Engineering
  Business Unit
- ENB376 Transport Engineering
  Business Unit

## Year 5, Semester 1
- BEB801 Project 1
- ENB378 Water Engineering
- ENB471 Design of Concrete Structures and Foundations
  Business Unit

## Year 5, Semester 2
- BEB701 Work Integrated Learning 1
- ENB476 Civil Engineering Design Project
  Business Unit
  Business Unit

## Course structure - Civil Engineering - Students who commenced in 2011

### Year 1, Semester 1
- ENB110 Engineering Statics and Materials
- MAB125 Foundations of Engineering Mathematics
  OR
- MAB126 Mathematics for Engineering 1
  Business Unit
  Business Unit

### Year 1, Semester 2
- ENB120 Electrical Energy and Measurements
- MAB126 Mathematics for Engineering 1
  OR
- MAB127 Mathematics for Engineering 2
  Business Unit
  Business Unit

### Year 2, Semester 1
- ENB100 Engineering and Sustainability
- ENB130 Mechanical and Thermal Energy
- ENB270 Engineering Mechanics of Materials
- ENB273 Civil Materials

### Year 2, Semester 2
- ENB150 Introducing Engineering Design
- ENB200 Introducing Engineering Systems
  Business Unit
  Business Unit

### Year 3, Semester 1
- ENB272 Geotechnical Engineering 1
- MAB233 Engineering Mathematics 3
  Business Unit
  Business Unit

### Year 3, Semester 2
- ENB275 Project Engineering 1

## Year 4, Semester 1
- ENB276 Structural Engineering 1
- ENB280 Hydraulic Engineering
- ENB371 Geotechnical Engineering 2

## Year 4, Semester 2
- ENB376 Transport Engineering
  Business Unit
- ENB376 Transport Engineering
  Business Unit

## Year 5, Semester 1
- BEB801 Project 1
- ENB378 Water Engineering
- ENB471 Design of Concrete Structures and Foundations
  Business Unit

## Year 5, Semester 2
- BEB701 Work Integrated Learning 1
- ENB476 Civil Engineering Design Project
  Business Unit
  Business Unit

## Course structure - Civil Engineering - Students who commenced in 2011

### Year 1, Semester 1
- ENB110 Engineering Statics and Materials
- MAB125 Foundations of Engineering Mathematics
  OR
- MAB126 Mathematics for Engineering 1
  Business Unit
  Business Unit

### Year 1, Semester 2
- ENB120 Electrical Energy and Measurements
- MAB126 Mathematics for Engineering 1
  OR
- MAB127 Mathematics for Engineering 2
  Business Unit
  Business Unit

### Year 2, Semester 1
- ENB100 Engineering and Sustainability
- ENB130 Mechanical and Thermal Energy
- ENB270 Engineering Mechanics of Materials
- ENB273 Civil Materials

### Year 2, Semester 2
- ENB150 Introducing Engineering Design
- ENB200 Introducing Engineering Systems
  Business Unit
  Business Unit

### Year 3, Semester 1
- ENB272 Geotechnical Engineering 1
- MAB233 Engineering Mathematics 3
  Business Unit
  Business Unit

### Year 3, Semester 2
- ENB275 Project Engineering 1

## Year 4, Semester 1
- ENB276 Structural Engineering 1
- ENB280 Hydraulic Engineering
- ENB371 Geotechnical Engineering 2

## Year 4, Semester 2
- ENB376 Transport Engineering
  Business Unit
- ENB376 Transport Engineering
  Business Unit

## Year 5, Semester 1
- BEB801 Project 1
- ENB378 Water Engineering
- ENB471 Design of Concrete Structures and Foundations
  Business Unit

## Year 5, Semester 2
- BEB701 Work Integrated Learning 1
- ENB476 Civil Engineering Design Project
  Business Unit
  Business Unit

## Course structure - Civil Engineering - Students who commenced in 2011

### Year 1, Semester 1
- ENB110 Engineering Statics and Materials
- MAB125 Foundations of Engineering Mathematics
  OR
- MAB126 Mathematics for Engineering 1
  Business Unit
  Business Unit

### Year 1, Semester 2
- ENB120 Electrical Energy and Measurements
- MAB126 Mathematics for Engineering 1
  OR
- MAB127 Mathematics for Engineering 2
  Business Unit
  Business Unit

### Year 2, Semester 1
- ENB100 Engineering and Sustainability
- ENB130 Mechanical and Thermal Energy
- ENB270 Engineering Mechanics of Materials
- ENB273 Civil Materials

### Year 2, Semester 2
- ENB150 Introducing Engineering Design
- ENB200 Introducing Engineering Systems
  Business Unit
  Business Unit

### Year 3, Semester 1
- ENB272 Geotechnical Engineering 1
- MAB233 Engineering Mathematics 3
  Business Unit
  Business Unit

### Year 3, Semester 2
- ENB275 Project Engineering 1
Business Unit

Year 2, Semester 1
ENB100 Engineering and Sustainability
ENB110 Engineering Statics and Materials
ENB250 Electrical Circuits
MAB127 Mathematics for Engineering 2
  OR
MAB233 Engineering Mathematics 3

Year 2, Semester 2
ENB150 Introducing Engineering Design
ENB200 Introducing Engineering Systems
  Business Unit
  Business Unit

Year 3, Semester 1
ENB240 Introduction To Electronics
ENB246 Engineering Problem Solving
  Business Unit
  Business Unit

Year 3, Semester 2
ENB242 Introduction To Telecommunications
ENB243 Linear Circuits and Systems
ENB244 Microprocessors and Digital Systems
ENB245 Introduction To Design and Professional Practice

Year 4, Semester 1
ENB301 Instrumentation and Control
ENB340 Power Systems and Machines
  OR
MAB233 Engineering Mathematics 3
  Business Unit
  Business Unit

Year 4, Semester 2
ENB345 Advanced Design and Professional Practice
  Business Unit
  Business Unit
  Business Unit

Year 5, Semester 1
BEB701 Work Integrated Learning 1
BEB801 Project 1
ENB340 Power Systems and Machines
  OR
  Electrical Engineering Selective
  Business Unit

Year 5, Semester 2
BEB802 Project 2
ENB344 Industrial Electronics
  Business Unit
  Business Unit

Electrical Engineering Selectives
ENB339 Introduction to Robotics
ENB448 Signal Processing and Filtering
ENB452 Advanced Power Systems Analysis
ENB453 Power Equipment and Utilisation
ENB456 Energy
ENB457 Controls, Systems and Applications
ENB458 Modern Control Systems

Course structure - Mechanical Engineering - Students who commenced 2011

Year 1, Semester 1
ENB110 Engineering Statics and Materials
MAB125 Foundations of Engineering Mathematics
  OR
MAB126 Mathematics for Engineering 1
  Business Unit
  Business Unit

Year 1, Semester 2
ENB120 Electrical Energy and Measurements
MAB126 Mathematics for Engineering 1
  OR
MAB127 Mathematics for Engineering 2
  Business Unit
  Business Unit

Year 2, Semester 1
ENB100 Engineering and Sustainability
ENB130 Mechanical and Thermal Energy
ENB212  Strength of Materials
MAB127  Mathematics for Engineering 2
OR
MAB233  Engineering Mathematics 3

Year 2, Semester 2
ENB150  Introducing Engineering Design
ENB200  Introducing Engineering Systems
Business Unit
Business Unit

Year 3, Semester 1
ENB211  Dynamics
ENB231  Materials and Manufacturing 1
Business Unit
Business Unit

Year 3, Semester 2
ENB205  Electrical and Computer Engineering
ENB215  Fundamentals of Mechanical Design
ENB221  Fluid Mechanics
ENB331  Materials and Manufacturing 2

Year 4, Semester 1
BEB701  Work Integrated Learning 1
ENB222  Thermodynamics 1
Business Unit
Business Unit

Year 4, Semester 2
MAB233  Engineering Mathematics 3
OR
Mechanical Engineering Selective
Business Unit
Business Unit

Year 5, Semester 1
BEB801  Project 1
ENB316  Design of Machine Elements
ENB311  Stress Analysis
OR
ENB312  Dynamics of Machinery
OR
ENB421  Thermodynamics 2
Business Unit

Year 5, Semester 2
BEB802  Project 2
ENB313  Automatic Control
OR
ENB317  Design and Maintenance of Machinery
OR
ENB321  Fluids Dynamics
Business Unit
Business Unit

Mechanical Engineering Selectives
ENB314  Industrial Noise and Vibration
ENB333  Operations Management
ENB336  Industrial Engineering
ENB339  Introduction to Robotics
ENB422  Energy Management
ENB423  Heating, Ventilation and Air-Conditioning
ENB432  Engineering Asset Management and Maintenance
ENB433  Plant and Process Design
ENB434  Tribology
ENB435  Computer Integrated Manufacturing

Course structure - Accountancy

Year 1 Semester 1
BSB110  Accounting
BSB115  Management

Year 1 Semester 2
BSB111  Business Law and Ethics
BSB124  Working in Business

Year 2 Semester 1
No QUT Business School units studies this semester.

Year 2 Semester 2
AYB200  Financial Accounting
AYB225  Management Accounting

Year 3 Semester 1
AYB221  Computerised Accounting Systems
<table>
<thead>
<tr>
<th>Year 3 Semester 2</th>
<th>No QUT Business School units studies this semester.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Year 4 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AYB230 Corporations Law</td>
</tr>
<tr>
<td>AYB321 Strategic Management Accounting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>AYB219 Taxation Law</td>
</tr>
<tr>
<td>AYB301 Audit and Assurance</td>
</tr>
<tr>
<td>AYB340 Company Accounting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB113 Economics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>AYB311 Financial Accounting Issues</td>
</tr>
<tr>
<td>BSB126 Marketing</td>
</tr>
</tbody>
</table>

Course structure - Advertising

<table>
<thead>
<tr>
<th>Year 1 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB113 Economics</td>
</tr>
<tr>
<td>BSB126 Marketing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB110 Accounting</td>
</tr>
<tr>
<td>BSB115 Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No QUT Business School units studies this semester.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMB220 Advertising Theory and Practice</td>
</tr>
<tr>
<td>BSB124 Working in Business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMB200 Consumer Behaviour</td>
</tr>
<tr>
<td>AMB201 Marketing and Audience Research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No QUT Business School units studies this semester.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMB318 Advertising Copywriting</td>
</tr>
<tr>
<td>AMB319 Media Planning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMB320 Advertising Management</td>
</tr>
<tr>
<td>AMB330 Advertising Planning Portfolio</td>
</tr>
<tr>
<td>BSB111 Business Law and Ethics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMB339 Advertising Campaigns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB119 Global Business</td>
</tr>
<tr>
<td>MGB223 Entrepreneurship and Innovation</td>
</tr>
</tbody>
</table>

Course structure - Economics

<table>
<thead>
<tr>
<th>Year 1 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB113 Economics</td>
</tr>
<tr>
<td>BSB115 Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGB223 Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>BSB124 Working in Business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No QUT Business School units studies this semester.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB110 Accounting</td>
</tr>
<tr>
<td>EFB223 Economics 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFB330 Intermediate Macroeconomics</td>
</tr>
<tr>
<td>EFB331 Intermediate Microeconomics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No QUT Business School units studies this semester.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB119 Global Business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB111 Business Law and Ethics</td>
</tr>
<tr>
<td>EFB222 Quantitative Methods For Economics and</td>
</tr>
</tbody>
</table>
### Finance

#### Year 5 Semester 1
- BSB126 Marketing
  Economics Choice Unit

#### Year 5 Semester 2
- EFB338 Contemporary Application of Economic Theory
  Economics Choice Unit

#### Economics Choice Units
Choose any three (3) of the following:
- EFB332 Applied Behavioural Economics
- EFB333 Introductory Econometrics
- EFB334 Environmental Economics and Policy
- EFB336 International Economics
- EFB337 Game Theory and Applications

### Human Resource Management

#### Year 1 Semester 1
- BSB113 Economics
- BSB115 Management

#### Year 1 Semester 2
- BSB111 Business Law and Ethics
- BSB124 Working in Business

#### Year 2 Semester 1
- No QUT Business School units studies this semester.

#### Year 2 Semester 2
- BSB110 Accounting
- MGB223 Entrepreneurship and Innovation

#### Year 3 Semester 1
- EFB201 Financial Markets
- EFB210 Finance 1

#### Year 3 Semester 2
- No QUT Business School units studies this semester.

#### Year 4 Semester 1
- BSB111 Business Law and Ethics
- EFB307 Finance 2

#### Year 4 Semester 2
- MGB201 Contemporary Employment Relations
- MGB320 Recruitment and Selection

---
<table>
<thead>
<tr>
<th>Course structure - International Business</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Semester 1</td>
<td>BSB119 Global Business</td>
</tr>
<tr>
<td>Year 1 Semester 2</td>
<td>BSB126 Marketing</td>
</tr>
<tr>
<td>Year 2 Semester 1</td>
<td>No QUT Business School units studies this semester.</td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>BSB110 Accounting</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>AMB210 Importing and Exporting</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>AYB227 International Accounting</td>
</tr>
<tr>
<td>Year 4 Semester 1</td>
<td>AMB303 International Logistics</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MGB225 Intercultural Communication and Negotiation Skills</td>
</tr>
<tr>
<td>Year 5 Semester 1</td>
<td>AMB369 International Business Strategy</td>
</tr>
<tr>
<td>Year 5 Semester 2</td>
<td>BSB124 Working in Business</td>
</tr>
<tr>
<td>Year 5 Semester 1</td>
<td>MGB340 International Business in the Asia-Pacific</td>
</tr>
<tr>
<td>Year 5 Semester 2</td>
<td>BSB126 Marketing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course structure - Management</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Semester 1</td>
<td>BSB113 Economics</td>
</tr>
<tr>
<td>Year 1 Semester 2</td>
<td>BSB124 Working in Business</td>
</tr>
<tr>
<td>Year 2 Semester 1</td>
<td>No QUT Business School units studies this semester.</td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>BSB110 Accounting</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>BSB111 Business Law and Ethics</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>MGB200 Leading Organisations</td>
</tr>
<tr>
<td>Year 4 Semester 1</td>
<td>MGB201 Contemporary Employment Relations</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MGB210 Managing Operations</td>
</tr>
<tr>
<td>Year 5 Semester 1</td>
<td>MGB324 Managing Business Growth</td>
</tr>
<tr>
<td>Year 5 Semester 2</td>
<td>MGB310 Sustainability in A Changing Environment</td>
</tr>
<tr>
<td>Year 5 Semester 2</td>
<td>MGB335 Project Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course structure - Marketing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Semester 1</td>
<td>BSB113 Economics</td>
</tr>
</tbody>
</table>

Published on: 13 June 2012
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB126</td>
<td>Marketing</td>
</tr>
</tbody>
</table>

**Year 1 Semester 2**
- BSB111 Business Law and Ethics
- BSB115 Management

**Year 2 Semester 1**
- No QUT Business School units studies this semester.

**Year 2 Semester 2**
- BSB110 Accounting
- BSB124 Working in Business

**Year 3 Semester 1**
- AMB201 Marketing and Audience Research
- AMB240 Marketing Planning and Management

**Year 3 Semester 2**
- No QUT Business School units studies this semester.

**Year 4 Semester 1**
- AMB200 Consumer Behaviour
- AMB340 Services Marketing

**Year 4 Semester 2**
- AMB202 Integrated Marketing Communication
- AMB335 E-marketing Strategies
- MGB223 Entrepreneurship and Innovation

**Year 5 Semester 1**
- AMB336 International Marketing

**Year 5 Semester 2**
- AMB359 Strategic Marketing
- BSB119 Global Business

**Course structure - Public Relations**

**Year 1 Semester 1**
- BSB119 Global Business
- BSB126 Marketing

**Year 1 Semester 2**
- BSB110 Accounting
- BSB115 Management

**Year 2 Semester 1**
- No QUT Business School units studies this semester.

**Year 2 Semester 2**
- AMB201 Marketing and Audience Research
- BSB113 Economics

**Year 3 Semester 1**
- AMB263 Introduction To Public Relations
- AMB264 Public Relations Techniques

**Year 3 Semester 2**
- No QUT Business School units studies this semester.

**Year 4 Semester 1**
- AMB372 Public Relations Planning
- AMB373 Corporate Communication

**Year 4 Semester 2**
- AMB374 Global Public Relations Cases
- AMB375 Public Relations Management
- MGB223 Entrepreneurship and Innovation

**Year 5 Semester 1**
- AMB379 Public Relations Campaigns

**Year 5 Semester 2**
- BSB111 Business Law and Ethics
- BSB124 Working in Business

**Course structure - Civil Engineering - Students who commenced in 2010**

**Year 1, Semester 1**
- ENB110 Engineering Statics and Materials
- MAB125 Foundations of Engineering Mathematics
  - OR
- MAB126 Mathematics for Engineering 1 Business Unit

**Year 1, Semester 2**
- ENB130 Mechanical and Thermal Energy
  - OR
- MAB126 Mathematics for Engineering 1 Business Unit
<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
<td></td>
</tr>
</tbody>
</table>

**Year 2, Semester 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
<td></td>
</tr>
<tr>
<td>ENB270</td>
<td>Engineering Mechanics of Materials</td>
<td></td>
</tr>
<tr>
<td>ENB273</td>
<td>Civil Materials</td>
<td></td>
</tr>
</tbody>
</table>

Year 2, Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
<td></td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
<td></td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3, Semester 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENBXXX</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>ENB280</td>
<td>Hydraulic Engineering</td>
<td></td>
</tr>
</tbody>
</table>

Year 3, Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
<td></td>
</tr>
<tr>
<td>ENB272</td>
<td>Geotechnical Engineering 1</td>
<td></td>
</tr>
<tr>
<td>ENB275</td>
<td>Project Engineering 1</td>
<td></td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
<td></td>
</tr>
</tbody>
</table>

**Year 4, Semester 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB276</td>
<td>Structural Engineering 1</td>
<td></td>
</tr>
<tr>
<td>ENB371</td>
<td>Geotechnical Engineering 2</td>
<td></td>
</tr>
</tbody>
</table>

Year 4, Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB375</td>
<td>Structural Engineering 2</td>
<td></td>
</tr>
</tbody>
</table>

**Year 5, Semester 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB801</td>
<td>Project 1</td>
<td></td>
</tr>
<tr>
<td>ENB372</td>
<td>Design and Planning of Highways</td>
<td></td>
</tr>
<tr>
<td>ENB378</td>
<td>Water Engineering</td>
<td></td>
</tr>
</tbody>
</table>

**Year 5, Semester 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB376</td>
<td>Transport Engineering</td>
<td></td>
</tr>
<tr>
<td>ENB471</td>
<td>Design of Concrete Structures and Foundations</td>
<td></td>
</tr>
</tbody>
</table>

Course structure - Civil Engineering - Students who commenced in 2009

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB101</td>
<td>Engineering Mechanics 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB131</td>
<td>Engineering Mathematics 1A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB180</td>
<td>Engineering Mathematics 1B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year 2, Semester 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
<td></td>
</tr>
<tr>
<td>ENB104</td>
<td>Engineering Materials</td>
<td></td>
</tr>
<tr>
<td>ENB271</td>
<td>Design of Structural Timber and Earthworks</td>
<td></td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
<td></td>
</tr>
</tbody>
</table>

**Year 2, Semester 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3, Semester 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB273</td>
<td>Civil Materials</td>
<td></td>
</tr>
<tr>
<td>ENB280</td>
<td>Hydraulic Engineering</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3, Semester 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB376</td>
<td>Transport Engineering</td>
<td></td>
</tr>
<tr>
<td>ENB471</td>
<td>Design of Concrete Structures and Foundations</td>
<td></td>
</tr>
</tbody>
</table>

Published on: 13 June 2012
<table>
<thead>
<tr>
<th>Year 4, Semester 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB272</td>
<td>Geotechnical Engineering 1</td>
<td></td>
</tr>
<tr>
<td>ENB274</td>
<td>Design of Environmentally Sustainable Systems</td>
<td></td>
</tr>
<tr>
<td>ENB275</td>
<td>Project Engineering 1</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4, Semester 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB276</td>
<td>Structural Engineering 1</td>
<td></td>
</tr>
<tr>
<td>ENB371</td>
<td>Geotechnical Engineering 2</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Course structure - Civil Engineering - Students who commenced in 2007 & 2008

<table>
<thead>
<tr>
<th>Year 2, Semester 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB100</td>
<td>Introducing Professional Learning</td>
<td></td>
</tr>
<tr>
<td>ENB104</td>
<td>Engineering Materials</td>
<td></td>
</tr>
<tr>
<td>ENB277</td>
<td>Design of Structural Timber and Earthworks</td>
<td></td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3, Semester 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB272</td>
<td>Geotechnical Engineering 1</td>
<td></td>
</tr>
<tr>
<td>ENB273</td>
<td>Civil Materials</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3, Semester 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
<td></td>
</tr>
<tr>
<td>OR (prior to 2009)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEB200</td>
<td>Introducing Sustainability</td>
<td></td>
</tr>
<tr>
<td>ENB274</td>
<td>Design of Environmentally Sustainable Systems</td>
<td></td>
</tr>
<tr>
<td>ENB276</td>
<td>Structural Engineering 1</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4, Semester 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB372</td>
<td>Geotechnical Engineering 2</td>
<td></td>
</tr>
<tr>
<td>ENB375</td>
<td>Design and Planning of Highways</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5, Semester 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB101</td>
<td>Engineering Mechanics 1</td>
<td></td>
</tr>
<tr>
<td>MAB131</td>
<td>Engineering Mathematics 1A</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB180</td>
<td>Engineering Mathematics 1B</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB102</td>
<td>Engineering Mechanics 2</td>
<td></td>
</tr>
<tr>
<td>MAB132</td>
<td>Engineering Mathematics 2A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5, Semester 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB182</td>
<td>Engineering Mathematics 2B</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB130</td>
<td>Engineering Mathematics 1B</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB131</td>
<td>Engineering Mathematics 1A</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB180</td>
<td>Engineering Mathematics 1B</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB132</td>
<td>Engineering Mathematics 2A</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Course Structure - Electrical Engineering - Students who commenced in 2010

#### Year 1, Semester 1
- **ENB120** Electrical Energy and Measurements
- **MAB125** Foundations of Engineering Mathematics
  - OR
- **MAB126** Mathematics for Engineering 1
  - Business Unit
  - Business Unit

#### Year 1, Semester 2
- **ENB130** Mechanical and Thermal Energy
- **MAB126** Mathematics for Engineering 1
  - OR
- **MAB127** Mathematics for Engineering 2
  - Business Unit
  - Business Unit

#### Year 2, Semester 1
- **ENB100** Engineering and Sustainability
- **ENB110** Engineering Statics and Materials
- **ENB250** Electrical Circuits
- **MAB127** Mathematics for Engineering 2
  - OR
- **MAB233** Engineering Mathematics 3

#### Year 2, Semester 2
- **ENB150** Introducing Engineering Design
- **ENB200** Introducing Engineering Systems
  - Business Unit
  - Business Unit

- **ENB240** Introduction To Electronics
- **ENB246** Engineering Problem Solving
  - Business Unit
  - Business Unit

- **ENB242** Introduction To Telecommunications
- **ENB243** Linear Circuits and Systems
- **ENB244** Microprocessors and Digital Systems
- **ENB245** Introduction To Design and Professional Practice

- **ENB301** Instrumentation and Control
- **ENB340** Power Systems and Machines
  - OR
- **MAB233** Engineering Mathematics 3
  - Business Unit
  - Business Unit

- **ENB345** Advanced Design and Professional Practice
  - Business Unit
  - Business Unit

- **ENB340** Power Systems and Machines
  - OR
  - Electrical Engineering Selective
  - Business Unit

- **ENB339** Introduction to Robotics
- **ENB448** Signal Processing and Filtering
- **ENB452** Advanced Power Systems Analysis

- **BEB701** Work Integrated Learning 1
- **BEB801** Project 1
- **ENB340** Power Systems and Machines
  - OR
  - Electrical Engineering Selective
  - Business Unit

- **ENB344** Industrial Electronics
  - Business Unit
  - Business Unit

- **ENB339** Introduction to Robotics
- **ENB448** Signal Processing and Filtering
- **ENB452** Advanced Power Systems Analysis
## Course structure - Electrical Engineering - Students who commenced in 2009

### Year 1, Semester 1
- **BEB100**: Introducing Professional Learning
- **MAB131**: Engineering Mathematics 1A
- **MAB180**: Engineering Mathematics 1B

### Year 1, Semester 2
- **ENB103**: Electrical Engineering
- **MAB132**: Engineering Mathematics 2A
- **MAB182**: Engineering Mathematics 2B

### Year 2, Semester 1
- **ENB240**: Introduction To Electronics
- **ENB242**: Introduction To Telecommunications
- **ENB246**: Engineering Problem Solving
- **PCB150**: Physics 1H

### Year 2, Semester 2
- **ENB200**: Introducing Engineering Systems

### Year 3, Semester 1
- **ENB340**: Power Systems and Machines
- **MAB233**: Engineering Mathematics 3

### Year 3, Semester 2
- **ENB243**: Linear Circuits and Systems
- **ENB244**: Microprocessors and Digital Systems
- **ENB245**: Introduction To Design and Professional Practice
- **ENB301**: Instrumentation and Control
- **ENB342**: Signals, Systems and Transforms
- **ENB345**: Advanced Design and Professional Practice
- **BEB801**: Project 1
- **BEB701**: Work Integrated Learning 1
- **BEB802**: Project 2
- **ENB344**: Industrial Electronics
- **ENB231**: Materials and Manufacturing 1
- **ENB334**: Design For Manufacturing
- **ENB339**: Introduction to Robotics
- **ENB350**: Real-time Computer-based Systems
- **ENB352**: Communication Environments For Embedded Systems
- **ENB436**: Mechatronics System Design
- **ENB440**: RF Techniques and Modern Applications
- **ENB441**: Applied Image Processing
- **ENB445**: RF Communication Technologies
- **ENB446**: Wireless Communications
- **ENB448**: Signal Processing and Filtering
- **ENB452**: Advanced Power Systems Analysis
- **ENB453**: Power Equipment and Utilisation
- **ENB454**: Power System Management
- **ENB455**: Power Electronics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB456</td>
<td>Energy</td>
</tr>
<tr>
<td>ENB457</td>
<td>Controls, Systems and Applications</td>
</tr>
<tr>
<td>ENB458</td>
<td>Modern Control Systems</td>
</tr>
<tr>
<td>INB353</td>
<td>Wireless and Mobile Networks</td>
</tr>
<tr>
<td>INB860</td>
<td>Computational Intelligence for Control and Embedded Systems</td>
</tr>
</tbody>
</table>

Course structure - Electrical Engineering - Students who commenced in 2007 & 2008

**Year 1, Semester 1**
- BEB100 Introducing Professional Learning
- MAB131 Engineering Mathematics 1A
  - OR
- MAB180 Engineering Mathematics 1B
  - Business Unit
  - Business Unit

**Year 1, Semester 2**
- ENB103 Electrical Engineering
- MAB132 Engineering Mathematics 2A
  - OR
- MAB182 Engineering Mathematics 2B
  - Business Unit
  - Business Unit

**Year 2, Semester 1**
- ENB240 Introduction To Electronics
- ENB246 Engineering Problem Solving
- MAB233 Engineering Mathematics 3
- PCB136 Engineering Physics 1C

**Year 2, Semester 2**
- ENB200 Introducing Engineering Systems
  - OR (prior to 2009)
- BEB200 Introducing Sustainability
  - Business Unit
  - Business Unit
  - Business Unit

**Year 3, Semester 1**
- ENB242 Introduction To Telecommunications
- ENB340 Power Systems and Machines
  - Business Unit
  - Business Unit

**Year 3, Semester 2**
- ENB243 Linear Circuits and Systems
- ENB244 Microprocessors and Digital Systems
- ENB245 Introduction To Design and Professional Practice
  - Business Unit

**Year 4, Semester 1**
- ENB301 Instrumentation and Control
- ENB342 Signals, Systems and Transforms
  - Business Unit
  - Business Unit

**Year 4, Semester 2**
- ENB345 Advanced Design and Professional Practice
  - Business Unit
  - Business Unit
  - Business Unit

**Year 5, Semester 1**
- BEB701 Work Integrated Learning 1
- BEB801 Project 1
  - Electrical Engineering Selective
  - Business Unit

**Year 5, Semester 2**
- BEB802 Project 2
- ENB344 Industrial Electronics
- ENB346 Digital Communications
  - Electrical Engineering Selective

**Electrical Engineering Selectives**
- ENB231 Materials and Manufacturing 1
- ENB334 Design For Manufacturing
- ENB339 Introduction to Robotics
- ENB350 Real-time Computer-based Systems
- ENB352 Communication Environments For Embedded Systems
- ENB436 Mechatronics System Design
- ENB440 RF Techniques and Modern Applications
- ENB441 Applied Image Processing
- ENB445 RF Communication Technologies
- ENB446 Wireless Communications
- ENB448 Signal Processing and Filtering
Course structure - Mechanical Engineering - Students who commenced in 2010

### Year 1, Semester 1

- **ENB110** Engineering Statics and Materials
- **MAB125** Foundations of Engineering Mathematics
  - OR
- **MAB126** Mathematics for Engineering 1
  - Business Unit
  - Business Unit

### Year 1, Semester 2

- **ENB130** Mechanical and Thermal Energy
- **MAB126** Mathematics for Engineering 1
  - OR
- **MAB127** Mathematics for Engineering 2
  - Business Unit
  - Business Unit

### Year 2, Semester 1

- **ENB100** Engineering and Sustainability
- **ENB212** Strength of Materials
- **MAB127** Mathematics for Engineering 2
  - OR
- **MAB233** Engineering Mathematics 3
  - Business Unit

### Year 2, Semester 2

- **ENB120** Electrical Energy and Measurements
- **ENB150** Introducing Engineering Design
- **ENB200** Introducing Engineering Systems
  - Business Unit

### Year 3, Semester 1

- **ENB211** Dynamics
- **ENB231** Materials and Manufacturing 1
  - Business Unit
  - Business Unit

### Year 3, Semester 2

- **ENB205** Electrical and Computer Engineering
- **ENB215** Fundamentals of Mechanical Design
- **ENB221** Fluid Mechanics
- **ENB331** Materials and Manufacturing 2

### Year 4, Semester 1

- **BEB701** Work Integrated Learning 1
- **ENB222** Thermodynamics 1
  - Business Unit
  - Business Unit

### Year 4, Semester 2

- **MAB233** Engineering Mathematics 3
  - OR
- **Mechanical Engineering Selective**
  - Business Unit
  - Business Unit

### Year 5, Semester 1

- **BEB801** Project 1
- **ENB316** Design of Machine Elements
- **ENB311** Stress Analysis
  - OR
- **ENB312** Dynamics of Machinery
  - OR
- **ENB421** Thermodynamics 2
  - Business Unit

### Year 5, Semester 2

- **BEB802** Project 2
- **ENB313** Automatic Control
  - OR
- **ENB317** Design and Maintenance of Machinery
  - OR
- **ENB321** Fluids Dynamics
  - Business Unit
  - Business Unit
Mechanical Engineering Selectives

ENB314 Industrial Noise and Vibration
ENB333 Operations Management
ENB336 Industrial Engineering
ENB339 Introduction to Robotics
ENB422 Energy Management
ENB423 Heating, Ventilation and Air-Conditioning
ENB432 Engineering Asset Management and Maintenance
ENB433 Plant and Process Design
ENB434 Tribology
ENB435 Computer Integrated Manufacturing

Course structure - Mechanical Engineering - Students who commenced in 2009

Year 1, Semester 1

BEB100 Introducing Professional Learning
MAB131 Engineering Mathematics 1A
OR
MAB180 Engineering Mathematics 1B
Business Unit
Business Unit

Year 1, Semester 2

ENB104 Engineering Materials
MAB132 Engineering Mathematics 2A
OR
MAB182 Engineering Mathematics 2B
Business Unit
Business Unit

Year 2, Semester 1

ENB101 Engineering Mechanics 1
ENB120 Electrical Energy and Measurements
ENB231 Materials and Manufacturing 1
PCB150 Physics 1H

Year 2, Semester 2

ENB200 Introducing Engineering Systems
Business Unit
Business Unit
Business Unit

Year 3, Semester 1

ENB211 Dynamics
ENB212 Strength of Materials
Business Unit
Business Unit

Year 3, Semester 2

ENB215 Fundamentals of Mechanical Design
ENB221 Fluid Mechanics
ENB331 Materials and Manufacturing 2
Business Unit

Year 4, Semester 1

ENB222 Thermodynamics 1
MAB233 Engineering Mathematics 3
Business Unit
Business Unit

Year 4, Semester 2

ENB205 Electrical and Computer Engineering
Business Unit
Business Unit
Business Unit

Year 5, Semester 1

BEB801 Project 1
ENB316 Design of Machine Elements
Two of:
ENB311 Stress Analysis
ENB312 Dynamics of Machinery
ENB421 Thermodynamics 2

Year 5, Semester 2

BEB701 Work Integrated Learning 1
BEB802 Project 2
One of:
ENB313 Automatic Control
ENB317 Design and Maintenance of Machinery
ENB321 Fluids Dynamics
Business Unit

Course structure - Mechanical Engineering - Students who commenced in 2008

Year 1, Semester 1
Course structure - Mechanical Engineering - Students who commenced in 2007

Year 1, Semester 1
BEB100 Introducing Professional Learning
MAB131 Engineering Mathematics 1A
OR
MAB180 Engineering Mathematics 1B
Business Unit
Business Unit

Year 1, Semester 2
ENB104 Engineering Materials
MAB132 Engineering Mathematics 2A
OR
MAB182 Engineering Mathematics 2B
Business Unit
Business Unit

Year 2, Semester 1
ENB101 Engineering Mechanics 1
ENB231 Materials and Manufacturing 1
MAB233 Engineering Mathematics 3
PCB136 Engineering Physics 1C

Year 2, Semester 2
ENB103 Electrical Engineering
Business Unit
Business Unit
Business Unit

Year 3, Semester 1
ENB105 Electrical and Computer Engineering
ENB211 Dynamics
Business Unit
Business Unit

Year 3, Semester 2
ENB200 Introducing Engineering Systems
ENB102 Engineering Mechanics 2
ENB201 Fluid Mechanics
Business Unit

Year 4, Semester 1
BEB701 Work Integrated Learning 1
ENB311 Stress Analysis
Business Unit
Business Unit

Year 4, Semester 2
ENB215 Fundamentals of Mechanical Design
Business Unit
Business Unit
Business Unit

Year 5, Semester 1
BEB801 Project 1
ENB222 Thermodynamics 1
ENB312 Dynamics of Machinery
ENB316 Design of Machine Elements

Year 5, Semester 2
BEB802 Project 2
Business Unit
Choose two of:
ENB313 Automatic Control
ENB317 Design and Maintenance of Machinery
ENB321 Fluids Dynamics

Course structure - Mechanical Engineering - Students who commenced in 2007

Year 1, Semester 1
BEB100 Introducing Professional Learning
MAB131 Engineering Mathematics 1A
OR
MAB180 Engineering Mathematics 1B
Business Unit
Business Unit

Year 1, Semester 2
ENB104 Engineering Materials
MAB132 Engineering Mathematics 2A
OR
MAB182 Engineering Mathematics 2B
Business Unit
Business Unit

Year 2, Semester 1
ENB101 Engineering Mechanics 1
ENB231 Materials and Manufacturing 1
MAB233 Engineering Mathematics 3
PCB136 Engineering Physics 1C

Year 2, Semester 2
ENB215 Fundamentals of Mechanical Design
Business Unit
Business Unit
Business Unit

Year 3, Semester 1
ENB105 Electrical and Computer Engineering
ENB211 Dynamics
Business Unit
Business Unit

Year 3, Semester 2
ENB200 Introducing Engineering Systems
ENB102 Engineering Mechanics 2
ENB201 Fluid Mechanics
Business Unit

Year 4, Semester 1
BEB701 Work Integrated Learning 1
ENB311 Stress Analysis
Business Unit
Business Unit

Year 4, Semester 2
ENB215 Fundamentals of Mechanical Design
Business Unit
Business Unit
Business Unit

Year 5, Semester 1
BEB801 Project 1
ENB222 Thermodynamics 1
ENB312 Dynamics of Machinery
ENB316 Design of Machine Elements

Year 5, Semester 2
BEB802 Project 2
Business Unit
Choose two of:
ENB313 Automatic Control
ENB317 Design and Maintenance of Machinery
ENB321 Fluids Dynamics
### Year 2, Semester 2
- **ENB103**: Electrical Engineering  
  Business Unit  
  Business Unit  
  Business Unit

### Year 3, Semester 1
- **ENB105**: Electrical and Computer Engineering  
  Business Unit  
  Business Unit  
  Business Unit
- **ENB211**: Dynamics  
  Business Unit  
  Business Unit

### Year 3, Semester 2
- **BEB200**: Introducing Sustainability  
  Business Unit
- **ENB102**: Engineering Mechanics 2  
  Business Unit
- **ENB201**: Fluid Mechanics  
  Business Unit

### Year 4, Semester 1
- **BEB701**: Work Integrated Learning 1  
  Business Unit  
  Business Unit
- **ENB311**: Stress Analysis  
  Business Unit  
  Business Unit

### Year 4, Semester 2
- **ENB215**: Fundamentals of Mechanical Design  
  Business Unit  
  Business Unit  
  Business Unit

### Year 5, Semester 1
- **BEB801**: Project 1  
- **ENB316**: Design of Machine Elements  
  Choose two of:  
  - **ENB313**: Automatic Control  
  - **ENB333**: Operations Management  
  - **ENB432**: Engineering Asset Management and Maintenance  
  - **ENB435**: Computer Integrated Manufacturing

### Year 5, Semester 2
- **BEB802**: Project 2  
- **ENB222**: Thermodynamics 1  
  Business Unit  
  Choose one of:  
  - **ENB312**: Dynamics of Machinery  
  - **ENB317**: Design and Maintenance of Machinery  
  - **ENB321**: Fluids Dynamics  
  - **ENB331**: Materials and Manufacturing 2

### Accountancy Major - Students who commenced in 2009

#### Year 1 Semester 1
- **BSB110**: Accounting  
- **BSB115**: Management

#### Year 1 Semester 2
- **BSB123**: Data Analysis  
- **BSB126**: Marketing

#### Year 2 Semester 1
- No Faculty of Business units studies this semester.

#### Year 2 Semester 2
- **AYB200**: Financial Accounting  
- **AYB225**: Management Accounting  
- **BSB111**: Business Law and Ethics

#### Year 3 Semester 1
- **AYB221**: Computerised Accounting Systems  
- **EFB210**: Finance 1

#### Year 3 Semester 2
- **AYB219**: Taxation Law

#### Year 4 Semester 1
- **AYB230**: Corporations Law  
- **AYB321**: Strategic Management Accounting

#### Year 4 Semester 2
- **AYB301**: Audit and Assurance  
- **AYB340**: Company Accounting  
- **BSB113**: Economics

#### Year 5 Semester 1
- **AYB311**: Financial Accounting Issues

### Accountancy Major - Students who commenced in 2007-2008

#### Year 1 Semester 1

Published on: 13 June 2012
Page 17/48
### Year 1 Semester 2
- BSB110  Accounting
- BSB111  Business Law and Ethics

### Year 2 Semester 1
- BSB113  Economics
- BSB122  now replaced by BSB123 Data Analysis

### Year 2 Semester 2
- BSB119  Global Business
- BSB123  Data Analysis
- BSB124  Working in Business

### Year 3 Semester 1
- AMB200  Consumer Behaviour
- AMB220  Advertising Theory and Practice

### Year 3 Semester 2
- AMB201  Marketing and Audience Research
- AMB318  Advertising Copywriting
- AMB319  Media Planning

### Year 4 Semester 1
- AMB320  Advertising Management
- AMB330  Advertising Planning Portfolio
- BSB111  Business Law and Ethics

### Year 5 Semester 1
- AMB339  Advertising Campaigns

### Banking & Finance Major - Students who commenced in 2007-2008
- Year 1 Semester 1
  - BSB113  Economics
  - BSB115  Management

- Year 1 Semester 2
  - BSB124  Working in Business
  - BSB126  Marketing

- Year 2 Semester 1
  - No Faculty of Business units studies this semester.

- Year 2 Semester 2
  - BSB110  Accounting
  - BSB123  Data Analysis
  - BSB119  Global Business
Year 3 Semester 1
EFB210  Finance 1
EFB222  Quantitative Methods For Economics and Finance

Year 3 Semester 2
EFB307  Finance 2

Year 4 Semester 1
EFB333  Introductory Econometrics
EFB335  Investments

Year 4 Semester 2
EFB201  Financial Markets
EFB223  Economics 2
EFB312  International Finance

Year 5 Semester 1
BSB111  Business Law and Ethics

Economics Major - Students who commenced in 2009

Year 1 Semester 1
BSB113  Economics
BSB115  Management

Year 1 Semester 2
BSB123  Data Analysis
BSB124  Working in Business

Year 2 Semester 1
No Faculty of Business units studies this semester.

Year 2 Semester 2
BSB110  Accounting
EFB222  Quantitative Methods For Economics and Finance
EFB223  Economics 2

Year 3 Semester 1
EFB330  Intermediate Macroeconomics
EFB331  Intermediate Microeconomics

Year 3 Semester 2
Choice units or remaining Faculty Core Units

Year 4 Semester 1
Choice units or remaining Faculty Core Units

Year 4 Semester 2
EFB338  Contemporary Application of Economic Theory
Choice units or remaining Faculty Core Units

Year 5 Semester 1
BSB111  Business Law and Ethics

Choice Units
Choose any three of the following:
EFB332  Applied Behavioural Economics
EFB333  Introductory Econometrics
EFB334  Environmental Economics and Policy
EFB336  International Economics
EFB337  Game Theory and Applications

Important Information
Please note: BSB119 and BSB126 are the remaining Faculty Core Units to be completed. Please check unit availability when selecting Choice units.

Economics Major - Students who commenced in 2007-2008

Year 1 Semester 1
BSB113  Economics
BSB115  Management

Year 1 Semester 2
BSB114  now replaced by BSB124 Working in Business
BSB110  Accounting

Year 2 Semester 1
No Faculty of Business units studies this semester.

Year 2 Semester 2
BSB123  Data Analysis
BSB119  Global Business
EFB223  Economics 2

Year 3 Semester 1
EFB330  Intermediate Macroeconomics
EFB331  Intermediate Microeconomics
<table>
<thead>
<tr>
<th>Year 3 Semester 2</th>
<th>EFB222</th>
<th>Quantitative Methods For Economics and Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 4 Semester 1</td>
<td>BSB111</td>
<td>Business Law and Ethics</td>
</tr>
<tr>
<td></td>
<td>EFB333</td>
<td>Introductory Econometrics</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>EFB328</td>
<td>Substitute any Level 3 EFB3xx unit</td>
</tr>
<tr>
<td></td>
<td>EFB329</td>
<td>Contemporary Applications of Economics Theory</td>
</tr>
<tr>
<td></td>
<td>EFB336</td>
<td>International Economics</td>
</tr>
<tr>
<td>Year 5 Semester 1</td>
<td>BSB126</td>
<td>Marketing</td>
</tr>
<tr>
<td>Finance Major - Students who commenced in 2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1 Semester 1</td>
<td>BSB113</td>
<td>Economics</td>
</tr>
<tr>
<td></td>
<td>BSB115</td>
<td>Management</td>
</tr>
<tr>
<td>Year 1 Semester 2</td>
<td>BSB124</td>
<td>Working in Business</td>
</tr>
<tr>
<td></td>
<td>BSB126</td>
<td>Marketing</td>
</tr>
<tr>
<td>Year 2 Semester 1</td>
<td></td>
<td>No Faculty of Business units studies this semester.</td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>BSB110</td>
<td>Accounting</td>
</tr>
<tr>
<td></td>
<td>BSB119</td>
<td>Global Business</td>
</tr>
<tr>
<td></td>
<td>BSB123</td>
<td>Data Analysis</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>EFB210</td>
<td>Finance 1</td>
</tr>
<tr>
<td></td>
<td>EFB222</td>
<td>Quantitative Methods For Economics and Finance</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>EFB307</td>
<td>Finance 2</td>
</tr>
<tr>
<td>Year 4 Semester 1</td>
<td>EFB223</td>
<td>Economics 2</td>
</tr>
<tr>
<td></td>
<td>EFB335</td>
<td>Investments</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>EFB201</td>
<td>Financial Markets</td>
</tr>
<tr>
<td></td>
<td>EFB312</td>
<td>International Finance</td>
</tr>
<tr>
<td></td>
<td>EFB340</td>
<td>Finance Capstone</td>
</tr>
<tr>
<td>Year 5 Semester 1</td>
<td>BSB111</td>
<td>Business Law and Ethics</td>
</tr>
<tr>
<td>Human Resource Management Major - Students who commenced in 2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1 Semester 1</td>
<td>BSB113</td>
<td>Economics</td>
</tr>
<tr>
<td></td>
<td>BSB115</td>
<td>Management</td>
</tr>
<tr>
<td>Year 1 Semester 2</td>
<td>BSB124</td>
<td>Working in Business</td>
</tr>
<tr>
<td></td>
<td>BSB126</td>
<td>Marketing</td>
</tr>
<tr>
<td>Year 2 Semester 1</td>
<td></td>
<td>No Faculty of Business units studies this semester.</td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>BSB110</td>
<td>Accounting</td>
</tr>
<tr>
<td></td>
<td>BSB119</td>
<td>Global Business</td>
</tr>
<tr>
<td></td>
<td>MGB223</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>MGB201</td>
<td>Contemporary Employment Relations</td>
</tr>
<tr>
<td></td>
<td>MGB207</td>
<td>Human Resource Issues and Strategy</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>MGB200</td>
<td>Leading Organisations</td>
</tr>
<tr>
<td>Year 4 Semester 1</td>
<td>MGB331</td>
<td>Learning and Development in Organisations</td>
</tr>
<tr>
<td></td>
<td>MGB339</td>
<td>Performance and Reward</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MGB220</td>
<td>Business Research Methods</td>
</tr>
<tr>
<td></td>
<td>MGB320</td>
<td>Recruitment and Selection</td>
</tr>
<tr>
<td></td>
<td>MGB370</td>
<td>Personal and Professional Development</td>
</tr>
<tr>
<td>Year 5 Semester 1</td>
<td>BSB111</td>
<td>Business Law and Ethics</td>
</tr>
</tbody>
</table>
International Business Major - Students who commenced in 2007-2009

Year 1 Semester 1
BSB119  Global Business
BSB126  Marketing

Year 1 Semester 2
BSB110  Accounting
BSB115  Management

Year 2 Semester 1
No Faculty of Business units studies this semester.

Year 2 Semester 2
BSB119  Global Business
BSB126  Marketing

Year 3 Semester 1
MGB200  Leading Organisations

Year 3 Semester 2
MGB210  Managing Operations
MGB223  Entrepreneurship and Innovation

Year 4 Semester 1
MGB225  Intercultural Communication and Negotiation Skills

Year 4 Semester 2
BSB110  Accounting
MGB310  Sustainability in A Changing Environment
MGB335  Project Management

Year 5 Semester 1
BSB111  Business Law and Ethics

Management Major - Students who commenced in 2009

Year 1 Semester 1
BSB113  Economics
BSB115  Management

Year 1 Semester 2
BSB124  Working in Business

BSB126  Marketing

Year 2 Semester 1
No Faculty of Business units studies this semester.

Year 2 Semester 2
BSB119  Global Business
BSB123  Data Analysis
MGB200  Leading Organisations

Year 3 Semester 1
MGB210  Managing Operations
MGB223  Entrepreneurship and Innovation

Year 3 Semester 2
MGB225  Intercultural Communication and Negotiation Skills

Year 4 Semester 1
MGB309  Strategic Management
MGB324  Managing Business Growth

Year 4 Semester 2
BSB110  Accounting
MGB310  Sustainability in A Changing Environment
MGB335  Project Management

Year 5 Semester 1
BSB111  Business Law and Ethics

Management Major - Students who commenced in 2007-2008

Year 1 Semester 1
BSB113  Economics
BSB115  Management

Year 1 Semester 2
BSB114  now replaced by BSB124 Working in Business
BSB126  Marketing

Year 2 Semester 1
No Faculty of Business units studies this semester.

Year 2 Semester 2
BSB111  Business Law and Ethics
<table>
<thead>
<tr>
<th>Year 3 Semester 1</th>
<th>Year 3 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGB200 Leading Organisations</td>
<td>MGB310 Sustainability in A Changing Environment</td>
</tr>
<tr>
<td>BSB122 now replaced by MGB201</td>
<td></td>
</tr>
<tr>
<td>MGB201 Contemporary Employment Relations</td>
<td></td>
</tr>
<tr>
<td>Year 4 Semester 1</td>
<td>Year 4 Semester 2</td>
</tr>
<tr>
<td>MGB210 Managing Operations</td>
<td>BSB119 Global Business</td>
</tr>
<tr>
<td>MGB223 Entrepreneurship and Innovation</td>
<td>BSB124 Working in Business</td>
</tr>
<tr>
<td>Year 5 Semester 1</td>
<td>Year 5 Semester 1</td>
</tr>
<tr>
<td>BSB110 Accounting</td>
<td>BSB110 Accounting</td>
</tr>
</tbody>
</table>

Management Option Unit List:

- Students must choose 2 of the following units. One must be a Level 3 unit:
  - MGB201 Contemporary Employment Relations
  - MGB218 Managing Business Growth
  - MGB225 Intercultural Communication and Negotiation Skills
  - MGB314 Organisational Consulting and Change
  - MGB370 Personal and Professional Development

Marketing Major - Students who commenced in 2009

<table>
<thead>
<tr>
<th>Year 1 Semester 1</th>
<th>Year 2 Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB113 Economics</td>
<td>BSB114 now replaced by BSB124 Working in Business</td>
</tr>
<tr>
<td>BSB126 Marketing</td>
<td>BSB119 Global Business</td>
</tr>
<tr>
<td>Year 1 Semester 2</td>
<td>Year 2 Semester 2</td>
</tr>
<tr>
<td>BSB111 Business Law and Ethics</td>
<td>BSB111 Business Law and Ethics</td>
</tr>
<tr>
<td>BSB115 Management</td>
<td>BSB113 Economics</td>
</tr>
<tr>
<td>Year 2 Semester 1</td>
<td>Year 3 Semester 1</td>
</tr>
<tr>
<td>No Faculty of Business units studies this semester.</td>
<td>AMB200 Consumer Behaviour</td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>Year 3 Semester 2</td>
</tr>
<tr>
<td></td>
<td>AMB201 Marketing and Audience Research</td>
</tr>
</tbody>
</table>
AMB201  Marketing and Audience Research

Year 4 Semester 1

AMB202  Integrated Marketing Communication
AMB340  Services Marketing

Year 4 Semester 2

BSB110  Accounting
AMB335  E-marketing Strategies
AMB252  Business Decision Making or
IBB213  International Marketing

Year 5 Semester 1

AMB359  Strategic Marketing

Public Relations Major - Students who commenced in 2007-2009

Year 1 Semester 1

BSB119  Global Business
BSB126  Marketing

Year 1 Semester 2

BSB110  Accounting
BSB115  Management

Year 2 Semester 1

No Faculty of Business units studies this semester.

Year 2 Semester 2

AMB201  Marketing and Audience Research
BSB113  Economics
BSB124  Working in Business

Year 3 Semester 1

AMB263  Introduction To Public Relations
AMB264  Public Relations Techniques

Year 3 Semester 2

BSB111  Business Law and Ethics

Year 4 Semester 1

AMB372  Public Relations Planning
AMB373  Corporate Communication

Year 4 Semester 2

AMB374  Global Public Relations Cases
AMB375  Public Relations Management
BSB123  Data Analysis

Year 5 Semester 1

AMB379  Public Relations Campaigns

Potential Careers:

UNIT SYNOPSES

AMB200 CONSUMER BEHAVIOUR
This unit provides students with the fundamental theories and models to develop a sound understanding of consumers, their needs, and behaviours. It provides a detailed examination of the consumer decision process and the internal and external influences on this core decision process. The unit also assists students in applying this knowledge to the development, implementation and evaluation of marketing activities within an organisation.
Prerequisites: BSB126 or CTB126 or BSB116 or BSB117
Antirequisites: MIB204
Equivalents: AMX200, CTB200
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

AMB201 MARKETING AND AUDIENCE RESEARCH
This unit provides an introduction to the conduct and evaluation of marketing and audience research across the disciplines of advertising, marketing and public relations. Class members explore how field studies, survey and experimental research are employed to support advertising, marketing and public relations information needs. The unit provides an overview of research process, research design, methods of data collection and analysis, and the development of research proposals to support decision-making. Class members also explore issues related to research on media audiences, research ethics, and the
management of client briefings.

Prerequisites: BSB126, CTB126, BSB116, or BSB117
Antirequisites: MIB305, MGB220, COB334
Equivalents: AMX201, CTB201
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point and Caboolture
Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

AMB202 INTEGRATED MARKETING COMMUNICATION
In past decades many organisations separated the different forms of marketing communication that convey their corporate and marketing messages. They developed separate plans for their advertising, public relations, direct marketing, personal selling and sales promotion with separate goals, objectives, strategies and budgets. Today many companies recognise the concept of integrated marketing communication which integrates these different functions along with other aspects of the marketing mix that communicate with stakeholders and customers. Integrated marketing communication requires a ‘total’ approach to planning marketing communication programs and coordinating communication strategies in support of overall brand and product/service marketing objectives.

Prerequisites: BSB126 or CTB126 or BSB116 or BSB117
Antirequisites: COB207, MIB309
Equivalents: AMX202
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point and Caboolture
Teaching period: 2011 SEM-1 and 2011 SEM-2

AMB210 IMPORTING AND EXPORTING
Trade has become fundamental to the survival and growth of many businesses in Australia as well as other economies. International business students need an understanding of the many challenges entailed in the management of trade. Import and export practice is an applied, technical and evolving area of international business operations that reflects the dynamic nature of trans-national trade in the global economy. This unit examines the importance of importing and exporting for Australia’s economic development, provides key information related to importing and exporting, uses industry perspectives on issues of current importance in international trade and provides a structured tutorial programme to achieve this.

Prerequisites: BSB119 or CTB119
Equivalents: AMX210, IBB210
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

AMB220 ADVERTISING THEORY AND PRACTICE
This unit serves as an introduction to later units in the advertising major and gives learners an overview of the advertising industry and the management of the advertising function. The unit traverses the interrelationship of the institutions of advertising, the advertisers, the advertising agencies and the media. It introduces research and details methods of determining advertising objectives, budgets, establishing target audiences, interpreting audience ratings and circulation figures, and enables learners to gain a preliminary understanding of the creative functions of the advertising industry. It also shows the ethical and legal side of advertising and its important role in society and the economy.

Prerequisites: BSB126, CTB126, BSB116, or BSB117
Antirequisites: COB308
Equivalents: AMX220
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

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

Prerequisites: BSB126 or CTB126
Equivalents: AMX240, CTB240
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

AMB252 BUSINESS DECISION MAKING
The nature of decisions and decision models in specific strategic and tactical areas of marketing management are examined in this unit. Decisions related to sales forecasting, market analysis, product planning, pricing, promotion and distribution are viewed from quantitative and qualitative perspectives. Students are exposed to computer software and analysis skills that aid the marketing decision process and build their analytical skills of direct relevance in marketing practice. The unit also embraces the analysis and application of marketing information systems including database marketing and the Internet as a marketing information resource.

Prerequisites: BSB126 or CTB126
Equivalents: AMB352
Credit points: 12
Campus: Gardens Point

AMB263 INTRODUCTION TO PUBLIC RELATIONS
This unit introduces students to the theory and practice of public relations, the discipline that deals with the creation, maintenance, and enhancement of relationships between organisations and their publics. Topics covered include publicity, events, and public opinion. This unit may be taken concurrently with AMB264 Public Relations Techniques especially by students undertaking a public relations major. However, it may also be taken by those students doing a public relations minor, or as a stand alone unit by those students in a wide variety of study disciplines who wish to
understand more about this important area of business.

**Prerequisites:** BSB126, CTB126, BSB116, or BSB117

**Equivalents:** AMB260, AMX263  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**AMB264 PUBLIC RELATIONS TECHNIQUES**

This unit offers an introduction to the main tactics and techniques used in public relations. Topics covered include the development of message strategies as well as a specialised focus on the production of examples of a variety of written public relations genres such as brochures, speeches, and media releases. This unit may be taken concurrently with AMB263 Introduction to Public Relations especially by students undertaking a public relations major. However, it may also be taken by those students doing a public relations minor, or as a stand alone unit by those students in a wide variety of study disciplines who wish to improve and enhance their communication skills.

**Prerequisites:** BSB126, CTB126, BSB116, or BSB117

**Antirequisites:** AMB261, AMB262  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**AMB303 INTERNATIONAL LOGISTICS**

This unit examines international logistics through the concepts of international distribution channels and international supply chain management. Strategy in managing international logistical constraints is emphasised with practical studies of contemporary international supply chain management in international industries. Traditional costs and financial aspects of supply chain management are considered. Contemporary issues are incorporated including: the impact of e-business on international logistics; the evolution of new technologies for ‘smart’ packaging, warehousing and international stock control; the combination of international services with goods products; recent technological developments in international transportation and product quality control.

**Prerequisites:** AMB210, IBB210, AMB240, or CTB240

**Equivalents:** AMX303, IBB303  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**AMB318 ADVERTISING COPYWRITING**

There are two parts to any copywriting process the thinking and the writing. In the first part, students learn to solve advertising problems through an understanding of the prospect and the product and the formulation of incisive creative strategy. In the second part, creative thinking techniques are applied and advertising concepts emerge from the creative strategy. Students' thinking and writing skills are refined in weekly workshops and culminate in a group project.

**Prerequisites:** AMB220 or COB308  
**Equivalents:** AMB221, AMX318  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**AMB319 MEDIA PLANNING**

This unit introduces the qualitative and quantitative factors affecting media selection and use by advertisers. It covers the costing and scheduling of media, market targeting, measuring media exposure, media comparisons and trends. In-depth analysis of advertising media will allow learners to develop an understanding of the characteristics of each. The application of the concepts of media decision making, media strategy and research to the development of a media plan are emphasised.

**Prerequisites:** AMB220  
**Equivalents:** AMB222, AMX319  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**AMB320 ADVERTISING MANAGEMENT**

This unit takes the perspective of the Advertising Manager and addresses the use of research in developing, implementing, managing, and assessing a successful advertising campaign. In Advertising Management, learners use the case method of learning to examine the advertising process from its place in the marketing mix to the formulation of objectives, strategy and budget to the development of creative and media tactics and their ongoing evaluation. In addition, issues that impinge upon the advertising campaign management process such as legal and ethical issues, globalisation and the client-agency relationship are discussed.

**Prerequisites:** (AMB318 or AMB221) and (AMB319 or AMB222)  
**Equivalents:** AMX320  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**AMB330 ADVERTISING PLANNING PORTFOLIO**

This advanced unit builds on the theoretical perspectives and applied skills introduced to students in copywriting, media and advertising management. It explores important issues such as the contribution of research to the creation of advertising; the hierarchical development of strategy from marketing and IMC strategy through to advertising, media and creative strategy; the role of the strategic planner in advertising; the use of planning to deliver more effective advertising solutions. Using problem-based learning, students establish benchmarks to evaluate advertising, develop advertising briefs and devise strategies for on-time and on-budget process management.

**Prerequisites:** AMB318 or AMB221, and AMB319 or AMB222  
**Equivalents:** AMX330  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2
AMB335 E-MARKETING STRATEGIES
E-Business and mobile commerce technologies have emerged as defining technologies for companies in the 21st century. This unit focuses on e-marketing applications and strategies and the marketer's role in developing solutions that integrate new and old economies. Drawing on their knowledge of marketing principles, students will examine the diverse applications of technology in product and service design; product distribution/service delivery and logistics; promotional strategies and other marketing components. The unit also explores the role of emerging electronic models and the use of e-marketing strategies to achieve global competitive advantage.
Prerequisites: AMB240 or CTB240, and AMB201 or CTB201  Credit points: 12  Campus: Gardens Point and Caboolture  Teaching period: 2011 SEM-1 and 2011 SEM-2

AMB336 INTERNATIONAL MARKETING
The aim of this unit is to provide students with a thorough understanding of the multiplicity of issues that impact on the development of international marketing strategies and plans and their operational implementation. The unit is highly applied and provides students with the following opportunities: to analyse global international firms, their marketing strategies and various international marketing issues in a variety of geographic and industry contexts; to evaluate methodologies and new practices for handling problems and issues typical of global and international markets and competition; to develop an operationally sound international marketing plan.
Prerequisites: AMB240, CTB240, AMB210, or IBB210  Credit points: 12  Campus: Gardens Point and Caboolture  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

AMB339 E-MARKETING STRATEGIES
E-Business and mobile commerce technologies have emerged as defining technologies for companies in the 21st century. This unit focuses on e-marketing applications and strategies and the marketer's role in developing solutions that integrate new and old economies. Drawing on their knowledge of marketing principles, students will examine the diverse applications of technology in product and service design; product distribution/service delivery and logistics; promotional strategies and other marketing components. The unit also explores the role of emerging electronic models and the use of e-marketing strategies to achieve global competitive advantage.
Prerequisites: AMB240 or CTB240, and AMB201 or CTB201  Antirequisites: MIB311  Credit points: 12  Campus: Gardens Point and Caboolture  Teaching period: 2011 SEM-1 and 2011 SEM-2

AMB359 STRATEGIC MARKETING
Emphasis of the capstone Marketing unit is on the role of marketing manager at the corporate and strategic business unit/division levels. Students are exposed to a variety of strategic marketing techniques and issues, and learn how to apply these in corporate planning and management. Topics include: developing and critiquing strategic marketing planning models; recognising the importance of market focus; determining what marketing strategy can realistically be accomplished for a business; identifying underlying factors that must be considered in developing marketing strategy for a market-oriented organisation; discussing problems in successful implementation of marketing strategy; and organising for successful strategy implementation.
Prerequisites: AMB340, and AMB335 or AMB241  Credit points: 12  Campus: Gardens Point and Caboolture  Teaching period: 2011 SEM-1 and 2011 SEM-2

AMB369 INTERNATIONAL BUSINESS STRATEGY
This unit focuses on the definition and implementation of corporate strategy for worldwide operations. As the capstone unit in the International Business major, it is designed to build upon the knowledge base of previous units, introducing you to the strategic management of firms, and engage you in the strategic choices which international managers face in the international environment.
Prerequisites: AMB336, AMB303, IBB303, or IBB213  Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1 and 2011 SEM-2

AMB372 PUBLIC RELATIONS PLANNING
This unit introduces students to the public relations planning process. Students build skills in planning by analysing the components, execution and evaluation of contemporary public relations campaigns. The public relations planning process, partnered with theoretical concepts and ethical considerations, is examined across practice contexts and areas.
Prerequisites: (AMB263 or AMB260) and AMB264)
Equivalents: AMX372
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

AMX372 CORPORATE COMMUNICATION
Corporate Communication provides students with the opportunity to build on and apply their understanding of public relations to an in-house corporate role. Students gain an overview of an organisation relevant to the practice of public relations at a senior level in organisations by investigating internal communication processes, corporate reputation, corporate social responsibility, organisational culture and change and issues and crisis management.
Prerequisites: (AMB263 or AMB260 and AMB264) or (AMB261 and AMB262)
Equivalents: AMB360, AMX373
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

AMX374 GLOBAL PUBLIC RELATIONS CASES
Global Public Relations Cases will apply the theoretical underpinnings of generic practice to specialist areas. Exposure to real-world global situations and public relations responses will improve students’ familiarity with the public relations discipline’s practice and strengthen students’ decision-making and critical thinking skills.
Prerequisites: AMB372, AMB261, or AMB262
Equivalents: AMB370, AMX374
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

AMX375 PUBLIC RELATIONS MANAGEMENT
This unit develops student skills in the analysis of public relations public relations programs in line with corporate strategy, integrating long term planning with issue assessment and response. Students extend analytical, interpretive and management skills in the public relations role.
Prerequisites: AMB372 and AMB373, or AMB360
Equivalents: AMX375
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

AMX379 PUBLIC RELATIONS CAMPAIGNS
As the capstone unit, Public Relations Campaigns sees the student bring together the design, strategic planning and tactical preparation that underpins an effective public relations campaign. Students research, develop and present their plans for a real world client, enhancing their portfolio prior to graduation.
Prerequisites: AMB374 or AMB370, and AMB201 or CTB201
Equivalents: AMB361, AMX379
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

AYB200 FINANCIAL ACCOUNTING
Financial Accounting examines of the accounting concepts and procedures relevant to both partnership and corporate structures within the context of the accounting profession's conceptual framework and the relevant accounting standards and Corporations Law requirements. Topics include: the formation, operation, financial reporting and disclosure for both partnerships and companies; accounting for leases; and the professional role of accountants. The emphasis is on the effect of the different forms of ownership on the financial statements.
Prerequisites: BSB110 or CTB110
Equivalents: AYB121, AYX200
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

AYB219 TAXATION LAW
This unit introduces students to the statutory framework of the Australian taxation system. Elements in the determination of taxable income and the levy of income tax are examined including general and specific categories of assessable income and allowable deductions, capital gains tax and administration aspects of the tax system. The taxation of fringe benefits is also examined. The unit concludes with a brief overview of the taxation of partnerships, trusts and companies and the goods and services tax. Emphasis is placed on developing students' skills in problem solving through research and analysis of taxation issues.
Prerequisites: BSB111 or CTB111
Antirequisites: LWB364
Equivalents: AYB325, AYX219
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

AYB221 COMPUTERISED ACCOUNTING SYSTEMS
This unit provides an examination of the concepts, processes and issues relevant to computerised accounting systems including: accounting information systems; internal controls; design and development of computerised accounting systems including general ledger and reporting cycle, revenue cycle, expenditure cycle and payroll cycle; computer fraud, security and crime; accessing accounting information; and accounting in an electronic environment. Practical application of these concepts is enhanced by the use of accounting software such as MYOB, spreadsheet software such as Excel, database software such as Access, and interactive multimedia software such as Accounting Information Systems Cycles.
Prerequisites: BSB110 or CTB110
Antirequisites: AYN443
Equivalents: AYX221
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

Page 27/48
AYB225 MANAGEMENT ACCOUNTING
This unit introduces students to accounting systems and techniques that provide management at all levels with information for use in planning, controlling and decision making. This can be contrasted with financial accounting, which provides summary financial information principally for external users (i.e., shareholders, creditors, banks, etc.). Emphasis is placed on developing a range of accounting systems (in particular product costing) which may be used in manufacturing firms, although the principles and concepts used to develop such systems can be adapted to service organisations.

Prerequisites: BSB110 or CTB110  
Equivalents: AYX225  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1 and 2011 SEM-2

AYB227 INTERNATIONAL ACCOUNTING
International Accounting is designed to provide students with an insight into, and an appreciation of, many of the accounting problems and issues faced in an international business environment. Issues examined include: comparative international accounting systems and practices; cultural influences on accounting; international financial reporting issues such as international business combinations, intangibles, foreign currency transactions and translation, comparative international analysis of financial statements; and global accounting issues in the twenty-first century. The unit also examines the impact of international harmonization of accounting standards on multinational corporations and the investment communities worldwide.

Prerequisites: BSB110 or CTB110, and BSB119 or CTB119  
Equivalents: AYX227  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1 and 2011 SEM-2

AYB230 CORPORATIONS LAW
The unit is intended to equip students with a basic understanding and knowledge relevant to the environment of legal entities, particularly corporations. It also seeks to provide students with sufficient basic understanding of the legal structure of business associations to enable them to recognise the appropriate structure for particular commercial situations.

Prerequisites: BSB111 or CTB111  
Credit points: 12  
Campus: Gardens Point  
Teaching period: 2011 SEM-1 and 2011 SEM-2

AYB301 AUDIT AND ASSURANCE
This unit enables students to comprehend the key concepts of auditing as a discipline, to demonstrate the relationship between auditing and the systems of accountability and to demonstrate the differences between manual and EDP audit processes. The unit builds on the knowledge of accounting and accounting standards acquired in prior units by enabling students to understand in detail the audit process (including professional auditing standards and techniques) which leads to the auditor providing an opinion on the financial reports of various types of entities. Ethics and auditor's liability are also covered.

Prerequisites: (AYB221 or INB120) and (AYB340 or AYB220)  
Equivalents: AYX301  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

AYB311 FINANCIAL ACCOUNTING ISSUES
This unit introduces students to the nature of accounting theory and integrates theory with practice to assist in the understanding of major Australian and International accounting issues. The following topics are addressed: positive and normative theories of accounting; the external reporting framework including international harmonisation and the conceptual framework; definition, recognition and measurement of assets, liabilities, equity, revenues and expenses; asset revaluations; intangibles; leases and employee entitlements. Accounting in specific industries such as construction, extractive industries and superannuation funds is also examined. This unit complies with the new international accounting standards.

Contracting theory is used

Prerequisites: AYB340 or AYB220  
Equivalents: AYX311  
Credit points: 12  
Contact hours: 3.5 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1 and 2011 SEM-2

AYB321 STRATEGIC MANAGEMENT ACCOUNTING
Strategic management accounting develops a theory of organisations that provides an understanding of the information requirements of management to facilitate the strategic planning, decision-making and control necessary for the achievement of their objectives. Topics include: developing effective performance-evaluation systems and compensation plans; examining how managers can design organisations to motivate individuals to make choices that increase firm value; strategic planning and budgetary systems; pricing and product mix decisions; managing transfer-pricing disputes among divisions; developing an understanding of new management accounting practices, including activity-based costing (ABC), the balanced scorecard (BSC), and economic value added (EVA); and appreciating the research on the benefits and problems with ABC, BSC and EVA.

Prerequisites: AYB225  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1 and 2011 SEM-2

AYB340 COMPANY ACCOUNTING
This unit includes: the preparation of consolidated financial statements; an overview of the statutory requirements that
dictate the format and content of published financial reports of companies; the requirements of the Corporations Act 2001 and the major disclosure orientated accounting standards; accounting for income tax; accounting for the acquisition of assets (including entities); accounting for investments in associates; accounting for foreign currency transactions arising from international trading and financing; and the translation of the results of foreign operations.

**Prerequisites:** AYB200 or AYB211  
**Equivalents:** AYX340  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**BEB100 INTRODUCING PROFESSIONAL LEARNING**
This unit will introduce students to a range of skills and knowledge sets required to support professional practice in design, engineering and urban development disciplines. It will include information literacy and communication skills and knowledge development. In addition, the unit will provide orientation to design, engineering and urban development professions through an introduction to their history, their place in society, the importance of ethical conduct to their practice and to the particular qualities of professional knowledge especially with regard to practice knowledge. The importance of integrated scholarship and collaborative links with other professions will be highlighted.

**Equivalents:** BNB0007, CNB190, PSB414  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point

**BEB200 INTRODUCING SUSTAINABILITY**
This unit will address issues of sustainability from a number of perspectives thus providing students with a variety of lenses on the ways in which the human-made environment impacts on the future of human settlement. The unit will include an introduction to sustainability from a variety of perspectives, including indigenous and other cultural perspectives, and from ecological, economic and technological perspectives. It will demonstrate to students the ways in which contrasting, and sometimes conflicting, ideas about sustainability are prioritised and how these priorities contribute to the impact that design, engineering and urban development professions have on a sustainable future.

**Equivalents:** PSB422  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point

**BEB701 WORK INTEGRATED LEARNING 1**
This unit aims to provide you with the opportunity to learn in a workplace environment. It will involve attendance, participation, observation, critical reflection, and report writing on workplace activities. The emphasis of your critical reflection and report writing will be on identifying and describing aspects of professional relevance incorporating: collaboration and teamwork; workplace, health and safety; professional conduct; ethical responsibility, and other aspects of your workplace experience.

This unit may form part of your (compulsory) course core (as required by professional accrediting bodies e.g. Engineers Australia, Australian Institute of Building, Royal Institution of Chartered Surveyors), or it may be one of several work integrated learning (WIL) units (selected as part of a Minor).

**Assumed knowledge:** This unit is not designed for first year students. It is recommended that you check WIL Community Blackboard site for information on enrolment pattern. If you are EN40 student you can only enrol after completing a minimum of 192 cp.  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1, 2011 SEM-2 and 2011 SUM

**BEB801 PROJECT 1**
This unit is usually taken in the final year of study. Students complete an individual project involving the application of skills and knowledge attained during the earlier years of their degree program. For some students, this unit will be taken one of two ‘project’ units related to the same student project; in such cases this unit may be a pre-requisite or co-requisite to the second unit (or a follow-on from the first unit). The final ‘deliverable’ for this unit may vary for each discipline and details will be provided in lectures/tutorials and on the Blackboard website.

**Equivalents:** CEB411, CEB420, CNB434, EEB781-1, EEB889-1  
**Credit points:** 12  
**Contact hours:** 2 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**BEB802 PROJECT 2**
This unit is usually taken in the final year of study, and is only taken by students completing a two unit project. Students complete an individual project involving the application of skills and knowledge attained during the earlier years of their degree program. This unit will be taken as the second of two ‘project’ units related to the same student project.

**Equivalents:** CEB415, EEB782-2, EEB889-2  
**Credit points:** 12  
**Contact hours:** 2  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**BSB110 ACCOUNTING**
Accounting data is the basis for decision making in any organisation. Accordingly, the aim of this unit is to provide students with a basic level of knowledge of modern financial and managerial accounting theory and practice so that they can understand how accounting data is used to help make decisions in organisations. The unit covers financial procedures and reporting for business entities, analysis and interpretation of financial statements and planning, control and business decision making.

**Antirequisites:** BSD110, CNB293, UDB342  
**Equivalents:** BSX110, CTB110  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point and
Caboolture  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

BSB111 BUSINESS LAW AND ETHICS
This unit integrates the concepts and principles of business law with the theories and applications of business ethics. The unit makes extensive use of cases in law and ethics to develop knowledge and skills that enable students to analyse, apply and evaluate the legal principles and ethical decision-making processes relevant to modern business practice.
Antirequisites: AYB120, LWS009, LWB145
Equivalents: BSX111, CTB111  Credit points: 12
Contact hours: 3 per week  Campus: Gardens Point and Caboolture  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

BSB113 ECONOMICS
This unit introduces students to the key economic concepts and their practical applications. It comprises twelve topics each focusing on a current economic issue. Microeconomic topics include demand and supply, elasticity, production and cost theory and market structure. Macroeconomic topics include measuring GDP, inflation and unemployment, money and banking, and fiscal and monetary policy.
Antirequisites: BSD113, UDB104  Equivalents: BSX113, CTB113  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point and Caboolture  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

BSB115 MANAGEMENT
The unit provides an introduction to the theories and practice of management and organisations. Emphasis is on the conceptual and people skills that are needed in all areas of management and in all areas of organisational life. The unit acknowledges that organisations exist in an increasingly international environment where the emphasis will be on knowledge, the ability to learn, to change and to innovate. Organisations are viewed from individual, group, corporate and external environmental perspectives.
Antirequisites: BSD115  Equivalents: BSBX115, CTB115  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point and Caboolture  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

BSB119 GLOBAL BUSINESS
This unit examines the drivers of globalisation and the diversity of country markets at an introductory level. It develops the skills and understanding to identify and respond to the opportunities, challenges and risks of conducting business across politically, economically and culturally diverse environments. An authentic country feasibility study is undertaken to help identify where a firm can find opportunities both in terms of actual and potential markets and the location for value-adding activities. The unit aims for students to have developed a comprehension of the nature and role of globalisation and the drivers of international business, a. knowledge of the competitive forces and challenges confronting all business as a consequence of globalisation processes and an awareness of the additional knowledge and skills required of management to operate business internationally across a diversity of environments.
Antirequisites: BSB116, BSB112, BSD119  Equivalents: BSBX119, CTB119  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point and Caboolture  Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

BSB123 DATA ANALYSIS
The ability to collect, analyse, manipulate, understand and report data is an important skill in any work environment. This is particularly true in business where learning to deal with randomness, variation and uncertainty is a vital skill for anyone intending to apply their knowledge. This unit is designed to ensure that students gain the basic tools necessary to allow them to develop this skill. Students will also gain an introduction to many of the quantitative techniques which will be used throughout their further studies in their chosen discipline.

BSB124 WORKING IN BUSINESS
This unit will help you to kickstart your study and your career in business regardless of your specific discipline. Not only does "Working in Business" give you an understanding of where business has come from and where it is headed, but you will also gain insights into yourself and how you can develop as both a student and professional in the business world. It covers an overview of business, the important issues for working as a professional in an organisation, and their practical applications. It comprises twelve topics each focusing on a current economic issue. Microeconomic topics include demand and supply, elasticity, production and cost theory and market structure. Macroeconomic topics include measuring GDP, inflation and unemployment, money and banking, and fiscal and monetary policy.

BSB126 MARKETING
This introductory subject examines the role and importance of marketing to the contemporary organisation. Emphasis is placed on understanding the basic principles and practices of marketing such as the marketing concept, market segmentation, management information systems and consumer behaviour. The unit explores the various...
elements of the marketing mix, with special reference to product, price, distribution, and promotion, including advertising and public relations. By way of introduction only, key issues relating to services marketing, e-marketing and strategic marketing are also canvassed.

Antirequisites: BSB116, BSD126  
Equivalents: BSX126, CTB126  
Credit points: 12  
Contact hours: 4 per week  
Campus: Gardens Point and Caboolture  
Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

**EFB201 FINANCIAL MARKETS**

This unit introduces students to the institutional structure of global financial markets, and thereby complements the understanding of theoretical finance gained in either BSB122 or EFB210. Topics covered include the functions of financial markets, the banking and payments system, financial system deregulation, non-bank financial institutions, stock exchange operations, debt markets, foreign exchange markets and markets for financial derivatives.

Prerequisites: BSB113 or CTB113  
Equivalents: EFX201  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1 and 2011 SEM-2

**EFB210 FINANCE 1**

This unit covers the following topics: an introduction to the financial institutional framework; an introduction to debt and equity instruments; financial mathematics applied to the pricing of debt and equity securities; a firm’s investment decision including Net Present Value (NPV) and Internal Rate of Return (IRR); introduction to risk and uncertainty using the Capital Asset Pricing Model (CAPM) and Weighted Average Cost of Capital (WACC) concept and risk management.

Prerequisites: BSB123 or BSB122 or MAB126 or (BSB110 and BSB113)  
Equivalents: EFX210  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

**EFB222 QUANTITATIVE METHODS FOR ECONOMICS AND FINANCE**

This unit will provide students with the necessary background for advanced study in economics, econometrics and finance. It should also enable them to use basic mathematical and statistical techniques for economic and financial analysis and enable the confident and independent use of these skills. Students will be helped to understand the use of these techniques with reference to real world applications drawn from the fields of economics and finance.

Prerequisites: BSB122 or CTB122, or BSB123 or MAB101 or MAB233  
Antirequisites: EFB101  
Equivalents: EFX222  
Credit points: 12  
Campus: Gardens Point

**EFB223 ECONOMICS 2**

Consumer behaviour, the role of the government in market intervention, allocative efficiency and market structure are some of the fundamental issues in microeconomics addressed in this unit. Business cycles and the related issue of macroeconomic stabilisation policy are analysed and explained within the Australian context. The significance of the international economy is described through a discussion of foreign exchange markets, the Australian dollar and the terms of trade.

Prerequisites: BSB113 or CTB113 or UDB104  
Equivalents: EFB102, EFX223  
Credit points: 12  
Campus: Gardens Point  
Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

**EFB240 FINANCE FOR INTERNATIONAL BUSINESS**

In this unit students analyse the way international operations and performance of business can be put at risk by changing financial and regulatory conditions across borders and determine how best to manage the exposure to this risk. This unit examines the following: the evolution of the international financial system; the foreign exchange market; the types of foreign exchange rate exposures; managing exchange; translation and consolidation risks; assessing foreign direct investment targets; comparing the performance of foreign affiliates; operations exposure to regulatory risk of tax; investment and competition policy changes; country risk assessment and managing country risk exposure.

Prerequisites: (BSB119 or CTB119) or (BSB116 and BSB113 or CTB113) or (BSB122 or CTB122)  
Antirequisites: EFB312, MIB202  
Equivalents: EFX240, IBB202  
Credit points: 12  
Campus: Gardens Point  
Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

**EFB307 FINANCE 2**

This unit includes the following topics: the financing decision - capital structure, debt versus equity, lease versus debt, term structure versus default structure of interest rates; the dividend decision - dividends versus capital gains, franked versus unfranked income; firm valuation; free cash flow model; evaluation of takeovers; Risk and Return - diversification, the CAPM model, its practical application and its relationship to efficient market hypothesis; introduction to forwards, futures, options, warrants, convertibles and risk management using financial derivatives.

Prerequisites: EFB210  
Equivalents: EFX307  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1 and 2011 SEM-2
EFB312 INTERNATIONAL FINANCE
This unit examines the theory and practice of international finance, including the mechanics and uses of the spot, forward, swap, futures and options markets in foreign exchange; the relationship between domestic and international capital markets; interest rate and exchange rate determination; risk management of foreign exchange; international trade finance; evaluation of offshore investment.
Prerequisites: EFB210  Antirequisites: EFB212, IBB202, EFB240  Equivalents: EFX312  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1 and 2011 SEM-2

EFB329 CONTEMPORARY APPLICATIONS OF ECONOMICS THEORY
This capstone unit reinforces and extends the economic theory introduced to students in the major, and applies it to a number of topical issues that lend themselves to critical analysis using economic principles. Both macroeconomic and microeconomic theories are used with the emphasis placed on usefulness of the theory in development of a framework which assists with decision-making and informs critiques of public policy. Some of the perspectives taken in studying these topics will include: their impacts on efficiency and on specific economic agents and institutions; the role, if any, of government in their resolution; and the economic instruments available to analysts by which to frame their detailed consideration.
Prerequisite(s): 192 credit points of study, including EFB202 and EFB211  Credit points: 12  Contact hours: 3 per week  Campus: Gardens Point  Teaching period: 2008 SEM-2  Incompatible with: EFB323

EFB330 INTERMEDIATE MACROECONOMICS
This unit develops an analytical framework which can be used to understand and evaluate the macroeconomic performance of the Australian economy. It also provides extensive discussion of the monetary and fiscal policy approaches that are taken to maintain a sustainable economy with low inflation and low unemployment. Key issues addressed include unemployment, inflation, economic growth, saving and the balance of payments.
Prerequisites: EFB223 or EFB102  Antirequisites: EFB202, EFB330  Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1

EFB331 INTERMEDIATE MICROECONOMICS
This unit is designed to develop students’ understanding of microeconomics and its applications at the intermediate level. More specifically, the theoretical and empirical content of this unit provides the basis for understanding the decisions and actions of consumers, firms and governments in modern economies. Furthermore, the unit provides an appreciation of the range of issues to which economics may usefully be applied to improve managerial decision-making and the formulation of public policy to improve the welfare of the community.
Prerequisites: EFB223 or EFB102  Antirequisites: EFB211, EFX331  Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1

EFB332 APPLIED BEHAVIOURAL ECONOMICS
This unit is designed to expose students to current and practical applications of behavioural economics that can be used to improve the understanding of important topics in the area of sports, arts and entertainment. It uses an economic approach to explore topics such as superstardom, fakes, fads and herding behaviour, favouritism, awards and creativity, pressure, pay and performance, positional concerns or outcome uncertainty. The theories and methodological tools learned in this unit can also be applied to other economic areas and industries.
Prerequisites: EFB223 or EFB102  Antirequisites: EFX332  Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1

EFB333 INTRODUCTORY ECONOMETRICS
Economics and finance graduates require some knowledge of econometrics to assist them in the application and testing of behavioural models and to provide quantitative forecasts for informed decision making. This unit aims to provide an introduction to a range of econometric techniques appropriate for students studying economics and finance. The unit will provide an understanding of some core underlying theoretical issues essential for competent econometric modelling and then introduce students to a set of techniques tailored specifically to the needs of economics and finance students.
Prerequisites: EFB222 or EFB101  Antirequisites: EFB200  Equivalents: EFX333  Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1

EFB334 ENVIRONMENTAL ECONOMICS AND POLICY
The unit introduces students to some of the current environmental and natural resource issues confronting society and how planners and decision-makers could better understand and address these problems using economics. This unit demonstrates that economics has a major role to play in helping us to understand and solve some of the environmental problems facing societies. It will be demonstrated that economics can often be used to help protect the environment rather than harm it. The unit would benefit those who wish to work either in the public or the private sector.
Prerequisites: EFB223 or EFB102  Antirequisites: EFX334  Credit points: 12  Campus: Gardens Point  Teaching period: 2011 SEM-1
EFB335 INVESTMENTS
This unit advances the students’ understanding of how investment decisions are made, what securities to invest in, how they fit in a portfolio, what is the impact of transaction costs, the risks associated with investing and performance evaluation of the investment process. This unit aims to provide students with an intermediate to advanced level of investment decision making skills which are essential for finance students in their personal and professional lives.  
**Prerequisites:** EFB307  
**Antirequisites:** EFB318  
**Equivalents:** EFX335  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

EFB336 INTERNATIONAL ECONOMICS
International economics advances student understanding of global markets and positions through theories and analyses of trade, intervention, currencies, current transactions, capital positions and obligations in an interdependent world. Through considerations of international positions and competitiveness the unit develops a framework for understanding of the prospects and challenges facing firms, organisations, institutions and governments active in the international economy and of the wider issues of global progress and stagnation.  
**Prerequisites:** EFB330 or EFB202, and EFB331 or EFB211  
**Antirequisites:** EFB314  
**Equivalents:** EFX336  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

EFB337 GAME THEORY AND APPLICATIONS
This unit presents the basic concepts of game theory and its application to economic phenomena, focussing on how individuals and firms deal with uncertainty and situations involving strategic interactions. The theoretical concepts are illustrated with applications from both the private and public sectors. Contents include the economics of uncertainty and information, asymmetric information, auctions, bargaining, markets and competition.  
**Prerequisites:** EFB331 or EFB211  
**Equivalents:** EFX337  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

EFB338 CONTEMPORARY APPLICATION OF ECONOMIC THEORY
EFB338 is a unit designed to summarize your studies in economics. The unit comprises usually of three or more topics of current research in economics. The topics cover micro and macro economics, trends in current theoretical, empirical and economic policy research. The unit is designed to develop your ability to summarise, evaluate and criticise research findings as well as to introduce you to how research in economics evolves to allow you to keep up with the progress made in economics after your degree.  
**Prerequisites:** EFB222 or EFB101, EFB223 or EFB102, EFB330 or EFB202, and EFB331 or EFB211  
**Assumed knowledge:** This unit is the capstone unit for the Economics primary major and is designed to be completed in the final year of study.  
**Equivalents:** EFB329, EFX338  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

EFB340 FINANCE CAPSTONE
This unit is designed to encompass the theory and knowledge gained in the entire Finance Major. The topics included in this unit are project evaluation, investment analysis, corporate valuation and advanced financial decision making. This unit aims to provide students with the forum to practice their finance skills in an applied setting which acts as a bridge between university studies and real-world employment in the financial services industry.  
**Prerequisites:** EFB307 and EFB335. EFB335 can be enrolled in the same teaching period as EFB340.  
**Equivalents:** EFX340  
**Credit points:** 12  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

ENB100 ENGINEERING AND SUSTAINABILITY
This unit introduces you to the essential professional skills and practices of engineers in the context of sustainable development.  
**Antirequisites:** DEB100 and UDB100  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

ENB101 ENGINEERING MECHANICS 1
Introduction to statics, forces, moments and couples; resolution and resultant of forces acting on a particle or rigid body; equilibrium of particle or rigid body under forces and/or moments; analytical methods for plane truss analysis; shear force and bending moment in beams; the properties of sections. Dynamics (for electrical engineering students).  
**Equivalents:** CEB109  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-1

ENB102 ENGINEERING MECHANICS 2
Free body diagram, Stresses in beams and bars, Moments, shear and deflections in beams and frames, Torsion in shafts, Stress transformation and buckling. Module 2: (Mech): Thin walled structures, combined loading of structures and machine members; yield criteria for safe elastic loading.  
**Prerequisites:** ENB101 or ENB110  
**Equivalents:** CEB110  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2010 SEM-2
ENB103 ELECTRICAL ENGINEERING
Fundamental quantities in circuits and network laws, response to sinusoidal sources, and circuit measurements, real and reactive power calculation, power factor improvement, electric and magnetic fields, three-phase system and applications, transformer theory.
Prerequisites: MAB126 or MAB131 or MAB180
Equivalents: EEB213
Credit points: 12
Contact hours: 4 per week
Campus: Gardens Point
Teaching period: 2010 SEM-2

ENB104 ENGINEERING MATERIALS
Atomic Bonding; Crystal Structure; Elastic Deformation; Elasticity Case Study; Plastic Deformation; Defects; Alloying and Strengthening in Metals; Diffusion; Fracture, Fatigue and Creep; Phase and Phase Diagrams; Iron-Carbon Phase Diagram; Transformation of Phases; Introductory to Corrosion; Ceramics, Polymers and Composite Materials, Electronic Materials.
Equivalents: MMB131
Credit points: 12
Contact hours: 5 per week
Campus: Gardens Point
Teaching period: 2010 SEM-1

ENB105 ELECTRICAL AND COMPUTER ENGINEERING
Module 1: Introductory Computing fundamentals of problem solving using computers and programming and techniques for writing correct and efficient programs. MATLAB and its applications.
Module 2: Electrical machines and their characteristics, principles of transformers basic electronic circuits, filters, PLC and operational amplifier circuits and applications.
Prerequisites: ENB103
Credit points: 12
Contact hours: 4 per week
Campus: Gardens Point
Teaching period: 2010 SEM-1

ENB110 ENGINEERING STATICS AND MATERIALS
Credit points: 12
Contact hours: 4 per week
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2

ENB120 ELECTRICAL ENERGY AND MEASUREMENTS
This unit introduces you to basic electrical circuit concepts. It requires you to perform circuit analysis, circuit synthesis, and the measurement and testing of relevant quantities within circuits.
Credit points: 12
Contact hours: 3 per week
Campus: Gardens Point
Teaching period: 2011 SEM-2 and 2011 SUM

ENB130 MECHANICAL AND THERMAL ENERGY
Engineers work with numerous kinds of systems where consideration must be given to the motion within, and associated energy of, the system. This unit introduces the student to the concepts of mechanical and thermal energy in the context of real engineering systems. The inter-relationships of between forces, motion and energy is described as related to the flow of energy within these engineering systems. After an introduction to engineering units, concepts and data, Newton’s first and second laws are used in the description of system motion and the concepts of force and energy, conservation of momentum and conservation of energy are introduced and described. Thermodynamic processes, certain thermo-physical parameters and the first and second law of thermodynamics are introduced and used to describe simple engineering systems. This is then expanded to include the generation and transport of energy through these systems in terms of convection, conduction and radiation heat transfer.
Equivalents: PCB150
Credit points: 12
Contact hours: 4 per week
Campus: Gardens Point
Teaching period: 2011 SEM-1

ENB150 INTRODUCING ENGINEERING DESIGN
This unit introduces you to engineering design. A multi-disciplinary approach is taken with an emphasis on engineering systems, technical design and project management.
Assumed knowledge: ENB110 is assumed knowledge.
Credit points: 12
Contact hours: 4 per week
Campus: Gardens Point
Teaching period: 2011 SEM-2

ENB200 INTRODUCING ENGINEERING SYSTEMS
This unit will enable you as a graduating Built Environment and Engineering professional to take active and positive steps to transform professional practice in ways that promote the sustainability of our planet, our economy and our society. As future professionals in the fields of Design, Urban Development and Engineering Systems, you will need to understand and apply the concepts of sustainability in your professional practice if we are to achieve sustainable development in the 21st Century.
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-2

ENB201 FLUID MECHANICS
Fluid properties, behaviour of stationary and moving fluids, hydrostatics and buoyancy; theory and application of the energy and momentum equations; pipe and open channel flow; dimensional analysis and pump performance characteristics.
Assumed knowledge: MAB126 or MAB180 or MAB131, and ENB101 or ENB110 are assumed knowledge.
Equivalents: CEB217
Credit points: 12
Contact hours: 4
Campus: Gardens Point
Teaching period: 2010 SEM-2

ENB205 ELECTRICAL AND COMPUTER ENGINEERING
This unit introduces single and three phase power, electrical machines, principles of transformers, electronic circuits and
sensors, filters, operational amplifier applications. It also covers computing fundamentals, programming in MATLAB and Excel using applications in electrical and computer engineering.

**Prerequisites:** ENB120 or ENB103  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

**ENB211 DYNAMICS**

Fundamental equations of particle kinetics; energy, power, impulse and momentum; kinematics of rigid bodies in plane motion, relative motion and motion relative to rotating axes; kinetics of rigid bodies, Basic machine components, (Gears, clutches, brakes etc.), Single degree of freedom system.

**Prerequisites:** (MAB126 or MAB180 or MAB131) and (ENB130 or PCB136 or PCB150)  
**Assumed knowledge:** ENB110 or ENB101 are assumed knowledge.  
**Equivalents:** MMB112  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

**ENB212 STRENGTH OF MATERIALS**

This unit introduces the analysis of stress and strain in simple engineering components and systems such as uniaxial and bending stresses, deflection of beams, torsion, thin walled structures, combined loading, yield criteria, and introduces the finite element method (FEA).

**Prerequisites:** ENB110 or ENB101 and ENB104  
**Credit points:** 12  
**Contact hours:** 5 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

**ENB215 FUNDAMENTALS OF MECHANICAL DESIGN**

Basic procedures of design, design for sustainability, universal design, Concept development, creative problem solving, Basic component design, computational scheme in design, manufacture & materials.  

**Assumed knowledge:** MAB126 or MAB180 or MAB131, and ENB101 or ENB110, and ENB104 or ENB110 are assumed knowledge.  
**Equivalents:** MMB281  
**Credit points:** 12  
**Contact hours:** 5 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

**ENB221 FLUID MECHANICS**

This unit introduces the basic concepts of fluid mechanics and applies them to some simple engineering problems.  

**Assumed knowledge:** MAB126 or MAB180 or MAB131, and ENB101 or ENB110 are assumed knowledge.  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

**ENB222 THERMODYNAMICS 1**

Thermodynamic behaviour of substances; theory and application of the 1st and 2nd laws of thermodynamics; thermodynamic cycles, including gas cycles, vapour power cycles and refrigeration cycles; gas-vapour mixtures and the principles of air-conditioning; fuels and combustion.  

**Assumed knowledge:** MAB127 or MAB182 or MAB132, and ENB130 or PCB136 are assumed knowledge.  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

**ENB231 MATERIALS AND MANUFACTURING 1**

Materials and their engineering applications, Manufacturing systems and technology, material properties and manufacturing, material selection, failure, graphical communication.

**Assumed knowledge:** ENB104 or ENB110 is assumed knowledge.  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

**ENB240 INTRODUCTION TO ELECTRONICS**

Module Electronics A provides a basic understanding of the characteristics and operation of discrete semiconductor components. Electronic circuit design is introduced with emphasis on the small signal low and high frequency response of those circuits. Module Digital Electronics gives students a good grounding in the basic principles of digital design, with particular regard to the fundamentals of digital number systems, Boolean algebra, combinational and sequential logic design.

**Prerequisites:** ENB103 or ENB120  
**Equivalents:** EEB312  
**Credit points:** 12  
**Contact hours:** 5 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

**ENB242 INTRODUCTION TO TELECOMMUNICATIONS**

Telecommunications systems and the principles underlying their operations are introduced starting from mathematical preliminaries such as the Fourier series and the Fourier transform. Analogue modulation techniques (AM and FM), systems and circuits for generation and demodulation, analogue to digital conversion, pulse modulation and baseband digital data communication techniques are studied using time and frequency domain analyses.

**Prerequisites:** (ENB120 or ENB103) and (MAB126 or MAB110 or MAB111)  
**Equivalents:** EEB340  
**Credit points:** 12  
**Contact hours:** 3 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1 and 2011 SEM-2

**ENB243 LINEAR CIRCUITS AND SYSTEMS**

Network analysis; Laplace transform of signals and transfer functions of systems, time and frequency responses of linear circuits, feedback configurations and transfer functions, analyse and designing analogue systems using transistors and operational amplifiers, designing and synthesising analogue filters, signal conditioning.

**Prerequisites:** ENB120 and MAB126  
**Assumed knowledge:** ENB240 is assumed knowledge.  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:**
Gardens Point  Teaching period: 2011 SEM-2

**ENB244 MICROPROCESSORS AND DIGITAL SYSTEMS**
This unit covers the basis for electronic circuit design in general but also in connection with microprocessor systems, theory and design of advanced embedded digital systems and practical implementation. The practical application of these circuits including interfacing and environment factors will be considered.

**Prerequisites:** ENB240  **Assumed knowledge:** ENB246 or INB104 is assumed knowledge.  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-2

**ENB245 INTRODUCTION TO DESIGN AND PROFESSIONAL PRACTICE**
Introduction to general principles of electronic circuit and electrical equipment design and realisation; design and implementation of basic electronic circuits; experience in undertaking engineering projects, in report writing, and working in teams. The unit gives students the opportunity to apply their theoretical knowledge to real-life engineering problems.

**Assumed knowledge:** ENB240 and ENB246 or INB104 is assumed knowledge.  **Equivalents:** EEB584  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-2

**ENB246 ENGINEERING PROBLEM SOLVING**
This unit introduces students to the use of computers as tools for solving engineering problems. MATLAB is introduced as a numerical computing environment with the capacity to support complex mathematics and to be programmed to solve specific engineering problems. Stand alone application development using C++ is introduced as a means of exposing students to the high and low level computer programming concepts that are necessary to the implementation of engineering solutions in hardware specific programming environments.

**Assumed knowledge:** MAB126 or MAB180 or MAB131, and ENB103 or ENB120 is assumed knowledge.  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**ENB250 ELECTRICAL CIRCUITS**
This unit introduces you to electrical circuit analysis. It shows how to determine the transient and steady state solution in single and three phase circuits as well as the interaction of fluxes and currents in transformers and electrical machines.

**Prerequisites:** ENB120  **Antirequisites:** ENB103  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**ENB270 ENGINEERING MECHANICS OF MATERIALS**
This unit introduces calculating the stress produced in various members of a structural system due to the forces applied to them, and how to determine the design specifications (size and shape) of the members to withstand the forces to prevent the structural system failing.

**Prerequisites:** ENB101 or ENB110  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**ENB271 DESIGN OF STRUCTURAL TIMBER AND EARTHWORKS**
In this unit, students develop and define a problem statement and are encouraged to develop their own creative solutions through the semester. This introduces students to aspects of project work and prepares them for their professional lives. Architectural and project issues include aesthetics, fitness for purpose, and constructability. Geotechnical issues include: site investigation, earthworks and compaction, and site investigation. Structural issues include: design, loads, load paths, load factors, strength factors, time dependent loads, structural capacity and stability, rules of thumb, structural timber, material selection, and basic surveying principles.

**Prerequisites:** ENB102 or ENB270 (can be enrolled in the same teaching period)  **Assumed knowledge:** ENB101 or ENB110 are assumed knowledge.  **Equivalents:** CEB207  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1

**ENB272 GEOTECHNICAL ENGINEERING 1**
Soil mechanics is a part of geotechnical engineering, soil types, their description, classification and engineering properties. The unit includes the following: granular and cohesive soil classification systems; volume and mass components; density and air voids; determination of soil geostatic vertical pressures; pore water pressures and effective stress; permeability theory and fluid seepage in soil, with erosion and piping analysis; soil shear strength assessment and application to retaining wall lateral pressures; retaining wall design; slope stability analysis and stabilisation. Computer simulation and analysis programs are used where appropriate.

**Assumed knowledge:** ENB102 or ENB270 are assumed knowledge  **Equivalents:** CEB209, CEB232  **Credit points:** 12  **Contact hours:** 6 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**ENB273 CIVIL MATERIALS**
The unit provides students with a sound and practical approach to material properties and selection so that they may adapt to scientific and technological changes in the variety of products entering the market. They understand where the engineer fits in a quality assurance program and become aware of the numerous components of quality...
assurance and the costs generated by quality control and assurance. Students become aware of the effect of the working environment on different engineering materials. Among other things, they study the behaviour of concrete from the time it is manufactured to the end of its life, and develop knowledge of the parameters involved in manufacturing good concrete, and the consequences of delivering poor concrete.

**Prerequisites:** ENB270 or ENB102. ENB270 can be studied concurrently. **Credit points:** 12  
**Contact hours:** 5 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

---

**ENB274 DESIGN OF ENVIRONMENTALLY SUSTAINABLE SYSTEMS**

This unit extends and applies the knowledge developed in BEB200 Introducing Sustainability to important issues such as site investigation, development of site planning criteria, site planning, environmental management and quality, pollution prevention and control, and resources and waste management. BEB200 and ENB274 form the foundations of the civil and environmental degree. This unit builds upon generic competencies acquired in BEB100 Introducing Professional Learning and ENB271 Design of Structural Timber and Earthworks. It also provides transport planning fundamentals, which will be built upon in ENB372 Design and Planning of Highways and ENB379 Transport Engineering and Planning Applications.

**Prerequisites:** BEB200 or ENB200 or ENB100 or UDB100 or SCB110  
**Assumed knowledge:** ENB271 is assumed knowledge.  
**Equivalents:** CEB214  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

---

**ENB275 PROJECT ENGINEERING 1**

The unit commences with the development of the construction techniques common to site investigation, earthworks, pile driving, deep foundations, reinforced and prestressed concrete and steel erection. This operational understanding is extended into a study of the practices used to estimate cost and to administer contracts, including planning and the legal implications of operating in a commercial environment. The unit concludes with the issues surrounding the uncertainty of weather and of operating in remote environments.

**Assumed knowledge:** ENB271 and ENB273 are assumed knowledge.  
**Equivalents:** CEB216  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

---

**ENB276 STRUCTURAL ENGINEERING 1**

This unit includes the following: development of the method of moment distribution and its application in analysis of continuous beams and frames; theory of influence lines and its application to determine the effects of moving loads on beams and trusses; 'pattern loading' on frames and continuous beams; behaviour of reinforced concrete members; applications in the design of beams and columns. 

**Prerequisites:** ENB102 or ENB270  
**Assumed knowledge:** ENB273 and ENB271 is assumed knowledge.  
**Equivalents:** CEB215  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

---

**ENB280 HYDRAULIC ENGINEERING**

This unit primarily provide a basic understanding of hydraulic (fluid) principles and an understanding of the use of these principles in engineering applications. The main topics to be covered are: Units and properties of fluids, Forces in static fluids, Buoyancy, Kinematics and continuity, The energy equation and the momentum equation; Similitude and dimensional analysis, Lift and drag, Frictional flow in pipes, Application of pipe resistance formulae, Fitting.  

**Assumed knowledge:** MAB126 or MAB180 or MAB131, and ENB101 or ENB110 are assumed knowledge.  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2

---

**ENB301 INSTRUMENTATION AND CONTROL**

The unit introduces the student to classical control systems, analysis and synthesis, and implementation in an industrial control context. It introduces the principles of electrical measurements and instrumentation, sensors, PLC, DSC and industrial networks, and foundation of feedback control theory for engineers.

**Prerequisites:** MAB126 or MAB182 or MAB132  
**Assumed knowledge:** ENB105 or ENB205 or ENB100 or UDB100 or SCB110  
**Credit points:** 12  
**Contact hours:** 5 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

---

**ENB311 STRESS ANALYSIS**

Further analysis of stress and strain; torsion of prismatic sections and thin-walled sections; axisymmetric problems; energy methods; thin plates. Introduction to FEA including the use of a FEA software.

**Prerequisites:** ENB102 or ENB212  
**Equivalents:** MMB212  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-1

---

**ENB312 DYNAMICS OF MACHINERY**

Kinematic and dynamic analysis of planar linkages and mechanisms; multi-degree of freedom systems with steady and transient vibrations. Introduction to noise.

**Prerequisites:** ENB211  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  
**Teaching period:** 2011 SEM-2
ENB313 AUTOMATIC CONTROL
This unit introduces you to the theory and practice of control systems engineering. The unit introduces system modelling principles for mechanical, electrical and electromechanical systems, using the Laplace transform to build transfer-function models of system components. The unit emphasizes the practical application of control theory to the analysis and design of feedback systems to ensure stability, reduce steady state errors and improve transient response. 
Prerequisites: ENB211  Antirequisites: ENB301  Assumed knowledge: ENB312 is assumed knowledge.  
Credit points: 12  Contact hours: 5 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2

ENB314 INDUSTRIAL NOISE AND VIBRATION
The unit is about the study of noise and vibration measurement and control which is experienced in industry. It includes a basic understanding of the theories and capable of modelling and predicting noise and vibration in an industrial environment. This unit will provide you with sufficient experience in instrumentation and measurement of noise and vibration to apply in industry.  
Prerequisites: ENB312  Assumed knowledge: MAB127 or MAB132 or MAB182 are assumed knowledge.  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point

ENB316 DESIGN OF MACHINE ELEMENTS
Analysis of operating conditions and their impact on design solutions, design of fasteners, shafts and other mechanical components, design of springs, Design for manufacturability, fundamentals of lubrication, computer aided design (solid modelling), frames and housings. 
Prerequisites: ENB215  Equivalents: MMB381  Credit points: 12  Contact hours: 6 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1

ENB317 DESIGN AND MAINTENANCE OF MACHINERY
Design of equipment for special applications such as pressure vessel, food processing, Design of machine system, Optimisation of design, machinery failure, prediction, analysis and prevention. Design for reliability application of FMEA, Condition monitoring, ethics, Fundamentals of friction , wear related to design, Failure analysis & OH&S. 
Prerequisites: ENB316  Equivalents: MMB382  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2

ENB321 FLUIDS DYNAMICS
Hydraulic and pneumatic systems; design, analysis and performance of pumps, turbines and fluid couplings; unsteady pipe flow; flow around solid bodies, including potential flow and boundary layers; compressible flow and shock waves.

Prerequisites: ENB201 or ENB221  Equivalents: MMB352  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2

ENB331 MATERIALS AND MANUFACTURING 2
ENB331 is a third year unit which extends the formative body of knowledge gained in ENB231 and introduces the shear deformation mechanisms of engineering material and how these properties can be used to understand the mechanics of metal cutting. Descriptive and analytical information about different material removal processes is provided to the student through lectures, tutorials and case studies. The unit also provides the student with an excellent opportunity to apply the knowledge in the design and manufacture of a component. 
Prerequisites: ENB231  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2

ENB333 OPERATIONS MANAGEMENT
This unit develops students’ ability in applying quantitative techniques in solving different types of industrial operations problems. Topics include: product mix, assignment and transportation models; location and layout decisions, job design analysis; project planning; quality control and the use of simulation in operations management.  
Equivalents: MMB476  Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2011 SEM-1

ENB334 DESIGN FOR MANUFACTURING
Topics covered in this unit include: basic concepts in the analysis of a mechanical engineering design, relating the design requirements to a range of manufacturing processes; an understanding of the complete manufacturing specifications for mechanical designs based on functional requirements, manufacturing processes, interchangeability and standardisation; introduction to the basic principles in the design of jigs and fixtures in manufacturing.  
Assumed knowledge: ENB231 is assumed knowledge.  
Equivalents: MMB374  Credit points: 12  Contact hours: 5 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2

ENB336 INDUSTRIAL ENGINEERING
Aim of this unit is to develop skills and understanding the concepts and techniques of lean manufacturing (methods engineering). These includes identifying wastes using Value Stream Mapping (VSM), 5S, SMED, JIT, plant layout, cell design with proper material handling and balance and job design with due consideration to ergonomics. 
Assumed knowledge: MAB233 is assumed knowledge.  
Credit points: 12  Contact hours: 4 per week  Campus: Gardens Point  Teaching period: 2011 SEM-2
ENB339 INTRODUCTION TO ROBOTICS
This unit introduces you to the components, systems and mathematical foundations of robotics. The unit introduces the technologies and methods used in the design and programming of modern intelligent robots, and encourages critical thinking about the use of robotic technologies in various applications. The unit emphasizes the practical application of robotic theory to the design and synthesis of robotic systems that respond accurately and repeatably.

Assumed knowledge: ENB201 or ENB221 and ENB222 are assumed knowledge. Equivalents: MMB451
Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-2

ENB340 POWER SYSTEMS AND MACHINES
This is a core unit that develops the basic topics essential for an electrical engineer working in areas that include the resources sector, the process industries, electrical power utilisation, electric power generators as well as the electricity supply industry. Topics covered in machines include magnetic circuits, single phase and three phase transformers; electric machines including electromechanical energy conversion, reluctance motors, induction motors, synchronous machines, D.C. machines, stepper motors, P.C. motors; motor control; heating, cooling and rating. Power system topics include power generation and energy sources, electricity market operation, fault calculations, basic protection and power system operation, in particular real and reactive power control.

Prerequisites: ENB103 or ENB250 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-1

ENB342 SIGNALS, SYSTEMS AND TRANSFORMS
The unit covers the area of Signals in Linear Systems for which a detailed study of Fourier theory applied to both analogue and discrete-time signals and to the analysis of linear systems will be given. Systems will be represented in time as well as in frequency and various characteristics and relationships in the two domains will be discussed. The students will be introduced to the fundamentals of analogue and discrete-time signal processing; analogue and discrete Fourier transform; linear and discrete convolution. Finally, the students will learn the fundamentals of digital filter design and implementation, with examples and applications arising from various disciplines.

Prerequisites: ENB242 Assumed knowledge: ENB243 and ENB246 are assumed knowledge. Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-1

ENB344 INDUSTRIAL ELECTRONICS
The unit gives a basic understanding of linear and switching applications in industrial electronics. Practical knowledge associated with interfacing and design is developed. Students will also study the theory and design of advanced digital embedded systems as well as the practicalities associated with implementation. It also covers power rectification, controlled rectification, inverters, AC and DC drives, uninterruptible power supplies and power switching components.

Prerequisites: ENB240 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-2

ENB345 ADVANCED DESIGN AND PROFESSIONAL PRACTICE
Detailed design and realisation of typical electronic subsystems used in all areas of electrical and electronic systems engineering. The unit enhances the student’s ability in solving complex engineering problems. The design build on the theoretical knowledge gained in other units. The student is required to write a detailed technical report and also give an oral presentation on her/his design.

Prerequisites: ENB245 Equivalents: EEB684 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-2

ENB346 DIGITAL COMMUNICATIONS
Revolutionary developments in the field of Digital Communication Technology have enabled improvement in the characteristics of communication systems in order to meet the performance requirements for transmission of information for private, business and industrial applications. This unit which covers Elements of a Digital Communication System aims at providing the students with an in-depth understanding of the theory and applications of digital communication systems and technology.

Prerequisites: ENB342 Assumed knowledge: MAB233 is assumed knowledge. Equivalents: EEB560 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-2

ENB350 REAL-TIME COMPUTER-BASED SYSTEMS
This unit covers the area of embedded systems and real-time kernels. C programming is reviewed in the context of real-time applications where it is often mixed with assembly language. Data representations, input-output programming, concurrency, scheduling, memory management and system initialisation are discussed. Programming laboratory exercises introduce development tools and reinforce fundamental concepts such as polling, interrupt driven input-output, serial port communication, pre-emptive and non pre-emptive scheduling, resource sharing, priority inversion and deadlock. Students develop a simple real-time process control application using programmable logic and micro-controllers.

Prerequisites: ENB244 Equivalents: EEB566 Credit points: 12 Contact hours: 4 per week Campus:
ENB352 COMMUNICATION ENVIRONMENTS FOR EMBEDDED SYSTEMS
This unit addresses the following: computer networks; network programming; open network foundations; embedded systems; client/server; bus architectures; network controllers; distributed systems in automation and process control; embedded Java; distributed objects; distributed databases; distributed operating systems. **Prerequisites:** ENB350  **Equivalents:** EEB666  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

ENB371 GEOTECHNICAL ENGINEERING 2
This unit includes: further study on the behaviour of soil and rocks; determination of subsurface pressures from surface loadings; soil settlement including time related clay consolidation settlement and immediate settlements on sand and clay as related to shallow foundations; assessment of bearing capacity and allowable bearing pressures under shallow foundations; pile foundation systems and analysis for capacity and settlement; rock mass behaviour, classification and joint shear strength applied to slope stability assessment and stabilisation measures. **Prerequisites:** ENB272  **Equivalents:** CEB322  **Credit points:** 12  **Contact hours:** 5 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-2

ENB372 DESIGN AND PLANNING OF HIGHWAYS
Civil engineers as professionals are responsible for the delivery of major transport infrastructure items through the stages of inception, planning, design, development, maintenance and management. The purpose of such projects is to improve the quality of life of the community by offering safe and efficient access to activity locations and mobility between locations. In delivering such infrastructure it is imperative that social, economic, and environmental impacts and benefits are considered and addressed. This unit offers students an opportunity to explore the role of the civil engineer in the preparation of a feasibility design study for a road as a major transport infrastructure item. **Assumed knowledge:** ENB271 and ENB274 are assumed knowledge.  **Equivalents:** CEB317  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

ENB375 STRUCTURAL ENGINEERING 2
This unit considers the following: limit states design of steel structures; buckling and ultimate strength behaviour of steel structures; tension members, compression members; local and global buckling (flexural and flexural torsional buckling modes) concepts as applied to compression members and beams; effective lengths of compression members and beams; design of beams; effect of lateral restraints on buckling; web stresses including web crippling and buckling; beam-columns; bolted and welded connections; unsymmetric bending of beams including principal second moments of area; shear stresses in beams of thin-walled open cross-sections and their shear centres. Most cold-formed steel sections are unsymmetric and hence the latter topics are useful in steel design. **Prerequisites:** ENB102 or ENB270 or ENB276  **Assumed knowledge:** ENB273 is assumed knowledge.  **Equivalents:** CEB318  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

ENB376 TRANSPORT ENGINEERING
The transport system is an essential part of our physical infrastructure. It is imperative that civil engineers are able to undertake typical road and traffic engineering investigations, analyses and designs. These require an understanding of the intent of individual road system elements, how they operate, and how they are delivered and managed: this understanding is developed in this unit. Further, it is important that civil engineers are able to undertake multimodal transport surveys to gain an understanding of the operation of a particular transport system. **Assumed knowledge:** ENB274 and ENB372 are assumed knowledge.  **Equivalents:** CEB323  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-2

ENB377 WATER AND WASTE WATER TREATMENT ENGINEERING
The provision of a safe, wholesome and adequate supply of water and the proper treatment, disposal, and reuse of wastewater are essential for protecting human health and well-being. Water and wastewater treatment are required for the control of water-borne diseases and the provision of proper sanitation for urban, rural, and recreational areas. Water and wastewater treatment engineering is a major field of civil and environmental engineering and is manifested by sound principles and practice in terms of solving sanitation problems. **Prerequisites:** ENB201 or ENB280  **Assumed knowledge:** ENB274 is assumed knowledge.  **Equivalents:** CEB321  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-2

ENB378 WATER ENGINEERING
The main topics to be covered in this unit follow: the hydrologic cycle and its application to the estimation of runoff from small catchments; probability and risk and the selection of design floods; hydrologic data; estimation of peak runoff using the Rational Formula estimation of runoff hydrographs using rainfall-runoff routing models; the
hydraulic characteristics of open channels; uniform flow, gradually varied flow and rapidly varied flow; the hydraulic characteristics of culverts and retention basins; the operation of urban drainage systems.

**Prerequisites:** ENB201 or ENB280  
**Equivalents:**  
CEB319  Credit points: 12  Contact hours: 4 per week  
Campus: Gardens Point  Teaching period: 2011 SEM-1

**ENB421 THERMODYNAMICS 2**
Applications of heat transfer theory in steam power plant, refrigeration and gas turbines; steady state and transient conduction; convection with internal or external flow; free convection in stationary fluids; boiling and condensation; thermal resistance networks; heat exchangers; radiation heat transfer.

**Prerequisites:** ENB222 and ENB321  
**Equivalents:**  
MMB351  Credit points: 12  Contact hours: 4 per week  
Campus: Gardens Point  Teaching period: 2011 SEM-1

**ENB422 ENERGY MANAGEMENT**
Topics covered in this unit include: Global energy and climate issues, the systematic process by which energy use is monitored and analysed; individual treatment of electricity, fuels and their properties, compressed air, buildings, cycle requirements, energy recovery equipment; financial analysis of proposals. Environmental aspects will be considered for each topic.

**Assumed knowledge:** ENB201 or ENB221 and ENB222 are assumed knowledge.  
**Equivalents:**  
MAB451  Credit points: 12  Contact hours: 3 per week  
Campus: Gardens Point  Teaching period: 2011 SEM-2

**ENB423 HEATING, VENTILATION AND AIR-CONDITIONING**
Heating, Ventilation and Air Conditioning (HVAC) is closely related to human habitation, comfort and productivity. It also consumes considerable amount of energy. With increasing global warming, it is becoming one of the most important engineering systems in modern buildings.

This unit will introduce you basic principles of HVAC and refrigeration systems. It will discuss the design factors and practices related to the design and operation of HVAC systems. It will also provide you with other relevant knowledge commonly used in the building services industry. This course should therefore provide you a good basis to undertake further study, research and professional work in this field.

**Prerequisites:** ENB201 or ENB221 or ENB222  
**Credit points:** 12  **Contact hours:** 3 per week  
**Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**ENB432 ENGINEERING ASSET MANAGEMENT AND MAINTENANCE**
This unit includes the following: engineering asset management policy statement; overhaul and replacement of engineering assets; organisation for maintenance; maintenance planning and control; failure mode and effect analysis; reliability, maintainability and availability analysis; risk assessment; spare parts inventory management.

**Assumed knowledge:** MAB233 is assumed knowledge.  
**Equivalents:**  
MMB470  **Credit points:** 12  **Contact hours:** 4 per week  
**Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**ENB433 PLANT AND PROCESS DESIGN**
The unit is of great assistance to graduates who will work in one of the many industry where Mechanical Engineers are concerned with Plant and Process Design. These industries use heat exchangers, piping systems and cooling towers intensively. This would include power stations, mineral processing, sugar/processing and refinery/chemical industries. The unit is taught by university and industry specialists who have considerable experience in their chosen field.

**Credit points:** 12  **Contact hours:** 4 per week  
**Campus:** Gardens Point  **Teaching period:** 2011 SEM-2

**ENB434 TRIBOLOGY**
Tribology is the study of friction, wear and lubrication. In this unit, the knowledge you acquire is applied to solve problems prevalent in engineering. Topics covered range from the theory of friction, lubricant properties and chemistry, to the control of friction and wear by proper selection of both materials and lubricants.

**Prerequisites:** ENB201 or ENB221  
**Credit points:** 12  
**Contact hours:** 4 per week  
**Campus:** Gardens Point  **Teaching period:** 2011 SEM-2

**ENB435 COMPUTER INTEGRATED MANUFACTURING**
Topics covered in this unit include: introduction of the concepts of strategic planning for computer integrated manufacturing; concepts of advanced manufacturing technologies and the various components of computer integrated manufacturing system; the importance of concurrent engineering in the context of CIM; introduction to the principles of modelling and simulation techniques as a design and evaluation tool for manufacturing systems.

**Assumed knowledge:** ENB231 and MAB233 are assumed knowledge.  
**Equivalents:**  
MMB471  **Credit points:** 12  **Contact hours:** 4 per week  
**Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**ENB436 MECHATRONICS SYSTEM DESIGN**
This unit provides students with an understanding of design and interpretation of hydraulic and pneumatic circuits (including graphical symbols, fluid logic and components of fluid systems) and a basic understanding of PLC programming for control of manufacturing systems with the
emphasis on hands on practice of developing a control system for a given process. Topics include the following: mechatronics systems design; power supply; introduction to fluid power and graphical symbols; hydraulic and pneumatic systems; simple circuits; fluid logic; logic symbols and circuits; hydraulic components, fluids, system design, circuits; pressure compensated flow control. 

**Prerequisites:** ENB334
**Equivalents:** MMB478
**Credit points:** 12
**Contact hours:** 4 per week
**Campus:** Gardens Point
**Teaching period:** 2011 SEM-1

**ENB440 RF TECHNIQUES AND MODERN APPLICATIONS**

This unit addresses the following: lumped and distributed microwave and RF circuits, including [y], [t] and [s] parameters; impedance matching techniques; passive and active microwave devices; RF circuit design techniques; microwave and RF measurement techniques; linear antennas and microwave antennas; analysis and synthesis of antenna arrays; specialised antennas and antenna measurements; EMC definition, standards and regulations; test plan; measurements; interference coupling; susceptibility; EMC design techniques, component selection, circuit layouts, grounding, shielding, filters, suppressors, isolation and safety; EMC management; propagation of electromagnetic fields in electrical materials; application of numerical methods.

**Prerequisites:** ENB343
**Antirequisites:** ENB445
**Assumed knowledge:** ENB242 and ENB244 are assumed knowledge.
**Credit points:** 12
**Contact hours:** 5 per week
**Campus:** Gardens Point
**Teaching period:** 2011 SEM-1

**ENB441 APPLIED IMAGE PROCESSING**

The aim of this unit is to introduce you to the basic topics of image processing to the students. The unit covers topics such as image acquisition, image representation, image enhancement, image segmentation, and image filtering. These topics will be introduced using a project based approach with applications to engineering practical problems.

**Prerequisites:** ENB342
**Credit points:** 12
**Contact hours:** 4 per week
**Campus:** Gardens Point
**Teaching period:** 2011 SEM-1

**ENB445 RF COMMUNICATION TECHNOLOGIES**

The unit covers various communication and signal processing technologies that are used in point to point and point to multi-point; wired and wireless communications including microwave terrestrial and satellite communication; last miles solutions including ADSL, VDSL and wireless local loops; ad hoc radio transmission such as the Bluetooth and Home RF, Wireless LANs including wireless infrared transmission and IEEE8012.11 standard.

**Prerequisites:** ENB343
**Assumed knowledge:** ENB242 and ENB244 are assumed knowledge.

**Equivalent:** EEB766
**Credit points:** 12
**Contact hours:** 5 per week
**Campus:** Gardens Point

**ENB446 WIRELESS COMMUNICATIONS**

This unit addresses the following: cellular mobile radio system concepts; mobile radio propagation; spread spectrum techniques and CDMA; speech coding modulation and channel coding techniques for GSM and CDMA; fading mitigation through diversity; inter-symbol interference mitigation; the GSM and CDMA standards; the WAP and the GPRS; introductions to UMTS/IMT2000; introduction to personal communications; introduction to blue tooth technology; other wireless systems including wireless LAN, wireless local loop, microwave local multipoint distribution systems (LMDS) and LEO satellite communication.

**Prerequisites:** ENB346
**Equivalents:** EEB960
**Credit points:** 12
**Contact hours:** 4 per week
**Campus:** Gardens Point
**Teaching period:** 2011 SEM-2

**ENB448 SIGNAL PROCESSING AND FILTERING**

This unit gives a comprehensive introduction to the representation and processing of signals distorted or corrupted by noise, and the systems needed to process them. Techniques for estimating signal parameters for the detection of signals in the presence of noise will be discussed. The methods presented will be tested on raw data drawn from different engineering applications, such as wireless communications, biomedical EEG signals and brain models, speech and music synthesis, and radars.

**Prerequisites:** ENB342
**Assumed knowledge:** MAB233 is assumed knowledge.
**Credit points:** 12
**Contact hours:** 4 per week
**Campus:** Gardens Point
**Teaching period:** 2011 SEM-2

**ENB452 ADVANCED POWER SYSTEMS ANALYSIS**

The aim of this unit is to introduce the fundamentals and applications of image processing to the students. The unit cover topics such as signal processing, wireless local loop, microwave local multipoint distribution systems; simple circuits; fluid logic; logic symbols and circuits; pressure compensated flow control.

**Prerequisites:** ENB340
**Credit points:** 12
**Contact hours:** 5 per week
**Campus:** Gardens Point
**Teaching period:** 2011 SEM-2

**ENB453 POWER EQUIPMENT AND UTILISATION**

The unit emphasises the use of relevant standards to the specification and design of electrical equipment for the use of electrical energy supply for buildings and lighting. Design approaches emphasise current engineering practise.

**Prerequisites:** ENB340
**Credit points:** 12
**Contact hours:** 4 per week
**Campus:** Gardens Point
**Teaching period:** 2011 SEM-2
ENB454 POWER SYSTEM MANAGEMENT
The aim of this subject is to develop skills in the operational management and the overall system management of Power systems. There are many decisions to be made in the context of imperfect information. This subject provides tools to provide a degree of structure to the decision process, whether at purchase time or in daily operation. These tools cover the areas of risk analysis, reliability and asset management and extend to the operational areas of utilization of equipment and quality of supply. The outcome is to achieve a balance between maintenance and capital purchases between investment and reliability.
Prerequisites: ENB340 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 SEM-1

ENB455 POWER ELECTRONICS
The unit introduces the student to advanced industrial electronics and power converters with different applications. Students learn how to model power converter, design a controller and simulate power electronic systems using Matlab/Simulink software for different applications. They also learn practical issues such as EMI, efficiency and losses to design a controller and power circuits.
Prerequisites: ENB344 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-1

ENB456 ENERGY
Renewable energy sources including solar and wind energies are becoming more important than ever due to increasing energy demand, dwindling oil and gas supplies, increasing pollution levels in the atmosphere and the associated global warming effects. Renewables may also help improve competitiveness and have a positive impact on regional development and employment.

An overview of the different energy sources will be covered followed by an understanding of the characteristics of solar energy, radiation calculation, measurements and applications in remote, hybrid and grid interactive configurations. Students will be equipped with fundamentals of alternative energy sources including solar thermal, photovoltaics and wind conversion technologies.
Assumed knowledge: MAB126 or MAB180 or MAB131 are assumed knowledge. Equivalents: EEB911 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 SEM-2

ENB457 CONTROLS, SYSTEMS AND APPLICATIONS
Control systems are playing an increasingly important role in process control, energy management and utility management. This unit is concerned with the application of advanced control systems with an emphasis on physical architectures and implementations. Topics covered include control system actuators, sensors and controllers, control system architectures, human machine interfacing, adaptive control strategies and intelligent control.
Prerequisites: ENB301 Assumed knowledge: This unit is limited to 30 enrolments Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-2

ENB458 MODERN CONTROL SYSTEMS
This unit introduces the student to the following concepts: Discrete time control systems and their design, state space modelling and control system design using state space techniques, linear optimal control, non-linear systems, and adaptive control with applications of neuro-computing and fuzzy logic.
Prerequisites: ENB301 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-2

ENB467 DESIGN OF CONCRETE STRUCTURES AND FOUNDATIONS
Concrete design and construction; roles of building professionals; current structures; structural systems; load paths; rules of thumb; building layout, function and form, design effects; seismic and element loads; formwork and placement constraints; reinforced and prestressed concrete slabs, beams and columns; architectural issues, connections and detailing; site investigation, spread and pile footings and foundations; retaining walls.
Prerequisites: ENB276 and ENB371 Equivalents: CEB424 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-1

ENB476 CIVIL ENGINEERING DESIGN PROJECT
Through preparation of various civil engineering design elements of a major project, this final design strand unit builds upon the earlier units to polish students' professional capabilities as expected of a graduate civil engineer. Students will be expected to apply to their project the knowledge and experience gained in the civil engineering sub-disciplinary core units including: Geotechnical Engineering 2, Water Engineering, and Transport Engineering. The aims of this unit are to provide you with an understanding of the role of the civil engineer within a major project, including the various technical activities undertaken, overall project management, and an understanding of community expectations.
Prerequisites: (ENB371 and (( ENB372, ENB376, and ENB378) or EN40MJR-CVCOENG) Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-2

IBB213 INTERNATIONAL MARKETING
The aim of this unit is to provide students with a thorough understanding of the multiplicity of issues that impact on the development of international marketing strategies and plans and their operational implementation. The unit is highly applied and provides students with the following opportunities: to analyse global international firms, their marketing strategies and various international marketing issues in a variety of geographic and industry contexts; to evaluate methodologies and new practices for handling problems and issues typical of global and international markets and competition; to develop an operationally sound international marketing plan.

Prerequisite(s): BSB119 or CTB119 & BSB126 or CTB126; or BSB116 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2008 SEM-1, 2008 SEM-2 and 2008 SUMMER Incompatible with: MIB213

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.

Prerequisite(s): 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

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: ITB487 Credit points: 12 Contact hours: 3 per week Campus: Gardens Point Teaching period: 2011 SEM-1

MAB125 FOUNDATIONS OF ENGINEERING MATHEMATICS

A sound understanding of the language and techniques of mathematics is essential for any quantitative discipline. This unit provides an introduction to the aspects of mathematics especially applicable to engineering and is directed at those students whose mathematics preparation does not include Maths C or an equivalent. For this purpose, it's located in first semester of the first year of your course. This unit introduces you to the fundamental mathematical ideas of function, calculus, vectors and matrices, through the use of contextualised engineering related problems. In solving these problems you will develop both an understanding of the mathematical concepts and competency in appropriate solution methods.

Antirequisites: MAN120 Assumed knowledge: Grade of at least Sound Achievement in Senior Mathematics B (or equivalent) or MAB105 is assumed knowledge Equivalents: MAB100, MAB120, MAB180 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

MAB126 MATHEMATICS FOR ENGINEERING 1

Building upon the foundations established in MAB125 or Senior Maths C, this unit addresses the significant role of mathematical modelling using differential equations for the description and resolution of simple and complex problems relevant to the discipline of engineering. The formulation and solution of such problems is supported by appropriate advanced mathematical concepts used for function approximation, differentiation and integration. The unit is located in first year for application in core engineering units throughout the rest of the course. Undertaking this unit will allow you to develop your problem solving skills, especially in the context of mathematical techniques applied to ordinary differential equations used to model engineering relevant problems.

Antirequisites: MAN121 Assumed knowledge: Grade of at least Sound Achievement in Senior Mathematics C (or equivalent) or MAB125 or MAB180 or MAB120 is assumed knowledge Equivalents: MAB111, MAB121, MAB131, MAB182 Credit points: 12 Contact hours: 4 per week Campus: Gardens Point Teaching period: 2011 SEM-1, 2011 SEM-2 and 2011 SUM

MAB127 MATHEMATICS FOR ENGINEERING 2

Building upon the foundations established in MAB125 or Senior Maths C, this unit addresses the significant role of mathematical modelling using vectors, matrices and multivariable calculus for the description and resolution of simple and complex problems relevant to the discipline of engineering. The formulation and solution of such problems is supported by appropriate advanced mathematical
concepts used for function approximation, differentiation and integration. You will complete this unit in first year or first semester of second year depending on your initial maths background. Undertaking this unit will allow you to develop your problem solving skills, especially in the context of advanced mathematical techniques applied to vectors and matrices used to model engineering relevant problems. **Assumed knowledge:** Grade of at least Sound Achievement in Senior Mathematics C (or equivalent) or MAB125 or MAB120 or MAB131 or MAB182 is assumed knowledge **Equivalents:** MAB112, MAB122, MAB132

**Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1

**MAB131 ENGINEERING MATHEMATICS 1A**

This unit includes the following: trigonometry, complex numbers, differentiation with applications, integration with applications, matrices, linear systems and vector algebra. Students must have completed at least four semesters of both Senior Mathematics B and C with an exit level of Sound Achievement (or equivalent).

**Prerequisite(s):** At least SA in both Senior Mathematics B and Senior Mathematics C or MAB100

**Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2009 SEM-1  **Incompatible with:** MAB180

**MAB132 ENGINEERING MATHEMATICS 2A**

This unit includes the following: vector calculus; differentiation of vectors; velocity and acceleration; relative velocity; vector algebra; equivalent systems of forces; functions of several variables; partial derivatives; hyperbolic functions; inverse functions; inverse trigonometric and hyperbolic functions; partial derivatives; numerical methods; differential equations; multiple integrals; areas and volumes; Laplace transforms; Fourier series.

**Prerequisite(s):** MAB131  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2009 SEM-2  **Incompatible with:** MAB182

**MAB180 ENGINEERING MATHEMATICS 1B**

This unit includes: sine and cosine functions; logarithmic functions; exponential functions; complex numbers; determinants; vector algebra in 2 and 3 dimensions; derivatives and their applications (differentiation, chain rule, higher derivatives); integrals and their applications. Students must have completed four semesters of Senior Mathematics B with an exit level of Sound Achievement, or have passed MAB105 (or equivalent). Incompatible with MAB131. Students with an exit level of High Achievement or better in Senior Mathematics C are advised to take MAB131.

**Prerequisite(s):** At least SA in Senior Mathematics B (four semesters) or equivalent or MAB105  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2009 SEM-1 and 2009 SEM-2  **Incompatible with:** MAB131, HA in Senior Mathematics C

**MAB182 ENGINEERING MATHEMATICS 2B**


**Prerequisite(s):** MAB180  **Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2009 SEM-1, 2009 SEM-2 and 2009 SUM  **Incompatible with:** MAB112, MAB132

**MAB233 ENGINEERING MATHEMATICS 3**

This unit will provide you with the foundation knowledge and skills to carry out a statistical data investigation including defining the problem, planning the investigation, collecting and analysing data, and reporting conclusions in context. It will also provide you with foundation knowledge and concepts of probability, random variables and distributions for further learning in engineering.

**Prerequisites:** MAB131 or MAB182 or MAB121 or MAB126 or MAB127  **Antirequisites:** BSB123, MAB101, MAN101

**Credit points:** 12  **Contact hours:** 4 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1 and 2011 SEM-2

**MGB200 LEADING ORGANISATIONS**

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

**Prerequisites:** BSB115 or CTB115  **Antirequisites:** MGB211, CTB211, MGB222, CTB232  **Equivalents:** MGX200  **Credit points:** 12  **Contact hours:** 3  **Campus:** Gardens Point and Caboolture  **Teaching period:** 2011 SEM-1, 2011 SEM-2 and 2011 SUM

**MGB201 CONTEMPORARY EMPLOYMENT RELATIONS**

This unit will develop your skills in understanding the effects of both domestic and international legal environments relating to employment relationships. This is important for developing practical, workable business strategies and HRM interventions.

**Prerequisites:** BSB115 or CTB115  **Equivalents:** MGX201  **Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2011 SEM-1
and 2011 SEM-2

**MGB207 HUMAN RESOURCE ISSUES AND STRATEGY**
This unit provides a broad overview of the role and functions of human resource management (HRM) and explores the contribution of HRM to business performance and quality of work life. This unit gives you a foundation for professional practice in HRM and a practical introduction to the ways that organisations go about aligning the contributions of their people with business goals.

*Prerequisites:* BSB115 or CTB115  
*Equivalents:* CTB247, MGX207  
*Credit points:* 12  
*Contact hours:* 3 per week  
*Campus:* Gardens Point  
*Teaching period:* 2011 SEM-1 and 2011 SEM-2

**MGB210 MANAGING OPERATIONS**
This unit extends general management approaches to the production operations subsystems of service and manufacturing organisations. The unit focuses on the deployment of productive resources in order to maximise the added value of services and products. Issues of quality and efficiency are considered analytically in terms of broader strategies and constraints. It considers the opportunities that new technology brings to operational strategies in both manufacturing and service. Project management principles are considered in relation to resource deployment and continuous improvement.

*Prerequisites:* BSB115 or CTB115  
*Equivalents:* CTB234, MGX210  
*Credit points:* 12  
*Contact hours:* 3 per week  
*Campus:* Gardens Point and Caboolture  
*Teaching period:* 2011 SEM-1 and 2011 SEM-2

**MGB218 MANAGING BUSINESS GROWTH**
Entrepreneurial management is becoming a critical skill for rapidly growing small and medium sized enterprises (SMEs) and for small business units (SBUs) in large corporations. This unit examines and compares the venture growth processes for entrepreneurial managers. This unit focuses on the post start up issues for the entrepreneurial venture. It considers the rapid growth issues in the identification, analysis and learning processes for SMEs.

*Prerequisite(s):* 96 credit points of approved study  
*Credit points:* 12  
*Contact hours:* 3 per week  
*Campus:* Gardens Point  
*Teaching period:* 2008 SEM-2

**MGB220 BUSINESS RESEARCH METHODS**
The unit will develop your understanding of business research methods so that you can undertake research into workplace issues and problems as well as being able to critically analyse the appropriateness of research findings for the real world.

*Prerequisites:* BSB123 or BSB122  
*Antirequisites:* AMB201, CTB201  
*Credit points:* 12  
*Contact hours:* 3 per week  
*Campus:* Gardens Point  
*Teaching period:* 2011 SEM-1

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

*Prerequisites:* BSB115 or CTB115  
*Equivalents:* CTB223, MGX223  
*Credit points:* 12  
*Contact hours:* 3 per week  
*Campus:* Gardens Point and Caboolture  
*Teaching period:* 2011 SEM-1 and 2011 SEM-2

**MGB225 INTERCULTURAL COMMUNICATION AND NEGOTIATION SKILLS**
The course develops student's abilities to identify and resolve problems in cross-cultural communication or negotiation situations where cultural differences have created misunderstandings or undesirable or unexpected outcomes. It first explores the concept of 'national culture' by considering the work of major theorists of cultural value dimensions - from Hall to Schwartz. Students are encouraged to analyse communication/negotiation process issues in terms of these value dimensions and to practise managing the process of communication/negotiation to improve their outcomes.

*Prerequisites:* BSB115, CTB115, BSB119 or BSB124  
*Antirequisites:* MGB312  
*Credit points:* 12  
*Contact hours:* 3 per week  
*Campus:* Gardens Point and Caboolture  
*Teaching period:* 2011 SEM-1 and 2011 SEM-2

**MGB309 STRATEGIC MANAGEMENT**
In this unit fundamental elements of strategy, which can be used in the decision making process, are placed in a framework that is developed within the particular context of Australia's economic development position. The emphasis is upon process and content issues that affect the strategic performance and positioning of the organisation. This involves creating an understanding of the universal building blocks of competitive advantage at the business, corporate and international levels. By understanding the nature and determinants of competitive and strategic advantages, students should enhance their professional competences to be able to take a more strategic and critical perspective.

*Prerequisites:* MGB200, MGB211, CTB211, MGB222, or CTB232  
*Antirequisites:* MIB314  
*Credit points:* 12  
*Contact hours:* 3 per week
Campus: Gardens Point and Caboolture  
Teaching period: 2011 SEM-1 and 2011 SEM-2

MGB310 SUSTAINABILITY IN A CHANGING ENVIRONMENT
This unit provides participants with an opportunity to investigate selected and critical issues in the relationship between business activity and the imperative of creating sustainable futures. The unit draws on interdisciplinary sources to encourage the development of a systemic view that incorporates global, corporate, and personal levels of analysis. The unit prepares participants to make a significant contribution to the sustainable development of organisations and society. The unit will be of value to business and non-business students seeking careers in private, public, and not-for-profit sectors.
Prerequisites: MGB200, MGB211, CTA211, MGB222, or CTA232  
Antirequisites: MGB334, CTA334, MGB212  
Equivalents: MGX310  
Credit points: 12  
Contact hours: 3  
Campus: Gardens Point and Caboolture  
Teaching period: 2011 SEM-1

MGB314 ORGANISATIONAL CONSULTING AND CHANGE
Managing change is a fundamental skill required by prospective managers and professionals. This unit provides opportunities for students to develop a theory in practice orientation to consulting to individuals, groups, and organisations. Hence content theory and process theory is addressed. The focus of this unit is on human process issues and change. The unit examines a range of human process interventions designed to improve organisational effectiveness. Attention is also given to change strategies that are socially and culturally inclusive. Graduates of this unit should be able to be productive members of organisational change teams.
Prerequisites: MGB211, CTA211, MGB222, CTA232, or MGB200  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1

MGB320 RECRUITMENT AND SELECTION
This unit examines the most effective techniques for recruiting and selecting the best people for organisations, in the context of current pressures on attracting and keeping skilled, talented people in the workforce. Commonly used recruitment and selection techniques are covered, emphasising the validity and reliability of each technique, to enable the best strategies to be developed.
Prerequisites: MGB339 or MGB221  
Equivalents: MGX320  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-2

MGB324 MANAGING BUSINESS GROWTH
This unit is designed to provide skills in the analysis, solutions and implementation of the general management issues that SME owners have to manage in their growing operations. The unit brings together the different functional aspects of managing an established SME and how they are best managed from the owner’s (general manager’s) point of view. It also provides opportunity to bring students into contact with real world SME owners and their venture management issues.
Prerequisites: MGB223  
Equivalents: MGB218, MGX324  
Credit points: 12  
Contact hours: 3  
Campus: Gardens Point and Caboolture  
Teaching period: 2011 SEM-1

MGB331 LEARNING AND DEVELOPMENT IN ORGANISATIONS
This unit is designed to equip you with the skills and knowledge to meet strategic organisational human resource development requirements. The unit explores learning and development concepts and approaches and the role of learning and development as a strategic partner to management. You will learn how to design, implement and evaluate systems for learning in organisations as part of a strategic approach to human resource development.
Prerequisites: MGB211, CTA211, MGB222, CTA232, or MGB200  
Equivalents: MGX331  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point  
Teaching period: 2011 SEM-1

MGB335 PROJECT MANAGEMENT
This unit develops knowledge in the areas relating to effective management of projects (as distinct processes). This knowledge is gained by focusing on the central issues of project selection, modelling, planning, control and evaluation. Case study projects are used throughout the unit and are mainly from the services industry sector. The unit seeks to develop the technical skills (tools and techniques) as well as the people (behavioural) skills needed for effective management of projects.
Prerequisites: (MGB210 and MGB309) or (MGB210 and AMB303)  
Credit points: 12  
Contact hours: 3 per week  
Campus: Gardens Point and Caboolture  
Teaching period: 2011 SEM-1 and 2011 SEM-2

MGB339 PERFORMANCE AND REWARD
This unit will provide you with the basic competencies expected of HR practitioners in managing performance and reward/compensation systems, which are among the most important strategies used by organisations to support competitive advantage. Performance and Reward Management is a key functional area of HRM and it is imperative that you understand the strategic framework within which these decisions are made.
Prerequisites: MGB201, MGB207, or CTA207  
Equivalents: MGB221, MGX339  
Credit points: 12  
Contact hours: 3  
Campus: Gardens Point  
Teaching period: 2011 SEM-1
MGB340 INTERNATIONAL BUSINESS IN THE ASIA-PACIFIC
Australia is situated in the fastest growing region in the world - the Pan-Pacific rim. The aim of this unit is to meet the needs of future business professionals working internationally and particularly within the Pan-Pacific region, to understand the nature of this region’s business environment.

Prerequisites: MGB225, IBB205, IBB217, or IBB208
Antirequisites: IBB317
Equivalents: MGX340
Credit points: 12
Campus: Gardens Point
Teaching period: 2011 SEM-2

MGB370 PERSONAL AND PROFESSIONAL DEVELOPMENT
This unit develops personal, interpersonal and team skills that distinguish outstanding human resource, management and other professionals. Recent literature has identified the need for professionals to acquire knowledge in the areas of self management and the management of others to contribute to organisational performance. To achieve this, Personal and Professional Development is positioned at the conclusion of the course to build upon concepts learned in introductory and intermediate units with a strong focus on the application of theory to practice.

Prerequisites: MGB331 and BSB124
Equivalents: MGB315, MGX370
Credit points: 12
Contact hours: 3
Teaching period: 2011 SEM-1 and 2011 SEM-2

PCB136 ENGINEERING PHYSICS 1C
This introductory unit covers: dynamics (motion in 1D, vectors, Newton’s Laws, motion in 2D (including circular motion), uniform circular motion, work, energy and power potential energy and conservation of energy, linear momentum and collisions); waves (oscillatory motion, wave motion, sound waves, superposition and standing waves); geometrical optics (reflection, refraction, dispersion, Huygens’ principle, image formation by mirrors and lenses, optical instruments); physical optics (interference of light, diffraction); thermal physics (temperature, thermometry, thermal expansion, heat and thermal energy, heat capacity and specific heat, latent heat, heat transfer).

Credit points: 12
Contact hours: 4 per week
Campus: Gardens Point
Teaching period: 2009 SEM-1 and 2009 SEM-2

PCB150 PHYSICS 1H
Professionals in the applied sciences require an understanding of the processes of making and recording measurements and an understanding of the physical principles that govern the behaviour of both the physical parameters being measured and the instrument being used to make the measurement. The aim of this unit is to introduce you to the processes of making measurements and estimating, processing and interpreting the uncertainties involved with these measurements. To enable you to understand the physical parameters being measured and also the limits of the measuring instrument; the physics of mechanics, heat, sound and light will be introduced and explained.

Credit points: 12
Contact hours: 5 per week
Campus: Gardens Point
Teaching period: 2011 SEM-1 and 2011 SEM-2