SUGGESTED PROGRAM OF STUDY 2011

**BACHELOR OF ACTUARIAL STUDIES with BACHELOR OF ECONOMICS**

This is a suggested sequence of units for the Bachelor of Actuarial Studies with Bachelor of Economics (BActStud/BEc). This document is to be used as an example only, and does not replace the Course Handbook [http://www.handbook.mq.edu.au/](http://www.handbook.mq.edu.au/) or the University Timetable [http://www.timetables.mq.edu.au](http://www.timetables.mq.edu.au).

Suggested first year program

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Code</td>
<td>Unit Name</td>
</tr>
<tr>
<td>ACST152</td>
<td>Introduction to Actuarial Studies</td>
</tr>
<tr>
<td>ECON111</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>STAT171</td>
<td>Statistical Data Analysis</td>
</tr>
<tr>
<td>MATH132</td>
<td>Mathematics IA (Advanced)</td>
</tr>
<tr>
<td></td>
<td>*MATH133 Mathematics IB (Advanced)</td>
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<tbody>
<tr>
<td>Unit Code</td>
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</tr>
<tr>
<td>ACST202</td>
<td>Mathematics of Finance</td>
</tr>
<tr>
<td>STAT272</td>
<td>Probability</td>
</tr>
<tr>
<td>ACCG252</td>
<td>Applied Financial Analysis and Management</td>
</tr>
<tr>
<td>ECON203</td>
<td>Microeconomic Analysis</td>
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Suggested third year program

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Code</td>
<td>Unit Name</td>
</tr>
<tr>
<td>ACST306</td>
<td>Quantitative Asset and Liability Modelling 1</td>
</tr>
<tr>
<td>ACST356</td>
<td>Mathematical Theory of Risk</td>
</tr>
<tr>
<td>ACST358</td>
<td>Survival Models</td>
</tr>
<tr>
<td></td>
<td>'People' or 'Planet' Elective</td>
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<table>
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<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
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</thead>
<tbody>
<tr>
<td>Unit Code</td>
<td>Unit Name</td>
</tr>
<tr>
<td>ACST402</td>
<td>Actuarial Control Cycle 1</td>
</tr>
<tr>
<td>ECON309</td>
<td>Industrial Organisation</td>
</tr>
<tr>
<td>ECON3XX</td>
<td>300 Level ECON Elective</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

*The above program contains 15 credit points in the second semester of first year. This allows greater flexibility for students who decide to transfer into a different degree at the end of their first year. Students who find that 4 units in a semester is a sufficient challenge may delay ACST212 until 2nd semester of 2nd year, and delay the elective from 2nd semester of 2nd year to 4th year.

Students who wish to retain the option to abandon the double degree and graduate with a BActStud at the end of the 3 years should move the Planet or People Elective from 4th year to an earlier year. One option is to switch it with ECON232.
**Accreditation**

The Institute of Actuaries of Australia (IAAust) is the professional body of actuaries in Australia. It specifies the accreditation process that must be completed to become an actuary in Australia. Full details of the accreditation process are available on the IAAust website at: [http://www.actuaries.asn.au/](http://www.actuaries.asn.au/).

At Macquarie University students are able to undertake Part I and Part II of the accreditation process as part of their Undergraduate degree.

Part I covers the fundamental skills required by actuaries and can be undertaken via Macquarie University as part of a standard three year Undergraduate degree in Actuarial Studies.

There are 8 subjects in Part I, referred to as the “Core Technical” subjects. These are:

- **CT1** – Financial Mathematics
- **CT2** – Finance and Financial Reporting
- **CT3** – Probability and Mathematical Statistics
- **CT4** – Models
- **CT5** – Contingencies
- **CT6** – Statistical Methods
- **CT7** – Business Economics
- **CT8** – Financial Economics

Graduates can apply for exemptions from the Part I subjects if they attain grades of Credit or above in the relevant Macquarie University units of study (see overleaf).

**Part II** of the program, the Actuarial Control Cycle and the Investments Module, educates students on how to apply actuarial skills to business situations.

Students are able to complete Part II either as part of the fourth year at Undergraduate level, as Postgraduate students or as Non-Award students.

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**PEOPLE and PLANET Units**

**Double degree rules**

1. Students enrolled in double or combined degrees need to do BOTH people and planet units.
2. These units must be taken in two different Faculties.
3. If any of the units are part of the student’s program of study, even if they fulfil (1) they cannot be counted as people/planet units.

**People Units**

1. **Outside the Department of Applied Finance and Actuarial Studies and the Department of Economics** but within the Business and Economics Faculty

   - **DEM127** Demographic Fundamentals
     - Department of Accounting and Corporate Governance
   - **HRM107** Introduction to Human Resource Management
     - Department of Marketing and Management

   The full list of People Units can be found in the Course Handbook [http://www.handbook.mq.edu.au/](http://www.handbook.mq.edu.au/).

2. **Outside the Faculty**

   The full list of People Units Outside the Faculty can be found in the Course Handbook [http://www.handbook.mq.edu.au/](http://www.handbook.mq.edu.au/).

**Planet Units**

1. **Outside the Applied Finance and Actuarial Studies Department and the Department of Economics** but within the Business and Economics Faculty

   - **BUSL100** Global Legal Frameworks for a Sustainable Planet
     - Department of Accounting and Corporate Governance
   - **ACCG260** Accounting and Reporting for the Environment
     - Department of Accounting and Corporate Governance

   The full list of Planet Units can be found in the Course Handbook [http://www.handbook.mq.edu.au/](http://www.handbook.mq.edu.au/).

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