



ACST832

Actuarial Control Cycle 2

S2 External 2014

Applied Finance and Actuarial Studies

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General Information

Unit convenor and teaching staff

Unit Convenor

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Administrator

Hong Xie

[please contact via iLearn messages](#)

Credit points

4

Prerequisites

ACST831

Corequisites

Co-badged status

Co-badged with ACST832

Unit description

This unit, in conjunction with ACST831, develops and applies the actuarial principles and practices underlying the design, assessment, management and control of financial systems in the areas of life insurance, general insurance, and superannuation, as well as other less traditional areas of actuarial practice. The two units consider the process of actuarial and financial management including: product design, pricing, marketing, monitoring of experience, reserving, financing, solvency, surplus, and enterprise risk management. The commercial environment and professionalism are discussed. Students gaining a credit or higher in this unit will satisfy part of the requirements for exemption from Part IIA of the professional exams of the Institute of Actuaries of Australia.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

Learning Outcomes

On successful completion of this unit, you will be able to:

- Discuss and apply an Actuarial Control Cycle in a variety of practical commercial situations
- Apply a Risk Assessment Framework to identify and assess the risks in a range of commercial situations
- Apply relevant approaches and techniques to the valuation of liabilities
- Measure and report emerging profits and/or costs
- Measure, report, and manage Solvency
- Monitor and Assess Experience
- Manage the business and respond to the experience
- Apply the tests of Professionalism
- Understand the requirements for Continuing Professional Development

General Assessment Information

A Standardised Numerical Grade (SNG) gives you an indication of how you have performed within the band for your description grade. The SNG is not a mark and you may not be able to work it out from your raw examination mark and other assessment marks. Nor are you able to determine that you are "one mark away" from a different grade.

The Macquarie University units Actuarial Control Cycle 1, Actuarial Control Cycle 2, and Investment Management are accredited by the Actuaries Institute. You will be recommended for exemption from Part 2 of the professional qualifications if:

* you attain grades of Credit or better in all three units, or

* you attain an average SNG of 65 or better across all three units, with an SNG of at least 60 in each unit,

The Actuaries Institute sends external examiners to review the performance of borderline students and to verify that appropriate exemption standards have been maintained.

It is the responsibility of the student to apply to Macquarie University to recommend them to the Actuaries Institute for professional exemptions. For information about this process please refer to http://www.businessandconomics.mq.edu.au/current_students/undergraduate/how_do_i/exemptions_for_professional_examinations

EXAMINATION LOCATION FOR DISTANCE STUDENTS

Students outside of Sydney must contact Hong Xie to organise (and confirm) the location of supervision of their final examination. Instructions will be provided via the Announcement. Students who do not confirm their exam city by the announced due date are at risk of not being able to sit the exam in their location

Assessment Tasks

Name	Weighting	Due
<u>Assessed Coursework</u>	5%	Weeks 2 to 12 (see Schedule)
<u>Presentation Preparation</u>	5%	Monday October 13 5pm
<u>Major Assignment</u>	15%	Tuesday October 28 5pm
<u>Assignment</u>	0%	Tuesday September 30 5pm
<u>Class Participation</u>	5%	Throughout term
<u>Final Examination</u>	70%	University Exam Timetable

Assessed Coursework

Due: **Weeks 2 to 12 (see Schedule)**

Weighting: **5%**

Textbook Chapter Tasks

Submission: You must submit textbook chapter tasks from time to time during the term. Submit electronically via iLearn before 5 pm on Tuesday as per the schedule on iLearn.

Extension and Penalties: No extensions will be granted. Late assignments will be accepted up to 72 hours after the submission deadline. A penalty of 20% of the awarded marks will apply for each complete 24 hour period after the due date/time. This penalty does not apply when the student has made an application for special consideration and special consideration has been granted.

What is required to complete the unit satisfactorily: Each textbook chapter task requires you to

read a chapter of the textbook or a related reading and provide a one-page answer to a question based on the chapter's topic. A sample of these chapter tasks will be marked.

On successful completion you will be able to:

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- Measure, report, and manage Solvency
- Monitor and Assess Experience
- Manage the business and respond to the experience
- Apply the tests of Professionalism

Presentation Preparation

Due: **Monday October 13 5pm**

Weighting: **5%**

Submission: Monday October 13 by 5 pm. Submit via iLearn (instructions will be posted)

Extension & Penalties No extensions will be granted. Late assignments will be accepted up to 72 hours after the submission deadline. A penalty of 20% of the awarded mark will apply for each complete 24 hours period after the deadline. This penalty does not apply for cases in which an application for special consideration is made and approved.

What is required: Preparation of Materials for Class Presentation. Slides and a handout, executive summary for a presentation

On successful completion you will be able to:

- Discuss and apply an Actuarial Control Cycle in a variety of practical commercial situations
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Major Assignment

Due: **Tuesday October 28 5pm**

Weighting: **15%**

Submission: Subm it electronically via iLearn before 5 pm on Tuesday October 28 by 5 pm

Extension & Penalties: No extension will be granted. Late assignments will be accepted up to 72 hours after the subm ission deadline. A penalty of 20% of the awarded mark will apply for each complete 24 hours period that the submission is late. This penalty does not apply for cases in which an application for special consideration is made and approved.

What is required : Analysis of an actuarial problem (details given on iLearn)

On successful completion you will be able to:

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- Monitor and Assess Experience
- Manage the business and respond to the experience
- Apply the tests of Professionalism

Assignment

Due: **Tuesday September 30 5pm**

Weighting: **0%**

Postgraduate Assignment (for ACST832 students only)

Submission: Submit electronically via iLearn before 5 pm on Tuesday September 30.

Extension and Penalties: No extensions will be granted. Late assignments will be accepted up to 72 hours after the submission deadline. A penalty of 20% of the awarded marks will apply for each complete 24 hour period after the due date/time. This penalty does not apply when the student has made an application for special consideration and special consideration has been granted.

What is required to com plete the unit satisfactorily: This is a pass/fail assignment. You will be asked to answer a question about the Actuaries Institute CPD requirements and plan your CPD activities. You must pass this assignment in order to pass this unit.

On successful completion you will be able to:

- Apply the tests of Professionalism
- Understand the requirements for Continuing Professional Development

Class Participation

Due: **Throughout term**

Weighting: **5%**

Class Participation via the Online Discussion Forum

Submission: Post comments regularly on the iLearn Discussion Forum for distance students, answering questions each week. A separate document on iLearn sets out the requirements in more detail.

Extension and Penalties: No extensions will be granted. Students have not submitted the task prior to the deadline will be awarded a mark of 0 for the task, except for cases in which an application for special consideration is made and approved.

What is required: Marks will be awarded for both quantity and quality of participation.

On successful completion you will be able to:

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Final Examination

Due: **University Exam Timetable**

Weighting: **70%**

Exam ination conditions: The exam will be 3 hours long, with ten minutes reading time.

Normal University examination rules apply. Calculators will be allowed in the final examination

but a clear indication of the steps involved in every calculation must be shown. Any machines that have a text-retrieval capacity, specifically those with a full alphabet on the keyboard, are not allowed. Calculators may be checked at the commencement of the examination, and the make/model may be recorded.

Dictionaries are not permitted in the final exam, and no reference materials are allowed to be taken into the final exam.

You should ensure that your handwriting in the final examination is legible. Sections of work that are not legible will not be marked

Date and location of Examination: The Examination will be conducted during the University examination period. The examination timetable will be published on the University website later in the term. The exam timetable will be available in Draft form approximately eight weeks before the commencement of the examinations and in Final form approximately four weeks before the commencement of the examinations.

What is required to complete the unit satisfactorily: To be eligible to pass this unit, a pass is required in the final examination.

On successful completion you will be able to:

- Discuss and apply an Actuarial Control Cycle in a variety of practical commercial situations
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- Apply the tests of Professionalism

Delivery and Resources

Classes

The Actuarial Control Cycle 2 is a co-badged unit, available to both ACST403 and ACST832 students. Lectures are offered in three modes – campus classes (North Ryde), city classes (Sydney CBD) and distance education (students can be located anywhere).

For external students, course material will be posted on the iLearn website for the unit. The course material will include learning guides, course notes, additional readings, and discussion questions. The day lectures are recorded and posted on iLearn, along with some MP4 recordings of additional lecture material.

The unit is set up to encourage active online participation by all students on the discussion

forums. Participation is very important in this subject and many students have commented that the online discussion was one of the most useful parts of the unit. Please read the Guidelines for Discussion Postings.

Required and Recommended Texts and/or Materials

Required texts : Bellis, C, Lyon, R, Klugman, S & Shepherd, J (2010) *Understanding Actuarial Management: the actuarial control cycle*, 2nd edition, Institute of Actuaries of Australia.

Copies of the textbook are available in the Special Reserve section of the library.

There is a Learning Guide for each section of work. You should read the Learning Guide before the lectures, and bring a copy with you to classes.

Additional readings will be posted on iLearn.

Technology Used and Required

In this unit, you will need to have access to and to be able to use software to produce overhead slides, software to produce pdf documents, and word-processing software to produce reports.

Downloadable lecture recordings

The University audio-visual team makes recordings of on-campus lectures. These will be available via iLearn (use the Echo360 tab on the right hand side of the home page).

Some additional recordings will be posted on iLearn in MP4 format.

Unit web page

The web page for this unit can be accessed via the “login” button on <http://ilearn.mq.edu.au>

You should check the website regularly (at least twice a week) to read announcements posted by University staff. Announcements are also posted to your University email account, and you should check your email regularly. This is your responsibility and we cannot make allowances for students who miss important information.

Teaching and Learning Strategy

We assume that you have acquired the knowledge and skills included in the syllabi for the Part I (Core technology) subjects and Actuarial Control Cycle I.

For each topic, you should read the relevant chapter of the textbook, the Learning Guide, and any other readings posted on iLearn. to the lecture recordings. We encourage all students to actively participate in class discussions via iLearn.

Unit Schedule

Week	Commencing	Topic	Lecturer
1	August 4	Valuing Liabilities	Bruce Edwards
2	August 11	Profits	Bruce Edwards
3	August 18	Solvency 1	Shauna Ferris
4	August 25	Solvency 2	Shauna Ferris
5	September 1	Regal & Occidental case study	Bruce Edwards
6	September 8	Monitoring Experience	Bruce Edwards
7	September 15	Monitoring Experience	Bruce Edwards
Break			
Break			
8	October 6	Responding to Experience	Bruce Edwards
9	October 13	Presentations	All
10	October 20	Responding to Experience 1	Bruce Edwards
11	October 27	Applying Risk Management	Peter Carroll
12	November 3	Professionalism	Peter Carroll
13	November 10	Revision	Shauna Ferris

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](#). Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

Assessment Policy <http://mq.edu.au/policy/docs/assessment/policy.html>

Grading Policy <http://mq.edu.au/policy/docs/grading/policy.html>

Grade Appeal Policy <http://mq.edu.au/policy/docs/gradeappeal/policy.html>

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the [Learning and Teaching Category](#) of Policy Central.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/

Supplementary Exams

Further information regarding supplementary exams, including dates, is available here

http://www.businessandconomics.mq.edu.au/current_students/undergraduate/how_do_i/special_consideration

Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module for Students](#)
- [Ask a Learning Adviser](#)

Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

IT Help

For help with University computer systems and technology, visit <http://informatics.mq.edu.au/help/>.

When using the University's IT, you must adhere to the [Acceptable Use Policy](#). The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

- Discuss and apply an Actuarial Control Cycle in a variety of practical commercial situations
- Apply a Risk Assessment Framework to identify and assess the risks in a range of commercial situations
- Apply relevant approaches and techniques to the valuation of liabilities
- Measure and report emerging profits and/or costs
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- Monitor and Assess Experience
- Manage the business and respond to the experience
- Apply the tests of Professionalism
- Understand the requirements for Continuing Professional Development

Assessment tasks

- Assessed Coursework
- Major Assignment
- Assignment
- Class Participation
- Final Examination

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is

the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

- Discuss and apply an Actuarial Control Cycle in a variety of practical commercial situations
- Apply a Risk Assessment Framework to identify and assess the risks in a range of commercial situations
- Apply relevant approaches and techniques to the valuation of liabilities
- Measure and report emerging profits and/or costs
- Measure, report, and manage Solvency
- Monitor and Assess Experience
- Manage the business and respond to the experience
- Apply the tests of Professionalism

Assessment tasks

- Assessed Coursework
- Class Participation
- Final Examination

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

Learning outcomes

- Discuss and apply an Actuarial Control Cycle in a variety of practical commercial situations
- Apply a Risk Assessment Framework to identify and assess the risks in a range of commercial situations
- Apply relevant approaches and techniques to the valuation of liabilities
- Measure and report emerging profits and/or costs
- Measure, report, and manage Solvency
- Monitor and Assess Experience
- Manage the business and respond to the experience

- Apply the tests of Professionalism

Assessment tasks

- Presentation Preparation
- Major Assignment
- Final Examination

Changes from Previous Offering

Learning Guides, readings, and lecture overheads are regularly updated to reflect developments in financial markets and actuarial practice.

Research

RESEARCH

This unit uses research in several ways:

- * The unit uses research by Macquarie University researchers (e.g. current and former Macquarie staff members are editors and authors of the textbook and other readings);
- * This unit uses research from external sources (references will be provided);
- * This unit gives you practice in applying research findings in your assignments.