



Centre for Actuarial Studies

Department of Economics

Undergraduate and Honours Student Guide 2018

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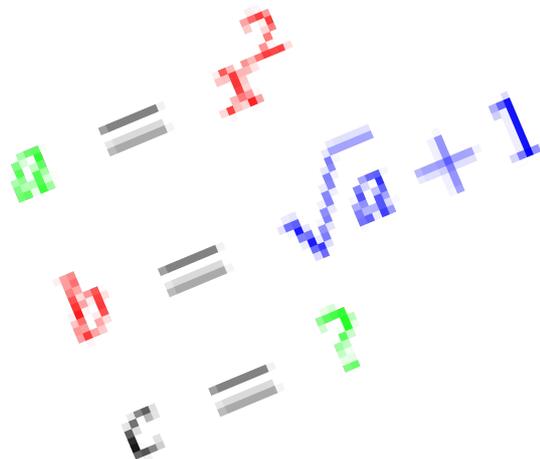


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1. Introduction

The Centre for Actuarial Studies has produced this guide to assist students undertaking Actuarial Studies as part of their BCom or BCom (Honours) degree. The guide is intended to give you some general information about the possible subjects that you can take and the assistance available to you. Information about the actuarial profession and exemptions is also included. A short description of each section of the guide is given below (subsections are shown in the Table Contents).

2. Course Planning

This section includes details about the subjects you should take as part of your BCom degree if you wish to major in Actuarial Studies. The three years of an undergraduate degree are outlined, together with information about completing the Honours year.

3. Actuarial Subjects

There are a number of issues that are specifically related to the subjects offered by the Centre for Actuarial Studies, including available resources, prizes and scholarships. These are outlined in this section.

4. Other Issues

This section covers miscellaneous issues that you may find important, such as how to find out about potential employment opportunities, where you can seek assistance if you are struggling to cope with your course and what the Actuarial Students' Society does.

5. Heriot-Watt Exchange Program

The Centre for Actuarial Studies has an exchange agreement with the Department of Actuarial Mathematics and Statistics, Heriot-Watt University, Edinburgh, Scotland. This section contains details of the exchange program, including who is eligible for the program and how to apply.

6. Qualifying as an Actuary

This section provides an overview of how to qualify as a Fellow of the Actuaries Institute. It includes information about how subjects offered as part of a degree correspond to subjects required by the Institute and how exemptions can be obtained from Institute subjects. Details on how to join the Actuaries Institute are also contained in this section.

7. Staff of the Centre for Actuarial Studies

Centre staff contact details are included in this section, as well as their [pictures](#).

We hope you find this guide useful and informative. It may be updated from time-to-time (check the Centre's website). If you have any suggestion about how the guide can be improved, please pass them on to the staff at the Centre for Actuarial Studies.

Please note that while this guide is intended to provide information to you, it is not a legal document and does not replace or override the guidelines and information set out in official University publications. The Centre for Actuarial Studies is not responsible for any actions taken by you on the basis of information set out in this document. Please refer to official University publications and information tools for complete up to date information and direction.

2. Course Planning

General Issues

What are the criteria for completing a BCom degree?

You require 300 points to complete a BCom degree. Of these, between 87.5 and 125 points must be from level-1 subjects and at least 75 points must be from level-3 subjects. Of the required level-1 and level-3 points, at least 50 must be from subjects offered by the Faculty of Business and Economics of the University of Melbourne. You can take up to 75 points from subjects taught outside the Faculty and still achieve a BCom degree. A Commerce major must be completed.

Students in the BCom must take Introductory Microeconomics, Introductory Macroeconomics, Organisational Behaviour, Principles of Finance and Account Reports and Analysis. They must also take two quantitative subjects. Students with an actuarial specialisation satisfy the quantitative subjects requirement by taking MAST20004 Probability and MAST20005 Statistics, and hence should NOT enrol in subjects such as Quantitative Methods 1 and 2.

Breadth is a required component of your undergraduate degree. BCom students specialising in Actuarial Studies will satisfy the breadth component of their degree by completing two first year maths subjects, MAST20004 Probability and MAST20005 Statistics plus two other subjects that are neither commerce subjects nor subjects offered by the Department of Mathematics and Statistics. Very often one of these subjects will be at level 1, and the other at level 2.

It is important to realise that in order to satisfy the requirements of the BCom you must pass the appropriate number of Commerce subjects. If you should fail a subject in Actuarial Studies you are not obliged to repeat the subject in order to obtain your BCom. You will, however, need to make up the 12.5 subject points.

The following advice is based on the assumption that a student wishes to obtain as many exemptions as possible from the professional exams of the Actuaries Institute (explained [here](#)). Therefore, recommended subjects for each year of study include both exemption subjects and prerequisites for exemption subjects.

First Year

What subjects should I do in my first year of Actuarial Studies?

The first year provides you with a broad skill base in business, economics and science. It is recommended that you enrol in the subjects shown below. (There are other possibilities for the two mathematics subjects, see below.) Most of the above are prerequisites for level-2 subjects (see [Second-year](#) below) and you are strongly encouraged to complete these subjects. ACTL10001 Introduction to Actuarial Studies is not compulsory and is not a prerequisite to any subsequent subject. However, completing this subject will give you a clearer view of actuarial work.

Breadth subjects

The Centre for Actuarial Studies does not give any advice on which subjects students should take as breadth subjects, other than to recommend that you take subjects that interest you and expand your horizons. Other faculties, including both Arts and Science, offer sequences of subjects at first and second year level, and there are also sequences of University Breadth Subjects.

First Year	Actuarial Studies
First Semester	
ACCT10001	Accounting Reports and Analysis
ECON10004	Introductory Microeconomics
MAST10008	Accelerated Mathematics 1
FNCE10002	Principles of Finance
Second Semester	
ACTL10001	Introduction to Actuarial Studies
ACCT10002	Introductory Financial Accounting
ECON10003	Introductory Macroeconomics
MAST10009	Accelerated Mathematics 2

Are there any prerequisites to these subjects?

The first-year Mathematics subjects are very important components of your actuarial degree. We highly recommend that you enrol in MAST10008 Accelerated Mathematics 1 if you have the prerequisites, as the two Accelerated Mathematics subjects give a better preparation for second and third-year Actuarial Studies. Decisions about entry into these and other Mathematics subjects are made by the Department of Mathematics and Statistics, not by the Centre for Actuarial Studies.

Entry to MAST10008 Accelerated Mathematics 1 is subject to a high level of achievement in VCE Specialist Mathematics 3/4 or equivalent. Students with a raw study score of 38 or more in this subject, or with permission from the Director of the Mathematics and Statistics Learning Centre, may enter the subject directly. Students with lower study scores who do not gain direct entry can enter the subject by taking a placement test in the week before semester starts.

If you are not able to enter MAST10008, it is recommended that you enrol in MAST10006 Calculus 2 in Semester 1, and then MAST10007 Linear Algebra in Semester 2.

Students who have not completed VCE Specialist Mathematics 3/4 or equivalent must take the sequence of MAST10005 Calculus 1 in Semester 1, followed by MAST10006 Calculus 2 and MAST10007 Linear Algebra in Semester 2. Such students should not enrol in ACTL10001 Introduction to Actuarial Studies.

If you have completed MAST10013 UMEP Mathematics you will be exempt from MAST10008 Accelerated Mathematics 1. This means that you will have a space in Semester 1 to take another breadth subject in mathematics or elsewhere.

MAST10018 Linear Algebra Extension Studies can be used as a substitute for MAST10007 Linear Algebra. However, students who have taken MAST10019 Calculus Extension Studies need to take MAST20026 Real Analysis.

The subject ACCT10002 Introductory Financial Accounting requires ACCT10001 Accounting Reports and Analysis. If you completed Trinity College Foundation Program's accounting course and have applied for and been granted an exemption from ACCT10001 Accounting Reports and Analysis through the Faculty, however, with a mark of 88% or more, you are not required to complete ACCT10001 Accounting Reports and Analysis. This means that you have an extra choice of subject in first semester.

Mid-year intake

If you enter university in second semester (*i.e.* in July or August), it is essential that you are in a position to take subjects ACTL20001 Financial Mathematics 1 and MAST20004 Probability in the

first semester of the following year. This means that you must complete both MAST10009 Accelerated Mathematics 2 (or MAST10006 Calculus 2) and MAST10007 Linear Algebra in Semester 2 (*i.e.* in your first semester at university).

It is not essential to enrol in ACTL10001 Introduction to Actuarial Studies, but students who do not enrol in this subject and who still want an introduction to actuarial concepts may work their way through the prescribed lecture notes during the summer break. Contact a member of staff if you wish to do this.

It is strongly recommended that mid-year intake students complete 2 summer semester subjects in each of the two summers following their enrolment, so that they can complete the BCom degree at the end of a calendar year and enter Honours or the MCom (Actuarial science) in the following year.

A specimen program for a mid-year intake student is as follows:

Mid-Year Intake: First Three Semesters	
<i>Second Semester</i>	
MAST10009	Accelerated Mathematics 2 (or MAST10006 Calculus 2)
MAST10007	Linear Algebra
ECON10004	Introductory Microeconomics
ACCT10001	Accounting Reports and Analysis
<i>Summer Semester</i>	
ACCT10002	Introductory Financial Accounting
	One other subject
<i>First Semester of Following Year</i>	
ACTL20001	Financial Mathematics 1
MAST20004	Probability
ECON10002	Introductory Macroeconomics
FNCE10002	Principles of Finance

Note that MAST10007 Linear Algebra is offered during the summer semester. Students may elect to swap the elective subject from summer and MAST10007 in the specimen program above.

What do I need to achieve in first year to continue Actuarial Studies in second year?

There is no minimum second-year mark for admission into second year of Actuarial Studies. Provided you have the necessary prerequisites and fulfill Faculty requirements, you can enrol in level-2 actuarial subjects.

However, if you intend to complete the professional qualification to become an actuary (explained [here](#)), it is suggested that you do your best to achieve an average mark of at least 70% across your first-year subjects. Past experience shows that students with an average first-year mark less than 70% find it difficult to achieve exemptions in second and third year. You may wish to speak with the Director of Study about your situation at the end of your first year.

It is important to note that entry to the key second year actuarial subject ACTL20001 Financial Mathematics I is based on your score in first year mathematics subjects. Students taking MAST10008 and MAST10009 must pass both subjects and average 60% over the two subjects. Students taking MAST10006 and MAST10007 must average 75% over the two subjects. It is also possi-

ble to enter ACTL20001 by obtaining an aggregate of 135 marks in MAST10009 and MAST10007. Please note that these prerequisites are strictly applied.

What if I decide that I no longer wish to pursue Actuarial Studies at the end of first year?

If you decide that Actuarial Studies is not for you at the end of first year, the subjects set out above are broad enough to allow you to switch to another area of study within the Faculty. For example, you may choose to major in Economics and/or Finance, and you can still achieve a BCom degree by the end of three years at University. Alternatively, you may wish to apply to change to a degree in another faculty.

The Director of Study for first year students is A/Professor Shuanming Li. Year level Directors of Study are able to give advice on academic matters.

Second Year

What subjects should I complete in my second year of Actuarial Studies?

In your second year, you should take the following subjects:

Subject	Prerequisites
First Semester	
ACTL20001 Financial Mathematics 1	Accelerated Mathematics 1 and 2, averaging at least 60 *
MAST20004 Probability	Accelerated Mathematics 1 and 2 *
MGMT20001 Organisational Behaviour	
Elective	
Second Semester	
ACTL20002 Financial Mathematics 2	Financial Mathematics 1 and Probability
MAST20005 Statistics	Probability *
ECON20001 Intermediate Macroeconomics	Introductory Macroeconomics and Introductory Microeconomics
Breadth subject	

*There are some alternative prerequisites for these subjects. See above for ACTL20001, or look up any of those subjects in the online version of the Undergraduate Studies Handbook for more information: <https://handbook.unimelb.edu.au/faces/htdocs/user/search/SimpleSearch.jsp>. Some variations of the above sample program are possible, since MGMT20001 Organisational Behaviour is offered in both Semesters 1 and 2.

Students considering going on [exchange](#) must enrol in MGMT20001 Organisational Behaviour in their second year of study.

Are there any criteria for entering third year Actuarial Studies?

There are no set criteria for entering third year Actuarial Studies. You may enrol in any third-year actuarial provided you have the necessary prerequisites. However, the recommended subjects in third year are heavily concentrated towards Actuarial Studies and hence at the end of your second year you should be sure that you wish to complete your degree with a major in Actuarial Studies.

The Director of Study for second year students is Dr. Zhuo Jin.

Third Year

What subjects should I do in third year?

There are currently six actuarial subjects that can be taken in third year, one of which (ACTL30003) is a double subject worth 25 points.

The recommended subjects for third year are:

Subject	Prerequisites
First Semester	
ACTL30001 Actuarial Modelling 1	Financial Mathematics 2 and Statistics
ACTL30002 Actuarial Modelling 2	Financial Mathematics 2 and Statistics
ACTL30006 Financial Mathematics 3	Financial Mathematics 2 and Statistics
One other subject	
Second Semester	
ACTL30003 Contingencies	Actuarial Modelling 1
ACTL30004 Actuarial Statistics	Actuarial Modelling 2
ACTL30005 Models for Insurance and Finance	Financial Mathematics 2 and Statistics

The Director of Study for third year students is Dr. Xueyuan Wu.

Major in Actuarial Studies

To obtain a major in Actuarial Studies a student must complete 37.5 points of third year Actuarial Studies subjects.

Honours Year

Should I do an Honours degree?

There are many advantages in completing an Honours year. An Honours degree will give you the opportunity to broaden your knowledge and skill base, as well as allowing you to complete a research based subject.

Some employers (particularly the public service and some investment and finance firms) will only employ graduates with an Honours degree, and hence completing a higher level degree will open up more employment opportunities to you.

By studying for Honours, you have the opportunity to obtain exemption from all of Part I of the Actuaries Institute's professional examinations. Also, Part II of the qualification as a Fellow of the Institute of Actuaries of Australia (described [here](#)) is covered in the Honours year. It is advanta-

geous to study these subjects as a full time Honours student, rather than attempting them after graduation on a part time basis while you are working.

The Centre now offers an alternative degree to honours: the MCom in actuarial science. This lasts 18 months and offers everything the honours degree does and more. It has its own guide, downloadable from the Centre's website.

What are the criteria for doing an Honours year?

Students who have completed the BCom with a major in Actuarial Studies (or equivalent) may apply to the Faculty for entry into Honours.

For students with a BCom in Actuarial Studies from the University of Melbourne, entry into Honours usually requires

1. to have satisfied the requirements for a BCom degree ([previously described](#))
2. to have achieved a grade of at least H2B in four level-3 actuarial subjects.

Note that ACTL30003 counts as two subjects. Thus, a mark of 74 in ACTL30003 would count as two H2B grades. For students with an actuarial degree from another university we apply equivalent criteria for admission.

If you do not meet the requirements for an Honours year, you may still apply and your application will be considered in terms of your overall academic record. However, only in exceptional circumstances would such an application be successful.

You should also note that meeting the above two requirements does not guarantee a place in Honours. For example, a student who completed eight level-3 subjects with four marks in actuarial subjects of 70 and four marks of 50 meets the requirements, but would not be admitted. The Centre will only admit students who it believes can successfully complete the Honours year.

How do I apply to undertake an Honours degree?

Students interested in doing Honours must make a formal application. Local students must apply online at

<https://prod.ss.unimelb.edu.au/student/S1/eApplications/eAppLogin.aspx?f=%24S1.EAP.LOGI N.WEB>.

International students must submit an International Undergraduate Application, available either at using the link above, or

<http://futurestudents.unimelb.edu.au/info/international>.

The Faculty of Business and Economics will write to you, probably in early January, to advise if your application has been accepted or not. Your offer letter will include information and instructions for enrolment.

What subjects should I take in my Honours year?

It is compulsory for Honours in Actuarial Studies that a student completes either ACTL40001 Actuarial Studies Research Essay or ACTL40010 (Actuarial Studies Projects Part I) and ACTL40011 (Actuarial Studies Projects Part II). A suggested program is shown below.

Subject	Prerequisites
First Semester	
ACTL40002 Risk Theory 1	Actuarial Statistics
ACTL40004 Advanced Financial Mathematics 1	Financial Mathematics 3 and Models for Insurance and Finance
ACTL40010 Actuarial Studies Projects Part I or ACTL40001 Actuarial Studies Research Essay	Entry into Honours
ACTL40006 Actuarial Practice and Control 1	
Second Semester	
ACTL40011 Actuarial Studies Projects Part II or ACTL40001 Actuarial Studies Research Essay	Entry into Honours
Three out of the following four subjects:	
ACTL40003 Risk Theory 2	Risk Theory 1
ACTL40008 Advanced Financial Mathematics 2 (not offered in 2018)	Advanced Financial Mathematics 1 Contingencies and Actuarial Statistics
ACTL40007 Actuarial Practice and Control 2	Actuarial Statistics, Contingencies and Financial Mathematics 3
ACTL40009 Actuarial Practice and Control 3	Actuarial Statistics, Contingencies and Financial Mathematics 3

Other Subjects

An Honours degree comprises 75 points from level-4 Actuarial Studies subjects, plus two further subjects at level 3 or higher. (The latter may be offered by any faculty but only a small number of subjects will be approved). The subjects that you take in your Honours year will be somewhat dependent on the subjects you have previously studied, as most level-4 subjects have prerequisites at level 3. Your study plan for your Honours year must be approved by the Centre.

Each student undertakes either the Actuarial Studies Projects or the Research Essay (not both). Advice on whether to take ACTL40001 or ACTL40010 and ACTL40011 is given by the Centre for Actuarial Studies. Each project lasts eight weeks, so the three projects cover the whole year. The research essay is about a single topic, and the work is also spread over the whole academic year. The essay is best suited to students considering a PhD.

The Director of Study for Honours year students is Dr. Enrique Calderin.

3. Actuarial Subjects

Here are a number of issues specific to actuarial subjects.

Syllabus

The subjects offered by the Centre for Actuarial Studies are set out in the University Undergraduate Studies Handbook. Each subject's description may be found online by making a search on the page

<https://handbook.unimelb.edu.au/faces/htdocs/user/search/SimpleSearch.jsp>.

Assessment

How are the actuarial subjects assessed?

Like most University subjects, actuarial subjects are assessed by the lecturer in charge in accordance with the criteria set out in the University Undergraduate Studies Handbook.

All subjects are assessed by an end of semester examination, and many subjects also have assignments forming part of the assessment. Most subjects have a hurdle requirement so that a pass in the final exam must be achieved.

Marks are assessed by the lecturer in charge and determined by all Centre Staff at an examiners' meeting before results are released.

How do I apply for special consideration?

If your circumstances are such that you are unable to sit an examination or if you believe that your performance has been affected by some significant event, you can apply for special consideration. To do so, you must complete the application online through your Student Portal at <https://my.unimelb.edu.au> and return the Health Professional Report (HPR) form.

Before completing an online application students should read the Special Consideration information available at <http://students.unimelb.edu.au/admin/special>.

If you are awarded a special exam, you will have to sit this exam at very short notice within the supplementary exam period.

Are marks for all students standardised?

No. Marks in each subject are not adjusted to fit a specified distribution. This means that if all students achieve a standard of H1, then all students will receive this grade. Likewise, in the unlikely event that no student achieved the performance required for an H1 grade, this grade would not be awarded.

What can I do if I do not agree with the final grade that I receive?

You have the possibility of viewing your exam papers and receive feedback about your performance. There is a specified period for exam viewing, so you should apply early. Note that exam viewing does not allow students to argue about marks. The University has issued a directive that a mark should not change unless an answer has not been marked or marks have been incorrectly added.

Resources

What resources are available to me to assist my study program?

Each lecturer will outline resources that are available for each subject. These include prescribed texts and recommended readings. Items such as tutorial questions, past examination papers and popular reading materials may also be available on reserve at the Baillieu Library, depending on the lecturer in charge.

Prescribed textbooks may be purchased from the University Bookshop. Some actuarial texts are available in the Baillieu Library and in the Giblin Eunson Library, often under the Dewey code 368. Actuarial journals may be accessed electronically via the Library website.

The Centre for Actuarial Studies' home page on the internet is also a useful resource, with links to other relevant websites. Go to <http://fbe.unimelb.edu.au/economics/ACT> .

What computer resources are used in Actuarial Studies?

The R Project for Statistical Computing is used in some level-3 subjects.

A working knowledge of standard software packages such as Excel and Word will help you in some level-1, level-2 and level-3 subjects. Visual Basic (VBA) is a programming language that is used in some fourth-year subjects.

Access to the internet is available via the University network.

Where are the computer laboratories and what are their hours of operation?

The Faculty of Business and Economics and the Melbourne Business School have labs for students.

Bouverie Street Laboratory (open to all students)

Location: 233 Bouverie Street.

Postgraduate Laboratory

Location: Level 4, 198 Berkeley Street (the Spot).

Opening hours may be found at

<http://fbe.unimelb.edu.au/students/bcom/current-students/services>.

What about libraries?

The Giblin Eunson Library is located on the ground floor of the FBE building. The Baillieu Library is adjacent to the Arts West building.

Library opening hours change over time and are different during non-teaching periods; current opening hours are posted on <http://library.unimelb.edu.au/hours> .

Prizes and Scholarships

Are there any scholarships available for actuarial students?

The Faculty of Business and Economics offers some scholarship assistance to students with good academic records. These are awarded independently of the Centre for Actuarial Studies.

Are there any prizes available for academic performance in actuarial subjects?

A number of firms sponsor prizes to the best eligible student in selected subjects. To be eligible for a prize, you must be a degree student of the University of Melbourne, attempting the subject for the first time. Details of prizes will be announced by lecturers, or you may consult

<http://fbe.unimelb.edu.au/scholarships/prizes> .

Current prize sponsors include:

Taylor Fry
 The Actuaries Institute
 Willis Towers Watson
 Deloitte Actuaries & Consultants
 KPMG
 Trimantium Capital

There are two other prizes: the Martin Jilovsky Memorial Prize, awarded to the top Australian student in third year, and a University Medal for the top Honours graduate in Actuarial Studies.

4. Other Issues

Calculators in Exams

The university policy as of 1st January

Casio FX82 (with or without any suffix)

The Centre takes this policy very seriously. Any student found to be in breach of this policy will be disciplined.

Employment

Vacation Work

A number of employers offer vacation work to students over the summer break. These short term jobs can lead to offers of full time employment in the longer term. You can approach firms directly to see if they have any openings for you on either a vacation or full time work basis. A list of potential employers may be obtained from the Actuarial Students' Society (see below).

Employment on Graduation

Actuaries work with a number of employers, including:

- ◆ consulting firms
- ◆ life insurance companies
- ◆ general insurance companies
- ◆ health insurance companies
- ◆ investment companies
- ◆ merchant banks
- ◆ stockbrokers
- ◆ governments
- ◆ universities

Job opportunities from employers seeking graduates may also be announced during lectures, particularly in third year.

The Actuarial Students' Society organises a number of functions to facilitate meetings between students and actuaries (see below) and these are also a valuable source of job opportunities.

Remuneration varies with the type of job and the employer, but most students may expect to receive a starting salary (after a three year BCom degree) in the range of \$40,000 to \$60,000. (A 2012 survey of actuarial salaries found that graduates received between \$50,000 and \$71,000, if superannuation is included.). Honours graduates may expect a higher starting salary. Apart from salary, working conditions vary between employers and you should consider other aspects of employment such as the availability of study leave.

Past experience has shown that actuarial graduates have little trouble in gaining employment, especially those students who complete an Honours degree.

Guidance and Assistance

You may need some help with a number of issues throughout your studies. You may be having some problems in planning your course or you may wish to discuss career opportunities. You may simply be falling behind in your studies due to circumstances beyond your control and you may need someone to talk to.

Student Counselling

The University provides a student counselling service located at Level 2, 138 Cardigan Street in Carlton. The contact number is (03) 8344 6927 or see <http://services.unimelb.edu.au/counsel> .

Language Skills

If English is not your first language, you may require some assistance to ensure that your written work is grammatically correct. The English as a Second Language (ESL) program can provide you with assistance in this area. Go to

<http://languages-linguistics.unimelb.edu.au/areas/esl> .

Actuarial Students' Society

The Actuarial Students' Society is a student body which operates independently of the Centre for Actuarial Studies. The major aim of the Society is to bring the students closer to the actuarial community. They organise a variety of functions with practicing actuaries working in business, including guest lectures, formal luncheons and the annual "Contact Night". These functions provide a great opportunity for students to meet potential employers and can lead to job opportunities.

The Society's other major objective is to create an enjoyable sociable atmosphere for actuarial students via BBQs, pizza nights, movie nights and an end of year party. Their events are announced to students in class, and their website is

<http://www.melbourneactuary.com> .

5. Heriot-Watt Exchange Program

What is the exchange program?

The Centre for Actuarial Studies has an exchange agreement with the Department of Actuarial Mathematics and Statistics, Heriot-Watt University, Edinburgh, Scotland. Each year, up to two students from each University can spend a year at the other institution, gaining credits towards

their degree and also having the opportunity to gain exemptions from professional actuarial exams.

Who is eligible for the program?

The program is open to third year students with a good academic record who intend to complete an Honours year. Students in the program are eligible to choose between degrees of Honours and Master of Commerce.

How does the program work?

The academic year at Heriot-Watt starts in September and finishes in June. Hence, students on the exchange program complete the first semester of their third year at the University of Melbourne before travelling to Edinburgh for a year. On returning to Melbourne in the following year, students will have completed the BCom degree provided sufficient subjects have been taken at both Heriot-Watt and Melbourne. Students complete their Honours degree by spending the second semester, or complete their Master degree by spending two semesters after their return undertaking subjects at the University of Melbourne

If you are participating in the program, there are some constraints on the subjects that need to be taken in third year at both Heriot-Watt and Melbourne. You will be advised of details at the time applications are called for. Students considering going on exchange must enrol in MGMT20001 Organisational Behaviour in their second year of study.

Is there financial support for the exchange?

Tuition fees are not required to be paid in Edinburgh, but you will still be subject to HECS or fees in Australia. Exchange students are considered automatically for a Melbourne Global Grant. No separate application form is necessary. Students will be ranked by grade average and some students will receive a grant of \$2,500. There is no guaranteed minimum grant. Other funding is also available. Detailed explanation of the various possibilities available to Exchange students is available at

<http://www.mobility.unimelb.edu.au/outbound/funding/exchange-funding.html> .

Other than the financial help above you will be required to provide the necessary funds for travel, accommodation and living expenses in Edinburgh. The Centre for Actuarial Studies does not provide any financial assistance for the exchange program.

When can I apply for the exchange?

Applications are called for in your second year, around August. You must submit your application on the official application form that will be available from the Centre for Actuarial Studies. You will be given more information in the first semester of your second year and applications must be submitted during second semester, usually in September.

Applications will be assessed by staff of the Centre for Actuarial Studies, and the successful applicants will usually be advised before the end of October. Faculty approval is required for the exchange, and is normally given based on the Centre's recommendation.

6. Qualifying as an Actuary

How do I qualify as an actuary?

Completing a BCom degree with a major in Actuarial Studies will not mean that you are qualified as an actuary. Rather, you will have some actuarial skills and may be part way through the qualification process. An actuary is a professional, and the governing body of the profession sets the criteria necessary to qualify as an actuary.

The requirements to qualify as an actuary depend on which professional body you join, Australian, British, American or other. The professional bodies generally require you to complete two types of examination: core examinations that equip you with the basic skill set that you need to be an actuary; and practical examinations where you are required to apply these skills and use judgment in a specific work environment.

There are three parts to the process of qualifying as a Fellow of the Institute of Actuaries of Australia (FIAA).

Part I: Subjects CT1 –CT8

The Institute requires you to complete eight core subjects which cover the basic skills required by an actuary.

These eight subjects correspond to subjects taught at the University of Melbourne. If you perform sufficiently well, you will be recommended for exemption from the subjects offered by the Institute (as explained [here](#)).

The subjects may also be completed via a correspondence course with the Institute and Faculty of Actuaries in the UK. These are particularly relevant if you do not achieve an exemption while completing your degree.

The Australian Part I subjects are the same as the Core Technical (CT) Subjects CT1-CT8 in the UK.

Part II 2011: Part II A & B

The aim of this part of the qualification is to introduce a generalised actuarial approach to a range of commercial problems. It introduces areas of practice and provides an insight into how actuarial techniques can be used in non-traditional fields.

The Institute's Part II syllabus changed from 1 January 2011. The Part II syllabus before 2011 continues to be known as "Part II: The Actuarial Control Cycle". The new Part II syllabus is known as "Part II 2011". The latter is comprised of:

- Part IIA –The Actuarial Control Cycle
- Part IIB –Investment and Asset Modeling

This is offered as three university subjects in the Honours year in Actuarial Studies (or as part of a Masters degree).

A high enough average mark must be achieved in university exams in order to obtain an exemption from Part II.

Part III: Specialist Subjects

Part III is examined directly by the Actuaries Institute and is not currently taught in universities. It has four modules, covering topics in investments, risk management, life insurance, general insurance, retirement income systems, finance and commercial actuarial practice. More details may be found on Actuaries Institute's website:

<http://www.actuaries.asn.au/studying-with-the-institute/part-iii> .

Is the FIAA qualification recognised in other countries?

The FIAA qualification is recognised by the Institute and Faculty of Actuaries in the UK after 12 months residence and practice in the UK. Other countries/regions such as Hong Kong, Malaysia and New Zealand also recognise the FIAA qualification in most areas of practice.

The USA has slightly different rules but if you are an FIAA, you can automatically become an Associate of the Society of Actuaries.

What is an Associate of the Actuaries Institute?

You become an Associate of the Institute of Actuaries of Australia (AIAA) once you complete Parts I and II of the Australian course, a professionalism course and have three years of professional experience. This qualification is not recognised overseas. Once you become an Associate, you are entitled to call yourself an actuary.

How does Part I correspond with international courses?

Part I is equivalent to the Core Technical subjects CT1-CT8 studied in the UK. Hence completion of Part I in Australia means that you have completed the first eight subjects offered by the Institute and Faculty of Actuaries in the UK.

There are also similarities between the course offered by the Society of Actuaries in the USA and Part I of the Australian course. You can apply for exemptions from some of the Society of Actuaries' subjects if you have completed some or all of Part I. This is part of the "mutual recognition" agreements between actuarial organizations. More details may be found at

<http://www.actuaries.asn.au/becoming-an-actuary/becoming-a-member/becoming-an-accredited-member> .

Exemptions

What are the exemption subjects and what level is required?

If you complete certain subjects at University of Melbourne, and achieve a sufficiently high standard, you will be recommended for exemption from the corresponding subjects of the Actuaries Institute. The table below sets out the correspondence between University and Institute subjects.

The standard required for exemption is an average mark of 73 or better in subjects taught outside the Centre, *i.e.* subjects with a prefix that is not ACTL. There is a minimum requirement of 50 or better in each subject. In many cases an exemption is based on more than one subject, in which case it is the average mark that counts. Thus, if there are two subjects then marks of 70 and 76 would suffice, while marks of 48 and 98 would not.

Institute Subject	University Institute Subject
Part I	
CT 1 Financial Mathematics	ACTL20001 Financial Mathematics 1 ACTL20002 Financial Mathematics 2
CT 2 Finance and Financial Reporting	ACCT10002 Introductory Financial Accounting FNCE10002 Principles of Finance
CT 3 Probability and Mathematical Statistics	MAST20004 Probability MAST20005 Statistics
CT 4 Modelling	ACTL30001 Actuarial Modelling 1 ACTL30002 Actuarial Modelling 2
CT 5 Contingencies	ACTL30003 Contingencies
CT 6 Statistical Methods	ACTL30004 Actuarial Statistics ACTL40002 Risk Theory 1
CT 7 Economics	ECON10004 Introductory Microeconomics ECON20001 Intermediate Macroeconomics
CT 8 Financial Economics	ACTL30006 Financial Mathematics 3 ACTL40004 Advanced Financial Mathematics 1
Part II	
Part II A: The Actuarial Control Cycle	ACTL40006 Actuarial Practice and Control 1 ACTL40007 Actuarial Practice and Control 2
Part II B: Investment and Asset Modelling	ACTL40009 Actuarial Practice and Control 3

For students who started in 2016 or before, it is possible to use Business Finance instead of Principles of Finance for the CT2 exemption.

For subjects taught in the Centre in second and third year, recommendations for exemptions are based on performance in end of semester exams only (including special exams). For subjects ACTL40002 (Risk Theory 1) and ACTL40004 (Advanced Financial Mathematics 1), the university marks are used for exemptions (*i.e.* the mid-semester exam counts as well). Students who are awarded a university grade of H1 or H2A usually obtain exemptions, while students who are awarded H3, P or N usually do not. It is quite common for students who are awarded H2B to obtain the exemption, but this is not always the case.

If in a subject you do not obtain the mark to achieve exemption from professional exams then you do not need to repeat the subject. As long as you achieve a pass mark or above the subject will still be credited towards your BCom, but you will not receive exemption from the professional exam.

What happens if my marks are less than those needed for an exemption?

If you miss the required marks in exemption subjects, you will not be recommended for an exemption. If you wish to try again for an exemption, you can resit subjects in two ways.

First, you can resit the relevant subjects at the University of Melbourne as a continuing education student. You will be required to pay a fee as a Community Access Program (CAP) student (approximately \$3,700 per subject), but you are not subject to HECS. The result you achieve on the resit examination does not impact your BCom degree results. Note that if you have obtained a high mark in one exemption subject but a low mark in the partner subject, you need only retake one subject. For example if a student obtained 73 in MAST20004 and 70 in MAST20005, the student could obtain exemption from CT3 by retaking MAST20005 through the Community Access Program and obtaining a mark of 73 or better.

Alternatively you may resit Part I subjects by taking the relevant correspondence courses directly with the Institute and Faculty of Actuaries in the UK. To sit the UK subjects you must be a member of the Actuaries Institute (see [below](#)) or a member of the UK Institute and Faculty. You do not need to be a member of a UK body if you are a member of the Actuaries Institute.

You will be required to purchase the course material from ActED (<http://www.acted.com.au>), for around \$300. You are also required to register for the exam before the due date. The exam registration fee varies according to the value of the Australian dollar but is likely to be in the vicinity of \$500. The examinations are held twice a year in April and September at a venue organised by the Actuaries Institute in major capital cities. More information is available from the following link:

<http://www.actuaries.asn.au/studying-with-the-institute/part-i/examinations> .

What is the best method of resitting subjects?

Resitting subjects through the University provides you with more support, via lectures, tutorials and peer assistance. However, this must be managed carefully to avoid course overload. The Centre will not automatically permit a student to enrol for exemption purposes only, especially in the Honours year. Resitting subjects through the UK Institute and Faculty of Actuaries may be better financially and may be considered more flexible with two opportunities each year to resit exams. Note, however, that exam dates are likely to be during semester and so disrupt your university studies.

When should I resit subjects?

The time when you resit subjects will depend on your individual circumstances and how you are progressing through your BCom.

We do not encourage you to resit exams while you are completing your third year or Honours year at University. The third year of Actuarial Studies is a tough year, and you would be well advised not to try to pick up any exemption subjects that you miss during second or third year until at least the following year. Doing too many subjects (including resit subjects) may ultimately cause you to miss more exemptions than if you had had a lighter study load.

You may be able to resit some second year exemption subjects via the UK examinations before you commence your third year.

Remember that you are at the University for a degree and it may be best for you to secure this before pursuing the professional qualification.

How do I receive my exemptions?

On completion of your degree, you need to send two standard letters to the Centre. The first one sets out which exemptions you believe you have achieved. The second one is addressed to the Actuaries Institute, but sent to the Centre for endorsement. Standard letters can be downloaded from the Centre's website.

http://fbe.unimelb.edu.au/economics/ACT/courses/exemption_information .

You must pay the appropriate exemption fees to the Actuaries Institute, and must take up exemptions within two years of them being offered by the Institute, otherwise the offer will lapse. You can wait until graduating before applying for exemptions.

If you wish to receive exemptions from other actuarial professional bodies, you need to write to them directly.

The Actuaries Institute

The Actuaries Institute, formerly the “Institute of Actuaries of Australia”, is the body that governs the actuarial profession in Australia. Among other things, it sets professional standards and a code of conduct by which all actuaries must abide, as well as setting the syllabus for qualification as an actuary.

Who can join the Actuaries Institute?

Anyone undertaking the actuarial program can join the Actuaries Institute. The application form may be found at:

<http://www.actuaries.asn.au/becoming-an-actuary/becoming-a-member/becoming-a-student-member> .

Your membership entitles you to such items as the Australian Journal of Actuarial Practice, papers that members present at sessional meetings, and the Actuary Australia magazine. There are two advantages for students who join the Actuaries Institute. First, the joining fee and annual subscription are less if you join as a full time student than if you wait until you finish your degree. Secondly, and more importantly, joining the Actuaries Institute gives you access to the regular notices of employment opportunities that are distributed to members of the Institute.

When should I join the Actuaries Institute?

At the end of second year, students will have an idea of their prospects of successfully completing a professional actuarial qualification. We would suggest, therefore, that you delay becoming a student member until your third or Honours year at University.

Further Information

Further information about the Actuaries Institute can be found on their website:

<http://www.actuaries.asn.au> .

You may contact the Institute in Sydney by email at actuaries@actuaries.asn.au.

Further information about the Institute of Actuaries and the Faculty of Actuaries can be found at

<http://www.actuaries.org.uk> .

All questions regarding these professional bodies, for example regarding exam dates, should be directed to the professional body and not to the Centre.

7. Staff of the Centre for Actuarial Studies

Contact Details

The Centre for Actuarial Studies is located on the third floor of the Faculty of Business and Economics Building at the University of Melbourne. Reception is on the fourth floor, however.

General enquiries: Telephone: (03) 8344 5289, (03) 8344 5355
 Facsimile: (03) 8344 6899
 Email: econ-actenquiries@unimelb.edu.au

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The Centre for Actuarial Studies' website is <http://fbe.unimelb.edu.au/economics/ACT/>

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Directors of Study

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2 nd year	Dr. Zhuo Jin
3 rd year	Dr. Xueyuan Wu
Honours	Dr. Enrique Calderin

Should you have any questions regarding your study, please contact your Director of Study in the first instance, rather than the Director of the Centre.



Dr. Enrique Calderin

Dr. Ping Chen

Prof. David Dickson



Dr. Kevin Fergusson

Dr. Zhuo Jin

Assoc. Prof. Shuanming Li



Dr. Xueyuan Wu

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