PD-ACTSCI Postgraduate Diploma in Actuarial Science

Year and Campus:	2015
CRICOS Code:	070383M
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Graduate/Postgraduate
Duration & Credit Points:	100 credit points taken over 12 months
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Course Overview:	The overall aim of the Postgraduate Diploma in Actuarial Science is to provide graduates who have a bachelor's degree that includes a strong mathematical component with a one-year program that provides a pathway to a professional actuarial career. Graduates of the diploma will be well placed to enter the actuarial profession.
Learning Outcomes:	**1. Learning Goal** Graduates of this degree will be critical thinkers in relation to actuarial studies and related disciplines. **Learning objectives to achieve this goal** On successful completion of this degree students will be able to: # Describe and explain the fundamental theories of actuarial science as they apply in life insurance, general insurance and superannuation; and # Assess the suitability of actuarial, financial and economic models in solving actuarial problems. **2. Learning Goal** Graduates of this degree will be analytical in the application of actuarial theory, knowledge, principles, techniques and data. **Learning objectives to achieve this goal** On successful completion of this degree students will be able to: # Analyse actuarial data through the application of statistical techniques; # Perform actuarial calculations through the application of actuarial techniques; and # Analyse real and hypothetical actuarial problems. **3. Learning Goal** Graduates of this degree will be problem solvers capable of explaining and applying actuarial models. **Learning objectives to achieve this goal** On successful completion of this degree students will be able to: # Describe the core areas of actuarial practice and relate to those areas actuarial principles, theories and models; and # Analyse and evaluate options in business decision making.
Course Structure & Available Subjects:	Students enrolled in the Postgraduate Diploma in Actuarial Science will need to successfully complete 8 x 12.5 point subjects comprising four core subjects and four elective subjects from the Master of Actuarial Science over two semesters full-time or four semesters part-time. (Students who take the elective subjects Probability and Statistics will not be able to complete four core subjects in two semesters of full-time study.)

Subject Options:	**Four core subjects chosen from the following eight Master of Actuarial Science core subjects:**		
	Subject	Study Period Commencement:	Credit Points:
	ACTL90001 Mathematics of Finance I	Semester 1	12.50
	ACTL90002 Mathematics of Finance II	Semester 2	12.50
	ACTL90003 Mathematics of Finance III	Semester 1	12.50
	ACTL90004 Insurance Risk Models	Semester 1	12.50
	ACTL90005 Life Contingencies	Semester 2	12.50
	ACTL90006 Life Insurance Models I	Semester 1	12.50
	ACTL90007 Life Insurance Models 2	Semester 2	12.50
	ACTL90008 Statistical Techniques in Insurance	Semester 2	12.50

Elective Subjects

Four electives to be taken from the Master of Management elective or foundation subject listings. Depending on the background of students entering the diploma, some students may also take subjects in probability and statistics.

Entry Requirements:	1. The Selection Committee will evaluate the applicant's ability to pursue the course successfully using the following criteria:
	
	  # An undergraduate or postgraduate degree with the equivalent of a major in mathematically based subjects;
	  # Performance on the Graduate Records Examination (GRE) unless the applicant has met one of the approved conditions for GRE exemption; and
	  # The applicant's submitted statement of intent in seeking entry.
	
	2. The Selection Committee may conduct interviews and tests and may call for referee reports or employer references to elucidate any of the matters referred to above.
	
	Note: Students who successfully complete the Postgraduate Diploma in Actuarial Science may be eligible to progress to the Master of Actuarial Science with 100 points credit.

Core Participation Requirements:	The Faculty of Business and Economics welcomes applications from students with disabilities. It is University and Faculty policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the Faculty's programs. The BCom and Masters degrees of the Faculty of Business and Economics equip graduates with the knowledge and technical skills necessary to understand and participate in the modern business world. The degrees include the following academic requirements for study: (1) The ability to explain and evaluate concepts, theories, institutional arrangements and operations of modern mixed economies;(2) The ability to critically evaluate the economy, commerce and business in the broader social and political context;(3) The ability to explain and apply concepts across a range of commerce and business disciplines in solving business and policy problems; and(4) The ability to contribute positively to the development of organisations and society in relation to business, government and the commercial professions. All students of the Faculty's courses must possess intellectual, ethical, and emotional capabilities required to participate in the full curriculum and to achieve the levels of competence required by the Faculty. Candidates for the BCom degree and for FBE Masters degrees must have abilities and skills in communication; in conceptual, integrative, and quantitative dimensions; and in behavioural and social dimensions. I. Communication: The student must be able to communicate effectively and efficiently in oral and/or written form. A student must have the ability to clearly and independently communicate knowledge and application of a discipline, principles or practices during assessment tasks, and in some discipline streams. II. Intellectual#Conceptual, Integrative and Quantitative Abilities: The student is expected to have the ability to develop problem#solving skills and demonstrate the ability to establish study plans and priorities. These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving requires all of these intellectual abilities.

	Students should also have the ability to comprehend complex disciplinary and cross disciplinary information related to the BCom and Masters degrees. III. Behavioural and Social Attributes: A student must possess behavioural and social attributes that enable them to participate in a complex learning environment and the emotional health required for full utilisation of his/ her intellectual abilities. Students are required to take responsibility for their own participation and learning. They also contribute to the learning of other students in collaborative learning environments, demonstrating interpersonal skills and an understanding of the needs of other students. Assessment may include the outcomes of tasks completed in collaboration with other students. Integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that are deemed necessary for students enrolled in FBE courses. Students who feel their disability will prevent them from participating in tasks involving the inherent academic requirements of the BCom and FBE Masters courses are encouraged to contact the Disability Liaison Unit. Adjustments can be provided to minimise the impact of a disability, but students should participate in the course in an independent manner.
Graduate Attributes:	On successful completion of this degree, graduates will be: Receptive to alternative ideas through a review of the literature and through class participation and assessment; Able to use, critically evaluate and test actuarial models; Adept in statistical reasoning through completion of core quantitative subjects in the degree; Able to solve problems through their understanding of financial, statistical and actuarial techniques; Able to work effectively with computer software for the analysis of data; Able to retrieve, summarise and interpret actuarial and financial information through class exercises and assessment; Able to apply and synthesise mathematical, statistical, financial and actuarial theory, models and evidence to a variety of financial and insurance issues; Effective in communication of ideas; and Able to collaborate and be effective in team work.
Generic Skills:	**Graduates of this degree will be skilled in:** # Recognising the interrelationships and synergies which exist between the disciplines of the faculty; # Synthesizing ideas, theories and data in developing solutions to actuarial problems; # Critical evaluation of evidence in support of an argument or proposition; # Problem solving in actuarial practice through the application of appropriate theories; # Teamwork through collaborative exercises in seminars, workshops and assessment; # Skills in the use of software packages applicable to actuarial and statistical modelling; and # Written and oral communication of actuarial ideas, theories and solutions to peers and the wider community.
Notes:	This program is no longer available for entry from 2014. It has been replaced with the Graduate Diploma in Actuarial Science (GD-ACTSC).