

ACTL90008 Statistical Techniques in Insurance

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2011.
Time Commitment:	Contact Hours: A 2 hour seminar and a 1 hour workshop per week Total Time Commitment: Estimated total time commitment of 120 hours per semester
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	Students should be competent in the use of Excel.
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements for this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Contact:	Graduate School of Business and Economics Level 4, 198 Berkeley Street Telephone: +61 3 8344 1670 Online Enquiries (https://nexus.unimelb.edu.au/OnlineEnquiryForm.aspx?campaigncode=CMP-01311-VZ8293&cssurl=https://nexus.unimelb.edu.au/cssfiles/gsbe.css&redirecturl=http://www.gsbe.unimelb.edu.au/contactus/nexus/gsbe.html) Web: www.gsbe.unimelb.edu.au (http://www.gsbe.unimelb.edu.au)
Subject Overview:	Topics include experience rating; claim run-off triangles; generalised linear models; time series and their applications; simulation.
Objectives:	On successful completion of this subject a student should be able to: <ul style="list-style-type: none"> # Describe the fundamental concepts of rating and apply them to simple experience rating systems; # Describe and apply techniques for analysing a delay (or run-off) triangle and projecting the ultimate position; # Explain the fundamental concepts of a generalised linear model (GLM), and describe how a GLM may apply; # Define and apply the main concepts underlying the analysis of time series models; # Explain the concepts of "Monte Carlo" simulation using a series of pseudorandom numbers.
Assessment:	An assignment of up to 1,000 words (10%) One hour mid-semester test (20%) Two hour end of semester exam (70%)
Prescribed Texts:	You will be advised of prescribed texts by your lecturer.
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	High level of development: <ul style="list-style-type: none"> # Written communication; # Problem solving; # Statistical reasoning;

	<ul style="list-style-type: none"># Application of theory to practice;# Interpretation and analysis;# Synthesis of data and other information;# Evaluation of data and other information;# Use of computer software.
Related Course(s):	Master of Actuarial Science Postgraduate Diploma in Actuarial Science