

ECON90010 Quantitative Analysis of Finance II

Credit Points:	12.5									
Level:	9 (Graduate/Postgraduate)									
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.									
Time Commitment:	Contact Hours: Three hours per week of lectures and tutorials Total Time Commitment: Estimated total time commitment of 120 hours per semester									
Prerequisites:	ECON90033 Quantitative Analysis of Finance I or ECOM90011 Financial Econometrics or equivalent <table border="1" data-bbox="387 629 1485 835"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ECON90033 Quantitative Analysis of Finance I</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>ECOM90011 Financial Econometrics</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ECON90033 Quantitative Analysis of Finance I	Semester 1, Semester 2	12.50	ECOM90011 Financial Econometrics	Semester 2	12.50
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ECON90033 Quantitative Analysis of Finance I	Semester 1, Semester 2	12.50								
ECOM90011 Financial Econometrics	Semester 2	12.50								
Corequisites:	None									
Recommended Background Knowledge:	None									
Non Allowed Subjects:	None									
Core Participation Requirements:	<p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University 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 University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p> </p>									
Coordinator:	Mr Tomasz Wozniak, Prof Vance Martin									
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Subject Overview:	The subject will focus on estimating and testing nonlinear models in finance including volatility models, artificial neural networks, factor models of contagion and discrete models of financial behaviour. Special attention will be given to applications in option markets (implied volatility and smiles), bond markets (level effects) and credit markets (default risk). Estimation and testing methods are based on maximum likelihood and generalised method of moments. The computer software used throughout the course is E-Views.									
Learning Outcomes:	<p>On successful completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # Identify and apply recent advances in quantitative methods to solve a range of problems in finance; 									

	<ul style="list-style-type: none"> # Describe how quantitative procedures can be applied in financial decision making; # Demonstrate a sophisticated understanding of quantitative methods by reproducing existing results. This will involve using both mathematical and computer skills. The computer programs used are EViews, Matlab and Excel; # Develop alternative frameworks for exploring new ideas in building alternative financial models; # Evaluate the strengths and importance of research in applied finance and the implications of research for solving financial problems.
Assessment:	2000 word group assignment, due in second half of semester (20%); One 90 minute mid-semester test in Weeks 5 (10%); and A 2-hour final examination, during the examination period (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:	<p>On successful completion of this subject, students should have improved the following generic skills:</p> <ul style="list-style-type: none"> # Evaluation of ideas, views and evidence; # Synthesis of ideas, views and evidence; # Strategic thinking; # Critical thinking; # Application of theory to economic policy and business decision making; # Summary and interpretation of information; # Statistical reasoning; # Problem solving skills; # Written communication; and # Oral communication.
Notes:	This subject is only available to students enrolled in the second year of the Master of Finance.
Related Course(s):	Master of Finance