

ECON20003 Quantitative Methods 2

Credit Points:	12.5												
Level:	2 (Undergraduate)												
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Summer Term, Parkville - Taught on campus. Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.												
Time Commitment:	Contact Hours: Semester 1 and 2: Two 1-hour lectures and a 1-hour tutorial per week; Summer Semester: Two 2-hour lectures and two 1-hour tutorials per week for six weeks Total Time Commitment: Not available												
Prerequisites:	One of the following: <table border="1" data-bbox="389 674 1485 936"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ECON10005 Quantitative Methods 1</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>MAST10010 Data Analysis 1</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>MAST10011 Experimental Design and Data Analysis</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ECON10005 Quantitative Methods 1	Semester 1, Semester 2	12.50	MAST10010 Data Analysis 1	Semester 2	12.50	MAST10011 Experimental Design and Data Analysis	Semester 1, Semester 2	12.50
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ECON10005 Quantitative Methods 1	Semester 1, Semester 2	12.50											
MAST10010 Data Analysis 1	Semester 2	12.50											
MAST10011 Experimental Design and Data Analysis	Semester 1, Semester 2	12.50											
Corequisites:	None												
Recommended Background Knowledge:	Please refer to Prerequisites and Corequisites.												
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:	Dr Reza Hajargasht, Dr Wasana Karunaratne, Prof Bill Griffiths												
Contact:	Summer: Wasana Karunaratne lakminik@unimelb.edu.au (mailto:lakminik@unimelb.edu.au) Semester 1: Reza Hajargasht har@unimelb.edu.au (mailto:har@unimelb.edu.au) Semester 2: Bill Griffiths b.griffiths@unimelb.edu.au (https://mce_host/faces/htdocs/b.griffiths@unimelb.edu.au)												
Subject Overview:	This subject provides students with background mathematical and statistical skills necessary for solving a wide range of commerce problems. It draws heavily on examples from accounting, management and marketing and, to a lesser extent, economics and finance. Topics include: review of statistics; tests of the location of populations; simple and multiple regression for use with time series and cross section data, including interpretation of estimates, hypothesis testing												

	and forecasting, an introduction to diagnostics; Logit models; an introduction to time series methods; and seasonality.
Learning Outcomes:	<ul style="list-style-type: none"> # Conduct and interpret a number of parametric and non-parametric tests of the location of quantitative populations. # Complete simple and multiple regression analysis, appropriate tests on regression coefficients, analyse and interpret the results and explain the findings. # Identify the circumstances under which test procedures may not be valid. # Analyse several specific models often employed in the various fields within commerce. # Identify the circumstances under which a model with a binary dependent variable is appropriate. # Evaluate the results of a Logit model, test relevant hypotheses on the regression coefficients in a Logit model and explain the findings. # Explain the difficulties that can arise when studying time series data. # Interpret season factors and seasonally adjust data. # Employ several methods to analyse and forecast time series data. # Use and understand various publicly available statistics, including the many data series available describing the economy and markets.
Assessment:	A 2-hour end-of-semester examination (70%), assignments not exceeding 20 pages in total (15%), a mid-semester exam (5%), and a mark based on tutorial attendance and participation (10%).
Prescribed Texts:	You will be advised of prescribed texts by your lecturer.
Breadth Options:	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2016/B-ARTS) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/B-MUS) <p>You should visit learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<ul style="list-style-type: none"> # High level of development: collaborative learning; statistical reasoning; application of theory to practice; interpretation and analysis; synthesis of data and other information; evaluation of data and other information; use of computer software. # Moderate level of development: oral communication; written communication; problem solving; critical thinking; receptiveness to alternative ideas. # Some level of development: team work; accessing data and other information from a range of sources.
Related Majors/Minors/Specialisations:	Economics
Related Breadth Track(s):	Quantitative Methods in Economics Economics & Finance