

# ECON10005 Quantitative Methods 1

<b>Credit Points:</b>	12.5						
<b>Level:</b>	1 (Undergraduate)						
<b>Dates &amp; Locations:</b>	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.						
<b>Time Commitment:</b>	Contact Hours: Two 1-hour lectures and a 1-hour tutorial per week Total Time Commitment: 170 hours per semester						
<b>Prerequisites:</b>	<p>A study score of at least 25 in English (any) or equivalent and Mathematical Methods in VCE Units 3 &amp; 4 or equivalent.</p> <p>OR</p> <p>Entry into the Bachelor of Commerce.</p> <p>OR</p> <p>Successful completion of</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST10012 Introduction to Mathematics</td> <td>Summer Term, Semester 1</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	MAST10012 Introduction to Mathematics	Summer Term, Semester 1	12.50
Subject	Study Period Commencement:	Credit Points:					
MAST10012 Introduction to Mathematics	Summer Term, Semester 1	12.50					
<b>Corequisites:</b>	None						
<b>Recommended Background Knowledge:</b>	Please refer to Prerequisites and Corequisites.						
<b>Non Allowed Subjects:</b>	<p>Students completing <b>ECON10005 Quantitative Methods 1</b> (<a href="#">../view/current/econ10005</a>) may not gain credit for <b>MAST10010 Data Analysis 1</b> (<a href="#">../view/current/mast10010</a>) or <b>MAST10011 Experimental Design and Data Analysis</b> (<a href="#">../view/current/mast10011</a>) .</p> <p>Students who have completed MAST20005 Statistics will not be permitted to enrol in this subject.</p> <p>Students intending to major in Actuarial Studies should not enrol in this subject.</p>						
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;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.&lt;/p&gt; &lt;p&gt;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: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>						
<b>Coordinator:</b>	Mr Jonathan Thong						
<b>Contact:</b>	<a href="mailto:jonathan.thong@unimelb.edu.au">jonathan.thong@unimelb.edu.au</a> (mailto:jonathan.thong@unimelb.edu.au)						
<b>Subject Overview:</b>	This subject covers the core concepts which underpin quantitative decision analysis in the various specialisations within the faculty. It provides a foundation for all second-year quantitative subjects in the commerce degree. The topics covered are drawn from financial mathematics; measures of location and dispersion; probability, random variables and expected values; sampling design; estimation and testing using the normal and t-distribution; and simple						

	regression and correlation. Excel is used to illustrate applications in accounting, economics, finance, management and marketing.
<b>Learning Outcomes:</b>	<ul style="list-style-type: none"> <li># Graph economic data using methods that facilitate analysis.</li> <li># Explain concepts relevant for summarising and interpreting data.</li> <li># Explain how the concepts of random variables and probability distributions are useful for drawing inferences.</li> <li># Explain the concepts of population, samples and sampling distributions.</li> <li># Estimate unknown population quantities and test hypotheses about them.</li> <li># Conduct simple regression analysis to model the relationship between variables and draw inferences about relationships.</li> <li># Apply common analytical techniques relevant for financial decision making.</li> </ul>
<b>Assessment:</b>	2-hour end-of-semester examination (70%) Three assignments, of approximately 1000 words, expected to be due in weeks 5, 8 & 11 (30%) Any student failing to achieve at least a 50% pass on the final exam can receive an overall mark for the subject no higher than 50.
<b>Prescribed Texts:</b>	You will be advised of prescribed texts by your lecturer.
<b>Breadth Options:</b>	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> <li># <b>Bachelor of Arts</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-ARTS">https://handbook.unimelb.edu.au/view/2015/B-ARTS</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-ENVS">https://handbook.unimelb.edu.au/view/2015/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-MUS">https://handbook.unimelb.edu.au/view/2015/B-MUS</a>)</li> </ul> <p>You should visit <a href="http://breadth.unimelb.edu.au/breadth/info/index.html">learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)</a> and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<ul style="list-style-type: none"> <li># High level of development: problem solving; 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; accessing data and other information from a range of sources.</li> <li># Moderate level of development: oral communication; written communication; critical thinking; receptiveness to alternative ideas.</li> <li># Some level of development: collaborative learning; team work.</li> </ul>
<b>Related Majors/Minors/Specialisations:</b>	Economics
<b>Related Breadth Track(s):</b>	Quantitative Methods in Economics Economics &&& Finance