

# MAST90081 Advanced Probability

<b>Credit Points:</b>	12.5								
<b>Level:</b>	9 (Graduate/Postgraduate)								
<b>Dates &amp; Locations:</b>	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.								
<b>Time Commitment:</b>	Contact Hours: Contact Hours: 36 hours comprising 2 one-hour lecture per week and 1 one-hour practice class per week. Total Time Commitment: Estimated Total Time Commitment - 170 hours								
<b>Prerequisites:</b>	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST30020 Probability for Inference</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	MAST30020 Probability for Inference	Semester 1	12.50
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MAST30020 Probability for Inference	Semester 1	12.50							
<b>Corequisites:</b>	None								
<b>Recommended Background Knowledge:</b>	None								
<b>Non Allowed Subjects:</b>	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST90062 Probability &amp; Mathematical Statistics I</td> <td>Not offered 2016</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	MAST90062 Probability & Mathematical Statistics I	Not offered 2016	12.50
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MAST90062 Probability & Mathematical Statistics I	Not offered 2016	12.50							
<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>	Prof Aihua Xia								
<b>Contact:</b>	Aihua Xia <a href="mailto:aihuaxia@unimelb.edu.au">aihuaxia@unimelb.edu.au</a> (mailto:aihuaxia@unimelb.edu.au)								
<b>Subject Overview:</b>	This subject mostly explores the key concept from Probability Theory: convergence of probability distributions, which is fundamental for Mathematical Statistics and is widely used in other applications. We study in depth the classical method of characteristic functions and discuss alternative approaches to proving limit theorems of Probability Theory.								
<b>Learning Outcomes:</b>	After completing this subject students should gain: <ul style="list-style-type: none"> <li># a deeper understanding of the principles of probability theory and some of its important application,</li> <li># the ability to pursue further studies in this and related areas.</li> </ul>								
<b>Assessment:</b>	Up to 40 pages of written assignments (two assignments worth 10% each) due mid and late semester (20%) 3-hour written examination (80%)								
<b>Prescribed Texts:</b>	TBA								

<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<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>	<p>In addition to learning specific skills that will assist students in their future careers in science, they will have the opportunity to develop generic skills that will assist them in any future career path. These include:</p> <ul style="list-style-type: none"> <li># problem-solving skills: the ability to engage with unfamiliar problems and identify relevant solution strategies;</li> <li># analytical skills: the ability to construct and express logical arguments and to work in abstract or general terms to increase the clarity and efficiency of analysis;</li> <li># collaborative skills: the ability to work in a team;</li> <li># time-management skills: the ability to meet regular deadlines while balancing competing commitments</li> </ul>
<b>Related Course(s):</b>	Doctor of Philosophy - Engineering Master of Philosophy - Engineering Master of Science (Mathematics and Statistics)
<b>Related Majors/Minors/ Specialisations:</b>	Mathematics and Statistics