

Discrete Mathematics / Operations Research

Year and Campus:	2015																
Coordinator:	Dr Lawrence Reeves																
Contact:	<p>Melbourne Graduate School of Science Faculty of Science The University of Melbourne Victoria 3010</p> <p>Tel: + 61 3 8344 6128 Fax: +61 3 8344 3351</p> <p>Web: http://graduate.science.unimelb.edu.au/ (http://graduate.science.unimelb.edu.au/)</p>																
Overview:	<p>The Graduate Diploma allows students who have completed an undergraduate degree to refocus or expand their body of knowledge by completing the requirement of one of the undergraduate majors (or equivalent) in the Bachelor of Science not already completed. The Graduate Diploma provides a pathway to the Master of Science Streams.</p>																
Learning Outcomes:	<p>Students who complete the Graduate Diploma should:</p> <ul style="list-style-type: none"> # Demonstrate an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories and methodologies that are applied with intellectual honesty and a respect for ethical values; # Apply critical and analytical skills and methods to the identification and resolution of problems; # Act as informed and critically discriminating participants within the community of scholars, as citizens and in the work force; # Communicate effectively; # Commit to continuous learning; # Be proficient in the use of appropriate modern technologies, such as the computer and other information. 																
Structure & Available Subjects:	<p>Completion of 100 points:</p> <ul style="list-style-type: none"> # 50 points of study at Level 3; # 50 points of study at Level 2 or above. 																
Subject Options:	<p>Subject Prerequisites: both of MAST10006 Calculus 2 and MAST10007 Linear Algebra, or equivalents or both of MAST10008 Accelerated Mathematics 1 and MAST10009 Accelerated Mathematics 2, or equivalents..</p> <p>Level 2</p> <p>Students should select 50 points of level 2 options to meet the pre-requisites for their level 3 choices.</p> <p>-</p> <p>Both of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST20018 Discrete Maths and Operations Research</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>MAST20026 Real Analysis</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus one of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST20004 Probability</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>		Subject	Study Period Commencement:	Credit Points:	MAST20018 Discrete Maths and Operations Research	Semester 2	12.50	MAST20026 Real Analysis	Semester 1, Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	MAST20004 Probability	Semester 1	12.50
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MAST20004 Probability	Semester 1	12.50															

	MAST20006 Probability for Statistics	Semester 1	12.50
	Plus one elective selected from: Any level 2 MAST subject that will meet the pre-requisites for level 3 options. - Level 3 All three of:		
	Subject	Study Period Commencement:	Credit Points:
	MAST30021 Complex Analysis	Semester 1, Semester 2	12.50
	MAST30012 Discrete Mathematics	Semester 2	12.50
	MAST30013 Techniques in Operations Research	Semester 1	12.50
	Plus any other third year level subject offered by the Department of Mathematics and Statistics.		
Links to further information:	http://graduate.science.unimelb.edu.au		
Related Course(s):	Graduate Diploma in Science		