

# Pure Mathematics

<b>Year and Campus:</b>	2015												
<b>Coordinator:</b>	Dr Lawrence Reeves												
<b>Contact:</b>	<p><b>Melbourne Graduate School of Science</b>  Faculty of Science  The University of Melbourne  Victoria 3010</p> <p>Tel: + 61 3 8344 6128  Fax: +61 3 8344 3351</p> <p>Web: <a href="http://graduate.science.unimelb.edu.au/">http://graduate.science.unimelb.edu.au/</a> (<a href="http://graduate.science.unimelb.edu.au/">http://graduate.science.unimelb.edu.au/</a>)</p>												
<b>Overview:</b>	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.												
<b>Learning Outcomes:</b>	<p>Students who complete the Graduate Diploma should:</p> <ul style="list-style-type: none"> <li># 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;</li> <li># Apply critical and analytical skills and methods to the identification and resolution of problems;</li> <li># Act as informed and critically discriminating participants within the community of scholars, as citizens and in the work force;</li> <li># Communicate effectively;</li> <li># Commit to continuous learning;</li> <li># Be proficient in the use of appropriate modern technologies, such as the computer and other information.</li> </ul>												
<b>Structure &amp; Available Subjects:</b>	<p>Completion of 100 points:</p> <ul style="list-style-type: none"> <li># 50 points of study at Level 3;</li> <li># 50 points of study at Level 2 or above.</li> </ul>												
<b>Subject Options:</b>	<p><b>Subject Prerequisites:</b> 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><b>Level 2</b></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>All of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST20009 Vector Calculus</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>MAST20022 Group Theory and Linear Algebra</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 elective selected from:</p> <p><b>Any level 2 MAST subject that will meet the pre-requisites for level 3 options.</b></p> <p>-</p> <p><b>Level 3</b></p>	Subject	Study Period Commencement:	Credit Points:	MAST20009 Vector Calculus	Semester 1, Semester 2	12.50	MAST20022 Group Theory and Linear Algebra	Semester 2	12.50	MAST20026 Real Analysis	Semester 1, Semester 2	12.50
Subject	Study Period Commencement:	Credit Points:											
MAST20009 Vector Calculus	Semester 1, Semester 2	12.50											
MAST20022 Group Theory and Linear Algebra	Semester 2	12.50											
MAST20026 Real Analysis	Semester 1, Semester 2	12.50											

	All of:		
	Subject	Study Period Commencement:	Credit Points:
	MAST30005 Algebra	Semester 1	12.50
	MAST30021 Complex Analysis	Semester 1, Semester 2	12.50
	MAST30026 Metric and Hilbert Spaces	Semester 2	12.50
	Plus any other third year level subject offered by the Department of Mathematics and Statistics. -		
<b>Links to further information:</b>	<a href="http://graduate.science.unimelb.edu.au">http://graduate.science.unimelb.edu.au</a>		
<b>Related Course(s):</b>	Graduate Diploma in Science		