

## D-MATHSC Diploma in Mathematical Sciences

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| <b>Year and Campus:</b>                           | 2013 - Parkville  |
| <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>Level:</b>                                     | Undergraduate   |
| <b>Duration &amp; Credit Points:</b>              | 100 credit points taken over 12 months full time. This course is available as full or part time.  |
| <b>Coordinator:</b>                               | Penny Wightwick   |
| <b>Contact:</b>                                   | <p><b>Science Student Centre</b><br/>The Eastern Precinct (building 138)<br/>(between Doug McDonnell building and Eastern Resource Centre)</p> <p><i>Enquiries</i><br/>Phone: 13 MELB (13 6352)<br/>Email: <a href="mailto:13MELB@unimelb.edu.au">13MELB@unimelb.edu.au</a> (<a href="mailto:13MELB@unimelb.edu.au">mailto:13MELB@unimelb.edu.au</a>)</p>   |
| <b>Course Overview:</b>                           | The Diploma in Mathematical Sciences is a 100-point diploma, normally taken concurrently with an undergraduate degree.  |
| <b>Objectives:</b>                                | <p>Students undertaking the Diploma in Mathematical Sciences concurrently with an undergraduate degree will generally achieve the objectives of the new generation BSc degree, but the following specific outcomes are particular objectives of the Diploma:</p> <p>(a) support the graduate attributes, under “academically excellent”:</p> <ul style="list-style-type: none"> <li># be intellectually curious and apply a rigorous, critical and logical approach to enquiry;</li> <li># apply outstanding analytical, quantitative and technical skills to problem solving and, where relevant, design;</li> </ul> <p>(b) support the graduate attribute, under “knowledgeable across disciplines”:</p> <ul style="list-style-type: none"> <li># have a set of flexible and transferable skills for different types of employment;</li> </ul> <p>(c) provide students who would not otherwise have the opportunity, access to professional masters or research-preparation masters programs in mathematics and statistics, while keeping open the pathways associated with the major chosen within the core of their undergraduate degree.</p>   |
| <b>Course Structure &amp; Available Subjects:</b> | <p>Students undertake the Diploma in Mathematical Sciences together with an undergraduate degree, to make a total program of between 350 and 400 points.</p> <p>Up to fifty points of appropriate Mathematics and Statistics subjects in the undergraduate degree program may also be attributed to the Diploma.</p> <p>Note that in some cases students will be required to complete a total of 125 points of mathematics and statistics study to complete a maths sequence as required by the Diploma. Note that only 100 points of this 125 points of study can be completed in the Diploma and therefore any additional points required must be completed within the bachelors degree or via the Community Access Program.</p> <p>To be awarded the Diploma students must have completed 100 points of Mathematics and Statistics subjects at post-VCE level, including 50 points at third year level. Students enrolled in the Bachelor of Science majoring in Mathematics and Statistics or Mathematical Physics are not permitted to complete a Diploma in Mathematical Sciences.</p> <p>Students are required to select subjects in the undergraduate degree and the Diploma, so that all requirements of the undergraduate degree are met and, in addition through the Diploma, the student meets the specific requirements for the award of any one specialisation of the major in Mathematics and Statistics, as defined for the Bachelor of Science.</p> <ul style="list-style-type: none"> <li># <b>Pure Mathematics</b> (<a href="http://handbook.unimelb.edu.au/view/2013/!R01-AA-SPC%2B1007">../view/2013/!R01-AA-SPC%2B1007</a>)</li> <li># <b>Applied Mathematics</b> (<a href="http://handbook.unimelb.edu.au/view/2013/!R01-AA-SPC%2B1008">../view/2013/!R01-AA-SPC%2B1008</a>)</li> <li># <b>Discrete Mathematics and Operations Research</b> (<a href="http://handbook.unimelb.edu.au/view/2013/!R01-AA-SPC%2B1009">../view/2013/!R01-AA-SPC%2B1009</a>)</li> </ul> |

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|  | <p># <b><u>Statistics / Stochastic Processes (../view/2013!/R01-AA-SPC%2B1010)</u></b></p> <p><b>Pathways</b></p> <p>Depending on a student's individual circumstances and their study preferences, the Diploma may be taken in a variety of 'Fast Track' modes or by adding the full 100 points (i.e. one full year) to their degree.</p> <p>The mode of undertaking the diploma, either Fast Track or by addition of a full year to their degree, will depend on each student's particular circumstances and study preferences, including whether they meet the criteria for permission to overload. The overload policy requires a particular level of performance/achievement be attained for permission to overload.</p> <p>Fast Track modes will involve cross crediting of up to 50 points and/or overloading in one, two or all three years of the course.</p> |
| <p><b>Entry Requirements:</b></p>              | <p>All current and commencing new generation undergraduate degree students and Bachelor of Engineering students (commencing 2008 and beyond) can apply to undertake the diploma subject to meeting prerequisites.</p> <p>Please note: Bachelor of Science students who complete a major in Mathematics and Statistics or Mathematical Physics will not be permitted to complete a Diploma in Mathematical Sciences.</p> <p>For the Diploma in Mathematical Sciences students must have completed VCE Unit 3/4 Mathematical Methods or equivalent.</p>  |
| <p><b>Core Participation Requirements:</b></p> | <p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a></p>  |
| <p><b>Further Study:</b></p>                   | <p>Any postgraduate program accessible to BSc students with a major in Mathematics and Statistics is open to students who successfully complete the Diploma and the accompanying undergraduate degree, since Diploma completion ensures that all academic requirements of a major in Mathematics and Statistics have been met.</p>   |
| <p><b>Graduate Attributes:</b></p>             | <p>The program allows students of high ability to complete the requirements of the major in Mathematics and Statistics (normally available within the BSc) in addition to the major selected for their undergraduate degree. Students with majors in two distinct disciplines will be "knowledgeable across disciplines" as required in the graduate attributes. They will also be prepared for a wider choice of postgraduate coursework and research programs at this and other universities. Refer also to the statement of course 'Objectives'.</p>  |