# Discrete Mathematics / Operations Research

| | |
|---|---|
| **Year and Campus:** | 2016 |
| **Coordinator:** | Dr Lawrence Reeves |
| **Contact:** | **lreeves@unimelb.edu.au (mailto:lreeves@unimelb.edu.au)** |
| **Overview:** | 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. |
| **Learning Outcomes:** | Students who complete the Graduate Diploma should:<br># 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;<br># Apply critical and analytical skills and methods to the identification and resolution of problems;<br># Act as informed and critically discriminating participants within the community of scholars, as citizens and in the work force;<br># Communicate effectively;<br># Commit to continuous learning;<br># Be proficient in the use of appropriate modern technologies, such as the computer and other information. |
| **Structure & Available Subjects:** | Completion of 125 points:<br># 50 points of study at Level 2 or above;<br># 50 points of study at Level 3;<br># 25 point of study at Level 9 |
| **Subject Options:** | ***Subject prerequisites:*** For stream specific requirements please **click here (http://science.unimelb.edu.au/available-stream-requirements%20)** .<br>**Level 2**<br>Students should select 50 points of level 2 options to meet the pre-requisites for their level 3 choices.<br>-<br>Both of: |

| Subject | Study Period Commencement: | Credit Points: |
|---|---|---|
| MAST20026 Real Analysis | Semester 1, Semester 2 | 12.50 |
| MAST20018 Discrete Maths and Operations Research | Semester 2 | 12.50 |

Plus one of:

| Subject | Study Period Commencement: | Credit Points: |
|---|---|---|
| MAST20004 Probability | Semester 1 | 12.50 |
| MAST20006 Probability for Statistics | Semester 1 | 12.50 |

Plus one level 2 MAST subject that will meet the pre-requisites for level 3 options

**Level 3**

All three of:

| | |
|---|---|
| | <table><tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr><tr><td>MAST30021 Complex Analysis</td><td>Semester 1, Semester 2</td><td>12.50</td></tr><tr><td>MAST30013 Techniques in Operations Research</td><td>Semester 1</td><td>12.50</td></tr><tr><td>MAST30012 Discrete Mathematics</td><td>Semester 2</td><td>12.50</td></tr></table><br>Plus any other third year level subject offered by the Department of Mathematics and Statistics.<br><br>**Level 9**<br><br>Plus two level 9 subjects selected from listed discipline subjects in the Master of Science (Mathematics and Statistics) program |
| **Links to further information:** | http://graduate.science.unimelb.edu.au |
| **Related Course(s):** | Graduate Diploma in Science |