

# Applied Mathematics (specialisation of Mathematics and Statistics major)

| <b>Year and Campus:</b>                       | 2012   |                |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
|---|--|----------------|--|---------|----------------------------|----------------|----------------------------|------------------------|-------|--|------------|-------|--|------------|-------|---------|----------------------------|----------------|------------------------|------------|-------|--------------------------------|------------|-------|--------------------------------|------------|-------|
| <b>Coordinator:</b>                           | See Mathematics and Statistics major   |                |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| <b>Contact:</b>                               | See Mathematics and Statistics major   |                |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| <b>Overview:</b>                              | Applied Mathematics specialisation within the Mathematics and Statistics major   |                |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| <b>Objectives:</b>                            | See Mathematics and Statistics major   |                |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| <b>Structure &amp; Available Subjects:</b>    | Completion of 50 points of study at Level 3.   |                |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| <b>Subject Options:</b>                       | <p>All three of</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST30021 Complex Analysis</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>MAST30028 Numerical and Symbolic Mathematics</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>MAST30029 Partial Differential Equations</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus one elective selected from</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST30011 Graph Theory</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> <tr> <td>MAST30001 Stochastic Modelling</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> |                |  | Subject | Study Period Commencement: | Credit Points: | MAST30021 Complex Analysis | Semester 1, Semester 2 | 12.50 | MAST30028 Numerical and Symbolic Mathematics | Semester 1 | 12.50 | MAST30029 Partial Differential Equations | Semester 2 | 12.50 | Subject | Study Period Commencement: | Credit Points: | MAST30011 Graph Theory | Semester 1 | 12.50 | MAST30012 Discrete Mathematics | Semester 2 | 12.50 | MAST30001 Stochastic Modelling | Semester 2 | 12.50 |
| Subject                                       | Study Period Commencement:   | Credit Points: |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| MAST30021 Complex Analysis                    | Semester 1, Semester 2   | 12.50          |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| MAST30028 Numerical and Symbolic Mathematics  | Semester 1   | 12.50          |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| MAST30029 Partial Differential Equations      | Semester 2   | 12.50          |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| Subject                                       | Study Period Commencement:   | Credit Points: |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| MAST30011 Graph Theory                        | Semester 1   | 12.50          |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| MAST30012 Discrete Mathematics                | Semester 2   | 12.50          |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| MAST30001 Stochastic Modelling                | Semester 2   | 12.50          |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| <b>Notes:</b>                                 | <p>This specialisation is available to new generation Bachelor of Science students (B-SCI). It is also available to Bachelor of Science students who commenced prior to 2008. The published structure of this specialisation/major includes subjects available in the current year. Pre-2008 Bachelor of Science students who completed one or more Level 3 science subjects towards this major prior to 2010 should contact the EPSC for advice on appropriate subjects to complete this major.</p>   |                |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |
| <b>Related Majors/Minors/Specialisations:</b> | Mathematics and Statistics   |                |  |         |                            |                |                            |                        |       |  |            |       |  |            |       |         |                            |                |                        |            |       |                                |            |       |                                |            |       |