

Mathematics and Statistics

Year and Campus:	2015					
Coordinator:	Dr Lawrence Reeves Department of Mathematics and Statistics					
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Overview:	A Mathematics and Statistics major will provide essential knowledge and transferable skills for students entering careers or research in the following areas: General sciences, Agriculture and environmental sciences, Banking, Finance and Commerce, Engineering, Government, Education, Industry, e.g. logistics/project manager, market research consultant, IT and computing, and Medicine.					
Learning Outcomes:	<p><i>Mathematics and Statistics Major Graduates should demonstrate:</i></p> <ul style="list-style-type: none"> # ability to construct logical, clearly presented and justified arguments; # ability to formulate and model practical and abstract problems in mathematics and statistics; # mastery of a broad range of mathematical and statistical methods, with a particular emphasis in one of four specialisations; # ability to analyse complex problems, then choose and apply appropriate mathematical/statistical tools in finding a solution; # appreciation of the universal utility of mathematics and statistics within all fields of science; # appreciation that mathematics and statistics are disciplines based on rigorous proofs and logical deduction; # understanding of the role of mathematics and statistics in other fields; # ability to communicate clearly, effectively and precisely about mathematical and statistical ideas; # ability to clearly communicate abstract mathematical/statistical ideas to an audience with a heterogeneous background in sciences; # understanding of the applicability of mathematics and statistics in addressing current issues facing humankind. # an ability to work effectively and responsibly both as an individual and as part of a team.. 					
Structure & Available Subjects:	Completion of 50 points of study at Level 3.					
Majors/Minors/Specialisations	<p>There are four specialisations within the Mathematics and Statistics major.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="background-color: #cccccc;">Major/Minor/Specialisation</th> </tr> </thead> <tbody> <tr> <td>Pure Mathematics</td> </tr> <tr> <td>Applied Mathematics</td> </tr> <tr> <td>Operations Research / Discrete Mathematics</td> </tr> <tr> <td>Statistics / Stochastic Processes</td> </tr> </tbody> </table>	Major/Minor/Specialisation	Pure Mathematics	Applied Mathematics	Operations Research / Discrete Mathematics	Statistics / Stochastic Processes
Major/Minor/Specialisation						
Pure Mathematics						
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Statistics / Stochastic Processes						
Notes:	This major 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 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 Science Student Centre for advice on appropriate subjects to complete this major.					
Related Course(s):	Bachelor of Arts and Bachelor of Science Bachelor of Commerce and Bachelor of Science Bachelor of Science Bachelor of Science					