

Program Enrolment Checklist (2015)



CRICOS Provider Code: 00109J
CRICOS Course Code: 001608D

Bachelor of Mathematics (10237)

Please refer to the B Mathematics Program Handbook for specific information in relation to the program structure and compulsory and directed courses required for each individual major: <http://www.newcastle.edu.au/degrees/bachelor-of-mathematics/handbook>. This Program Enrolment Checklist is current as at 13/08/2015 and is subject to change.

Year 1	MATH1210 Standard Pathway	MATH1220 Standard Pathway	MATH1800	STAT1070	ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE
	MATH1110 Alternate Pathway	MATH1120 Alternate Pathway			ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE
Year 2	MATH2310	MATH2320	MAJOR 2000 level compulsory/ directed	MAJOR 2000 level compulsory/ directed	ELECTIVE Standard Pathway	ELECTIVE	ELECTIVE	ELECTIVE
					MATH2340 Alternate Pathway			
Year 3	MAJOR 3000 level compulsory	MAJOR 3000 level directed	MAJOR 3000 level directed	MAJOR 3000 level directed	ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE

Students should have all of the following boxes ticked to be eligible for the degree:

- A total of 240 units
- 60 units of core courses for the Standard Pathway or 70 units of core courses for the Alternate Pathway
- A maximum of 120 units of electives for the Standard Pathway or a maximum of 110 units of electives for the Alternate Pathway
- At least one major of 80 units with 40 units at 3000 level and including 20 units of core courses
- A maximum of 100 units at 1000 level
- A minimum of 60 units at 3000 level

Please note: students must complete an 80 unit major including at least 40 units at 3000 level and all compulsory courses for that major. Students completing a double major must complete at least 60 units unique to each major and 20 units shared between the two majors, including at least 40 units at 3000 level for each major and all compulsory courses for each major. The Studies in Mathematics and Statistics major cannot be completed as part of a double major.

ALTERNATE PATHWAY

Complete all of the following 60 units

MATH1110 Mathematics 1
 MATH1120 Mathematics 2
 MATH1800 Mathematical Modelling
 STAT1070 Statistics for the Sciences
 MATH2310 Calculus of Science and Engineering
 MATH2320 Linear Algebra
 MATH2340 Linearity and Continuity

STANDARD PATHWAY

Complete all of the following 70 units

MATH1210 Mathematical Discovery 1
 MATH1220 Mathematical Discovery 2
 MATH1800 Mathematical Modelling
 STAT1070 Statistics for the Sciences
 MATH2310 Calculus of Science and Engineering
 MATH2320 Linear Algebra

APPLIED MATHEMATICS MAJOR	PURE MATHEMATICS MAJOR	STATISTICS MAJOR	STUDIES IN MATHEMATICS AND STATISTICS MAJOR
Compulsory Courses	Compulsory Courses	Compulsory Courses	Compulsory Courses
Complete all of the following 40 units	Complete all of the following 30 units	Complete all of the following 50 units	Complete all of the following 20 units
MATH1800 Mathematical Modelling STAT1070 Statistics for the Sciences MATH2730 Operations Research 1 MATH2800 Differential Equations	MATH2310 Calculus of Science and Engineering MATH2320 Linear Algebra MATH2330 Analysis	MATH1800 Mathematical Modelling STAT1070 Statistics for the Sciences STAT2000 Applied Statistics and Research Methods STAT2010 Fundamentals of Statistics STAT3010 Statistical Inference	MATH2310 Calculus of Science and Engineering MATH2320 Linear Algebra
Directed Courses	Directed Courses	Directed Courses	Directed Courses
Complete 40 units from 3000 level Directed Courses, including at least one of MATH3840 or MATH3850	Complete 10 units from 2000 level Directed Courses	Complete 30 units from 3000 level Directed Courses	Complete 20 units from 2000 level Directed Courses, including at least one of MATH2330, MATH2730 and MATH2000
MATH3700 Advanced Differential Equations MATH3820 Numerical Methods MATH3830 Operations Research 2 MATH3840 Optimisation in Business and Industry MATH3850 Industrial Project	MATH2600 Introduction to Modern Mathematical Computation MATH2800 Differential Equations	STAT3030 Generalized Linear Models STAT3040 Time Series Analysis STAT3100 Total Quality Management STAT3120 Applied Bayesian Methods STAT3170 Surveys and Experiments	MATH2330 Analysis MATH2600 Introduction to Modern Mathematical Computation MATH2730 Operations Research 1 MATH2800 Differential Equations STAT2000 Applied Statistics and Research Methods STAT2010 Fundamentals of Statistics
	Directed Courses		Directed Courses
	Complete 40 units from 3000 level Directed Courses, including at least one of MATH3120 or MATH3170		Complete 40 units from 3000 level Directed Courses, including at least one of MATH3120, MATH3170, MATH3840 or MATH3850
	MATH3010 Logic and Set Theory MATH3120 Algebra MATH3170 Number Theory MATH3180 Topology MATH3205 Fourier Analysis MATH3242 Complex Analysis MATH3510 Combinatorics and Graph Theory MATH3700 Advanced Differential Equations MATH3820 Numerical Methods		MATH3010 Logic and Set Theory MATH3120 Algebra MATH3170 Number Theory MATH3180 Topology MATH3205 Fourier Analysis MATH3210 Directed Studies in Mathematics MATH3242 Complex Analysis MATH3400 Research Topics in Mathematics MATH3510 Combinatorics and Graph Theory MATH3700 Advanced Differential Equations MATH3820 Numerical Methods MATH3830 Operations Research 2 MATH3840 Optimisation in Business and Industry MATH3850 Industrial Project STAT3010 Statistical Inference STAT3030 Generalized Linear Models STAT3040 Time Series Analysis STAT3100 Total Quality Management STAT3120 Applied Bayesian Methods STAT3170 Surveys and Experiments STAT3990 Topics in Statistics