Science

Bachelor of Advanced Mathematics (Honours) (3956)

2022 Commencing Students
Program Structure

Single Degree Mode

PROGRAM STRUCTURE				
An approved Major	96 UOC (16 courses)	144 UOC	192 UOC	
Science Electives				
Honours	48 UOC (8 courses)			
Free Electives	36 UOC (4 courses)	48 UOC		
General Education	12 UOC (2 courses)			

Dual Degree Mode

PROGRAM STRUCTURE			
An approved Major	96 UOC	144 UOC	240 UOC (ADA / BUS)
Science Electives			
Honours	48 UOC		288 UOC (LAW / ENG)
Other Degree Courses	96 UOC (ADA or BUS) 144 UOC (LAW or ENG)		

Science Electives are courses taken from within the Faculty of Science or as defined here

Free Electives are courses from any Faculty at UNSW including Science, but cannot be GEN-branded courses

General Education must taken from courses that are not considered Science Electives

Science students cannot take GENS courses under any circumstance

Students in Single Degree Mode cannot complete more than 72 UoC of Level 1 courses including any GEN courses and Level 1 courses taken for General Education.

Science

Bachelor of Advanced Mathematics (Honours) (3956)

2022 Commencing Students
Approved Majors

Information is correct as of 26.10.2021 and is based on proposed prerequisites and course availability. This is to be used as a guide only and does not replace individual advice. Refer to the Handbook and Class Timetable for the relevant term to check availability for these courses. Contact The Nucleus: Student Hub for further assistance. CRICOS Provider Code 00098G

Science

Bachelor of Advanced Mathematics (Honours) (3956)

2022 Commencing Students – Single Degree – Major in Advanced Statistics (MATHU1)
Choose from available proposed courses in each year

Year 1		
SCIF1131 Introductory Skills for Science (T1, T3)	MATH1241 Higher Mathematics 1B (T1,T2)	6 UOC Free Elective
MATH1141 Higher Mathematics 1A (T1,T3)	6 UOC Level 1 Computer Science Elective	6 UOC Free Elective
MATH1081 Discrete Mathematics (T1,T2, T3)	6 UOC Free Elective	

Year 2		
MATH2111 Higher Several Variable Calculus (T1)	MATH2601 Higher Linear Algebra (T2)	MATH2931 Higher Linear Models (T3)
6 UOC Science Elective	MATH2901 Higher Theory of Statistics (T2)	6 UOC General Education
6 UOC Free Elective	MATH2221 (T2) or MATH2621 (T3)	

Year 3		
MATH3901 Higher Probability and Stochastic Processes (T1)	MATH3821 Statistical Modelling and Computing (T2)	6 UOC Any Level 3 Mathematics Course
MATH3911 Higher Statistical Inference (T1)	6 UOC Mathematics level 3 (See Note 1)	
6UOC Free Elective	6 UOC General Education	

NOTES

This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.

Note 1: 6 UOC Mathematics level 3: MATH3831 (T2), MATH3841 (TBC), MATH3851 (T3), MATH3871 (T3)

See Program Structure on page 1 for a guide on the terminology and colour codes used in this progression plan.
Note: All students in Advanced Mathematics (Hons) must complete an Honours year of 48 UoC. Please note the Honours component is not included in this template.

Information is correct as of 26.10.2021 and is based on proposed prerequisites and course availability. This is to be used as a guide only and does not replace individual advice. Refer to the Handbook and Class Timetable for the relevant term to check availability for these courses. Contact The Nucleus: Student Hub for further assistance. CRICOS Provider Code 00098G

Science

Bachelor of Advanced Mathematics (Honours) (3956)

2022 Commencing Students – Double Degree – Major in Advanced Statistics (MATHU1)
Choose from available proposed courses in each year

UNSW
SYDNEY

Year 1

SCIF1131 Introductory Skills for Science (T1, T3)	MATH1241 Higher Mathematics 1B (T1,T2)	Other Degree Course
MATH1141 Higher Mathematics 1A (T1,T3)	6 UOC Level 1 Computer Science Elective	Other Degree Course
MATH1081 Discrete Mathematics (T1,T2, T3)		Other Degree Course

Year 2

MATH2111 Higher Several Variable Calculus (T1)	MATH2601 Higher Linear Algebra (T2)	MATH2931 Higher Linear Models (T3)
6 UOC Science Elective	MATH2901 Higher Theory of Statistics (T2)	Other Degree Course
Other Degree Course	MATH2221 (T2) or MATH2621 (T3)	

Year 3

MATH3901 Higher Probability and Stochastic Processes (T1)	MATH3821 Statistical Modelling and Computing (T2)	6 UOC Any Level 3 Mathematics Course
MATH3911 Higher Statistical Inference (T1)	6 UOC Mathematics level 3 (See Note 1)	
Other Degree Course	Other Degree Course	Other Degree Course

Year 4

Other Degree Course	Other Degree Course	Other Degree Course
Other Degree Course	Other Degree Course	Other Degree Course
Other Degree Course	Other Degree Course	

NOTES

This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.

Note 1: 6 UOC Mathematics level 3: MATH3831 (T2), MATH3841 (TBC), MATH3851 (T3), MATH3871 (T3)

See Program Structure on page 1 for a guide on the terminology and colour codes used in this progression plan.
In double degrees with Law or Engineering, a further 48uoc of other faculty course must be studied in addition to what is pictured here (Year 5)

Note: All students in Advanced Mathematics (Hons) must complete an Honours year of 48 UoC. Please note the Honours component is not included in this template.

Science

Bachelor of Advanced Mathematics (Honours) (3956)

2022 Commencing Students – Single Degree – Major in Applied Mathematics (MATHA1)
Choose from available proposed courses in each year

Year 1		
SCIF1131 Introductory Skills for Science (T1, T3)	MATH1241 Higher Mathematics 1B (T1,T2)	6 UOC Free Elective
MATH1141 Higher Mathematics 1A (T1,T3)	6 UOC Level 1 Computer Science Elective	6 UOC Free Elective
MATH1081 Discrete Mathematics (T1,T2, T3)	6 UOC Free Elective	

Year 2		
MATH2111 Higher Several Variable Calculus (T1)	MATH2601 Higher Linear Algebra (T2)	MATH2621 Higher Complex Analysis (T3)
MATH2301 Mathematical Computing (T1)	MATH2901 Higher Theory of Statistics (T2)	6 UOC General Education
6 UOC Free Elective	MATH2221 Higher Theory and Applications of Differential Equations (T2)	

Year 3		
6 UOC from Level 3 Elective – List A (See Note 1)	6 UOC from Level 3 Elective – List A (See Note 1)	6 UOC from Level 3 Elective – List B (See Note 2)
6 UOC Free Elective	6 UOC from Level 3 Elective – List B (See Note 2)	6 UOC General Education
6 UOC from Level 3 Elective – List A (See Note 1)	6 UOC Free Elective	

NOTES

This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.

Note 1: 6 UOC Level 3 Elective List A: MATH3041 (T2), MATH3101 (T3), MATH3121 (T1), MATH3161 (T1), MATH3171 (TBC), MATH3201 (T3), MATH3261 (T3), MATH3311 (T2), MATH3361 (TBC), MATH6781 (T2)
Note 2: 6 UOC Level 3 Elective List B: See Handbook for full list

See Program Structure on page 1 for a guide on the terminology and colour codes used in this progression plan.

Note: All students in Advanced Mathematics (Hons) must complete an Honours year of 48 UoC. Please note the Honours component is not included in this template.

Science

Bachelor of Advanced Mathematics (Honours) (3956)

2022 Commencing Students – Double Degree – Major in Applied Mathematics (MATHA1)
Choose from available proposed courses in each year

Year 1

SCIF1131 Introductory Skills for Science (T1, T3)	MATH1241 Higher Mathematics 1B (T1,T2)	Other Degree Course
MATH1141 Higher Mathematics 1A (T1,T3)	6 UOC Level 1 Computer Science Elective	Other Degree Course
MATH1081 Discrete Mathematics (T1,T2, T3)		Other Degree Course

Year 2

MATH2111 Higher Several Variable Calculus (T1)	MATH2601 Higher Linear Algebra (T2)	MATH2621 Higher Complex Analysis (T3)
MATH2301 Mathematical Computing (T1)	MATH2901 Higher Theory of Statistics (T2)	Other Degree Course
	MATH2221 Higher Theory and Applications of Differential Equations (T2)	Other Degree Course

Year 3

6 UOC from Level 3 Elective – List A (See Note 1)	6 UOC from Level 3 Elective – List A (See Note 1)	6 UOC from Level 3 Elective – List B (See Note 2)
6 UOC from Level 3 Elective – List A (See Note 1)	6 UOC from Level 3 Elective – List B (See Note 2)	
Other Degree Course	Other Degree Course	Other Degree Course

Year 4

Other Degree Course	Other Degree Course	Other Degree Course
Other Degree Course	Other Degree Course	Other Degree Course
Other Degree Course	Other Degree Course	

NOTES

This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.

Note 1: 6 UOC Level 3 Elective List A: MATH3041 (T2), MATH3101 (T3), MATH3121 (T1), MATH3161 (T1), MATH3171 (TBC), MATH3201 (T3), MATH3261 (T3), MATH3311 (T2), MATH3361 (TBC), MATH6781 (T2)
Note 2: 6 UOC Level 3 Elective List B: See Handbook for full list

See Program Structure on page 1 for a guide on the terminology and colour codes used in this progression plan.
In double degrees with Law or Engineering, a further 48uoc of other faculty course must be studied in addition to what is pictured here (Year 5)
Note: All students in Advanced Mathematics (Hons) must complete an Honours year of 48 UoC. Please note the Honours component is not included in this template.

Bachelor of Advanced Mathematics (Honours) (3956)

2022 Commencing Students – Single Degree – Major in Pure Mathematics (MATHP1)
Choose from available proposed courses in each year

Year 1

SCIF1131 Introductory Skills for Science (T1, T3)	MATH1241 Higher Mathematics 1B (T1,T2)	6 UOC Free Elective
MATH1141 Higher Mathematics 1A (T1,T3)	6 UOC Level 1 Computer Science Elective	6 UOC Free Elective
MATH1081 Discrete Mathematics (T1,T2, T3)	6 UOC Free Elective	

Year 2

MATH2111 Higher Several Variable Calculus (T1)	MATH2601 Higher Linear Algebra (T2)	MATH2621 Higher Complex Analysis (T3)
6 UOC General Education	MATH2901 Higher Theory of Statistics (T2)	MATH2701 Abstract Algebra and Fundamental Analysis (T3)
6 UOC Free Elective	MATH2221 Higher Theory and Applications of Differential Equations (T2)	

Year 3

MATH3711 Higher Analysis (T1)	MATH3611 Higher Analysis (T2)	MATH3701 Higher Topology and Differential Geometry (T3)
6 UOC Free Elective	6 UOC Any Level 3 Math course	6 UOC General Education
6 UOC Any Level 3 Math course	6 UOC Free Elective	

NOTES

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See Program Structure on page 1 for a guide on the terminology and colour codes used in this progression plan.

Note: All students in Advanced Mathematics (Hons) must complete an Honours year of 48 UoC. Please note the Honours component is not included in this template.

Science

Bachelor of Advanced Mathematics (Honours) (3956)

2022 Commencing Students – Double Degree – Major in Pure Mathematics (MATHP1)
Choose from available proposed courses in each year

Year 1

SCIF1131 Introductory Skills for Science (T1, T3)	MATH1241 Higher Mathematics 1B (T1,T2)	Other Degree Course
MATH1141 Higher Mathematics 1A (T1,T3)	6 UOC Level 1 Computer Science Elective	Other Degree Course
MATH1081 Discrete Mathematics (T1,T2, T3)		Other Degree Course

Year 2

MATH2111 Higher Several Variable Calculus (T1)	MATH2601 Higher Linear Algebra (T2)	MATH2621 Higher Complex Analysis (T3)
Other Degree Course	MATH2901 Higher Theory of Statistics (T2)	MATH2701 Abstract Algebra and Fundamental Analysis (T3)
Other Degree Course	MATH2221 Higher Theory and Applications of Differential Equations (T2)	

Year 3

MATH3711 Higher Analysis (T1)	MATH3611 Higher Analysis (T2)	MATH3701 Higher Topology and Differential Geometry (T3)
6 UOC Any Level 3 Math course	6 UOC Any Level 3 Math course	
Other Degree Course	Other Degree Course	Other Degree Course

Year 4

Other Degree Course	Other Degree Course	Other Degree Course
Other Degree Course	Other Degree Course	Other Degree Course
Other Degree Course	Other Degree Course	

NOTES

This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.

See Program Structure on page 1 for a guide on the terminology and colour codes used in this progression plan.

In double degrees with Law or Engineering, a further 48uoc of other faculty course must be studied in addition to what is pictured here (Year 5)

Note: All students in Advanced Mathematics (Hons) must complete an Honours year of 48 UoC. Please note the Honours component is not included in this template.