UNSW Co-op Program Scholarship

Sample Study Outline

Advanced Mathematics

Program / Degree: 3956 B. Advanced Mathematics (Honours) with a major in **Pure Mathematics**

Year	Term 1	UOC	Term 2	UOC	Term 3	UOC
1st	MATH1141 Higher Mathematics 1A MATH 1081 Discrete Mathematics SCIF1131(S2)	6 6 6	Free Elective Free Elective MATH1241 Higher Mathematics 1B	6 6 6	MATH2621 Higher Complex Analysis Free Elective Science Elective	6 6 6
	Total UOC	18	Total UOC	18	Total UOC (nominal)	18
2nd	MATH2111 Higher Several Variable Calculus Science Elective General Education Option	6 6 6	MATH2221 Higher Math Method for Des MATH2601 Higher Linear Algebra MATH2901 Higher Theory of Statistics	6 6 6	**Industry Training 1**	**12**
	Total UOC	18	Total UOC	18	Total UOC (nominal)	12
3rd	MATH3711 Higher Algebra Prescribed Electives Free Elective	6 6 6	MATH3611 Higher Analysis Prescribed Elective General Education Option	6 6 6	MATH3701 Higher Topology and Differential Geometry MATH2701 Abstract Algebra and Fundamental Analysis	6 6
	Total UOC	18	Total UOC	18	Total UOC	18
4th	Industry Training 2 -A	**12**	**Industry Training 2- B** **Industry Training 3 - A**	**12**	**Industry Training 3- B**	**12**
	Total UOC (nominal)	12	Total UOC (nominal)	12	Total UOC (nominal)	12
5th	MATH4001 Honours Prescribed Elective	6 6	MATH4001 Honours Prescribed Elective Prescribed Elective	6 6 6	MATH4001 Honours Prescribed Elective Prescribed Elective	6 6 6
	Total UOC	18	Total UOC	18	Total UOC	18

Notes:

- This is a SAMPLE study outline only and can be subject to change.
- You must always take your Industry Training schedule into consideration when planning your course enrolment or other commitments (see diagram below).

- All students in Advanced Mathematics must complete an Honours year of 48 UoC.
- In addition to the courses required for your major, students must also take
- *Science Electives*, *Free Electives*, and *General Education* courses. Students may use their Science Electives and/or Free Electives to complete a second major or minor.
- Students must take 12 UOC of Stage 3 Mathematics chosen with the approval from the Head of School of Mathematics and Statistics or nominee.

Please Note: Semester offerings are subject to change, please check the timetable prior to planning for your enrolment.

- **Free Electives** may be from Science or any other Faculty at UNSW.
- **General Education** courses cannot be Science courses, and Science students cannot take GENS courses for their General Education.

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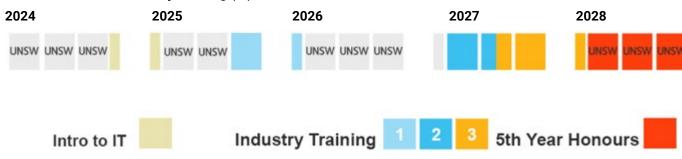.

Resources:
- [UNSW Handbook](#)
- [School of Mathematics and Statistics](#)
- [Co-op Program Page](#)

Co-op Academic Coordinator

For enrolment related questions please always contact your Co-op Academic Coordinator in the first instance:

Dr Sahani Pathiraja   s.pathiraja@unsw.edu.au

When would I be on Industry Training (IT)?

Advanced Mathematics

Program / Degree: [3956 B. Advanced Mathematics (Honours)](#) with a major in **Advanced Statistics** (MATHU13956)

Year	Term 1	UOC	Term 2	UOC	Term 3	UOC
1st	MATH1141 Higher Mathematics 1A MATH 1081 Discrete Mathematics SCIF1131(S2)	6 6 6	Free Elective Free Elective MATH1241 Higher Mathematics 1B	6 6 6	MATH2621 Higher Complex Analysis Free Elective Stage 1 COMP	6 6 6
	Total UOC	18	Total UOC	18	Total UOC (nominal)	18
2nd	MATH2111 Higher Several Variable Calculus Science Elective General Education Option	6 6 6	MATH2221 Higher Math Method for DEs MATH2601 Higher Linear Algebra MATH2901 Higher Theory of Statistics	6 6 6	MATH2931 Higher Linear Models **Industry Training 1**	6 **12**
	Total UOC	18	Total UOC	18	Total UOC (total with nominal)	6(18)
3rd	MATH3901 Higher Prob & Stochastic Proc MATH3911 Higher Stats Inference Free Elective	6 6 6	MATH3821 Stat Modelling & Computing Free Elective Free Elective	6 6 6	Stage 3 Approved MATH Stage 3 Approved MATH (Note 1) General Education	6 6 6
	Total UOC	18	Total UOC	18	Total UOC	18
4th	**Industry Training 2 -A**	**12**	**Industry Training 2- B** **Industry Training 3 - A**	**12**	**Industry Training 3- B**	**12**
	Total UOC (nominal)	12	Total UOC (nominal)	12	Total UOC (nominal)	12
5th	MATH4001 Prescribed elective	6 6	MATH4001 Prescribed elective Prescribed elective	6 6 6	MATH4001 Prescribed elective Prescribed elective	6 6 6
	Total UOC	18	Total UOC	18	Total UOC	12

Notes:

- This is a SAMPLE study outline only and can be subject to change.
- You must always take your Industry Training schedule into consideration when planning your course enrolment or other commitments (see diagram below).

- All students in Advanced Mathematics must complete an Honours year of 48 UoC.

- In addition to the courses required for your major, students must also take
- *Science Electives*, *Free Electives*, and *General Education* courses. Students may use their Science Electives and/or Free Electives to complete a second major or minor.
- Note 1: 6 UOC Mathematics level 3: MATH3831 (T2), MATH3841 (TBC), MATH3851 (T3), MATH3871 (T3), MATH3856 (T3)

*Students must take 12 UoCof Stage 3 Mathematics chosen with the approval from the Head of School of Mathematics and Statistics or nominee.

Science Electives are courses taken from within the Faculty of Science, as defined by *Table 1* in the 3970 Bachelor of Science Online Handbook.
Free Electives may be from Science or any other Faculty at UNSW.
General Education courses cannot be Science courses, and Science students cannot take GENS courses for their General Education.

Students cannot complete more than 72 UoC of Level 1 courses including any GEN courses and Level 1 courses taken for General Education.
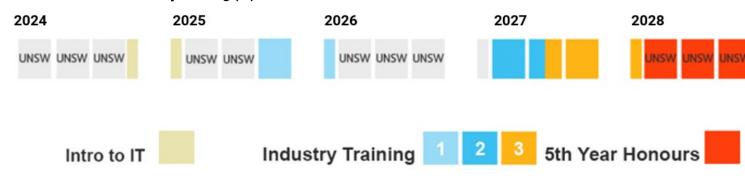
Resources:

- UNSW Handbook
- School of Mathematics and Statistics
- Co-op Program Page

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When would I be on Industry Training (IT)?

Sample Study Outline

Advanced Mathematics

Program / Degree: 3956 B. Advanced Mathematics (Honours) with a major in **Applied Mathematics**

Year	Term 1	UOC	Term 2	UOC	Term 3	UOC
1st	MATH1141 Higher Mathematics 1A	6	Free Elective	6	MATH2621 Higher Complex Analysis	6
	MATH 1081 Discrete Mathematics	6	Free Elective	6	Free Elective	6
	SCIF1131(S2)	6	MATH1241 Higher Mathematics 1B	6	COMP1511 Programming Fundamentals	6
	Total UOC	18	Total UOC	18	Total UOC (nominal)	18
2nd	MATH2111 Higher Several Variable Calculus	6	MATH2221 Higher Math Method for Des	6	**Industry Training 1**	**12**
	MATH2301 Mathematical Computing	6	MATH2601 Higher Linear Algebra	6		
	General Education Option	6	MATH2901 Higher Theory of Statistics	6		
	Total UOC	18	Total UOC	18	Total UOC (nominal)	12
3rd	Stage 3 Approved MATH (Note 3)	6	Stage 3 Approved MATH (Note 1)	6	Stage 3 Approved MATH (Note 1 or 2)	6
	Stage 3 Approved MATH (Note 3)	6	Stage 3 Approved MATH (Note 2)	6	General Education Option	6
	Free Elective	6	Free Elective	6	Free Elective	6
	Total UOC	18	Total UOC	18	Total UOC	18
4th	**Industry Training 2 -A**	**12**	**Industry Training 2- B** **Industry Training 3 - A**	**12**	**Industry Training 3- B**	**12**
	Total UOC (nominal)	12	Total UOC (nominal)	12	Total UOC (nominal)	12
5th	MATH4001	6	MATH4001	6	MATH4001	6
	Prescribed Elective	6	Prescribed Elective	6	Prescribed Elective	6
			Prescribed Elective	6	Prescribed Elective	6
	Total UOC	12	Total UOC	18	Total UOC	18

Notes:

- This is a SAMPLE study outline only and can be subject to change.
- You must always take your Industry Training schedule into consideration when planning your course enrolment or other commitments (see diagram below).

In addition to the courses required for your major, students must also take
Science Electives, *Free Electives*, and *General Education* courses. Students may use their Science Electives and/or Free Electives to complete a second major or minor.

Stage 3 Electives:
Note 1: 6 UOC Level 3 Elective List A: MATH3041 (T2), MATH3051 (T3)
Note 2: 6 UOC Level 3 Elective List B: MATH3101, MATH3121, MATH3161, MATH3171, MATH3191, MATH3201, MATH3261, MATH3261, MATH3311, MATH3361, MATH3371, MATH6781
Note 3: Level 3 Elective: See Handbook

Free Electives may be from Science or any other Faculty at UNSW.

General Education courses cannot be Science courses, and Science students cannot take GENS courses for their General Education.
Students cannot complete more than 72 UOC of Level 1 courses including any GEN courses and Level 1 courses taken for General Education.

<u>Resources:</u>
- [UNSW Handbook](#)
- [School of Mathematics and Statistics](#)
- [Co-op Program Page](#)

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When would I be on Industry Training (IT)?