Flinders University
Science & Engineering

Bachelor of Science (Honours) (Physics)

2024 Study Planner

Semester 1 Start:

First Level	**Semester 1**	**MATH1121** Mathematics 1A	**PHYS1101** Physics 1A	**STEM1001** Nature of STEM	**Major or Elective Topic (4.5/13.5 units)**	
	Semester 2	**MATH1122** Mathematics 1B	**PHYS1102** Physics 1B	**Major or Elective Topic (4.5/13.5 units)**	**Major or Elective Topic (4.5/13.5 units)**	
Second Level	**Semester 1**	**MATH2702** Linear Algebra and Differential Equations	**MATH2711** Multivariable Calculus	**PHYS2702** Classical Physics	**Major or Elective Topic (4.5/9 units)**	
	Semester 2	**PHYS2001** Quantum and Nuclear Physics	**PHYS2712** Thermodynamics and Energy Systems	**STEM2005** Science Applied	**Major or Elective Topic (4.5/9 units)**	
Third Level	**Semester 1**	**ENGR2861** Electromagnetics and Electromagnetic Waves	**PHYS3001** Quantum and Statistical Physics	**Major or Elective Topic (4.5/9 units)**	**MATH Option** # Select one topic from list below **(S1 or S2)**	**STEM Option #** Select one topic from list below **(S1 or S2)**
	Semester 2	**MATH3712** Partial Differential Equations	**PHYS3702** Solid State Physics and Optoelectronics	**Major or Elective Topic (4.5/9 units)**		
Fourth Level	**Semester 1**	**STEM7001** Honours Research Methods	**STEM7005** Advanced Techniques in Chemical and Physical Science	**STEM7006** Advanced Chemical and Physical Science	**STEM7000A** Honours Research Thesis	
	Semester 2	**STEM7000B** Honours Research Thesis	**STEM7000C** Honours Research Thesis	**STEM7000D** Honours Research Thesis	**STEM7000E** Honours Research Thesis	

This guide is correct at time of publishing but is subject to change (November 2023)

Semester 2 Start: (to complete in 3 years)

First Level	Semester 2	**MATH1121** Mathematics 1A	**Major or Elective Topic (4.5/13.5 units)**	**Major or Elective Topic (4.5/13.5 units)**	**Major or Elective Topic (4.5/13.5 units)**	
	SU	**MATH1122** Mathematics 1B				
	Semester 1	**PHYS1101** Physics 1A	**STEM1001** Nature of STEM	**MATH2702** Linear Algebra and Differential Equations	**MATH2711** Multivariable Calculus	
Second Level	Semester 2	**PHYS1102** Physics 1B	**STEM2005** Science Applied	**MATH3712** Partial Differential Equations	**MATH Option** # Select one topic from list below **(S1 or S2)**	**STEM Option #** Select one topic from list below **(S1 or S2)**
	Semester 1	**PHYS2001** Quantum and Nuclear Physics	**PHYS2702** Classical Physics	**ENGR2861** Electromagnetics and Electromagnetic Waves		
Third Level	Semester 2	**PHYS2712** Thermodynamics and Energy Systems	**PHYS3702** Solid State Physics and Optoelectronics	**Major or Elective Topic (4.5/9 units)**	**Major or Elective Topic (4.5/9 units)**	
	Semester 1	**PHYS3001** Quantum and Statistical Physics	**Major or Elective Topic (4.5/9 units)**	**Major or Elective Topic (4.5/9 units)**		
Fourth Level	Semester 2	**STEM7001** Honours Research Methods	**STEM7000A** Honours Research Thesis	**STEM7000B** Honours Research Thesis	**STEM7000C** Honours Research Thesis	
	Semester 1	**STEM7005** Advanced Techniques in Chemical and Physical Science	**STEM7006** Advanced Chemical and Physical Science	**STEM7000D** Honours Research Thesis	**STEM7000E** Honours Research Thesis	

Key:

Core Topics	Compulsory topic
Elective	Any topic offered by the University at the appropriate year level, provided entry and course requirements are met and that no more than 45 units of First Year topics are included in the 108-unit program.

# MATH Year 3 Option Topics:	**# STEM Year 3 Option Topics:**
MATH3702 Methods of Applied Mathematics (S1) MATH3711 Complex Analysis (S2)	STEM3001 Science Connect (S1 or S2) STEM3100 Research Project in Science (NS1 or NS2)

Please note:

- This document is provided as a guide only. Students are responsible for ensuring that they have completed their study according to the official Course Rule.
- Topic information for all topics, including pre-requisites can be found on the Topic Page
- General enrolment assistance is available via Ask Flinders
- For specific course advice e-mail: courseadvice.SE@flinders.edu.au