

Bachelor of Advanced Science

MAJOR **Physics**

This study plan should be used as a general guide for your course. We recommend you consult with your [CSE Course/Major Advisor](#) and particularly if your intended enrolment varies from this plan.

The information in the study plan is current at the time of creation and may be subject to future change. If you would prefer a part-time study plan, please adjust the below study planner; reviewing subject prerequisites to ensure you are on track for course completion.

Useful study planning/enrolment resources:

To search for information on subjects: [Subject Search](#)

To register for your classes: [Class Registration](#)

For important dates check: [Academic Calendars](#)

Further enrolment resources: [Enrolment Resources](#)

	STUDY PERIOD 1	STUDY PERIOD 2
Year 1	Course SC1101:03 Science Technology and Truth	Course SC1109:03 Modelling Natural Systems-Advanced <i>PREREQ: MA1000 or MA1009</i>
	Course MA1000:03 Mathematical Foundations <i>PREREQ: MA1020 or MA0020 or Maths B or Maths C</i>	Course MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>
	Course CH1020:03 Preparatory Chemistry or Elective (only if already satisfied via previous study)	Major PH1007:03 Advanced Stream Physics 2 <i>PREREQ: ((Maths B or equivalent or MA1020 or MA0020) and PH1005) or (Physics and Maths C)</i>
	Major PH1005:03 Advanced Stream Physics 1 <i>PREREQ: Maths B or MA1020 or MA0020 or MA1000 or MA1008. Allow concurrent for MA1000 and MA1008.</i>	Elective

Year 2	STUDY PERIOD 1	STUDY PERIOD 2
	Course SC2209:03 Quantitative Methods in Science-Advanced <i>PREREQ: MA1003 and SC1109 plus 6 credit points of Level 1 subjects</i>	Major PH2240:03 Atomic and Nuclear Physics <i>PREREQ: PH2002 and MA1003</i>
	Course MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i> <i>Required List 2 (Skill Subject)</i>	Elective <i>RECOMMENDED: BSc SKILL SUBJECT- List 2 (table below)</i>
	Major PH2002:03 Classical Mechanics and Quantum Physics 1 <i>PREREQ: MA1003 and PH1005 and (PH1006 or PH1007 or (EG1012 and EG1011))</i>	Elective
	Major PH2019:03 Introduction to Electromagnetism Optics and Early Quantum <i>PREREQ: (EG1012 or PH1005) and MA1003</i>	Elective

Year 3	STUDY PERIOD 1	STUDY PERIOD 2
	Course Select Availability in Study Period 1, 2, 3, 7 or 11 SC3003:03 Science Research Internship <i>PREREQ: 15 credit points of AQ, BC, BS, BZ, CH, EV, EA, MA, MB, PH or SC Level 2 subjects</i> OR SC3008:03 Professional Placement <i>PREREQ: Students must have successfully completed 12 credit points of second year subjects. Enrolment is restricted to students with an approved placement</i>	
	Course Select an ADVANCED SKILL subject from List 1	
	Major PH3008:03 Statistical Mechanics and Transport <i>PREREQ: PH2019 and PH2002 and MA2000</i>	Major PH3002:03 Quantum Physics 2 <i>PREREQ: MA2000 and PH2002</i>
	Major PH3021:03 Physics of the Earth, Solar System, and Universe <i>PREREQ: MA2000 and PH2002 and PH2019</i>	Elective
	Elective	Elective
Elective		

ADVANCED SKILL SUBJECTS - LIST 1	
STUDY PERIOD 1	STUDY PERIOD 2
BS5260:03 Modelling Ecological Dynamics	BC5203:03 Advanced Bioinformatics
MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>	CH5002:03 Research Skills and Communication in Chemistry (Advanced) <i>PREREQ: Satisfactory completion of 9 credit points of Level 2, 3 or 5 CH subjects</i>
[^] EA5409:03 Mineralogy and Geophysics	SC5502:03 Design and Analyses in Ecological Studies
[^] PH5014:03 Research Skills and Communication in Physics (Advanced)	

[^]Note: EA5409 and PH5014 are not offered in 2023

BSc SKILL SUBJECTS - LIST 2	
STUDY PERIOD 1	STUDY PERIOD 2
MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>	CH2103:03 Analytical Chemistry <i>PREREQ: CH1001 OR CH1011</i>
MA2830 Data Visualisation	EV2502:03 Introduction to Geographic Information Systems <i>PREREQ: At least 12 credit points of Level 1 subjects</i>
SC3010:03 Sensors and Sensing for Scientists <i>PREREQ: BZ2001 or SC2202 or SC2209 or SC2201</i>	MA2210:03 Linear Algebra <i>PREREQ: MA1003</i>
TRIMESTER 3	
CP2404:03 Database Modelling	

COURSE NOTES

A maximum of 30 credit points may be taken at Level 1.

A minimum of 18 credit points of science subjects must be taken at Level 3 or higher.

ADDITIONAL INFORMATION

[2023 Bachelor of Advanced Science Handbook](#)
[Physics Major](#)