

## Bachelor of Science MAJOR Physics

This study plan should be used as a general guide for your course. We recommend you consult with your <u>CSE Course/Major Advisor</u> 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
		Course
		CH1020:03 Preparatory Chemistry
		OR
		Select 3 credit points of any level 1, 2, 3 or 5 subjects (if completed high school level Chemistry or equivalent)
~		Course
2023		MA1020:03 Preparatory Mathematics
2(		OR
		Select 3 credit points of any level 1, 2, 3 or 5 subjects (if completed high school level Maths Methods or equivalent)
		Second Major
		Elective <b>OR</b> Second Major Subject
		(Depending on chosen structure)
٨	Note: Students studying this major as a second major mu	st either i undertake this major in conjunction

<sup>^</sup>Note: Students studying this major as a second major must either i. undertake this major in conjunction with the Mathematics major; or prior to commencing this course; ii. have satisfied both MA1020 and CH1020 subject material in order to undertake this major in conjunction with the Data Science major, or iii. have satisfied either MA1020 or CH1020 subject material for other major combinations. Students must select MA1000 and MA1003 as undergraduate elective subjects and MA2000 as the List 2 subject.



	STUDY PERIOD 1	STUDY PERIOD 2	
2024	<b>Course</b> SC1101:03 Science, Technology, and Truth	Course SC1102:03 Modelling Natural Systems PREREQ: MA1020 or MA0020 or Senior Mathematics or equivalent OR SC1109:03 Modelling Natural Systems - Advanced PREREQ: MA1000 or MA1009	
	Major PH1005:03 Advanced Stream Physics 1 PREREQ: Maths B or MA1020 or MA0020 or MA1000 or MA1008 OR admission to 116209, 116409 or 116309. Allow concurrent for MA1000 and MA1008	Major PH1007:03 Advanced Stream Physics 2 PREREQ: ((Maths B or equivalent or MA1020 or MA0020) and PH1005) or (Physics and Maths C)	
	Second Major	Second Major	
	Second Major	Second Major	

<sup>^</sup>Note: SC1109 is compulsory in the Advanced BSc Program and should be taken instead of SC1102 if you are considering that pathway.

	STUDY PERIOD 1	STUDY PERIOD 2
2025	Course SC2202:03 Quantitative Methods in Science PREREQ: SC1102 or MA1020 or MA1000 or Mathematics B or equivalent OR SC2209:03 Quantitative Methods in Science - Advanced PREREQ: SC1109 and MA1003 plus 6 credit points of any level 1 subjects	<b>Major</b> PH2240:03 Atomic and Nuclear Physics <i>PREREQ: PH2002 AND MA1003</i>
	Major PH2002:03 Classical Mechanics and Quantum Physics 1 PREREQ: MA1003 AND PH1005 AND (PH1006 OR PH1007 OR (EG1012 AND EG1011))	Major PH3002:03 Quantum Physics 2 PREREQ: MA2000 AND PH2002
	Major PH2019:03 Introduction to Electromagnetism Optics and Early Quantum PREREQ: (EG1012 OR PH1005) AND MA1003	Second Major
	List 2 MA2000:03 Mathematics for Scientists and Engineers PREREQ: MA1003 (Students in this major must choose this subject from List 2 (Skill Subjects)	Second Major



	STUDY PERIOD 1	STUDY PERIOD 2	
	<b>Course</b> SC3008:03 Professional Placement PREREQ: 12 credit points of second year subjects and be enrolled in their final year of study within the College of Science and Engineering		
2026	<b>Major</b> PH3008:03 Statistical Mechanics and Transport <i>PREREQ: PH2019 AND PH2002 AND MA2000</i>		
	<b>Major</b> PH3021:03 Physics of the Earth, Solar System, and Universe <i>PREREQ: MA2000 AND PH2002 AND PH2019</i>		
	Second Major		

BREADTH SUBJECTS - LIST 1			
STUDY PERIOD 1		STUDY PERIOD 2	
BM1000:03 Introductory Biochemistry and Microbiology		BS1001:03 Introduction to Biological Processes	
BS1007:03 Introduction to Biodiversity		CH1002:03 Chemis PREREQ: CH1001	stry: Principles and Applications
CH1001:03 Chemistry: A Central Science		EA1110:03 Evolution of the Earth	
EG1000:03 Engineering 1		MA1003:03 Mather PREREQ: MA1000	natical Techniques
EV1005:03 Environmental Processes and Global Change		MA1580:03 Foundations of Data Science	
MA1000:03 Mathematical Foundation		PH1007:03 Advanced Stream Physics 2 PREREQ: PH1005 OR (High School Physics and M	
PH1005:03 Advanced Stream Physics 1			
TRIMESTER 1	TRIMES	STER 2	TRIMESTER 3
CP1401:03 Problem Solving and Programming I CP1401:03 Problem Solving and Programming I-* <i>EXTERNAL OFFERING</i>	CP1401:03 Problem Solving and Programming I-*EXTERNAL OFFERING		CP1404:03 Programming II CP1404:03 Programming II-*EXTERNAL OFFERING
	CP1404:03 Programm	ming II-*EXTERNAL	



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 PREREQ: CH1001 OR CH1011		
MA2830 Data Visualisation	EV2502:03 Introduction to Geographic Information Systems PREREQ: At least 12 credit points of level 1 subjects		
SC3010:03 Sensors and Sensing for Scientists PREREQ: SC2202 OR (SC2209 OR SC2201 OR BZ2001)	MA2210:03 Linear Algebra PREREQ: MA1003		

## **TRIMESTER 3**

CP2404:03 Database Modelling 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 Bachelor of Science Handbook Physics