

## Bachelor of 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
2023		<b>Course</b> CH1020:03 Preparatory Chemistry <b>OR</b> Select 3 credit points of any level 1, 2, 3 or 5 subjects (if completed high school level Chemistry or equivalent)
		<b>Course</b> MA1020:03 Preparatory Mathematics <b>OR</b> Select 3 credit points of any level 1, 2, 3 or 5 subjects (if completed high school level Maths Methods or equivalent)
		Elective <b>OR</b> Second Major Subject (Depending on chosen structure)
		Elective <b>OR</b> Second Major Subject (Depending on chosen structure)

		STUDY PERIOD 1	STUDY PERIOD 2
<b>2024</b>	<b>Course</b> SC1101:03 Science, Technology, and Truth		<b>Course</b> SC1102:03 Modelling Natural Systems <i>PREREQ: MA1020 or MA0020 or Senior Mathematics or equivalent</i> <b>OR</b> SC1109:03 Modelling Natural Systems - Advanced <i>PREREQ: MA1000 or MA1009</i>
	<b>Major</b> PH1005:03 Advanced Stream Physics 1 <i>PREREQ: Maths B or MA1020 or MA0020 or MA1000 or MA1008 OR admission to 116209, 116409 or 116309. Allow concurrent for MA1000 and MA1008</i>		<b>Major</b> PH1007:03 Advanced Stream Physics 2 <i>PREREQ: ((Maths B or equivalent or MA1020 or MA0020) and PH1005) or (Physics and Maths C)</i>
	<b>Elective List 1</b> MA1000 Mathematical Foundations <i>PREREQ: MA1020 or Mathematics B or Mathematics C</i> <i>(Students in this major must choose this subject from List 1 (Breadth Subjects))</i>		<b>Elective List 1</b> MA1003 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i> <i>(Students in this major must choose this subject from List 1 (Breadth Subjects))</i>
	Elective <b>OR</b> Second Major Subject (Depending on chosen structure)		Elective <b>OR</b> Second Major Subject (Depending on chosen structure)

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

		STUDY PERIOD 1	STUDY PERIOD 2
2026	<b>Course</b> SC3008:03 Professional Placement <i>PREREQ: 12 credit points of second year subjects and be enrolled in their final year of study within the College of Science and Engineering</i>		
	<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>		
	Elective <b>OR</b> Second Major Subject (Depending on chosen structure)		

## 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 Chemistry: Principles and Applications <i>PREREQ: CH1001</i>	
CH1001:03 Chemistry: A Central Science		EA1110:03 Evolution of the Earth	
EG1000:03 Engineering 1		MA1003:03 Mathematical Techniques <i>PREREQ: MA1000</i>	
EV1005:03 Environmental Processes and Global Change		MA1580:03 Foundations of Data Science	
MA1000:03 Mathematical Foundation		PH1007:03 Advanced Stream Physics 2 <i>PREREQ: PH1005 OR (High School Physics and M</i>	
PH1005:03 Advanced Stream Physics 1			
TRIMESTER 1		TRIMESTER 2	
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- <i>EXTERNAL OFFERING</i>	
		CP1404:03 Programming II- <i>EXTERNAL OFFERING</i>	
		CP1404:03 Programming II- <i>EXTERNAL OFFERING</i>	

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: SC2202 OR (SC2209 OR SC2201 OR BZ2001)</i>		MA2210:03 Linear Algebra <i>PREREQ: MA1003</i>	
			TRIMESTER 3
			CP2404:03 Database Modelling CP2404:03 Database Modelling- <i>*EXTERNAL OFFERING</i>

### 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](#)  
[Physics](#)