

Bachelor of Science MAJOR Mathematics

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 SC1102:03 Modelling Natural Systems <i>PREREQ: MA1020 or MA0020 or Senior Mathematics or equivalent</i> or SC1109:03 Modelling Natural Systems-Advanced ^ <i>PREREQ: MA1000 or MA1009</i>
	Course MA1020:03 Preparatory Mathematics – SP3 or Elective (only if already satisfied via previous study)	Course CH1020:03 Preparatory Chemistry or Elective (only if already satisfied via previous study)
	Major MA1000:03 Mathematical Foundations <i>PREREQ: MA1020 or MA0020 or Maths B or Maths C</i>	Major MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>
	Second 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>	Second 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>

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

Year 2	STUDY PERIOD 1		STUDY PERIOD 2		
	Course SC2202:03 Quantitative Methods in Science <i>PREREQ: SC1102</i> or SC2209:03 Quantitative Methods in Science-Advanced <i>PREREQ: MA1003 and SC1109 plus 6 credit points of level 1 subjects</i>		Course Select a SKILL SUBJECT from List 2 <i>Subjects are available across a number of study periods/trimesters, see List 2 for full availabilities.</i>		
	Major MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>		Major MA2210:03 Linear Algebra <i>PREREQ: MA1003</i>		
	Second Major PH2002:03 Classical Mechanics & Quantum Physics 1 <i>PREREQ: MA1003 and PH1005 and (PH1006 or PH1007 or (EG1012 and EG1011))</i>		Second Major PH2240:03 Atomic and Nuclear Physics <i>PREREQ: PH2002 and MA1003</i>		
	Second Major PH2019:03 Introduction to Electromagnetism Optics and Early Quantum <i>PREREQ: (EG1012 or PH1005) and MA1003</i>				
	TRIMESTER 1		TRIMESTER 2		TRIMESTER 3
Major MA2211:03 Discrete Mathematics <i>PREREQ: Maths B or MA1020 or MA0020</i>					

Year 3	STUDY PERIOD 1		STUDY PERIOD 2	
	Course SC3008:03 Professional Placement Select Availability in Study Period 1, 2, 3, 7 or 11 <i>PREREQ: Students must have successfully completed 12 cp of second year.</i> <i>Enrolment is restricted to students with an approved placement</i>			
	Major MA3211:03 Mathematical Modelling and Differential Equations <i>PREREQ: MA2000 and (MA2210 or MA2201)</i>		Major MA3210:03 Probability and Stochastic Processes <i>PREREQ: MA2000 and (MA2210 or MA2201)</i>	
	Second Major PH3008:03 Statistical Mechanics and Transport <i>PREREQ: PH2019 and PH2002 and MA2000</i>		Major MA3212:03 Optimisation and Operations Research <i>PREREQ: MA2000 and (MA2210 or MA2201)</i>	
	Second Major PH3021:03 Physics of the Earth, Solar System, and Universe <i>PREREQ: MA2000 and PH2002 and PH2019</i>		Second Major PH3002:03 Quantum Physics 2 <i>PREREQ: MA2000 and PH2002</i>	
Elective				

