

Bachelor of Advanced Science

MAJOR Physics

SECOND MAJOR Chemistry

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](#)

Year 1	STUDY PERIOD 1	STUDY PERIOD 2
	Course SC1101:03 Science, Technology and Truth	Course MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>
	Course MA1000:03 Mathematical Foundations <i>PREREQ: MA1020 or MA0020 or Maths C or</i>	Course CH1020:03 Preparatory Chemistry <i>(or any Level 1, 2, 3 or 5 subject if already satisfied via previous study)</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>	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>
	Second Major CH1001:03 Chemistry: A Central Science <i>CH1020, CH0020 or EG1010 or High School Senior Chemistry</i>	Second Major CH1002:03 Chemistry: Principles and Applications <i>PREREQ: CH1001 or CH1011 and allow concurrent for CH1011 and CH1001</i>

Year 2	STUDY PERIOD 1	STUDY PERIOD 2
	Course Select 3 credit points of subjects from List 1 (Advanced Skill Subjects) <i>*Must select MA2000 as List 1 elective</i>	Course SC1109:03 Modelling Natural Systems-Advanced <i>PREREQ: MA1000 or MA1009</i>
	Major PH2019:03 Intro to Electromagnetism Optics and Early Quantum <i>PREREQ: (EG1012 or PH1005) and MA1003</i>	Major PH2048:03 Medical and Radiation Physics <i>PREREQ: PH1007 and MA1003</i>
	Major PH2002:03 Classical Mechanics and Quantum Physics 1 <i>PREREQ: MA1003 and PH1005 and (PH1006 or PH1007 or (EG1012 and EG1011))</i>	Second Major CH2103:03 Analytical Chemistry <i>PREREQ: CH1001 or CH1011</i>
	Second Major CH2210:03 Syntheses and Mechanism in Inorganic Chemistry <i>PREREQ: CH1001, CH1002</i>	Second Major CH2310:03 Organic Chemistry <i>PREREQ: CH1001, CH1002</i>

Year 3	STUDY PERIOD 1		STUDY PERIOD 2	
	Course SC3003:03 Science Research Internship (SP1, SP2, SP3, SP7, SP11) <i>PREREQ: 15 credit points of AQ, BC, BS, BZ, CH, EV, EA, MA, MB, PH or SC science level 2 subjects</i> OR SC3008:03 Professional Placement (SP1, SP2, SP3, SP7, SP11) <i>PREREQ: Must have successfully completed 12 second year credit points. Enrolment is restricted to students with an approved placement</i>			
	Course SC2209:03 Quantitative Methods in Science-Advanced <i>PREREQ: MA1003 and (SC1109 plus 6 credit points of other Level 1 subjects)</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>		Second Major CH3310:03 Special Topics in Organic Chemistry <i>PREREQ: CH2310</i>	
	Major PH3008:03 Statistical Mechanics and Transport <i>PREREQ: PH2019 and PH2002 and MA2000</i>		Second Major CH3110:03 Special Topics in Analytical Chemistry <i>PREREQ: CH2103</i>	
	Second Major CH3210:03 Applications of Inorganic Chemistry <i>PREREQ: CH2210</i>			

BREADTH SUBJECTS - LIST 1

STUDY PERIOD 1		STUDY PERIOD 2	
BM1000:03 Introductory Biochemistry and Microbiology <i>PREREQ: Allow concurrent enrolment in CH1020, CH0020 or Senior Chemistry</i>		CH1002:03 Chemistry: Principles and Applications <i>PREREQ: CH1001 OR CH1011 and allow concurrent for Ch1011 and CH1001</i>	
CH1001:03 Chemistry: A Central Science <i>PREREQ: CH1020, CH0020 or EG1010 or High School Senior Chemistry</i>		EA1110:03 Evolution of the Earth	
EG1000:03 Engineering 1		MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>	
EV1005:03 Environmental Processes and Global Change		MA1580:03 Foundations of Data Science <i>PREREQ: MA1000 or MA1020 or MA0020 or Maths B</i>	
MA1000:03 Mathematical Foundation <i>PREREQ: MA1020 or MA0020 or Maths B or Maths C</i>		PH1007:03 Advanced Stream Physics 2 <i>PREREQ: ((Maths B or equivalent or MA1020 or MA0020) and PH1005) or (Physics and Maths C)</i>	
PH1005:03 Advanced Stream Physics 1 <i>PREREQ: MA1000</i>			
TRIMESTER 1	TRIMESTER 2	TRIMESTER 3	
CP1401:03 Problem Solving and Programming I	CP1401:03 Problem Solving and Programming I <i>*External</i>	CP1404:03 Programming II <i>PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201</i>	
	CP1404:03 Programming II <i>*External</i>		

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)			

ADDITIONAL INFORMATION

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.

COURSE HANDBOOK

[Bachelor of Advanced Science Handbook](#)

[Physics Major](#)

[Chemistry Major](#)