

Bachelor of Advanced Science

MAJOR **Advanced Molecular and Cell Biology**

MAJOR **Choose a second major**

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		Major BS1001:03 Introduction to Biological Processes
		Second Major
		Second Major
		Elective (<i>Provided chemistry already satisfied via previous study</i>)

	STUDY PERIOD 1	STUDY PERIOD 2
Year 2	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>
	Major BM1000:03 Introductory Biochemistry and Microbiology <i>PREREQ: CH1020, CH0020 or Senior Chemistry*</i>	Second Major
	Second Major	Second Major



Missing chem and also want a MCB double major?

JCU's [Certificate of Higher Ed](#) has an online subject, CH0020 that is available before the start of your degree. Passing this subject will allow you to enrol in BM1000 in SP1. If choosing this option, further chemistry requirements are needed for your degree. You could also consider delaying SC1101 to second year and taking CH1020 concurrently with BM1000. Discuss which option is best for you with your academic advisor, Lionel.hebbard@jcu.edu.au.

	STUDY PERIOD 1	STUDY PERIOD 2
Year 3	Course SC2209:03 Quantitative Methods in Science-Advanced <i>PREREQ: MA1003 and SC1109 plus 6 credit points of Level 1 subjects</i>	Major BC2023:03 Molecular Genetics <i>PREREQ: At least 18 credit points of Level 1 subjects including BM1000</i>
	Major BC2013:03 Principles of Biochemistry <i>PREREQ: At least 18 credit points of Level 1 subjects which includes BM1000 and BS1001</i>	Major BC2024:03 Principles of Molecular Cell Biology <i>PREREQ: At least 18 credit points of Level 1 subjects including BM1000</i>
	Second Major	Major BC5201:03 Advanced Bioengineering
	Second Major	Second Major

	STUDY PERIOD 1	STUDY PERIOD 2
Year 4	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.</i> <i>Enrolment is restricted to students with an approved placement</i>	
	Course Select an ADVANCED SKILL subject- List 1	
	Major BC5101:03 Advanced Genes, Genomes and Development	
	Major BC5102:03 Advanced Molecular Basis of Disease	

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

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 Advanced Science Handbook](#)
[Advanced Molecular and Cell Biology Major](#)