Bachelor of Science MAJOR Molecular and Cell Biology Major

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	Course **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*
	Course **MA1020**:03 Preparatory Mathematics or **Elective** (only if already satisfied via previous study)	Major **BS1001**:03 Introduction to Biological Processes
	Major **BM1000**:03 Introductory Biochemistry and Microbiology *PREREQ: CH1020, CH0020 or Senior Chemistry**	**Second Major**
	Second Major	**Elective** *Provided CH1020: Preparatory Chemistry Is already satisfied via previous study*

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

Missing both math and 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. These can be discussed with your academic advisor, Lionel.hebbard@jcu.edu.au.

	STUDY PERIOD 1	STUDY PERIOD 2
Year 2	Course **SC2202**:03 Quantitative Methods in Science *PREREQ: SC1102* or **SC2209**:03 Quantitative Methods in Science-Advanced *PREREQ: MA1003 and SC1109 plus 6 credit points of level 1 subjects*	Course Select a SKILL SUBJECT from **List 2** *Subjects are available across a number of study periods/trimesters, see List 2 for full availabilities.*
	Major **BC2013**:03 Principles of Biochemistry *PREREQ: At least 18 credit points of Level 1 subjects including BM1000*	Major **BC2023**:03 Molecular Genetics *PREREQ: At least 18 credit points of Level 1 subjects including BM1000*
	Second Major	Major **BC2024**:03 Principles of Molecular Cell Biology *PREREQ: At least 18 credit points of Level 1 subjects including BM1000*
	Second Major	**Second Major**

	STUDY PERIOD 1	STUDY PERIOD 2
Year 3	Course **SC3008**:03 Professional Placement Select Availability in Study Period 1, 2, 3, 7 or 11 *PREREQ: Students must have successfully completed 12 cp of second year.* *Enrolment is restricted to students with an approved placement*	
	Major **BC3101**:03 Genes, Genomes and Development *PREREQ: BC2023*	Major **BC3201**:03 Bioengineering *PREREQ: BC2013 and BC2023*
	Major **BC3102**:03 Molecular Basis of Disease *PREREQ: BC2013 and BC2024*	**Second Major**
	Second Major	**Elective** *RECOMMENDED: BC3202:03 Special Topics in Biochemistry and Molecular Biology or BC3203:03 Bioinformatics*
	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 Chemistry: Principles and Applications
CH1001:03 Chemistry: A Central Science	EA1110:03 Evolution of the Earth
EG1000:03 Engineering 1	MA1003:03 Mathematical Techniques
EV1005:03 Environmental Processes and Global Change	MA1580:03 Foundations of Data Science
MA1000:03 Mathematical Foundation	PH1007:03 Advanced Stream Physics 2
PH1005:03 Advanced Stream Physics 1	

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
CP1401:03 Problem Solving and Programming I		CP1404:03 Programming II

SKILL SUBJECTS - LIST 2	
STUDY PERIOD 1	**STUDY PERIOD 2**
MA2000:03 Mathematics for Scientists and Engineers *PREREQ: MA1003*	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: BZ2001 OR SC2202 OR SC2209 OR SC2201*	MA2210:03 Linear Algebra *PREREQ: MA1003*

TRIMESTER 3
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

2023 Bachelor of Science Handbook
Molecular and Cell Biology Major