Bachelor of Science

Molecular and Cell Biology
Bioinformatics

2027 ENTRY

Useful study planning / Enrolment resources

Course and Subject Handbook	Academic Calendars	Class Registration	Enrolment Resources

Attention International Student visa holders: To remain compliant with enrolment requirements as a Student visa holder, you are required to enrol in at least one On-Campus, Multi-Modal or WIL subject offering in each compulsory study period and you cannot enrol in more than one third (33%) of your total course load through online or distance learning. To complete your course within your CoE duration, maintain sufficient subject enrolment. If only Online subject offerings are available in a compulsory study period, contact enrolments@jcu.edu.au urgently for enrolment advice.

Student Resources: If you require advice about your study plan, choosing electives, or which subjects to enrol in, please contact your major advisor or degree coordinator (CSE Course and Major Advisors). For information on available elective subject options please also refer to the Study Area guide (JCU STUDY AREA GUIDE — College of Science & Engineering).
INTENSIVE: Subjects labelled with *Intensive involve mandatory on-campus or fieldwork attendance with extended hours over a dedicated face-to-face period. Please check the face-to-face dates for the subject in the subject handbook and do not enrol in subjects with overlapping face-to-face dates. For more information, see the CSE Student Guide to Succeeding in Trimester 2 Intensives on the CSE Student Resources webpage.

How to read this planner

PREREQ Prerequisite information **ONLINE** Online offering **PLACEMENT** Placement requirement **INTENSIVE** Intensive on-campus requirement

2027

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
SC1101:03 Science, Technology and Truth	*MA1020:03 Preparatory Mathematics **OR** Any Level 1, 2, 3 or 5 subject if already satisfied via previous study	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 *SC1109 is compulsory in the Advanced BSc Program and should be taken instead of SC1102 if you are considering that pathway.
Molecular and Cell Biology Major BM1110:03 Molecules to Microbes	*CH1020:03 Preparatory Chemistry **OR** Any Level 1, 2, 3 or 5 subject if already satisfied via previous study	**Bioinformatics Major** BS1001:03 Introduction to Biological Processes
Bioinformatics Major CP1401:03 Problem Solving and Programming I	**Molecular and Cell Biology Major** BM1201:03 Energy Metabolism: Powering Life **PREREQ:** Senior Chemistry or equivalent, allow concurrent enrolment in CH1020	

*If you have satisfied the Chemistry and/or Math requirement via previous study, please contact enrolments@jcu.edu.au

2028

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
SC2202:03 Quantitative Methods in Science Offered TR1, TR3 **PREREQ:** SC1102 OR SC1109 or admission to Bachelor of Business and Environmental Science or admission to 116209, 116309 or 116409 **OR** SC2209:03 Quantitative Methods in Science-Advanced **PREREQ:** MA1003 and ((SC1109 plus 6 credit points of other Level 1 subjects) or admission in 116409)	**Molecular and Cell Biology Major** BM2230:03 DNA to Proteins **PREREQ:** Minimum 18 credit points of Level 1 subjects including BM1110 or BM1300 or BM1000 or BS1001	**Molecular and Cell Biology Major** BM2310:03 Drugs: Trigging System Responses **PREREQ:** BM1201
Bioinformatics Major BS2470:03 Evolution **PREREQ:** BZ1001 OR BS1001 OR BZ1005	Select 3 credit points of subjects from the List 2 **(Skills Subjects)**	**Molecular and Cell Biology Major** BM2330:03 Cell Biology: Signaling & Regulation **PREREQ:** Minimum 18 credit points of Level 1 subjects including BM1110 or BM1000 or BS1001
Bioinformatics Major Select 3 credit points of any Level 1, 2, 3 or 5 subjects		**Bioinformatics Major** BM2331:03 Bioinformatics I: Decoding DNA **PREREQ:** BM1110 or BS1001 **ONLINE**

2029

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
Molecular and Cell Biology Major BM3130:03 Genes, Genomes and Development **PREREQ:** BM2230	**Molecular and Cell Biology Major** BM3330:03 Synthetic Biology and Bioengineering **PREREQ:** BM1201 or BC2013 and BM2230 or BC2023	SC3008:03 Professional Placement Offered TR1, TR2, TR3 **PREREQ:** Students must have successfully completed 12 second year credit points **PLACEMENT** 100 hours **OR** SC3003:03 Science Research Internship Offered TR1, TR2, TR3 **PREREQ:** 15 credit points of Science Level 2 subjects plus a GPA of 5.5 or above. *Students must source a supervisor for their internship before enrolment **PLACEMENT** 100 hours
Molecular and Cell Biology Major BM3230:03 Molecular Basis of Disease **PREREQ:** BM1201 or BC2013 and BM2330 or BC2024	**Bioinformatics Major** BZ3450:03 Ecological and Conservation Genetics **PREREQ:** BS2470 **INTENSIVE:** 2 week face-to-face fieldwork component	**Bioinformatics Major** BM3331:03 Bioinformatics II: Mastering Big Genomic Data **PREREQ:** BM2331 and SC2202 or SC2209 or MA2405 or BZ2001 or (BC3101 and HS2402)
Select 3 credit points of any Level 1, 2, 3 or 5 subjects		**Bioinformatics Major** MA3405:03 Statistical Data Mining for Big Data **PREREQ:** MA2405 or MA2000 or SC2202 or SC2209

Course Handbook

Bachelor of Science	Molecular and Cell Biology Bioinformatics

Tip: Use this planner with the Course and Subject Handbook each enrolment period to confirm availability, prerequisites and campus/mode requirements.

Award Title	Bachelor of Science
Abbreviation	BSc
Credit Points	72
AQF Level	Level 7 - Bachelor Degree
Location	Townsville Bebegu Yumba, Cairns Nguma-bada
Division	Academy
College	College of Science and Engineering
Expected Time to Complete	3 Years
Maximum Time to Complete	9 Years
Maximum Leave of Absence	3 Years
CRICOS Code	076290A, OS