Bachelor of Advanced Science

Bioinformatics
Molecular and Cell Biology

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 your enrolments 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 students must maintain sufficient subject enrolment. If you are receiving US Federal Aid, there are further compliance considerations. Please contact financialaid@jcu.edu.au to confirm compliance of your subject selections.

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 on-campus requirements: Subjects labelled with *Intensive on-campus requirements 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	CH1020:03 Preparatory Chemistry **OR** Any Level 1, 2, 3 or 5 subject if already satisfied via previous study If you have satisfied the Chemistry requirement via previous study, please contact enrolments@jcu.edu.au.	MA1003:03 Mathematical Techniques **PREREQ:** MA1000 or MA1011 or MA1009
MA1000:03 Mathematical Foundations **PREREQ:** MA1020 or MA0020 or BR0202 or High school subjects: Mathematical Methods or Specialist Mathematics (or equivalent such as Maths B or Maths C)	**Molecular and Cell Biology Major** BM1201:03 Energy Metabolism: Powering Life **PREREQ:** Senior chemistry or equivalent, allow concurrent enrolment in CH1020	SC1109:03 Modelling Natural Systems-Advanced **PREREQ:** MA1000 or MA1009
Molecular and Cell Biology Major BM1110:03 Molecules to Microbes		**Bioinformatics Major** BS1001:03 Introduction to Biological Processes

2028

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
SC2209:03 Quantitative Methods in Science-Advanced **PREREQ:** MA1003 and (SC1109 plus 6 credit points of other Level 1 subjects) or admission in 116409	**Bioinformatics Major** BM2230:03 DNA to Proteins **PREREQ:** 18 credit points of Level 1 subjects including BM1110 or BM1300 or BM1000 or BS1001	**Bioinformatics Major** BM2331:03 Bioinformatics I: Decoding DNA **PREREQ:** BM1110 or BS1001 **ONLINE**
Bioinformatics Major CP1401:03 Problem Solving and Programming I	**Molecular and Cell Biology Major** Select 3 credit points of any level 1, 2, 3 or 5 subjects	**Molecular and Cell Biology Major** BM2310:03 Drugs: Triggering System Responses **PREREQ:** BM1201
Bioinformatics Major BS2470:03 Evolution **PREREQ:** BZ1001 or BS1001 or BZ1005		**Molecular and Cell Biology Major** BM2330:03 Cell Biology: Signaling & Regulation **PREREQ:** 18 credit points of Level 1 subjects including BM1110 or BM1000 or BS1001

2029

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
Molecular and Cell Biology Major BM3130:03 Genes, Genomes and Development **PREREQ:** BM2230	Select 3 credit points of subjects from **List 1 (Advanced Skills Subjects)**	SC3003:03 Science Research Internship **PREREQ:** Admission to BAdvSc plus 15 credit points of AQ, BC, BS, BZ, CH, EV, EA, MA, MB, PH or SC Science Level 2 subjects **OR** SC3008:03 Professional Placement **PREREQ:** Students must have successfully completed 12 second year credit points.
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**	**Bioinformatics Major** BM3331:03 Bioinformatics II: Mastering Big Genomic Data **PREREQ:** BM2331 and SC2202 or SC2209 or MA2405 or BZ2001 or (BC3101 and HS2402)
	Molecular and Cell Biology Major BM3330:03 Synthetic Biology and Bioengineering **PREREQ:** BM1201 or BC2013 and BM2230 or BC2023	**Bioinformatics Major** MA3405:03 Statistical Data Mining for Big Data **PREREQ:** MA2405 or MA2000 or SC2202 or SC2209

Course Handbook

Bachelor of Advanced Science	Bioinformatics Major Molecular and Cell Biology Major

Award Title	Bachelor of Advanced Science
Abbreviation	BAdvSc
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	092515M