# Bachelor of Science

Marine 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<br>**OR**<br>Any Level 1, 2, 3 or 5 subject if already satisfied via previous study | SC1102:03 Modelling Natural Systems<br>**PREREQ:** MA1020 or MA0020 or Senior Mathematics or equivalent<br>**OR**<br>SC1109:03 Modelling Natural Systems-Advanced<br>**PREREQ:** MA1000 or MA1009<br>*SC1109 is compulsory in the Advanced BSc Program and should be taken instead of SC1102 if you are considering that pathway. |
| **Marine Biology Major**<br>BS1007:03 Introduction to Biodiversity | *CH1020:03 Preparatory Chemistry<br>**OR**<br>Any Level 1, 2, 3 or 5 subject if already satisfied via previous study | **Marine Biology Major**<br>BS1001:03 Introduction to Biological Processes |
| **Bioinformatics Major**<br>CP1401:03 Problem Solving and Programming I | | **Bioinformatics Major**<br>Select 3 credit points of any level BM, CH, CP, EA, EG, EV, MA or PH subjects |

*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<br>Offered TR1, TR3<br>**PREREQ:** SC1102 OR SC1109 or admission to Bachelor of Business and Environmental Science or admission to 116209, 116309 or 116409<br>**OR**<br>SC2209:03 Quantitative Methods in Science-Advanced<br>**PREREQ:** MA1003 and ((SC1109 plus 6 credit points of other Level 1 subjects) or admission in 116409) | **Bioinformatics Major**<br>BM2230:03 DNA to Proteins<br>**PREREQ:** Minimum 18 credit points of Level 1 subjects including BM1110 or BM1300 or BM1000 or BS1001 | **Marine Biology Major**<br>BS2460:03 Fundamentals of Ecology<br>**PREREQ:** 6 credit points of Level 1 or 2 BZ/BS or EV subjects |
| **Marine Biology Major**<br>BS2470:03 Evolution<br>**PREREQ:** BZ1001 OR BS1001 OR BZ1005 | Select 3 credit points of subjects from the List 2 **(Skills Subjects)** | **Bioinformatics Major**<br>BM2330:03 Cell Biology: Signaling & Regulation<br>**PREREQ:** Minimum 18 credit points of Level 1 subjects including BM1110 or BS1001 |
| **Marine Biology Major**<br>MB2050:03 Functional Biology of Marine Organisms<br>**PREREQ:** ZL1001 or BZ1004 or AG1004 or BZ1007 or BS1007 or BZ1006 | | **Bioinformatics Major**<br>BM2331:03 Bioinformatics I: Decoding DNA<br>**PREREQ:** BM1110 or BS1001<br>**ONLINE** |

## 2029

| TRIMESTER 1 | TRIMESTER 2 | TRIMESTER 3 |
|---|---|---|
| **Marine Biology Major**<br>MB3210:03 Life History and Evolution of Reef Corals<br>**PREREQ:** SC2202 or SC2209 or BS2001 or BZ2001 or AG2001<br>*Prior Approval<br>**OR**<br>MB3160:03 Evolution and Ecology of Reef Fishes<br>(Offered TR2)<br>**PREREQ:** MB2050<br>**INTENSIVE:** 2 week face-to-face fieldwork component<br>*Prior Approval | **Marine Biology Major**<br>MB3270:03 Coastal, Estuarine and Mangrove Ecosystems<br>**PREREQ:** BS1007 or BZ1007 and (MB2050 or BS2460) and (SC2202 or SC2209 or BS2001 or BZ2001)<br>**INTENSIVE:** 2 week face-to-face fieldwork component<br>**OR**<br>MB3190:03 Coral Reef Ecology<br>(Offered TR3)<br>*Prior Approval | SC3008:03 Professional Placement<br>(Offered TR1, TR2, TR3)<br>**PREREQ:** Students must have successfully completed 12 second year credit points<br>**PLACEMENT** 100 hours<br>**OR**<br>SC3003:03 Science Research Internship<br>(Offered TR1, TR2, TR3)<br>**PREREQ:** 15 credit points of Science Level 2 subjects plus a GPA of 5.5 or above.<br>*Students must source a supervisor for their internship before enrolment<br>**PLACEMENT** 100 hours |
| **Marine Biology Major**<br>MB3050:03 Biological Oceanography<br>**PREREQ:** (BS1007 or BZ1007) and MB2050 and (SC2202 or SC2209 or BS2001 or BZ2001) | Select 3 credit points of any Level 1, 2, 3 or 5 subjects | **Bioinformatics Major**<br>BM3331:03 Bioinformatics II: Mastering Big Genomic Data<br>**PREREQ:** BM2331 and SC2202 or SC2209 or MA2405 or BZ2001 or (BC3101 and HS2402) |
| **Bioinformatics Major**<br>BM3130:03 Genes, Genomes and Development<br>**PREREQ:** BM2230<br>**OR**<br>BZ3450:03 Ecological and Conservation Genetics<br>(Offered TR2)<br>**PREREQ:** BS2470<br>**INTENSIVE** | | **Bioinformatics Major**<br>MA3405:03 Statistical Data Mining for Big Data<br>**PREREQ:** MA2405 or MA2000 or SC2202 or SC2209 |

## Course Handbook

| | |
|---|---|
| Bachelor of Science | Marine Biology<br>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 |