

RECOMMENDED STUDY PLAN

2022

DEGREE Bachelor of Marine Science

STREAM Maths

NAME _____

To assist you with subject information, and to avoid and clashes/issues, you **MUST** consult with your [CSE Course/Major Advisor](#) and refer to [Subject Search](#).

If you would prefer a part-time study plan, please adjust the below planner, reviewing subject prerequisites to ensure you are on track for course completion.

For elective subject selection - Lists of subjects grouped according to potential career aspirations and interests can be accessed [here](#). Options available include recommended marine science related areas of Chemistry, Earth Science, Environmental Science, Fisheries, Marine Biology, Maths and Physics as well as a number of additional general science related areas.

| | Study Period 1 - SP1 | Study Period 2 - SP2 |
|---------------|--|---|
| Year 1 | Degree Core: BS1007 Introduction to Biodiversity | Degree Core: EA1110 Evolution of the Earth |
| | Degree Core: CH1001 Chemistry: A Central Science PREREQ: CH1020* | Degree Option Core: SC1102 Modelling Natural Systems PREREQ: MA1020* OR MA0020 OR SENIOR MATHEMATICS OR EQUIVALENT. OR SC1109 Modelling Natural Systems – Advanced^ PREREQ: [(SENIOR CHEMISTRY OR CH1020* OR CH0020) AND (MATHS B OR MA1020* OR MA0020)] OR ADMISSION TO 50110M - ALLOW CONCURRENT FOR CH1020 & MA1020 |
| | Degree Core: MA1000 Mathematical Foundations PREREQ: MA1020* | Degree Core: MB1110 Introductory Marine Science PREREQ: [(SENIOR CHEMISTRY OR CH1020* OR CH0020) AND (MATHS B OR MA1020* OR MA0020)] OR ADMISSION TO 50110M – ALLOW CONCURRENT FOR CH1020 & MA1020 |
| | Elective: *see notes below on options | Stream Option: MA1003 Mathematical Techniques PREREQ: MA1000 OR MA1011 OR MA1009 |

^SC1109 may be taken as an alternative to SC1102 if you would prefer. It is a required subject in the Advanced Science program if you are considering that pathway.

*Missing Chemistry from high school, select CH1020 Preparatory Chemistry – **SP3 (Jan-Feb)**

*Missing high school intermediate level Mathematics B, select MA1020 Preparatory Mathematics – **SP3 (Jan-Feb)**

If you require BOTH CH1020 & MA1020 please speak with your course advisor prior to beginning your studies.

To avoid progression issues it is recommended you take CH1020 in SP3, MA1020 in SP1 and discuss taking MA1000 in SP2 with your course advisor.

| | Study Period 1 - SP1 | Study Period 2 - SP2 |
|---------------|---|---|
| Year 2 | Degree Opt Core: <u>SC2202</u> Quantitative Methods in Science PREREQ: SC1102 OR MA1020 OR MATH B OR EQUIVALENT OR <u>SC2209</u> Quantitative Methods in Science-Advanced PREREQ: SC1109 AND MA1003 PLUS 6CP OF OTHER LEVEL 1 SUBJECTS | Degree Core: <u>EV2502</u> Introduction to Geographic Information Systems PREREQ: 12CP LEVEL 1 SUBJECTS |
| | Degree Core: <u>CH2042</u> Marine Chemistry and Chemical Ecology PREREQ: CH1001 OR CH1011 | Degree Option Core: <u>PH2006</u> Marine Physics OR <u>PH2009</u> Advanced Marine Physics PREREQ: PH1005 AND MA1000 |
| | Degree Core: <u>MB2050</u> Functional Biology of Marine Organisms PREREQ: ZL1001 OR BZ1004 OR AG1004 OR BZ1007 OR BS1007 OR BZ1006 | Stream Options List 1: |
| | Stream Options List 1: | Elective: <i>*see notes above on options</i> |

| | Study Period 1 - SP1 | Study Period 2 - SP2 |
|---------------|---|--|
| Year 3 | Degree Core: <u>MB3050</u> Biological Oceanography PREREQ: (BS1007 OR BZ1007) AND MB2050 AND (SC2202 OR SC2209 OR BS2001 OR BZ2001) | Degree Core <u>EA3110</u> : Sedimentology and Stratigraphy PREREQ: EA1110 |
| | Degree Core: <u>EV3406</u> Coral Reef Geomorphology PREREQ: 12CP LEVEL 2 INCLUDING 6CP LEVEL 2 EV OR EA OR MB SUBJECTS | Degree Core: <u>MB3270</u> Coastal, Estuarine and Mangrove Ecosystems PREREQ: BS1007 OR BZ1007 AND (MB2050 OR BS2460) AND (SC2202 OR SC2209 OR BS2001 OR BZ2001) |
| | Degree Core: <u>SC3010</u> Sensors and Sensing for Scientists PREREQ: BZ2001 OR SC2202 OR SC2209 OR SC2201 | Degree Core: <u>EV3401</u> Coastal and Catchment Geomorphology PREREQ: AT LEAST 12CP AT LEVEL 2 INCLUDING 6CP OF LEVEL 2 EV OR EA SUBJECTS |
| | Stream Options List 1: | |

| SP11 (Nov-Dec) |
|--|
| Degree Core: <u>EA3640</u> Advanced Environmental and Marine Geoscience Technologies and Applications PREREQ: 12CP LEVEL 2 AND 3CP LEVEL 1 EA OR MB SUBJECTS |

| Stream Options List 1: | |
|--|---|
| Study Period 1 - SP1 | Study Period 2 - SP2 |
| <u>MA2000</u> Mathematics for Scientists and Engineers PREREQ: MA1003 | <u>MA2210</u> Linear Algebra PREREQ: MA1003 |
| <u>CP2404</u> Database Modelling | <u>MA2405</u> Advanced Statistical Modelling PREREQ: MA1401 OR BZ2001 OR MA2401 OR SC2202 OR SC2209 AND MA1000 |
| | <u>MA3405</u> Statistical Data Mining for Big Data PREREQ: MA2405 OR MA2000 OR SC2202 OR SC2209 |

ADDITIONAL COURSE RULES

Must complete a minimum of 18 credit points of Level 3 subjects.

ADDITIONAL COMPLETION REQUIREMENTS

Applicants who have not completed high school intermediate level Mathematics B (or equivalent) must select MA1020: Preparatory Mathematics as part of their study plan to successfully complete the Bachelor of Marine Science.

Applicants who have not completed high school Chemistry (or equivalent) must select CH1020: Preparatory Chemistry as part of their study plan to successfully complete the Bachelor of Marine Science.

Students should undertake the above subject/s in intensive mode where available and be aware that restrictions may apply to electives if they wish to complete in the normal three (3) year time frame. These subjects typically start earlier than the standard course commencement date. Contact JCU on 1800 246 446 for more information.

This course involves mandatory field work and any costs associated with that field work will be at the student's expense.

COURSE PROGRESSION REQUISITES

Must complete 18 credit points of Level 1 or 2 subjects before attempting any Level 3 subject.

ADDITIONAL INFORMATION

[Bachelor of Marine Science handbook](#)