Marine Science

Undergraduate Handbook 2018



Welcome to the Institute of Marine Science

The marine environment plays an important role in many of our lives. Whether you are interested in seafood, conservation, management or contributing to the science that will influence our future, Marine Science offers you the opportunity to learn about many different facets of our coasts and oceans.



The Institute of Marine Science has an active and diverse programme in Marine Science. Our enrolments continue to grow, reflecting interest and the relevance of Marine Science.

While most of our undergraduate teaching is conducted on the city campus, we have field courses that use our excellent research facilities at the Leigh Marine Laboratory, including our research vessel Hawere.

Enjoy your marine studies. I'll see you in our core second year course, MARINE 202 Principles of Marine Science

PROFESSOR SIMON THRUSH
Director Institute of Marine Science





Bachelor of Science in Marine Science

A major in Marine Science opens up a world of opportunities to students who want to study and work in the marine environment. There are plenty of issues to investigate, from the management of New Zealand's extensive marine areas, to oceanography and climate impacts, to the welfare of marine animals and fish stocks. All of these issues need good scientists and well-trained technicians who understand the marine environment.

Complementary majors

A double major is strongly recommended as it will enhance your career options by providing a broader base of skills and knowledge.

MARINE SCIENCE +

Biological Science

Earth Science

Environmental Science

Mathematics

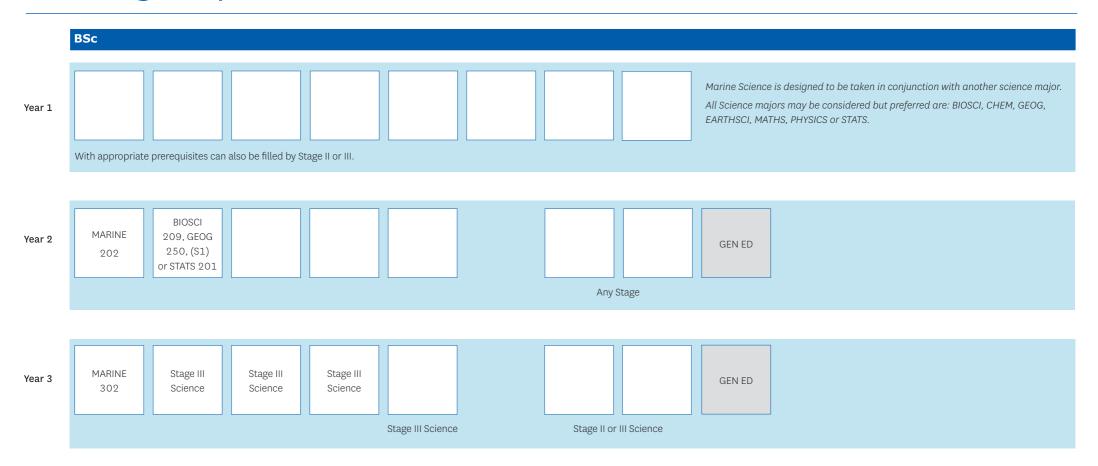
Statistics

www.science.auckland.ac.nz/doublemajors



For course planning and enrolment: www.science.auckland.ac.nz/student-centre For postgraduate study options: www.marine.auckland.ac.nz/postgraduate

BSc degree planner – Marine Science



- 1. Courses in a minimum of three subjects listed in the BSc Schedule
- 2. At least 180 points (12 courses) must be above Stage I
- 3. Up to 30 points (two courses) may be taken from outside the faculty
- 4.30 points (two courses) must be taken from the appropriate General Education Schedules for BSc students
- 5. At least 75 points must be at Stage III, of which 60 points must be in the majoring subject.

It is the student's responsibility to check that the final programme complies with University Regulations. The Faculty of Science is the final authority on all BSc regulations.

To view regulations for majors, and course descriptions, see www.calendar.auckland.ac.nz

BSc degree requires: 360 points (24 x 15-point courses). Each box represents one 15-point course.

We recommend that students enrol in eight courses each year.

Degree planners for double majors can be found at www.science.auckland.ac.nz/course-planning

Undergraduate Marine Science courses		
Course code	Title	
General Education		
Students majoring in Marine Science are not eligible to take MARINE 100G or BIOSCI 100G as one of their General Education requirements.		
MARINE 100G	The Oceans Around Us	
BIOSCI 100G	Antarctica: The Frozen Continent	
Stage I		
There are no prescribed marine science courses at Stage I, but we recommend:		
BIOSCI 104	New Zealand Ecology and Conservation	
ENVSCI 101	Environment, Science and Management	
STATS 101	Introduction to Statistics, OR STATS 108 Statistics for Commerce	
SCIGEN 101	Communicating for a Knowledge Society	
We also recommend one of the following courses:		
CHEM 150	Concepts in Chemistry (for students with no chemistry background)	
CHEM 110	Chemistry of the Living World (for bio-oriented students)	
CHEM 120	Chemistry of the Material World	
Stage II		
MARINE 202	Principles of Marine Science	
BIOSCI 206	Principles of Ecology	
BIOSCI 208	Invertebrate Biodiversity	
BIOSCI 209	Biometry	
STATS 201	Data Analysis	
GEOG 250	Geographical Research in Practice	
Stage III		
MARINE 302	Dynamics of Marine Systems	
MARINE 303	Freshwater and Estuarine Ecology	
BIOINF 301	Introduction to Bioinformatics	
BIOSCI 328	Fisheries and Aquaculture	
BIOSCI 329	Biology of Fish	
BIOSCI 333	Marine Ecology	
BIOSCI 335	Ecological Physiology	
BIOSCI 394	Conservation Ecology	
BIOSCI 395	Pacific Biogeography and Biodiversity	
GEOG 330	Research Methods in Physical Geography	
GEOG 351	Dynamics of Coastal Systems	
EARTHSCI 303	Sedimentary Paleoenvironments	
EARTHSCI 360	Climate and Ocean Processes	
EARTHSCI 361	Exploration Geophysics	
GEOPHYS 331	Physics of the Atmosphere and Ocean	

For course descriptions and prerequisite information: www.marine.auckland.ac.nz/ug-courses

Careers in Marine Science

New Zealand has the world's fourth largest exclusive economic zone. It must be managed sustainably to ensure it provides for our social and economic wellbeing. This means Marine Science graduates have opportunities in a huge variety of fields, ranging from research to Crown Research Institutes and the private sector. The skills you acquire will also enable you to take your career path to other oceans and marine environments:

Aquaculture	Marine Biologist
Biodiversity management	Policy advice
Conservation	Resource planning
Fisheries management	

Natalie Gilligan graduated with a Bachelor of Science majoring in Marine Science in 2016. She is now employed as a fisheries observer at the Ministry for Primary Industries.

"I chose to study at the University of Auckland as it is one of New Zealand's most internationally recognised universities, has a good reputation and is close to home.

"I made some of the most amazing friends with people who share the same passions and interests as me. Some lecturers were particularly helpful in getting me experience outside of University where I completed an aquaculture internship at NIWA and worked alongside many talented scientists and technicians.

"I believe that my qualification in Marine Science has provided me with useful and relevant knowledge that has enabled me to pursue a career doing something that I love.

"I am currently working in the fisheries industry where day to day I am involved with species identification and taxonomic classification, as well as data collection and report writing. The University of Auckland enabled me to gain relevant experience that I can now apply to my work."



Helpful information

Academic dates

www.auckland.ac.nz/dates

Academic Integrity Course

www.auckland.ac.nz/academic-integrity

Accommodation

www.accommodation.auckland.ac.nz

Buy coursebooks

www.science.auckland.ac.nz/resource-centre

Career Development and Employment Services

www.auckland.ac.nz/careers

Course advice and degree planning in Science

www.science.auckland.ac.nz/student-centre

General education

www.auckland.ac.nz/generaleducation

How to apply

www.apply.auckland.ac.nz

How to enrol

www.auckland.ac.nz/enrolment

International students

www.international.auckland.ac.nz

Māori and Pacific students

www.science.auckland.ac.nz/tuakana

Need help?

www.askauckland.ac.nz

Rainbow Science Network for LGBTI students

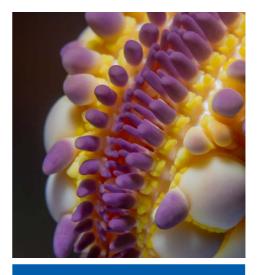
www.science.auckland.ac.nz/rainbowscience

Scholarships and awards

www.scholarships.auckland.ac.nz

Support for students

www.science.auckland.ac.nz/support



Applications close on 8 December Questions about Marine Science? marine@auckland.ac.nz

Disclaimer

Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the University of Auckland Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies.



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