

The cover features a vibrant underwater scene. In the foreground, a large, textured rockfish with a prominent orange eye and mottled brown and white scales is the central focus. Behind it, a school of smaller, silvery fish swims through a reef filled with various corals and sea anemones. The background is a deep, dark blue, suggesting the open ocean.

Marine Science

Undergraduate Handbook 2018



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

SCIENCE

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



Adjacent to
New Zealand's first
marine reserve

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

BSc

Year 1

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Marine Science is designed to be taken in conjunction with another science major. All Science majors may be considered but preferred are: BIOSCI, CHEM, GEOG, EARTHSCI, MATHS, PHYSICS or STATS.

With appropriate prerequisites can also be filled by Stage II or III.

Year 2

MARINE 202	BIOSCI 209, GEOG 250, (S1) or STATS 201							GEN ED
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Any Stage

Year 3

MARINE 302	Stage III Science	Stage III Science	Stage III Science					GEN ED
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Stage III Science

Stage II or III 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	
<i>Students majoring in Marine Science are not eligible to take MARINE 100G or BIOSCI 100G as one of their General Education requirements.</i>	
MARINE 100G	The Oceans Around Us
BIOSCI 100G	Antarctica: The Frozen Continent
Stage I	
<i>There are no prescribed marine science courses at Stage I, but we recommend:</i>	
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
<i>We also recommend one of the following courses:</i>	
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

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

Biodiversity management

Conservation

Fisheries management

Marine Biologist

Policy advice

Resource planning

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/rainbowsience

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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