

MARINE SCIENCE

UNDERGRADUATE HANDBOOK

2017



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

SCIENCE

Welcome to the Institute of Marine Science

Welcome to the Marine Science handbook. Have a quick dip into this because there are a lot of interesting and important things happening in our oceans.

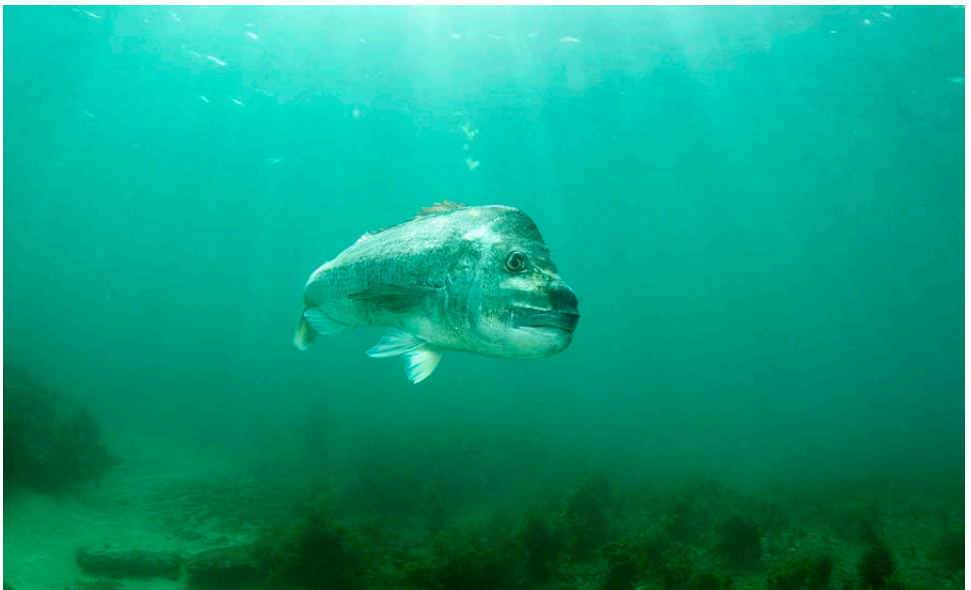


The marine environment plays an important role in many of our lives. Whether you are interested in seafood, conservation, management or contributing to the science that will influence our future, marine science offers you opportunity to learn about many different facets of our coasts and oceans

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'.

SIMON THRUSH
Director, Institute of Marine Science

*Cover photo - Notoclinops caerulepunctus (blue dot triplefin)
Photo credit: Paul Caiger*



Pagrus auratus (snapper) Photo credit: Dr Richard Taylor

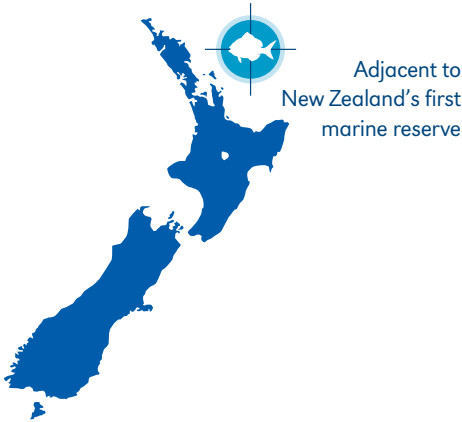
Bachelor of Science in Marine Science

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.

Earth and Marine Sciences ranks in the

TOP 15 
universities worldwide*

**www.marine.auckland.ac.nz/excellence*



Aerial view of Leigh Marine Laboratory. Photo credit: Peter Williams

3 The average number of years it takes to complete a Bachelor of Science degree



You can choose either a single or double major



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, go to www.science.auckland.ac.nz/student-centre

For postgraduate study options, see www.marine.auckland.ac.nz/postgraduate

Planning your major

BSc

Year 1

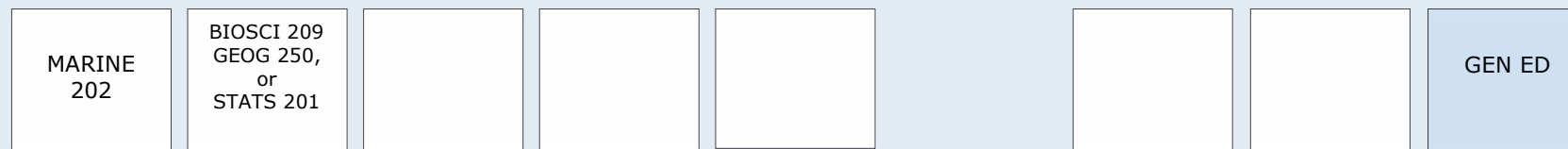


Marine Science is designed to be taken in conjunction with another science subject major.

All Science majors may be considered but preferred are: BIOSCI, CHEM, GEOG, EARTH SCIENCES, MATHS, PHYSICS or STATS.

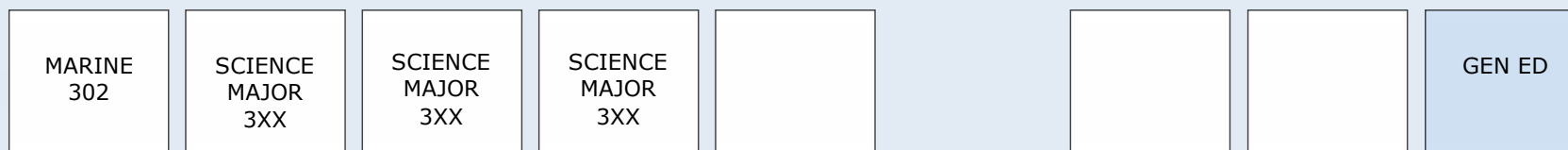
With appropriate prerequisites can also be filled by Stage II or III.

Year 2



Any Stage

Year 3



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 1.
3. Up to 30 points (2 courses) may be taken from outside the Faculty.
4. 30 points (2 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.

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.
 It is recommended that students enrol in 8 courses each year.



The research vessel, Hawere. Photo credit: Brady Doak



Kina in touch-friendly tank. Photo credit: Stephen Barker

Undergraduate Marine Science courses

Stage I

There are no prescribed marine science courses at Stage I, but we recommend:

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 209:	Biometry
STATS 201:	Data Analysis
GEOG 250:	Geographical Research in Practice

Stage III

MARINE 302:	Dynamics of Marine Systems
BIOSCI 328:	Fisheries and Aquaculture
BIOSCI 329:	Biology of Fish
BIOSCI 330:	Freshwater and Estuarine Ecology
BIOSCI 333:	Marine Ecology
BIOSCI 335:	Ecological Physiology
BIOSCI 394:	Conservation Ecology
GEOG 330:	Research Methods in Physical Geography
GEOG 351:	Dynamics of Coastal Systems
EARTHSCI 303:	Sedimentary Paleoenvironments
EARTHSCI 361:	Exploration Geophysics
GEOPHYS 331:	Physics of the Atmosphere and Ocean

For course descriptions and prerequisite information, go to 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.



"I went on an expedition to the Kermadec Islands, where I got to help gather data for a study on Galapagos Sharks. I saw what an awesome job a marine scientist can have and immediately decided I wanted to try and go down this career path.

"What the lecturers are teaching is often something they obviously care deeply about. This tends to make their lectures much more interesting and enjoyable. The flexibility of the programme, allowing you to take almost any route as long as you have a few core papers is also a definite bonus.

"I am very interested in our estuaries, the processes that shape them, the ways they are being impacted and what we can do to help protect or restore them."

Jack Hamilton is studying a Bachelor of Science majoring in Marine Biology

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



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.



Crab and flow. Photo credit: John Montgomery



Clown Nudibranch (*Ceratosoma amoena*). Photo credit: Paul Caiger

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 December 8.

Questions about Marine Science? Email marine@auckland.ac.nz



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