

Bachelor of Science – Marine Science Single Major

Suggested study pathways to careers in Marine Science/Fisheries Management/Marine Biology.

This pathway must be read in conjunction with the program requirements in the Handbook at this link

<http://www.newcastle.edu.au/program/10323.html> noting especially the program enrolment checklist (link half way down the first page)

	PROGRAM Core & Directed courses	MAJOR Compulsory & Directed courses	ELECTIVES - any available University course - suggested choices
1000 level (Yr 1)	STAT1070 <i>Stats. for Sciences</i> MATH1001 <i>Prep. Stud. Math</i> or MATH1110 <i>Math 1</i>	BIOL1040 <i>Introduction to Biology I</i> BIOL1050 <i>Introduction to Biology II</i>	CHEM1110 <i>Chem. for Life Sci I</i> CHEM1120 <i>Chem. for Life Sci II</i> PHYS1150 <i>Everyday Phys</i> ENVS1001 <i>Env. Science Concepts and Methods</i> ENVS1003 <i>Env. Values & Ethics</i> INFO1010 <i>Intro to Info Sys. & Tech</i> Choose up to six 1000 level courses
2000 level (Yr 2)	SCIT2000 <i>Science in Practice</i>	MARI2300 <i>Marine Biology</i> MARI2320 <i>Marine Ecology</i> ENVS2009 <i>Catchments & Water Supply</i>	ENVS2004 <i>Ecology*</i> GEOS2161 <i>GIS and Remote Sensing*</i> ENVS2005 <i>Ecology & Mg'ment Aust Flora</i> ENVS2006 <i>Ecology & Mg'ment Aust Fauna</i> ENVS2001 <i>Env. Con: Energy</i> ENVS2002 <i>Env. Leg. & Planning</i> Choose a minimum of four 2000 level courses
3000 level (Yr 3)		MARI3300 <i>Est. Ecology</i> MARI3320 <i>Ecol. Meth</i> MARI3330 <i>Marine Fish</i> MARI3400 <i>Marine Sci. Proj</i> MARI3410 <i>Coral Reef Ecol</i> Choose a minimum of four <i>* Highly recommended</i>	SRMT3040 <i>Community Resource Mg'ment</i> SRMT3050 <i>Sustainable Land Mg'ment</i> SRMT3060 <i>Restoration Ecology</i> ENVS3001 <i>Int. Impact Ass</i> ENVS3002 <i>App. Env. Sci.</i> ENVS3003 <i>Conservation Biology</i> ENVS3205 <i>Climate Change & res. Mgt</i> ENVS3008 <i>Project Mg'ment & Placement</i> Choose a minimum of two

IMPORTANT CAREERS AND PROGRAM INFORMATION OVERLEAF →

Link to this and other Career Pathways: <http://www.newcastle.edu.au/faculty/science-it/degree-programs/pathways/>



www.newcastle.edu.au

**SUGGESTED
CAREER PATH**

BACHELOR OF SCIENCE

PROGRAM INFORMATION

The Program Handbook lists all the rules you need to meet, plus courses required or available in the program. Link to the Bachelor of Science full information in the Handbook here: <http://www.newcastle.edu.au/program/10323.html>

In order to qualify for the Bachelor of Science award, a student must pass courses totalling 240 units, including:

- At least 160 units of approved science courses and obeying the structure of at least one Bachelor of Science Major. Approved science courses are all courses listed in the majors and co-majors of the Bachelor of Science, as well as the Approved Courses (Complementary to the Majors) listed below.
- Up to 80 units of general electives may be taken.
- A maximum of 100 units may be taken at 1000 level.

A **Bachelor of Science Major** consists of at least 90 units chosen from one area with at least 20 units at 1000 level, 30 units at 2000 level and 40 units at 3000 level. Students may also qualify for a double Science major or a co-major with Mathematics or Statistics.

The **160 units of approved science courses** consist of core courses, compulsory courses, and directed courses including:

1000 LEVEL (60 units)	<ul style="list-style-type: none">• 10 unit core course - STAT1070• 10 unit Directed MATH course (unless exempt from MATH in which case another 1000 level B Science course must be chosen in its place)• 20 units 1000 level courses from your major• 20 units 1000 level approved science courses
2000 LEVEL (40 units)	<ul style="list-style-type: none">• 10 unit core course - SCIT2000• 30 units 2000 level courses from your major
3000 LEVEL (60 units)	<ul style="list-style-type: none">• 40 units 3000 level courses from your major• 20 units 3000 level approved science courses

OTHER UNIVERSITY INFORMATION

What Can I Study

<http://www.newcastle.edu.au/what-can-i-study/science/>

Career Pathways

<http://www.newcastle.edu.au/faculty/science-it/degree-programs/pathways/>

School of Environmental Life Sciences - Study Information

<http://www.newcastle.edu.au/school/environmental-and-life-sciences/areas-of-study/>

The University Careers Service –

<http://www.newcastle.edu.au/service/careers/>

Study/employment options linked to Degree or a Major

<http://newcastle.edu.au/students/degrees-to-careers/>

Graduate Careers Australia - <http://www.graduatecareers.com.au/>

Course description Handbook <http://www.newcastle.edu.au/course/>

University General Enquiry number (02) 49215000 for help with study and administrative matters

CAREER INFORMATION – Marine Scientist/Fisheries Manager/Marine Biologist/Catchment Officer

Career opportunities in all branches of marine science are growing. Australia lays claim to 16.1 million sq km of coastal shallows and ocean floor, and has responsibility for the conservation of resources, control of pollution, and management of species in these areas. Marine scientists are needed to ensure that these critical actions are carried out. Graduates in this program will have the necessary skills and knowledge in the area of marine and estuarine ecology and biology, ecological methodologies, marine fish and fisheries and other topics related to marine environment. There are career opportunities in the relevant government agencies, non-governmental organizations, academic institutions and research organizations.

THIS INFORMATION IS CURRENT AS AT NOVEMBER 2011 AND IS SUBJECT TO CHANGE