MARINE SCIENCE CAREER SNAPSHOT





Explore your options, clarify your career goals



Build your networks



Gain course relevant experience



Fine tune your job application skills



Show initiative, engage in extra-curricular activities and stand out

For further ideas, access the **Career Ready Plan**

Marine Science

Marine Science encompasses elements of marine biology, oceanography, marine geosciences and environmental management. Study not only the ocean, but the multitude of ecosystems that exist below the surface, including coastal environments, ocean currents and the sea floor. Bachelor of Marine Science graduates possess skills needed to address the challenges facing the world's oceans and coasts over coming decades.

With a future focus on the "Blue Economy", the world of marine science acknowledges not only the economic potential of the world's oceans, but focuses on achieving a healthy marine environment, a strong economy and a vibrant society by sustainably managing our greatest resource: our oceans and coasts. Marine Science is a key economy driver.

Source: National Marine Science Committee as of 01/2023



Average age

41 years



Gender Share 40% female



Average full-time

43 hours



Weekly Pay \$1,794



Skill level rating Very high skill





Unemployment Average unemployment



Full-Time Share 78% Full-Time

Fast Facts on Marine Biologists and Life Scientists sourced from The Good Universities Guide Jan 2023 and Labour Markets Insights Jan 2023.

Marine Science Careers

Your career options need to be evaluated according to your goals and preferences.

Consider what you would like to drive your career:

- Developing academic knowledge
- Monitoring the interaction of climate change and the oceans
- Monitoring impact of human activity on marine water and life
- Protecting and restoring marine environment, coral reef, estuaries
- Mapping out the seabed and water currents (95 % of oceans are "unexplored")
- Monitoring and managing marine life for commercial purposes
- Developing marine-derived products in cosmetics, chemicals, new materials, pharmaceuticals and supplements, biotechnology, agriculture and food
- Effecting change in the above areas through policy
- Secondary teaching in science
- Specialist marine tourism

Sample positions include*:

- Principal Marine Scientist with SLR Consulting or RPS
- Fisheries Scientist Dept of Regional NSW.
- Principal Hydrogeologist with Cardno
- **Environmental Consultant with** Preston Consulting Pty Ltd
- Marine Biologist Experience Co Itd.
- Fish Performance Manager with Huon Aquaculture
- **Environmental Specialist with** Fircroft Australia Pty Ltd
- Research Manager Sustainable Fisheries - The Minderoo Foundation
- Expeditions Leader/Trip Director with Coral Expeditions
- Water Quality Technician with Pacific Biotechnologies Ltd
- Aguarist at SEA LIFE Sydney Aquarium
- Scientific Data Technician with Archipelago Asia Pacific
- Aquarist SEA LIFE Sunshine Coast Marine Technician with the
- Australian Defence Force **Environmental Scientist with**
- Vision Environment
- Secondary Science Teacher
- Research Assistant Dive Instructor

*Note: Not all of these positions will be available to graduates without prior experience or additional study or training.

What are JCU Marine **Science Graduates Doing?**

The JCU Alumni LinkedIn page provides information on over 2500 JCU alumni who have listed 'Marine Sciences' within their LinkedIn profile.

The top five employers listed on these LinkedIn profiles are: James Cook University, AIMS: Australian Institute of Marine Science, GBRMPA: Great Barrier Reef Marine Park Authority, CSIRO, The University of Western Australia. Retrieved in January 2023.

Investigate individual Alumni profiles to identify career paths, types of

JCU Careers and Employability

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experience, skills and past employers of JCU Marine Sciences graduates.

You will note that many alumni have postgraduate qualifications and further study dramatically improves your employability in your interest area.

Course Enhancing Experience

Whilst there are excellent opportunities to develop skills and experience in the field in this course, seeking further opportunities is advisable. Gaining career relevant experience can improve your job prospects, confidence and help you stand out against other applicants.

You can develop exposure to various natural environments, practice teamwork, communication, negotiation, collaboration and project management skills through volunteering for environmental protection organisations. Building on those experiences, you could source vacation work and internships.

It is essential that you keep a diary/ePortfolio of your experiences; record any key tasks and skills used to deliver those tasks, main challenges and how you tackled them, what you would do differently next time, any measurable results, how you liked the experience, your energy and engagement levels. These notes will help you choose the right career path and allow you to provide evidence about your competencies in your job applications.

Keep **reviewing job descriptions** in areas of your interest and note the technical skills that you will need to develop to be considered for those positions. Some of them, if not covered in your course, could be acquired through a <u>MOOC</u> micro credential and/or <u>LinkedIn Learning</u> and applied in volunteering.

Source volunteering jobs from:

- JCU Careers and Employability
- Volunteering North Queensland
- Townsville City Council
 Community Directory
- Great Barrier Reef Foundation
- Reef Check Australia
- Parks Australia
- Sea Shepherd

Vacation experiences and internships are a step up from volunteering and can be found in the student experience job boards and graduate recruitment directories:

- GradAustralia
- GradConnection
- <u>LinkedIn</u>

Many organisations** offer vacation and internship programs targeting Marine Science students – here are some examples:

- Department of Environment and Science
- Department of Infrastructure
 Regional Development and Cities
- North Queensland Bulk Ports
 Corporation

Graduate Employment

Many large organisations run graduate programs - paid professional development positions, where new hires are provided with on the job training and mentoring by the employer.

They usually recruit students in their final year of study to start in the following year. The competitive applications open as early as March so it is essential that you pencil in the dates at least one year in advance and address gaps in your skills and experience, if any exist.

Smaller organisations recruit a number of entry level positions throughout the year and offer more informal mentoring on the job covering a specific area within the organisation.

The following Australian and overseas organisations** are known to recruit Marine Science graduates, some of them also offering vacation programs:

- ABARES
- Bureau of Meteorology
- Great Barrier Reef Marine Park Authority
- Australian Fisheries Management Authority
- Australian Institute of Marine Science (AIMS)
- Institute for Marine and Antarctic Studies (IMAS)
- Australian Marine Conservation Society
- Queensland Government
 Department of Environment and Science
- Queensland Government
- Green Career
- European Geosciences Union
- Earthworks Jobs

- Marine Careers USA
- Woods Hole Oceanographic Institution
- Marine Conservation Institute
- <u>Department of Wildlife and</u>
 Fisheries Sciences Job Board
- Marine Stewardship Council
- North Pacific Marine Science Organization
- Japan Agency for Marine-Earth Science and Technology
- Environment Jobs UK
- Association of Polar Early Career Scientists
- WISE Oceans
- <u>Intergovernmental Oceanographic</u>
 <u>Commission</u>
- World's Oceanographic Institutions: a list (Wikipedia)

Many Australian government agencies involved in managing environment, land and resources also run graduate programs of interest, for example:

- Queensland Government
- <u>Australian Fisheries Management</u>
 Authority
- Department of the Environment and Energy
- Department of Agriculture, Water and Environment
- Geoscience Australia
- <u>Department of Natural</u> Resources, Mines and Energy

Tap into **online forums** e.g. Glassdoor and Whirlpool Forum to view discussions on employers and recruitment requirements, questions and experiences.

Professional Associations

Many professional associations offer heavily discounted or free student membership. The benefits include professional development, networking and career resources/job boards:

Australian Marine Sciences Assoc.

Institute of Marine Engineering, Science and Technology

Environment Institute of Australia and New Zealand

<u>Marinet</u>

You may also like to review the links in the Geology and Environmental Practice career snapshots.

^{**}The University does not endorse any of the listed opportunities nor has any connections with the organisations.