

# MARINE SCIENCE CAREER SNAPSHOT



## BOOST YOUR EMPLOYMENT PROSPECTS



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 [JCU Job Ready](#)

## Marine Science

Marine Science covers a variety of disciplines; it is part of the broad family of sciences called [Earth Sciences](#) and covers marine geology (sediments and the seabed rocks, undersea tectonic plates and their movements), marine physics (study of the water currents and their interactions with the atmosphere), marine chemistry (study of the varying ingredients of the sea water) and the interactions of all of the above with marine life (marine biology). The above aspects of marine science are sometimes referred to as geological, physical, chemical and biological oceanography.

With a future focus on "marine economy", the world of marine science acknowledges not only the economic potential of the world's oceans, but the environmental impact of unchecked economic ocean activity to ocean ecological health.

Source: [National Marine Science Committee](#) as of 08/2020

## Marine Science Careers

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

## All Life Scientists



**\$1,794**  
Weekly Pay ?



**Stable**  
Future Growth ?



**Unavailable**  
Unemployment ?



**7,500 workers**  
Employment Size ?



**Very high skill**  
Skill level rating ?



**75% Full-Time**  
Full-Time Share ?



**43 hours**  
Average full-time ?



**39 years**  
Average age ?



**53% female**  
Gender Share

Fast Facts on [Life Scientists](#) and [Geology/Geophysics/hydrogeologists](#) sourced from [JobOutlook.gov.au](#) as of 08/2020.

Consider what you would like to drive your career:

- developing academic knowledge
- monitoring the interaction of climate change and the oceans
- discovering and extracting fossil fuels
- mining rare minerals to build new environmentally friendly technologies
- 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
- specialist recruitment

Consider your work preferences:

- office vs fieldwork;
- "coalface" vs policy/big picture;
- private industry vs government or community;
- city vs bush,
- Australia vs overseas,
- Fly In Fly Out vs regular schedule,
- contract work vs permanent position

Sample positions include\*:

- Principal Marine Scientist with SLR Consulting
- Underwater Acoustics Consultant with SLR Consulting
- Principal Hydrogeologist with Cardno
- Environmental Consultant with Preston Consulting Pty Ltd
- Environmental Advisor with Tablelands Mining Group Pty Ltd
- Fish Performance Manager with Huon Aquaculture
- Environmental Specialist with Fircroft Australia Pty Ltd
- Production and Operations Manager with Capitalb
- Expeditions Leader/Trip Director with Coral Expeditions
- Water Quality Technician with Pacific Biotechnologies Ltd
- Aquarist 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 450 JCU alumni who have listed 'Marine Sciences' within their **LinkedIn profile**.



The top ten employers listed on these LinkedIn profiles are:

James Cook University, IUCN:

International Union for Conservation of Nature, RPS, Wildlife Conservation Society, National Geographic, The University of Queensland, Animal Smart Training, Mining People International, Fulton Hogan, Matrix Solutions Inc.

Retrieved in August, 2020.

Investigate individual Alumni profiles to identify career paths, types of experience, skills and past employers of JCU Marine Sciences graduates.

## Course Enhancing Experience

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 of essence 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 [MOOC](#) micro credential and/or [LinkedIn Learning](#) 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](#)
- [Wise Oceans](#)
- [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](#)
- [LinkedIn](#)

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 Research Council Centre of Excellence Coral Reef Studies](#)
- [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](#)
- [Department of Wildlife and 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](#)
- [Intergovernmental Oceanographic Commission](#)
- [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](#)
- [Australian Fisheries Management Authority](#)
- [Department of the Environment and Energy](#)
- [Department of Agriculture, Water and Environment](#)
- [Geoscience Australia](#)
- [Department of Natural 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.

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

## 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](#)

[Marinet](#)

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