




# 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 Career Action Plan](#)

## Marine Science

Marine Science 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.

## 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
- discovering and extracting fossil fuels
- mining rare minerals to build new environmentally friendly technologies


## Fast Facts


 **\$2,133**  
Weekly Pay ?

 **12,100 workers**  
Employment Size ?

 **Very strong**  
Future Growth ?

 **Very high skill**  
Skill level rating ?

 **Lower unemployment**  
Unemployment ?

 **86.6% Full-Time**  
Full-Time Share ?

 **43.2 hours**  
Average full-time ?

 **40 years**  
Average age ?

 **27.1% female**  
Gender Share

[FastFacts](#) on Geology/Geophysics sourced from JobOutlook.gov.au as of 02/2019

- monitoring impact of human activity on marine water & 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\*\*:

- Research Scientist - Coastal Oceanographer with AIMS
- Deep Sea Exploration Geologist with Nautilus Minerals
- Marine Ecologist with Jacobs
- Junior Scientist – Marine Biosecurity with Cawthorn Institute
- Environmental Scientist with Aust. Coastal & Marine Ecology Pty Ltd
- Scientist (Water and Waste) with Townsville City Council
- Advisor Policy and Regulatory with Aust. Maritime Safety Authority
- Graduate Oceanographer with MetOcean team, RPS Group
- Fisheries Scientist with Primary Industry Advisory Council
- Fisheries Scientist with Department of Agriculture and Water Resources
- Marine Geoscientist with Geoscience Australia
- Marine Parks Officer – Assessments and Authorisations with Parks Australia
- Seasonal Prediction Modelling Officer with Australian Bureau of Meteorology
- Marine Science Consultant with SLR Consulting
- Marine Geologist with DeBeers Group
- Senior Scientist with Department of Environment and Science, Water Assessments & Systems
- Secondary [Science Teacher](#)
- Guide with Smallworldjourneys
- Dive Instructor with ProDive

*\*Note: Accessed on Seek.com.au in February 2019. 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 380 JCU alumni who have listed 'Marine Sciences' within their [LinkedIn profile](#).

The top ten employers listed on these LinkedIn profiles are:

James Cook University, NOAA: National Oceanic & Atmospheric Administration, University of Queensland, University of Western Australia, Roger Williams University, Australian Institute of Marine Science, University of North Carolina at Wilmington, University of Maine, Woodside Energy, IUCN: International Union for Conservation of Nature.

Retrieved in February, 2019.

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** 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 tell compelling stories 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 applied in volunteering.

Source **volunteering jobs** from:

- [JCU Careers and Employment site](#)
- [Volunteering North Queensland](#)
- [Townsville City Council Community Directory](#)
- [Great Barrier Reef Foundation](#)
- [Reef Check Australia](#)

- [Parks Australia](#)
- [Wise Oceans](#)
- [Seashepherd](#)

**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](#)
- [Graduate Opportunities](#)
- [GradConnection](#)

Many organisations\*\* offer Vacation and internship Programs targeting Marine Science students – here are some examples:

- [Department of Infrastructure Regional Development and Cities](#)
- [Department of Agriculture and Water Resources](#)
- [North Queensland Bulk Ports Corporation](#)

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

## 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** for 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 offering also 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](#)

- [Australian Marine Conservation Society](#)
- [Queensland Government Department of Environment and Science](#)
- [Queensland Government Green Career](#)
- [Marine Science Jobs](#)
- [Earthworks](#)
- [European Geosciences Union](#)
- [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](#)
- [Conservation Job Board](#)
- [Japan Agency for Marine-Earth Science and Technology](#)
- [Jobs.ac.uk \(academic\)](#)
- [Environment Jobs UK](#)
- [Association of Polar Early Career Scientists](#)
- [WISE Oceans](#)
- [Intergovernmental Oceanographic Commission](#)
- [World's Oceanographic Institutions: a list \(Wikipedia\)](#)

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

- [Queensland Government](#)
- [Department of the Environment and Energy](#)
- [Department of Agriculture and Water Resources](#)
- [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.

## 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.