



# Science (Postgraduate)



JAMES COOK  
UNIVERSITY  
AUSTRALIA

Celebrating  
**50**  
YEARS  
1970 - 2020

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[jcu.edu.au](http://jcu.edu.au)



# Why JCU?

## **A STUDENT EXPERIENCE LIKE NO OTHER**

- Access to world-class teachers
- Develop skills in state-of-the-art facilities
  - Benefit from small class sizes
- Connect with professional networks
- Support through scholarships for merit and equity
  - Discover great accommodation options

## **OUTSTANDING RATINGS**

Study with the best. Independently rated best in the world for Marine and Freshwater Biology and second best in the world for Biodiversity Conservation.\*

## **WORLD-CLASS LECTURERS**

Access the best. JCU students excel in small classes, connecting with experts in their fields whose research is well above world standard\*.

## **UNIQUE TEACHING ENVIRONMENTS**

Be inspired by JCU's living laboratories. Study and learn in state-of-the-art teaching facilities and unique environments, including the World Heritage-listed Great Barrier Reef and the Daintree Rainforest, tropical wetlands and dry savannahs.

\*Excellence in Research Australia (ERA) 2018.





# Science

✔ Gain practical experience studying in the unique biodiverse region of North Queensland. Benefit from access to world-class research environments like JCU's Marine and Aquaculture Research Facility and the Daintree Rainforest Observatory. Complete field trips to locations like the Great Barrier Reef, Singapore, the Galapagos Islands, Thailand, or Vietnam.

✔ Students learn from industry experts through practical experiences in varied environments. You will choose one of seven majors, with additional electives to suit your professional interests.

✔ You can also take your learning further and enrol in our extended Master of Science (Professional) program. Therein you will complement your studies with a capstone research project or industry placement. Learn more about the [Master of Science \(Professional\)](#).

## COURSE DETAILS:

<b>Locations:</b>	Cairns, Townsville
<b>Commencing:</b>	February, July
<b>Duration:</b>	1.5 year full-time (Masters), part-time available
<b>Prerequisites:</b>	Bachelor degree in Science with a minimum GPA of 5 (65%) or equivalent.

Please visit the [handbook](#) for a detailed outline of the course structure. Note: Information is for domestic students only

# Experience has no substitute

Students choose from seven majors and can select elective subjects within the same major, or from another discipline to enhance their learning.

## MAJORS

### Aquaculture Science and Technology

Explore the science of aquaculture and learn about the husbandry and nutrition of various species in the JCU's Marine Aquaculture Research Facility and in the field. Investigate the scope and role of aquaculture as a food source and critically assess the environmental sustainability and suitability of existing and developing aquaculture industries.

### Environmental Earth Science

Learn from world-class lecturers about the impacts of land use, land management, and climate change on the earth surface. Apply your learnings to the diverse environments of the tropics, including the Daintree Rainforest, fertile agricultural regions, the savannah outback, and tropical rivers and coastlines.

### Environmental Management

Develop your capabilities in natural resource management. Gain specialised skills in remote sensing, Geographic Information Systems, and Environmental and Social Impact Assessment.

### Fisheries Science and Management

Explore the fundamentals of fisheries science and its application in tropical environments. Gain knowledge, technical skills and experience in fisheries assessments, sustainable development and management approaches.

### Geology

Develop your knowledge of geological structures, mineralogy and plate tectonics. Benefit from practical experience studying rocks, sediments and soils in the Great Artesian Basin, the Savannah and the areas surrounding the Great Barrier Reef Marine Park. Learn about feasible and sustainable ways to extract resources and evaluate geological natural hazards that may threaten communities.

### Marine Biology

Evaluate the impact of human society on tropical marine populations, species, habitats, and ecosystems. Attain the technical skills and knowledge necessary for working in the marine conservation sector so you can deliver innovative solutions for the marine environment and its dependent communities.

### Tropical Biology and Conservation

Integrate a range of disciplines as you observe, explore and build your understanding of the diversity of the biological world. Develop the skills necessary to conduct applied research and/or to deliver innovative and sustainable solutions for conserving the natural environment.







*“JCU is one of the world’s leading universities in Marine Science and offers study on Fisheries Management in the Tropics. This was the main reason I travelled from Germany to study here in Townsville. I had the opportunity to work on projects that will help to conserve the marine environment on an international scale.”*

**Sheila Villora**

MASTER OF SCIENCE, MAJORING IN FISHERIES SCIENCE AND MANAGEMENT



*“The best part of working at JCU is being part of an incredibly vibrant, active and diverse team of students and staff. Together, we regularly make breakthrough discoveries that change paradigms and practices globally. The other best thing is being able to live and work in such a great location! For students looking to upskill and specialise in a particular environmental science and/or management field, JCU is a perfect choice. Our speciality areas of marine biology, fisheries, aquaculture, ecology and conservation, earth sciences, geology and environmental management are all taught by passionate researchers. Our goal is that you get the experience, knowledge and practical applications necessary for your next career step. And along the way you also get to contribute to our fun, supportive and engaged community.”*

**Dr Naomi Gardiner**

SENIOR LECTURER AND COURSE COORDINATOR

## Career Opportunities

Gain significant employability skills to work as a science professional in Australia and internationally. JCU graduates work across the public or private sector for business, government, educational, research and not for profit agencies.

Develop your career as a biologist, conservation agent, resource consultant, environmental manager or geologist. Graduates are also sought after as research scientists, educators and science communicators.

JCU students increase their employability by either diversifying their portfolio of subjects or deepening their areas of specialisations.



# Progress your studies

Pursue your passion to a higher level through nested qualifications. You can enter directly into a Master of Science or use the Graduate Diploma or Graduate Certificate of Science as a stepping stone towards your Masters.

## Master of Science (Professional)

(48 CREDIT POINTS)

## Master of Science

(36 CREDIT POINTS)

## Graduate Diploma of Science

(24 CREDIT POINTS)

## Graduate Certificate of Science

(12 CREDIT POINTS)



## Contact us

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