

Master of Science (Professional)



JAMES COOK
UNIVERSITY
AUSTRALIA

Celebrating
50
YEARS
1970 - 2020



Ready today for tomorrow

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Why JCU?

A STUDENT EXPERIENCE LIKE NO OTHER

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

UNIQUE TEACHING ENVIRONMENTS

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

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*.

TOP MARKS ALL ROUND

Graduate with confidence. JCU students receive the support to succeed with JCU Science rated five stars for Learner Engagement, Skills Development, Student Experience and Teacher Quality[^].

WORLD-CLASS LECTURERS

Access the best. JCU students excel in small classes, connecting with experts in their fields.

*CWUR, 2017, [^]Good Universities Guide 2020



Master of Science (Professional)

- ✔ Take your undergraduate degree in science further and work in leadership roles within public or private organisations. Be equipped to address many of the world's current environmental issues with the advanced knowledge gained throughout this program.
- ✔ Get practical experience in World Heritage listed reef and rainforest environments. Learn from lecturers who are experts in their field and will challenge you to develop your problem-solving skills.
- ✔ Gain in-depth and comprehensive knowledge across a range of subjects, as well as deciding which area interests you the most as you have the opportunity to specialise in one of seven majors.

COURSE DETAILS:

Locations:	Cairns, Townsville
Commencing:	February, July
Duration:	1 year fulltime, part-time available
Prerequisites:	AQF Level 7 bachelor degree in science with minimum GPA of 5; 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

As a JCU Master of Science (Professional) student, you will diversify your knowledge studying the unique environments of North Queensland such as coral reefs, seagrass beds, mangroves, dry savannahs and tropical rainforests.

Receive advanced research training that you can apply to an industry-based project. You can also choose to conduct an independent research project, which could lead to a doctorate (PhD).

Students choose from seven majors and can select elective subjects within the same major, or from another discipline to enhance their learning. Only the Environmental Earth Science and Tropical Biology and Conservation majors are available at the Cairns campus.

MAJORS

Aquaculture Science and Technology

Students learn the principles of tropical aquaculture and gain technical skills in the world's fastest-growing food production sector. Focusing on fish, shellfish and pearls, students develop a theoretical and practical understanding of the science of fish farming.

Environmental Earth Science

Students access world-class lecturers and researchers to develop knowledge of the impacts of land use, land management, and climate change on the earth surface. Using current techniques, students investigate methods to control or minimise the harmful effects of human activity on the environment.

Environmental Management

Develop knowledge of how natural environments function and change over time. Students build an understanding of how societies can conserve, use and modify these environments and the resources they provide. Benefit from gaining specialised technical skills such as remote sensing, Geographic Information Systems, and Environmental and Social Impact Assessment.

Fisheries Science and Management

Develop an understanding of how to protect and manage marine resources. Gain practical experience in the Great Barrier Reef Marine Park and build skills in stock assessments, subsistence industrial fishing practices and technology development.

Geology

Students develop an advanced understanding of global

issues including mining, energy and ground water resources, environmental problems and climate change. Build practical experience studying rocks and minerals in the Great Artesian Basin, the Savannah and the areas surrounding the Great Barrier Reef Marine Park.

Marine Biology

JCU students learn from lecturers and researchers who are global leaders in their field. Understand how to inform best practice outcomes for communities, industry and resource management agencies globally, particularly in the Tropics. Access the JCU Orpheus Island Field Station and award-winning laboratories.

Tropical Biology and Conservation

Integrate diverse disciplines such as zoology, ecology, botany, behaviour and evolution biology with a range of terrestrial and marine habitats. Students observe, explore and understand the diversity of the biological world.

“Studying a Master’s of Science (Professional) at JCU, I feel like I am walking away with much more than a piece of paper, but with genuine hands-on experience and skills to tackle both industry and further academic studies. The willingness, positivity and approachability of professors and staff, who constantly encourage and create opportunities for students was the best part of the program. The help and encouragement of the teaching staff, really fostered essential relationships, which developed foundations that have allowed me to further pursue my passion. Being completely surrounded by some of the world’s best research and researchers was very invigorating. The exciting scientific field trip occasions and the ease of access to Great Barrier Reef islands really inspired me to continue working within this field. Diving and living on an island in the Great Barrier Reef for a field trip was pretty amazing and would motivate any student to join the scientific field.”

Jana Birkby

MASTER OF SCIENCE (PROFESSIONAL)



“The best part of working at JCU is being part of an incredibly vibrant, active and diverse team of students and staff. Together our JCU Science team regularly makes breakthrough discoveries that change paradigms and practices globally. It is great to be able to contribute to work that really does make a difference. 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 our 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

Career Opportunities

Have the opportunity to work as a science professional nationally and internationally with this postgraduate science course.

Advance your career in the public or private sector with organisations concerned with the management and use of environmental resources.

You could work in non-government organisations specialising in international aid and development, or focus on addressing environmental planning and educational issues.

Alternatively, get a job working in environmental consulting firms or become a science communication expert.





Postgraduate coursework applications

Apply directly to JCU, either by a form you download, complete and return, or by using the [Online Application Portal](#).

Your application must reach us before the deadline for your course.
your course.

ENTRY REQUIREMENTS

Postgraduate courses will usually require completion of an appropriate undergraduate degree for entry. You'll need to include certified copies of qualifications and academic records with your application. For some programs, appropriate work experience or equivalent qualifications will be considered.

FURTHER INFORMATION

To find out more, call 1800 246 446
or contact the [Student Enquiry Centre](#).

Contact us

Townsville: 07 4781 5255

Cairns: 07 4232 1000

Freecall (within Australia): 1800 246 446

Email: enquiries@jcu.edu.au

