



Studying Science at JCU

Welcome for Study Abroad and Exchange Students



Welcome College of Science & Engineering

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Why science at JCU ?



JCU Science & Engineering: A World Leader

JCU ranked #1 in the world for Marine Science ^{a)}

JCU is ranked #1 in Ecology and Evolution ^{a)}

JCU is ranked in top 75 in Ecology ^{b)}

JCU is top 100 in the World in Earth and Marine Sciences ^{c)}

JCU is #134 in the world for Environmental Sciences ^{c)}

All disciplines within College are at world standard or higher (ERA)

a) Research.com (2024) b) 2023 Shanghai Ranking Global Ranking of Academic Subjects;
c) 2024 QS World University Ranking

Our Purpose


Creating a brighter future for life in the Tropics and beyond, through education and research that makes a difference locally, and globally



Tropical Ecosystems and Environment



Industries and Economies in the Tropics

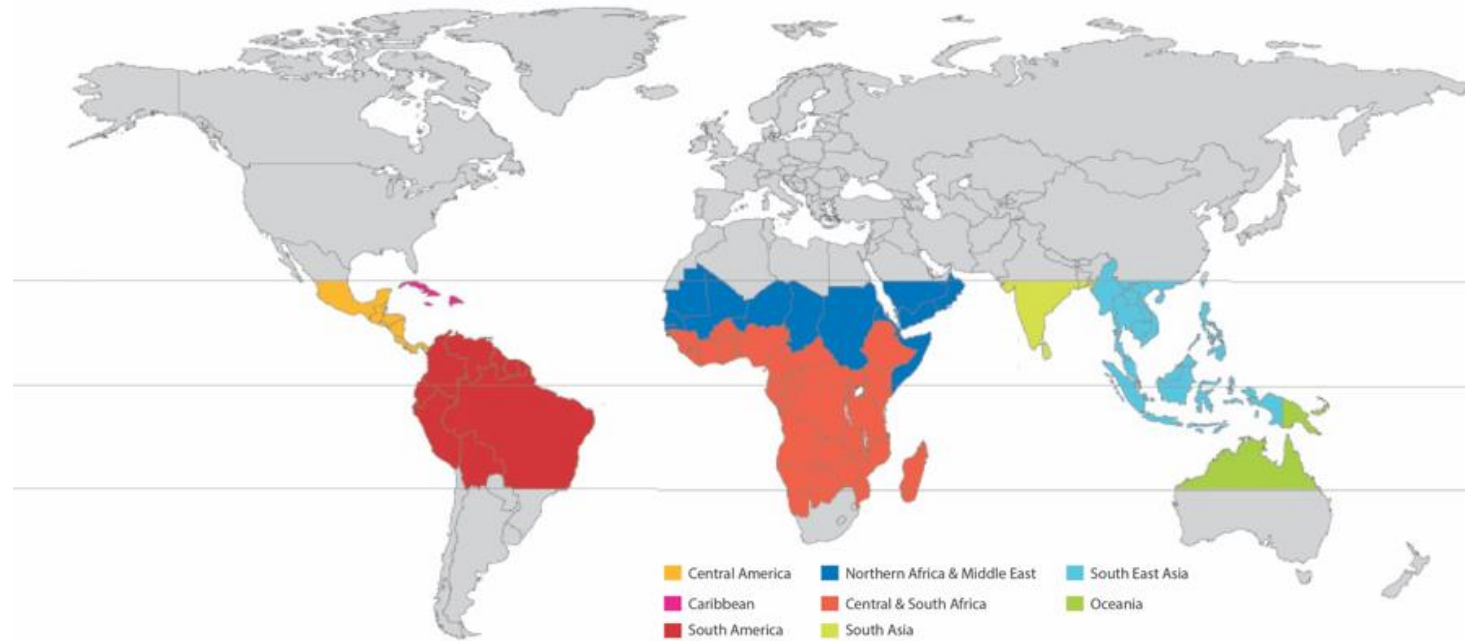


Peoples and Societies in the Tropics



Tropical Health, Medicine and Biosecurity

The Future is the Tropics....



The Tropics is home to:

40% of the world's current population

67% of the world's children by 2050

80% of the world's biodiversity

95% of the world's mangrove & coral reef-based biodiversity

This region is facing some of the most critical issues of our time:

health and disease,
environment, biosecurity,
governance, economic
development and more.

We need to create the next
generation of change-makers!

What is the JCU difference?

The JCU Difference

Real Experience. We believe science and engineering should be experienced, not just taught.

- Over 50 subjects in CSE have a field work component.
- Invest heavily in research stations for students and staff
- We are committed to providing our students with real world skills

Global perspective very diverse international connections

Taught by world-leading researchers

Real world Issues- Authentic research projects working with our industry partners

Studying in the tropics is different! Studying in regional and remote areas is also a big skill to add to your toolkit.

Real Experiences!

We don't just talk about learning. We have you experience it yourself!

Whether you are in the field or in the lab, you will leave JCU with ACTUAL experience.

You won't wonder if you know how to do something, you will know.

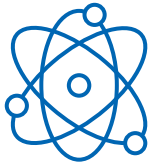




Amazing research facilities & collaborators

You'll benefit from hands-on learning opportunities in well-equipped laboratories and gain invaluable industry insight through our Work Integrated Learning program.

We work very closely with industry to embed real world issues and challenges into our assessment



North Queensland is home to key national marine scientific organisations

(some of our major collaborators & partners)



Australian Government

**Great Barrier Reef
Marine Park Authority**



Australian Government

Bureau of Meteorology



**AUSTRALIAN INSTITUTE
OF MARINE SCIENCE**



**QUEENSLAND
MUSEUM**

Home of the
National Sea Simulator (\$70M facility)!!

Taught by world-leading researchers

JCU scientists are regularly named in an elite group of 'highly cited' researchers as part of a worldwide survey of the impact of academic work each year.

Ten 'highly cited' JCU researchers in our College

*Clarivate Analytics, ISI Highly Cited Researcher List 2020

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Image JCU Image Library

A unique learning environment...there is no place on Earth like Tropical Queensland



Great
Barrier Reef

Cairns

Townsville



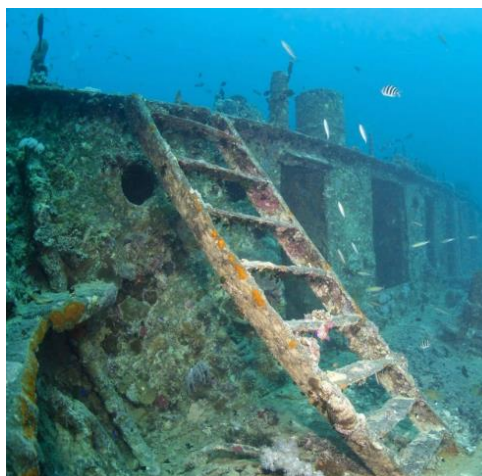
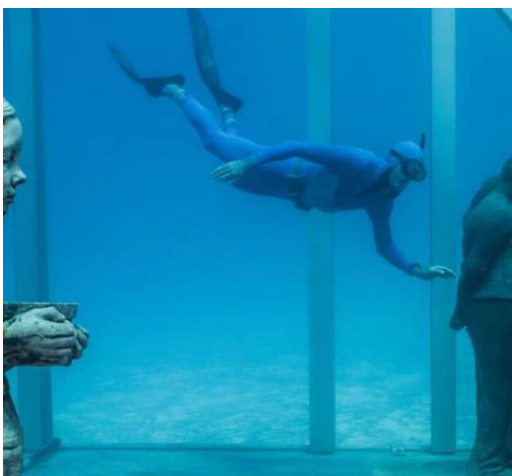
Tropical weather



Unique
natural wonders



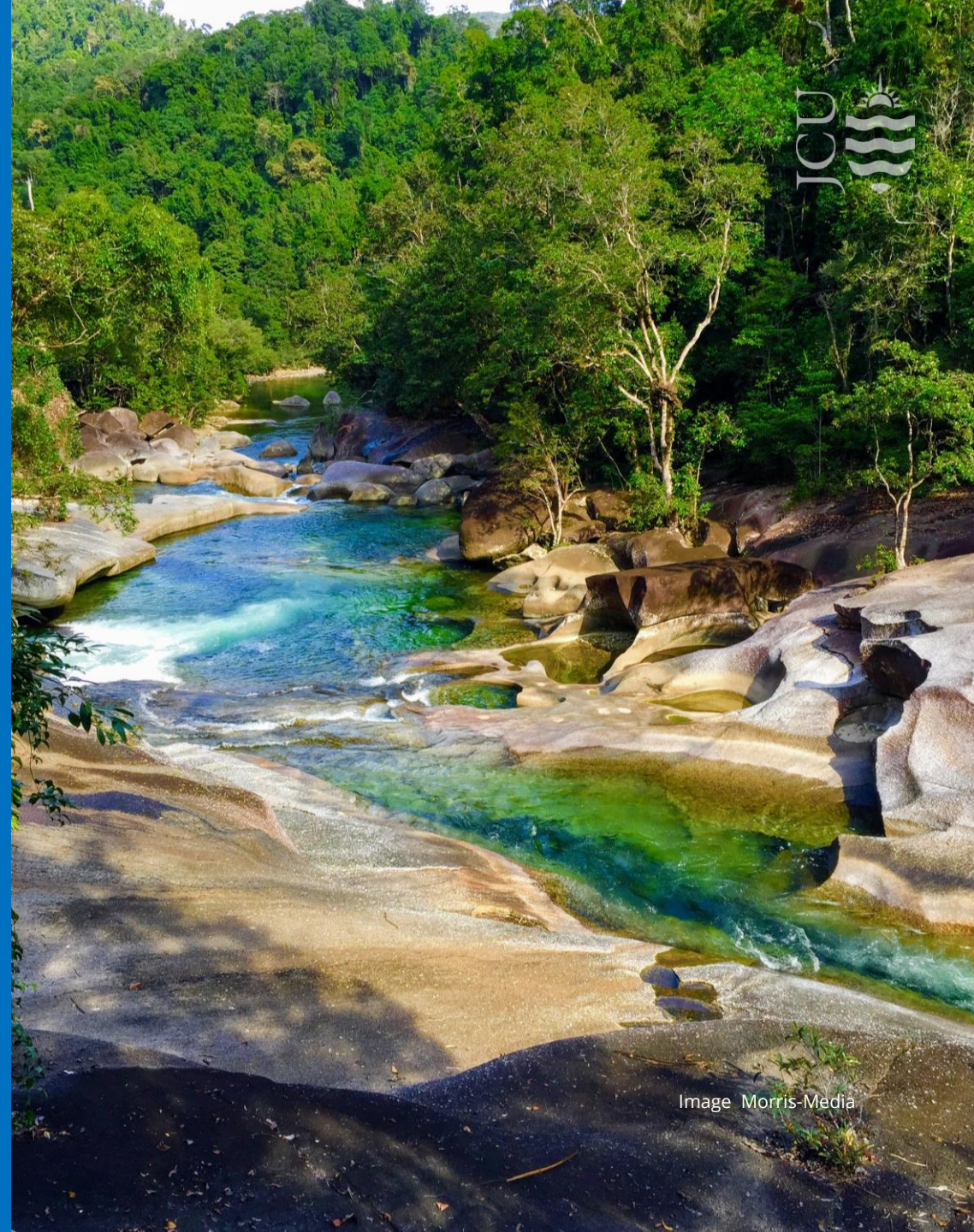
Affordable cost
of living





In case you have any spare time...a few more things to do....

- Hiking
- Magnetic Island
- Beaches
- Sunday markets
- Daintree rainforest
- Great Barrier Reef
- Cultural events/Sports events
- Wildlife



Origin of International Students (Australian Campuses)



Gain a global perspective while you study....

A Closer Look at our Field Stations



Orpheus Island Research Station



Access to diverse marine environments including mangroves, fringing reefs and mid-shelf reefs

Located in Green Zone on the Great Barrier Reef

1,100 species of fish

340 of the 350 known species of reef coral

Ready access to pristine inshore reefs

Accommodates up to 58 people with access a commercial quality kitchen, a fully air-conditioned lecture facility, wet and dry laboratories, and a library.



Dive or snorkel to experience



JCU Dive Club

Student led club offering easy access to dive and snorkel on the Great Barrier Reef

Members benefit from in-house dive gear hire and affordable dive certification courses through PADI

Day trips and multi-day liveaboard trips

More than 300 active members

JCU dive register for volunteer Research diving activities

Underwater selfie with Dr. Renato Morais and PhD. student Pauline Narvaez
Image Victor Huertas Martin

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My JCU Experience Diving in the Great Barrier Reef! #jculife

View all 328 comments

5 DAYS AGO



Daintree Rainforest Observatory



Situated in the World Heritage listed Wet Tropics

Largest continuous area of tropical rainforest in Australia

One of the oldest rainforests and highest densities of biodiversity

Canopy crane access



State of the art Aquarium Facilities

Marine and Aquaculture Research Facility

>600,000 L of seawater with biological filters and algal scrubbers to maintain exceptional water quality

Three separate compounds supporting 23 laboratories.

Macroalgae, prawns, barramundi, grouper, perch, reef fish, epaulette sharks

An underwater photograph of a coral reef. In the foreground, there is a large, detailed view of a coral reef with various types of coral and small fish. In the middle ground, two divers are swimming away from the camera towards the right. The water is clear and blue. In the background, more coral and many small fish are visible. A large, colorful clownfish is in the bottom right corner.

JCU Enrolment

A closer look

Your Approved JCU Subjects



**Approved Subjects
Approx 8-10**



**Research or
Internship
Opportunities**

Science + Non-Science Subjects

BZ3740 Wildlife Ecology & Management
MB3160 Evolution and Ecology of Reef Fishes
MB3190 Coral Reef Ecology
MB3200 Marine Conservation Biology
MB3204 Managing Marine Megafauna
EV5701 Coastal and Marine Management
AR2407 Forensic Archeology

**SC3003
Research
Project**

or

**SC3008
Internship
Placement**

You can add or drop anything in your pool of approved subjects!

Be aware some of the ones with field trips to Orpheus will now have waiting lists

Marine Subjects

- MB5014 Managing Tropical Fisheries
- MB3050 Biological Oceanography
- MB3150 Fisheries Sciences
- MB3160 Evolution and Ecology of Reef Fishes
- MB3200 Marine Conservation Biology
- MB3204 Managing Marine Megafauna
- MB3210 Life History and Evolution of Reef Corals
- MB3270 Coastal Estuarine and Mangrove Ecosystems





Ecology, Zoology and Environmental Sciences



- BZ2705 Terrestrial Vertebrate Fauna
- BZ3220 Population and Community Ecology
- BZ3225 Biological Invasions
- BZ3740 Wildlife Ecology and Management
- BZ3745 Tropical Entomology-3A
- EV3020 Environmental Social Science
- EV3701 Coastal and Marine Management





Physical & Earth Sciences



- CH2042 Marine Chemistry and Chemical Ecology- OIRS
- CH3041 Environmental Chemistry
- CP3403 Data Mining
- EA2006 Hydrology
- EA3207 Soil Properties and Processes

Research and Internship Opportunities



SC3008 Professional Placement/Internship Option

Placement in the industry during your time abroad

Job experience for resume

Many projects to choose from



SC3003 Science Research Internship



This subject is a dedicated individual research project working with a JCU scientist in your chosen academic discipline.

If you are serious about a research career in science, and want to try your hand at research, this subject is for you.

This is a key option for students who are thinking about coming back to JCU to do their Masters or PhD and are looking to find a good fit with a supervisor.

Top Tips and Key Differences..

Study Load

Most of you will be taking 4 subjects while you are with us. When selecting your subjects think about YOUR priorities. There is no correct answer here.

Volunteering

Yes ,there are a LOT of amazing trips going out and people looking for volunteers. Please don't skip key things like tests thinking that this is the ONLY opportunity ever.

Labs and Pracs

At JCU they are embedded within the subjects so make sure you get credit when you transfer them home.

Grades

Work differently here. Especially when transferring them back to America. High Distinctions are equivalent to an "A" but these are capped! Don't freak out.



Want something to smile about?

Did you have a good time?

Want to come back and study again?

Currently negotiating scholarships for study abroad students who come back for postgraduate studies.



JCU Masters Degree Programs



Master of Science
(2 years)



**Master of Marine
Biology**
(2 years)

(77% International)



**Master of
Environmental
Science**
(2 years)

So now is your time to set sail...



Don't be afraid to
charter your own path
while you are here!



Students experience not only a world
class education,

**but an
adventure...**

of a lifetime!



Questions?