SCIENCE CAREER SNAPSHOT

Study Opportunities

Considering studying Science at JCU? Then check out your options: Science - JCU Australia

Clarify your study goals

Prepare yourself for the new world of work by exploring the careers that match your skills and interests. The Good Careers Guide

Graduate Opportunities

A degree in science can open a wide range of career opportunities, as it equips you with critical thinking, problem-solving, and research skills that are highly valued in various industries. The specific career options available to you will depend on the field of science you study and the level of your degree (bachelor's, master's, or PhD). Exploring the opportunities in a structured way throughout your studies will enable you to work through which areas might suit you best and what steps you need to take to work in that field.

At JCU, the following Science majors are available*:

- Aquaculture Science and Technology
- Chemistry
- Data Science
- Earth Science
- Marine Biology
- Mathematics
- Molecular and Cell Biology
- Physics
- Zoology and Ecology

Careers in science often draw from more than one discipline, and it is possible to do combinations of majors, minors and interdisciplinary minors to suit your interests and expand your skill set.

But what jobs do these majors lead to? You could be employed in roles such as geologist, environmental scientist, oceanographer, mathematician, marine or molecular and cell biologist, physicist, ecologist, conservationist or rehabilitation scientist, environmental and policy consultant, wildlife consultant or chemist.

Employment Data

JCU Graduate outcome information for Science and Mathematics and all other Australian dental degrees is available on the Australian Government ComparED site.

The **Graduate Outcomes Survey 2020-2022** reported the following findings.

	JCU	National Average
Full-time employment	**64.3%** 143 responses	**64.3%**
Found employment	**80.9%** 194 responses	**83.1%**
Continued to Full-time study	**30.5 %** 203 responses	**38.1%**

Retrieved ComparED, 15 January 2024

The top five Employers of JCU graduates listed on LinkedIn are:

- James Cook Uni
- QLD Heath
- Aust. Institute of Maine Science
- CSIRO
- University of QLD

(Retrieved January 2024)

Explore more about our Labour markets.

Jobs and Skills Australia -- Home

Specialist or Generalist?

Science careers allow specialisation but also provide a wide range of skills that could take you into many roles with greater variety.

Graduates may choose to undertake postgraduate study to specialise in a particular area of interest within their discipline or pursue further studies in an area outside of science, such as education, law, business, journalism, and finance. High-achieving students passionate about research can choose to undertake an Honours year. This involves a combination of additional coursework and developing a personal research project within your field of study.

> *"STEM graduates cite higher order skills in research, logical thinking, and quantitative analysis as the return on their degrees; alongside the qualities of creativity, open-mindedness, independence, and objectivity."*

JCU Science graduates go on to conduct research and contribute to industries across Australia, and internationally. Their passion for innovation and highly developed skills are attractive to a variety of employers, including in government, industry, and not-for-profit organisations.

Explore your Options

It's important to know what you're heading towards, here are a few ways to investigate.

Investigate the **JCU Alumni tool** for an overview of where alumni are working, and drill down into their LinkedIn profiles to identify career pathways and current and past employers of JCU science graduates.

Follow established scientists/professionals locally or in other places. This is a great way to benefit from their posts without being connected - a good option if you haven't met in real life, or if you aren't yet confident enough to send a connection request.

Follow employers of choice, **interest groups** and **industry bodies** to ensure you don't miss their updates, e.g. CSIRO; BoM; Dept of Innovation, Industry and Science; ANSTO. Take note of the **hashtags** they use on their posts and follow those too. Your understanding of that field will keep expanding as each new post feeds through.

Use your Networks

Keep in touch with supervisors from volunteering, placements, or work experience via LinkedIn or directly to ensure you're informed of job openings when they occur, or even before they are advertised.

Attend industry events, conferences, and seminars to network with professionals in the science field. Networking can be a valuable way to learn about job opportunities and gather insights into career paths.

Investigate Current Vacancies

Searching for job vacancies is an excellent way to see what opportunities exist. Looking for **graduate or entry-level positions** will show you what you could do straight after graduation and what skills and experience you should develop while you're studying. Looking at what jobs **experienced professionals** can do will help you expand your longer-term goals.

A range of websites are listed below in often posted on employer websites, along with their LinkedIn, Facebook, and Twitter feeds.

Job Opportunities

Online Job Boards

- Seek
- Ethical Jobs Environment and Sustainability Jobs
- Careers at CSIRO
- JCU CareerHub
- Australian Job Search
- Australian Public Service
- Queensland Government Jobs
- THEUnijobs

Graduate Recruitment Directories

Directories provide information on graduate jobs, graduate programs, internships and vacation programs

- Qld Government - SmartJobs
- Qld Government Graduate Portal
- Prosple
- GradConnection
- Seek Graduate
- APS jobs Graduate Programs

Graduate programs are structured professional development positions where successful applicants are offered on-the-job training and mentoring within the organisation.

These programs generally **recruit students throughout their final year of study** for commencement in the following year. Applications open as early as March.

Tap into online forums eg. Glassdoor and Whirlpool Forum to view discussions on employers and recruitment experiences.

Volunteering

Volunteer work will give you practical experience, grow your networks and develop strong referees.

Think about areas of science that interest you most and seek out volunteer opportunities in that area. Alternatively, you may volunteer in an area not directly related to science based on your interests. This is still a great experience and develops your transferrable skills. Volunteer opportunities are listed on:

- Seek Volunteer
- FNQ Volunteers
- Volunteering North Queensland
- Townsville City Council Community Directory
- Cairns City Council Community Directory

Student competitions provide another source of skills development and application and there are many relevant to science, such as EY Data Science Challenge, the Ottonel Popesco PEMA Student Challenge, Brandstorm Loreal, FameLab, DrivenData, Kaggle, World Solar Challenge, Climate Launchpad

Vacation and Internship Programs are generally offered by employers to students in the middle/final years of their degree. Internships provide an opportunity for students to apply theoretical knowledge in a real-world setting, gain industry-specific skills, and make professional connections.

Professional Associations

Student membership with a Professional Association is an ideal way to gain valuable insight into your future profession, demonstrate interest and meet people in your field who can support you in developing your career.

Membership benefits include access to industry news and trends, professional development materials, advertised jobs, conferences and other networking events.

Some examples:

- Australian Academy of Science
- Australian Institute of Physics
- Australian Mathematical Society
- Inst of Analytics Prof of Australia
- Professional Scientists Australia
- Royal Australian Chemical Institute
- Statistical Society of Australia
- Soil Science Australia

More information

- Careers with STEM
- AMSI Maths Adds
- Australia's Chief Scientist
- Science Careers

** Correct at the time of publishing*

JCU Careers Resources

As a student, consider accessing JCU Careers resources and be job ready by developing your Employability skills.

Careers and Employability - JCU Australia

Build you employability skills and fine Tune your Application Skills

- **Resumes**
- **Application Documents**
- **Interviews**
- **LinkedIn**

For further ideas access **Career Ready Plan**