



STEM Learning for the Future: Science

Queensland is a centre of excellence for science and technology and home to many world-class research institutions and researchers. Committed to nurturing the ‘Super Scientists’ of the future, Queensland Government schools prepare students to take advantage of new opportunities in an increasingly knowledge-based economy.



Biology

Biology is the study of life and living organisms. With a range of fascinating sub disciplines, this subject covers everything from biochemistry to zoology, and is the foundation for a variety of exciting careers.

For example, biomedical engineers work on solving some of the world’s biggest issues, like discovering cures for deadly diseases and improving food production to feed a growing global population.



Jiayue, (China):

- Graduate of Cleveland District State High School
- Science Scholarship / Bachelor of Advanced Science (majoring in Genetics) at The University of Queensland (UQ)

Clara graduated from Cleveland State High School in 2014 with an OP*1, the highest grade that can be awarded by the Queensland Curriculum and Assessment Authority.

After excelling in Maths C, Maths B, Biology and Chemistry, Clara was awarded a Science Scholarship to study a Bachelor of Advanced Science at UQ, one of Australia’s most prestigious universities.

“Queensland is a beautiful place with beautiful weather. I have always been passionate about science and Queensland has one of the best science education systems in the world so that’s why I came here.”

*The Overall Position (OP) is Queensland’s tertiary ranking system and is currently used to determine eligibility for admission to tertiary courses.

You can watch Clara’s story on the EQI website at:
eqi.com.au/why-queensland/choice-of-subjects/stem

Chemistry

Why does food change when you cook it? How are medicines developed? What compounds could reverse the effects of environmental pollution? Chemistry answers these questions and millions more through the study of the properties and interactions of the substances and matter all around us.

If you dream of being a doctor, nurse, veterinarian, nutritionist or pharmacist then chemistry will already be on your program choices. However, if a scientific career is not for you then studying chemistry is a great way to develop the advanced analytical skills you need to succeed in other highly desirable careers.



For more information about STEM programs at Queensland Government schools please visit

<https://eqi.com.au/why-queensland/choice-of-subjects/stem>

or email

EQIMarketing@det.qld.gov.au

Physics

Often called the 'fundamental science,' physics is the study of matter, energy, space and time. An understanding of physics opens the door to all the scientific disciplines and is perfect for those with an aptitude for maths.

Studying physics gives you the foundation for careers in many different industries, such as engineering, aerospace, game design, TV and radio, design and advanced manufacturing.

STEM programs in Queensland Government schools

EQI schools offer a wide range of STEM subjects, excellence programs and after school activities to bring students to the forefront of science, innovation and technology to become the architects of the future.

Develop your scientific potential at a Queensland Academy

High achieving students can benefit from unique partnerships with The University of Queensland, Queensland University of Technology and Griffith University, enabling them to specialise in their favourite STEM subjects and enjoy a smooth transition from high school to university study.

Pathways to tertiary study

High quality teaching and academically rigorous programs prepare students for their choice of tertiary study or training. As an EQI student you can even experience university study while still at high school.