Physicists are involved in finding solutions to challenges facing our world, including developing instruments for environmental monitoring, computer models for climate change prediction, and developing solar and renewable energy systems. Physicists are also attempting to address the world’s ever-increasing appetite for information and information processing by undertaking research into quantum computers, nanotechnology, lasers and photonics.

Physics deals with the natural laws and processes, and the states and properties of matter, energy, space and time. Physics also underlies many of the recent advances in information technology, medicine and biotechnology. Areas of specialisation include mechanics, electromagnetism, lasers and optics, medical physics, computational physics, nuclear and radiation physics, astronomy and astrophysics, thermodynamics, quantum mechanics and relativity.

**Why choose this course?**
The course has a strong applied emphasis so you will spend a significant amount of time in the undergraduate teaching laboratories. In each unit the theory will be supported by experimental work and in your final year, you will undertake research and gain exposure to the research laboratories through the experimental physics unit.

You can also apply for the Vacation Research Experience Scheme to gain experience working on a research project. Many of the lecturers at QUT have worked in industry and QUT works closely with industry through consultancy and research projects, so you can be sure that the course will be up to date and relevant to the real world.

**Subject prerequisites**
- Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

**Minimum English requirements**
Students must meet the English proficiency requirements.

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**Andrew Knuckey**
**Real graduate**

‘The interdisciplinary approach at QUT creates a diverse experience in which you learn to apply a thought process, not just knowledge of a specific subject. It helps me with new ways of solving problems as a technical assistant (drilling) in the coal seam gas industry.’

Bachelor of Science (Physics)

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**Careers and outcomes**

Physicists are an asset to almost any industry. Employment areas of QUT physics graduates are very wide ranging. These include research and development departments of large manufacturing companies, mining and exploration companies, research institutions such as the CSIRO and the Defence Science and Technology Organisation, government bodies such as the Bureau of Meteorology, environmental protection agencies and health departments, schools, universities and hospitals.

Broad training in data analysis and problem-solving skills also makes physicists well suited to management and consulting roles in a range of technology-based industries.

**Professional recognition**

Graduates are eligible for membership of the Australian Institute of Physics, dependent on choice of study options.

**Other study options**

- Bachelor of Business/Bachelor of Science
- Bachelor of Information Technology/Bachelor of Science
- Bachelor of Laws (Honours)/Bachelor of Science
- Bachelor of Mathematics/Bachelor of Science