Bachelor of Science (ST01)

Year offered: 2012
Admissions: Yes
Course duration (full-time): 3 years
Course duration (part-time): 6 years
Start month: February, July
Past rank cut-off: 73
Past OP cut-off: 13
Deferment allowed: Yes
Total credit points: 288
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Professor David Gust
Discipline coordinator: Professor David Gust
Campus: Gardens Point
Attendance: Part-time, Full-time

Assumed knowledge: Maths B, English
Assumed knowledge notes: We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). For information on acquiring assumed knowledge visit http://www.qut.edu.au/assumed-knowledge

Course highlights
- Challenge your thinking in Science with real-world learning and relevant, up-to-date courses.
- Major in Biological Sciences, Chemistry, Earth Science, Environmental Science, or Physics
- Choose from a wide range of complementary or diverse study options to match your interests and aspirations.
- Learn to develop practical solutions that impact on the real world.
- Be at the cutting edge of international science education with access to QUT’s new multimillion dollar research and teaching facilities, including our $230M Science and Engineering Precinct.
- Gain real-world experience through work experience opportunities and our Vacation Research program.
- Study opportunities include student-led projects, international study tours, and access to experienced lecturers and industry representatives.

The course is subject to final university approval.

Details:
As part of this course you’ll choose a major, which you then combine with your choice from a wide range of secondary study options, to take your career path where you want.

Majors
- Biological Sciences
- Chemistry
- Earth Science
- Environmental Science
- Physics

You can also choose complementary study options that will provide opportunities to experience another science discipline or study beyond the classical science subjects in areas such as innovation, communication, computer science and education (STEM disciplines).

Depending on your choice, you could find yourself working in the laboratory, in the field, collaborating with industry or even studying overseas for a semester. The possibilities are endless.

For example, if you are passionate about biology, you’re creative, you love science and you want to work with people, then you could specialise in Biological sciences and choose a second major in science communication to pursue a career in science journalism.

Why choose Science?
As a QUT Science graduate your career path could put you at the forefront of the latest discoveries using nanotechnology, developing solutions to protect plant and animal species for future generations, investigating resource deposits or renewable energy sources, or solving problems like water shortage, salinity and climate change.

You’ll benefit from your course’s real-world focus and the practical experiences you gain throughout your studies:
- Flexibility - Choose from a range of majors and secondary study areas to match your interests and aspirations.
- Employability - Your course is designed in consultation with industry, government and the professions. You’ll apply theory to real-world situations, ensuring your skills will be in demand when you graduate.
- Practical teaching - From the beginning of your course you’ll be learning the latest techniques in the laboratory using equipment found in industry. Take advantage of dynamic new teaching spaces that encourage increased engagement between academics and students.
- State-of-the-art facilities - you’ll be at the forefront of international science education with access to QUT’s new multimillion dollar research and teaching facilities, including our $230M Science and Engineering Precinct.
- Learn from the experts - your lecturers are experts in their field and include award-winning teachers and world-renowned researchers. All have strong connections with industry through professional experience, applied research and consultancy projects.
Endless career possibilities
Here are some examples that might inspire ideas:

- **Work experience** - learn at QUT and in the workplace. Our work-integrated learning program gives you an invaluable opportunity to combine workplace experience with academic study, assessment and support.

- **Cutting-edge technologies** - You will learn about the latest discoveries from QUT’s internationally recognised research facilities, ensuring you graduate with the most up-to-date knowledge.

- **A taste of research** - try out a career in research by applying for a Vacation Research Experience Scholarship and undertake a real research project during the Summer Program.

- **See the world** - you might wish to combine your time at QUT with an overseas study experience and gain credit through an International Exchange minor.

**International aspirations** - an **environmental science** major with an **international exchange** applications minor, coupled with any minor from the university-wide minor list, will equip you with global skills that can be translated into opportunities overseas.

- **Communicate and inspire** - a student taking a **biological sciences** major, who is creative, loves science and wants to work with people, could take a second major in **science communication** to pursue an interest in science journalism.

- **Design the future** - a **physics** major with a second major in **computer science** will help you develop knowledge of systems and principles including languages and network design.

**Structures and Units**

**Your science degree**
At QUT you’ll create your own personal science degree program of 24 units. During your first year of study you’ll get to sample a range of core science disciplines, allowing you to decide on your major later.

**Faculty core and Imagine Science units**

These six units give you an introduction to the principles of science the opportunity to learn by enquiry, and to broaden your understanding of the core sciences. You’ll study two Faculty core units, two Imagine Science units and two Optional units of your choice.

From your very first semester, you will collaborate with your peers and teaching staff in QUT’s exciting new learning environments. In your Imagine Science units you will explore real-world problems from multiple scientific perspectives and learn the tools of the trade. Depending on your choices, you may find yourself out in the field, working in the laboratory or learning about the impact of scientific discovery on people, policy, industry and the planet.

Working with data you have collected, you’ll study how to apply fundamental methods of scientific practice, perform scientific analysis, and learn the tools to present your findings. You’ll have the opportunity to explore and discover the range of career and professional outcomes available to you, so you can gain the most from your unit selection and the flexibility the Bachelor of Science has to offer.

**Primary major**
Your major is your main area of study for what you aspire to become professionally. You will receive in-depth knowledge
and expertise within your chosen scientific discipline, preparing you for entry into the workforce or further study. It comprises 10 units and there are five majors to choose from:

- Biological Sciences
- Chemistry
- Earth Sciences
- Environmental Sciences
- Physics

Complementary study areas
This is where you make the degree your own, tailoring your studies to further match your individual career goals with a wide range of complementary study options available. You'll have the opportunity to develop sought-after professional skills, deepen your understanding of your major discipline, pursue an interest from across the university, or broaden your scientific understanding. You can even work with industry or study overseas to gain credit towards your degree.

You can choose: a Second major (eight units); or an Extended minor (four units) or Breadth minor (four units), plus either a Faculty minor (four units) or Breadth minor (four units).

Second major (eight units)
Choose a second area of study to complement your major, and develop a significant depth of knowledge and skills in two discipline areas. Experience another field, learn another academic methodology and experience interdisciplinary networking.

Choose a second Science discipline, or explore different perspectives which might include:

- computational science
- computer science
- innovation
- education (STEM disciplines)
- science communication, or
- science policy.

Minor (four units)
You might prefer to expand the breadth and depth of your studies by adding to your chosen science major with two minors. Minors include:

Extension minor (four units)
Gain further insights and depth in your primary area of study. Intensify your chosen major to develop additional knowledge, skills and experience for your career in science.

Breadth minor (four units)
Broaden your studies to include minors from the list of science majors, second majors or from the list of University-wide minors.

Potential Careers:
Biologist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Ecologist, Environmental Health Officer, Environmental manager, Environmental Scientist, Exploration Geologist, Forensic Biologist, Geologist, Geophysicist, Geoscientist, Government Officer, Industrial Chemist, Inventor, Investigator, Laboratory Assistant, Laboratory Technician (Chemistry), Life scientist, Mapping Scientist/Photogrammetrist, Marine Scientist, Mine Geologist, Natural Resource Scientist, Plant Biotechnologist, Police Officer (Australian Federal), Police Officer (State), Policy analyst, Policy Officer, Population Ecologist, Project Manager, Scientist.