

Bachelor of Science

Mathematical and Physical Sciences Stream

With the UTS Bachelor of Science, students can take their place at the forefront of a profession with the power to build resilience in both humanity and the planet. The mathematical and physical sciences stream allows students to choose from four different majors and a range of sub-majors.

Major options

Mathematics

This highly applied major challenges students to translate their mathematical knowledge into real-life applications. Learning in this major spans linear algebra, optimisation, statistics, complex analysis, programming foundations and regression, along with a choice of sub-majors in Mathematics (Extension), Physics, Biotechnology, Environmental Science, Medical Science or Chemistry.

Physics

The Physics major is focused on the fundamental phenomena that make up the universe. With an emphasis on materials and fabrication, this major introduces students to the theories that underpin transformational technologies like optical fibre and satellite communications, solar energy, battery technology, green energy and more. Students can tailor their qualification with a choice of three sub-majors in Mathematics, Chemistry or Engineering and work on real-world research projects in professional science laboratories.

Chemistry

This major emphasises the translation of theoretical learning into hands-on lab-based practice. In this major, students explore chemistry in all its forms, from organic and physical to analytical, inorganic and medicinal, and upskill in a secondary discipline with a choice of sub-majors in Mathematics, Physics, Biotechnology, Environmental Science or Medical Science.

Flexible

This major gives students massive scope to design their own science degree. They can choose subjects from across the Mathematical and Physical Sciences domain, indulging their interests with a broad selection or building deep expertise in a particular discipline area.

Key information

Five major options

Chemistry
Mathematics
Physics
Flexible

2022 selection rank Chemistry (74.7)

Mathematics (78.65)
Physics (73.5)

Flexible (75.6)

Location Duration

City campus 3 years (full time)

6 years (part time)

UAC code

607005 (Chemistry) 607003 (Mathematics) 607009 (Physics)

607001 (Flexible)

Combine this degree with

Creative Intelligence and Innovation, International Studies, Engineering, Business, Law, Sustainability and Environment

Course program

Find typical course programs for the Bachelor of Science.

A handbook.uts.edu.au/courses/c10242



Careers

Bachelor of Science graduates are ready for a vast range of roles across the public and private sectors, as well as teaching and research opportunities within universities, research institutes and other educational organisations.

Chemistry: Graduates can work in a vast range of roles, including as analytical chemists, organic chemists, research scientists, technical consultants or advisors, laboratory managers, quality control specialists, pharmacologist toxicologists, clinical trials managers, bio pharmacists or drug developers.

Mathematics: Graduates can apply their expertise across a vast range of sectors, from accounting and finance to marketing, transport, logistics and more. They can work as data scientists, analysts (data, market, quantitative finance, financial, systems, business, intelligence), managers (credit risk, financial portfolio, financial risk), mathematical modellers, programmers in diverse industries, statisticians (medical, sports, survey), policy advisors or as mathematics teachers or researchers.

Physics: Graduates can apply their technical and modelling skills across a diverse range of sectors, including R&D, instrumentation, finance, IT, health and education. They can work as physicists, material engineers or scientists, research scientists, quantum application specialists, data scientists, opto-mechanical researchers, ultra-cold atom scientists, nanofabrication engineers or semiconductor engineers, among others.

Flexible: Career options depend on students' individual study plans.

Course features

Scientist's toolkit

Complete a series of common core subjects that underpin all undergraduate UTS Science degrees. Data, Design and Decisions and Scientific Perspectives for Global Issues are designed to equip students with a toolkit of technical and workplace skills, preparing them to thrive both at and after uni.

Internships

Students studying this course have an opportunity to undertake internship subjects and receive academic credit for their placement off campus (an external business or research institute) or on campus (UTS research institutes or departments), in a capacity relevant to their academic studies.



"My studies have given me the skills that are necessary for the day-to-day workings of a scientist and important in any workplace situation, not just science."

Grace Peters

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Other courses

Other UTS Science courses you might be interested in:

Bachelor of Mathematical Sciences

Bachelor of Advanced Science (Pharmaceutical sciences)

Bachelor of Advanced Science (Quantum technology)

Bachelor of Forensic Science (Chemistry)

Contact us Tel: 1300 ASK UTS (1300 275 887) **⊘** ask.uts.edu.au

Find out more about the Bachelor of Science

