

Bachelor of Molecular Biotechnology

Harness the power of cellular and molecular processes with biotechnology courses that stand out from the pack. Explore medical or environmental biotech (or both), get hands-on with transformational technologies and upskill in the business of biotechnology with a range of professional electives.

Course aims

Learn from the leaders in biotechnology

Course content is shaped by research from the acclaimed UTS Climate Change Cluster (C3); the Australian Institute for Microbiology & Infection (AIMI); the School of Life Sciences; and the Deep Green Biotech Hub, a UTS-partnered collaboration that specialises in algal biotechnology and innovation. As well as studying industry-aligned curriculum, students gain access to guest lectures, mentoring and more through UTS's extensive industry connections.

Major options

Medical biotechnology

Study the key scientific disciplines that underpin the medical biotech field – molecular biology, microbiology, pharmacology, human genetics, and immunology. Students explore specialist subjects in areas like medical devices and bioprocessing and get hands-on with the cutting-edge molecular tools and techniques that define the modern biotech industry. Students develop the practical skills and theoretical knowledge to shape the future of medical diagnosis and treatment.

Study in purpose-built facilities

UTS is known for its commitment to practice-based teaching and the integration of new technologies into course design and development. Students learn in the world-class Hive Superlab and UTS Science Superlab, two tech-driven learning environments that support simultaneous teaching of multiple classes in a single collaborative space. They also have the opportunity to visit the UTS Biologics Innovation Facility, a purpose-built good manufacturing process (GMP) bioprocessing facility where biotechnology comes to life.

Environmental biotechnology

This major prepares students to harness biological technologies and methods to address pressing environmental issues, including pollution mitigation, environmental remediation, renewable energy generation, biosecurity, and biomass production.

Through a combination of hard science and specialist environmental subjects, graduates emerge ready to contribute to products and processes that preserve and care for our planet.

Key information

Two major options

Medical biotechnology
Environmental biotechnology

2022 selection rank

85.35

Location City campus

Duration 3 years (full time)

6 years (part time)

UAC code: 607045

Combine this degree with

Business

Course program

Find typical course programs for the Bachelor of Molecular Biotechnology and learn more about the units of study that make up this degree.

A handbook.uts.edu.au/courses/c10172



Careers

Depending on your study plan, you'll emerge ready to transform human health by developing new vaccines, diagnostics and medicines, or to preserve our natural world with roles in biosecurity, conservation and environmental consultancy, among others. Career options depend on the choice of major:

Medical biotechnology: Graduates can develop and deploy new vaccines, diagnostics and medicines for pharmaceutical and biotechnology companies, hospitals, pathology and biomedical firms, universities, and research institutes. Or, design, develop and oversee policy for government and regulatory bodies like the Therapeutic Goods Administration (TGA).

Environmental biotechnology: Graduates can work in various roles, such as research associate, consultant, field scientist, microbiologist, conservation officer, environment officer or biotechnologist across a wide range of industries, including government or biosecurity agencies. Or, graduates can design, develop and oversee policy for government and regulatory bodies.

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.

Cross-disciplinary expertise

UTS Science curriculum goes beyond scientific and technical skills development. With subjects in biobusiness and intellectual property commercialisation, students also explore the commercial and ethical impacts of biotechnology in the world beyond the lab.

Free electives

Students can customise the degree to suit their personal or career aspirations. Enrol in an international exchange, pursue a professional internship, or tailor the degree with a choice of subjects from any UTS faculty.

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.



"Studying biotechnology has opened my eyes to so many different areas of the world. From research to academia to business processes and decision making, I learnt about how industry interacts with scientific research."

Rachel Yamamoto

Bachelor of Molecular Biotechnology Bachelor of Business

Other courses

Other UTS Science courses you might be interested in:

Bachelor of Science (Flexible)

Bachelor of Science (Biotechnology)

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

Find out more about the Bachelor of Molecular Biotechnology

