

School of Science - Te Kura Pūtaiao

AUT's distinctive and multi-disciplinary <u>School of Science/Te Kura Pūtaiao</u> is part of AUT's largest faculty - <u>Health and Environmental Sciences/Te Ara Hauora Pūtaiao</u>.

Our diverse blend of disciplines comprises: Biomedical Science, Medical Diagnostics, Chemistry, Biology, Marine Science, Ecology, Microbiology, Molecular Genetics, Earth System Science, Geospatial Science, and Food Science.

We have approximately 70 FTE staff and 800 EFTS, and collaboration and partnership underpin everything we do. Students connect extensively with industry and community groups through our wide range of partner organisations. We have a supportive culture and are passionate about teaching and research, and are fully committed to embracing and supporting diversity and equity amongst staff and students. Our academics produce world-leading research, and our learning and practice are informed by current and evidence-based knowledge and expertise. Postgraduate programmes of study and supervision are led by experts in their field and students are supported to develop new projects or engage with existing work.

OUR COURSES

https://www.aut.ac.nz/study/study-options/science

We offer pre-degree courses to undergraduate and postgraduate programmes (some of which are delivered overseas in conjunction with other institutions) and recently introduced exciting, brandnew Bachelor of Science and Bachelor of Medical Laboratory Science curricula. The new BSc curriculum has three elements:

- 1. A common core (including science by, and in collaboration with, indigenous peoples, science and society, and work-in-learning opportunities);
- 2. A major (studying a major subject made up of eight individual courses);
- 3. And a flexible component comprising a minor plus four electives, two minors, or a second major.

Majors delivered include: Biological Science, Biomedical Science, Chemistry, Environmental Science, Food Science, and Marine Science, with minors offered within the above subjects and other areas such as Biodiversity Conservation, Earth System Science, Geospatial Science, Pharmaceutical Formulation, Biochemistry, Molecular Genetics, Environmental Sustainability, and Microbiology.

The school is also the only provider in the North Island of an accredited clinical bachelor's degree programme in Medical Laboratory Science.

In addition, 2024 will include the exciting review and revitalisation of our postgraduate programmes.

RESEARCH

https://www.aut.ac.nz/study/study-options/science/research



Research is well supported within the school and faculty, ensuring that learning and practice are informed by current and evidence-based knowledge and expertise. Our exceptional researchers within the school have world-class expertise across a broad range of disciplines and have attracted millions of dollars in external research funding.

The school has strong connections with national, international and local agencies and industries focusing on applied and translational research that aims to solve local and global health, nutrition, and environmental challenges.

Postgraduate programmes of study and supervision are led by experts in their field and students are supported to develop new projects or engage with existing work. The value of integrating research into practice and learning is reflected in the structure that sees research centres embedded within the teaching schools of the faculty. In our school, specific research expertise is supported by the following designated centres, groups, networks, and institutes:

- Centre for Food Science
- Aquaculture Biotechnology Research Group
- AUT Living Laboratories Research and Education Programme
- Drug Delivery Research Group
- Molecular Microbiology Research Group
- Genomics@AUT
- AUT Roche Diagnostics Laboratory
- Blue Economy Cooperative Research Centre
- AUT Lab for Cephalopod Ecology and Systematics
- MaiSci Rōpū: Māori and Indigenous Science

FACILITIES

https://www.aut.ac.nz/study/study-options/science/facilities

We are supported by top facilities, including the exceptional AUT Roche Diagnostics Laboratory (state-of-the-art medical and biomedical testing machinery and the only university lab of its kind in New Zealand). Space is a consideration for us, and we are creative and flexible in our solutions to space, facilities and resourcing, working closely together to ensure staff and students have the access needed to facilities and resources.

MĀORI AND PACIFIC

We have a strong focus on Māori and Pacific people and well-established kaupapa and values and host a centre of innovation termed the MaiSci Rōpū, which provides a platform for Māori and indigenous (largely Pacific based) science and scientists, including students. This Māori and Indigenous Science centre has educational and research foci with the aim of promoting STEM education and research for Māori and Pacific Aotearoa communities, developing courses in this area open to all students, linking with external communities, and further developing mātauranga Māori and Pacific indigenous scientific research. It also provides a platform for AUT's partnership with Pūhoro STEMM Academy.



EXTERNAL ENGAGEMENT

The school has strong connections with national, international, and local agencies and industries focusing on applied and translational research that aims to solve local and global health, nutrition, and environmental challenges. The school has developed strong working relationships with a range of external partners including: the Department of Conservation, Ministry for Primary Industries, Ministry of Business Innovation and Employment, the National Science Challenges, Crown Research Institutes, aquaculture and agriculture industries, food industries and organisations, the Medical Sciences Council, and a range of medical diagnostic providers.

FURTHER READING

If you haven't already, please visit the dedicated page for our School of Science on AUT's website:

https://www.aut.ac.nz/study/study-options/science