

WINTER 2019

AUT

Pūtaiao i AUT

SCIENCE AT AUT

WINTER UPDATE





A MESSAGE FROM THE HEAD OF SCIENCE

Kia ora koutou,

Welcome to our winter update from science at AUT. Today, I would like to talk about the excellent team of scientists that I work with – the people who are training and inspiring the scientists of tomorrow.

When we employ our lecturers, we don't just choose the candidate with the best research CV, our priority is for people that will connect with students and motivate them to achieve. A stellar international research CV is a prerequisite for science appointments, but the most important attribute is a passion for teaching. We test this out by following the normal job interview with the candidate presenting a lecture to the school. Our top professors don't just teach final-year or postgraduate, they begin right from first year students. First-year students also get assigned to a mentor group under an academic staff member who meets with them on a regular basis.

We take a lot of pride in the support we offer to our budding scientists and are passionate about seeing them work independently and innovatively when they make their way into the workforce. We will be available all day at our open day, AUT LIVE, to meet with these students, to show them our facilities, and to help them choose the path that will fuel their passion. I would like to encourage you to tell your students about AUT LIVE.

I look forward to seeing them soon.

Professor Len Gillman

Professor of Biogeography
Associate Dean, International
Head of School, School of Science

AUT LIVE

Saturday 31 August
AUT City Campus

We understand that your high school students' future can be a big decision, and we want to help them make the right one. At AUT LIVE, our annual open day, each study area has a dedicated space on campus where students can chat with our academics and ask any questions they have about study at AUT in 2020.



View our AUT LIVE highlights from 2018

WHAT YOUR STUDENTS CAN EXPECT

- 45-minute programme information sessions
- Meet AUT teaching staff
- Get help with their application
- Experience our state-of-the-art facilities
- Tour our on-campus accommodation
- Find out about student life and services for students

INTERACTIVE SESSIONS

- Chemistry with a bang
- Geospatial Science & VR



AUT LIVE

HOW TO REGISTER

Please encourage your students to pre-register before the day at aut.ac.nz/live



WIN A MACBOOK PRO

Those who register will also go in the draw to win a MacBook Pro, receive a personalised digital day planner to help make the most of AUT LIVE, and they'll be sent some useful information to get a head start on university life.

ON THE DAY

- Info sessions start at 9am
- Final info sessions start at 2pm
- Check in is from 7.30am
- Parents and whānau are more than welcome to attend too

GETTING THERE

Free parking will be available at the AUT North Campus and South Campus, and you can then use our free shuttle buses to get to the City Campus ([see timetable](#))

MAPS AND SCHEDULES

To help your students plan their day, they can refer to the programme schedule.



programme
schedule



WHY SCIENCE AT AUT?

AUT science graduates are shaping successful global careers and changing the world we live in. They're skilled, ready to challenge routine thinking, and equipped to create innovative solutions for a sustainable future.

Outstanding labs and facilities

Our students have access to top facilities and equipment for their research – like aerial drones, testing suites and marine research vessels. Training labs include the AUT Roche Diagnostics Laboratory which has state-of-the-art medical and biomedical testing machinery and is the only university lab of its kind in New Zealand.

Study that leads to rewarding careers

AUT science graduates are highly sought after by employers because they have a reputation for being agile thinkers with quality practical experience.

The Bachelor of Science has 13 majors, within the areas of biomedical, chemistry, applied ecology and food science. Students can complete double majors, within the standard three-year degree, providing a competitive edge in the market place and preparing them for a wide range of rewarding careers. Seven specialty areas are offered in medical diagnostics within the Bachelor of Medical Laboratory Science.

AUT science graduates excel in shaping successful careers in New Zealand and around the world. We're ranked as one of the top young universities; QS World University Rankings place AUT in the top 1.2% of universities worldwide and The Times Higher Education Survey ranks AUT top in New Zealand for research impact.

Ground-breaking research

Science research at the leading edge depends on creative thought, backed by solid theoretical understanding and practical experience.

Meet some of our researchers and see what they are working on, here:





Our science students have access to the latest technology and labs



Get out of the classroom with science field trips as far as the Antarctic



Nationally and internationally recognised lecturers



Collaborative and interactive classes



OUR LECTURERS

Our programmes are taught by experts in their fields, who combine practical experience with sound theoretical knowledge. Our academic staff are successful in conducting world-changing research and in developing new technologies. Their national and international connections with employers and research institutions help to provide graduates with excellent career pathways.



Associate Professor Barbara Bollard

Barbara's research interests are in geospatial science employing GIS applications, ecosystem management and spatial ecology. She has over 20 years' experience working in government and NGOs in both Australia and New Zealand.

Her research focus has recently been in mapping Specially Protected Areas in Antarctica, using drones with the latest in remote sensing technology. She has developed the capability to map species within landscapes for conservation planning with sub-centimeter accuracy. She is also a leading expert in integrating social data with environmental and biological information using decision support systems, multivariate statistics and GIS.



Professor Allan Blackman

Allan has been teaching and carrying out research in chemistry at university for over 25 years. Over this time he has published nearly 100 articles in international chemistry journals, and he is the lead author (along with four others) of the best-selling first year chemistry textbook in Australasia, which is currently in its 4th edition. He has also been the recipient of two university-wide teaching awards. He is part of a team of chemists at AUT who have been trained at universities as diverse as Oxford, MIT, Padova (Italy), Erlangen-Nürnberg (Germany) and Indiana, and who carry out world-recognised research in many areas of chemistry.

Associate Professor Barbara Bollard and Professor Allan Blackman are just two examples of the expert teaching staff here at AUT. The AUT School of Science employs a large number of New Zealand's best science researchers and thinkers.

OUR GRADUATES



Lon Hua
Medical Laboratory Scientist,
IGENZ Limited

Bachelor of Medical Laboratory Science

"The Bachelor of Medical Laboratory Science is a multidisciplinary degree that offers not one, but two 15-week clinical placements, which helps you understand more about the work you'll be doing in the foreseeable future. The experiences gained from these clinical placements have certainly opened my eyes about what the clinical world is all about.

"At the end of my second placement, I was offered to stay and work part-time in a diagnostic laboratory while finishing my final semester at AUT. The part-time position at the Liggins Institute transitioned into a full-time position post-graduation. After working for nearly a year, I was fortunate enough to be offered a permanent full-time position at IGENZ Limited."



Tara Rahdar
Health Protection Officer,
Community and Public Health, Canterbury
District Health Board

Bachelor of Science in Health Protection and
Environmental Health

Tara Rahdar came to AUT based on the recommendation from friends.

"I chose AUT because I had heard positive comments from my friends. Another reason why I decided to study at AUT was because I was looking for smaller, more interactive classes. I think you learn twice as much in a more interactive environment where you can exchange ideas."

She says she first became interested in health protection and environmental health in her second year at AUT when two guest lecturers came in to talk to students about their profession.

"I was studying microbiology at AUT, and we were visited by an environmental health officer from Auckland Council and a health protection officer from Auckland Regional Public Health.

"My background is in hospitality, and I've always been concerned about protecting the public from communicable diseases, and making sure that people consume healthy, hygienic food. I instantly decided that health protection and environmental health was the perfect career for me, and switched majors," she says.

WHY AUT



Check out the video

#1 IN NEW ZEALAND
FOR
**GLOBAL
RESEARCH
IMPACT**

TOP 1.2%
 UNIVERSITIES
WORLDWIDE



Study science majors
not available anywhere
else in NZ

CONTACT US

In collaboration with the AUT Future Students Team, our science staff offer the opportunity to come into your school to talk about AUT's undergraduate programmes.

To find out more please contact the Future Students Team:

✉ secondary.schools@aut.ac.nz

☎ 09 921 9211



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