# CREATIVE TECHNOLOGIES

## UNDERGRADUATE & POSTGRADUATE
## PROGRAMME GUIDE 2020

AUT

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

**5**
OUT OF **5**

**EMPLOYABILITY**
QS STARS 2017–2019

**TOP**
**1**.2%
UNIVERSITIES
WORLDWIDE

# Welcome to Creative Technologies



**Welcome to AUT – pioneering the direction for creative technologies.**

We recognise the world is evolving fast, and universities must adapt and lead change. The new challenges for education, research and practice are too complex to be constrained by traditional disciplinary boundaries. The most exciting and stimulating new career opportunities will be open to people with imagination, advanced technological knowledge, collaborative practice, entrepreneurial skills – and a willingness to think beyond conventional job descriptions and methodologies.

Our commitment to revolutionise education is exemplified by our innovative bachelor's and postgraduate programmes and cutting-edge facilities. All of our programmes are designed to respond to global advancements in which our graduates will live and work. The project-based approach teaches students how to work collaboratively, take charge of their own education and launch themselves into new careers. Students are attracted to creative technologies because of the opportunity to work with academics and industry partners from a broad variety of backgrounds.

Collaborative research groups include play, tangible interaction, entrepreneurship and innovation, transmedia, visualisation, sound, mechatronics/robotics, smart textiles and systems, mobility, and the philosophy of technology. The range of creative technologies programmes will help you acquire knowledge and develop creativity that can be applied to a wide range of pioneering industries. Alternatively, like some of our graduates, take the entrepreneurial initiative and start your own business.

**Dr Yvonne Chan**
BA(Hons) *Lond.*, MDes, PhD *H-W*
Director, Creative Technologies

# Welcome to AUT

**E ngā mana, e ngā reo**
**E te iti, e te rahi**
**E ngā mātāwaka o ngā tōpito o te ao**
**Ngā mahuetanga iho e kawe nei i ngā**
**moemoeā o rātou mā**
**Tēnā koutou katoa**

**Piki mai rā, kake mai rā,**
**Nau mai, haere mai ki tēnei o ngā wānanga**
**Whakatau mai i raro i te korowai āhuru**
**o Te Wānanga**
**Aronui o Tāmaki Makau Rau**

To the prestigious, the many voices
The few, the great
To those of all races and creeds
We who remain to fulfil the dreams and aspirations of the ancestors
Greetings one and all

Climb, ascend
Embark on the journey of knowledge
Let us at AUT embrace and empower you
To strive for and achieve excellence

Te whakatupu i te kōunga, i te mana taurite me ngā tikanga matatika, i ngā pūkenga ako,
i ngā pūkenga whakaako me te āta rangahau hei hāpai
i ngā hāpori whānui o te motu, otirā, o te ao.

To foster excellence, equity and ethics in learning, teaching, research and scholarship, and in so doing serve our regional, national and international communities.

# Contents

# AUT's faculties and schools

AUT has five faculties and 17 schools. The light orange box in the diagram below shows where the programmes in this programme guide sit within AUT.

## FACULTY OF BUSINESS, ECONOMICS AND LAW
### TE ARA PAKIHI, TE ŌHANGA ME TE TURE

**Business School**
Te Kura Kaipakihi

**Law School**
Te Kura Ture

**School of Economics**
Matauranga Ōhanga

## FACULTY OF DESIGN AND CREATIVE TECHNOLOGIES
### TE ARA AUAHA

**School of Art and Design**
Te Kura Toi a Hoahoa

**School of Communication Studies**
Te Kura Whakapāho

**School of Engineering, Computer and Mathematical Sciences**
Te Kura Mātai Pūhanga, Rorohiko, Pāngarau

**Creative Technologies**
**Marautanga Matatini**

## TE ARA POUTAMA
### FACULTY OF MĀORI AND INDIGENOUS DEVELOPMENT

## FACULTY OF CULTURE AND SOCIETY
### TE ARA KETE ARONUI

**School of Education**
Te Kura Mātauranga

**School of Hospitality and Tourism**
Te Kura Taurimatanga me te Mahi Tāpoi

**School of Language and Culture**
Te Kura Reo me te Ahurea

**School of Social Sciences and Public Policy**
Te Kura Pūtaiao ā-iwi me ngā Kaupapa Tūmatanui

## FACULTY OF HEALTH AND ENVIRONMENTAL SCIENCES
### TE ARA HAUORA A PŪTAIAO

**School of Clinical Sciences**
Te Kura Mātai Haumanu

**School of Interprofessional Health Studies**
Te Kura Pākeho Ngaiotanga o Ngā Marau Akoranga Hauora

**School of Public Health and Psychosocial Studies**
Te Kura Hauora Tūmatanui

**School of Science**
Te Kura Pūtaiao

**School of Sport and Recreation**
Te Kura Hākinakina

# Qualifications and study pathways



**CERTIFICATES & DIPLOMAS**

| Certificate in Social Sciences[1] | Certificate in Business[1] | Certificate in Science and Technology[1] | Certificate in Applied Science[1] |

**UNDERGRADUATE**

Bachelor of Creative Technologies

**POSTGRADUATE**

Bachelor of Creative Technologies (Honours)

Master of Creative Technologies

Master of Philosophy

Doctor of Philosophy
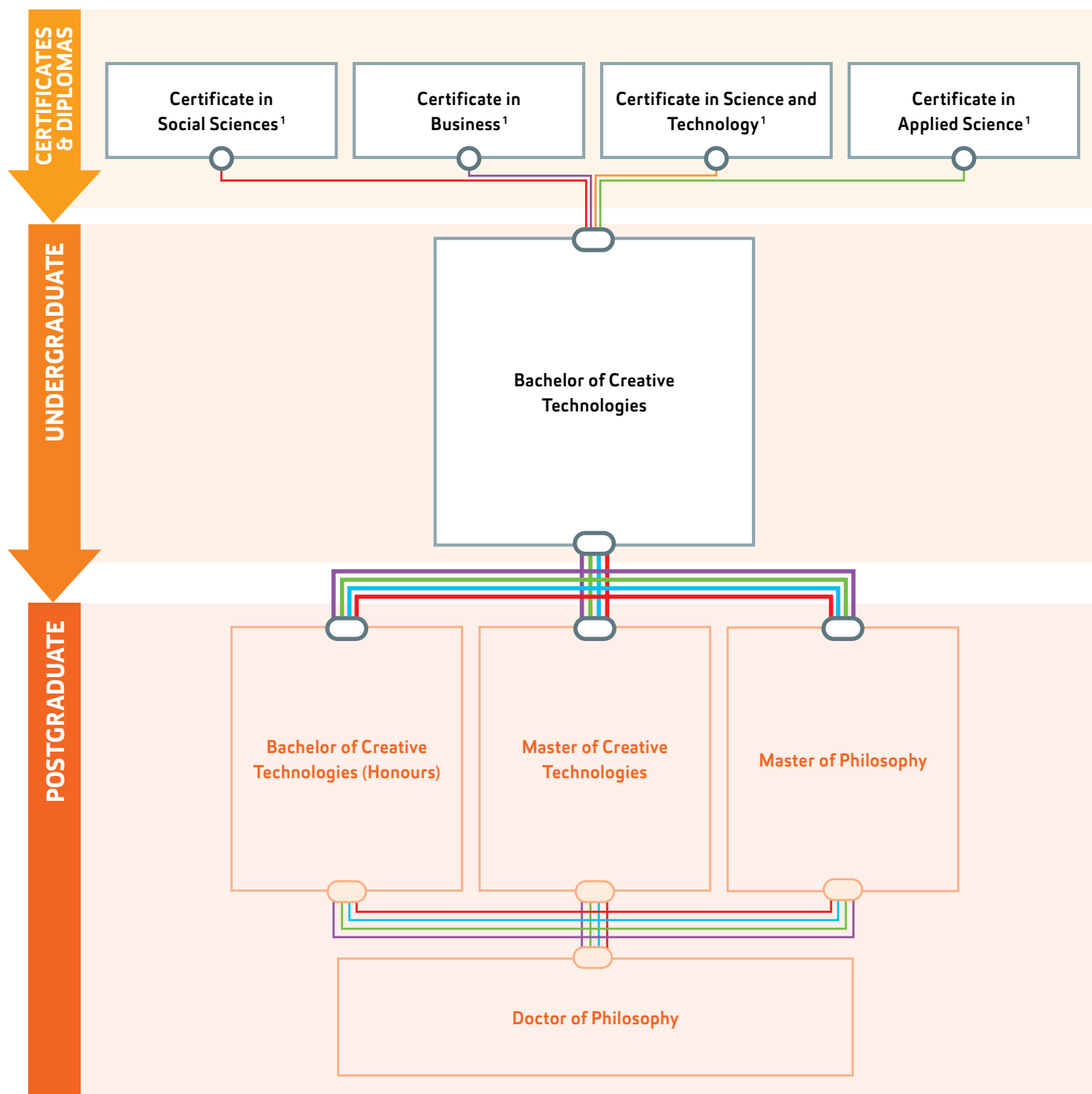
1. More information on these programmes can be found at **www.aut.ac.nz**

**Note:**

1) Completion of one qualification doesn't guarantee entry to a higher level qualification.

2) Apply for the qualification you are best suited for – you don't necessarily have to enrol in the qualification that appears at the top of the above diagram.

3) Some qualifications in the above diagram may be prerequisites to – and not credit towards – higher level qualifications.

**For more information, visit www.aut.ac.nz/creativetechnologies**

# WHY STUDY
# CREATIVE
# TECHNOLOGIES?

Entrepreneurial focused
degree structure

Mixed discipline degree

Access to high-tech labs network

**1** AUT City Campus in the heart of Auckland City   **2** Chromato-Pores was designed by creative technologies students Alana Braddon-Parson and Jolie Lam. Finalist in the World of Wearable Arts 2018   **3** AUT is home to a diverse community of creative people

## Challenging traditional thinking

If you want a university with future-focused teaching, an engaging learning environment that embraces people and ideas, and programmes designed for rewarding careers – then welcome to AUT. We're not afraid to think differently, and our students and staff are always looking for better ways to do things. You join a diverse community of creative people, working together in an environment from which new ideas emerge on a daily basis. Our programmes go beyond the traditional boundaries between creative arts, design, digital media, computing, engineering and entrepreneurship, bringing them together in one innovative, project-based learning environment.

## In touch with modern business

We're proud of our strong partnerships with businesses and the wider community, and frequently collaborate with industry organisations on research or other projects. As a creative technologies student you often work on projects in consultation with one of our many industry partners, giving you valuable industry experience and networking opportunities.

## Social and collaborative

Studying at AUT is never an isolated experience. You frequently collaborate with your classmates on projects, sharing ideas and supporting each other to achieve the best outcome. As you would in the workplace, you work with people from different disciplines – students, staff or industry contacts – to come up with a complete solution.

This collaborative approach creates a close-knit, supportive environment, and for many of our students it's the highlight of their studies.

## Technology is part of our DNA

We understand that globalisation and rapid developments in technology are driving the evolution of industries and jobs. Our staff and students are constantly testing the boundaries of new technologies, from 3D printing and digital textiles to motion capture and virtual worlds. Study with us and you have access to our high-end facilities, the same facilities industry and creative professionals often come in to use. Our state-of-the-art labs network offers plenty of opportunities to research and develop designs, products, materials and techniques, with each lab housing specialist technologies and experts to assist you.

## Big-hearted and diverse

Our students come from a variety of backgrounds, and you find all the support, encouragement and inspiration you need. We offer some of the most comprehensive student services and support in New Zealand, but you find care and support beyond these services – in conversations with lecturers, group work with classmates and in the many campus events. They're all reasons why 9 out of 10 AUT graduates recommend us as a great place to study.

# Life at AUT

AUT is a modern and innovative university with endless opportunities and a supportive culture that celebrates diversity. Studying at AUT is your chance to meet new people and develop lifelong skills, while getting the support you need to succeed at university and beyond.

We're proactive in enabling all students to succeed, and our comprehensive student support services ensure that you have an amazing experience inside and outside the classroom.

## We're here to help

No matter what the problem, the Student Hub is here to help. You can find a Student Hub on each campus and our specialist staff can help with anything from enrolment and student ID cards to matters far beyond university, like support with visa and immigration matters, StudyLink issues or landlord challenges.

## Dedicated support for new students

From Orientation to our many academic and cultural support programmes, our student support services are there to make starting out as a new student as easy as possible.

## Creating career-ready graduates

The AUT Employability and Careers team helps you plan in advance for your future career by developing job search and interview skills, while building your personal brand and networking skills. We'll also introduce you to employers looking to recruit AUT graduates.

## Gain an edge on the competition

The AUT Edge Award challenges, rewards and formally acknowledges the 'C skills' – collaboration, co-operation, community, curiosity, communication and creativity – gained through your volunteering, leadership and employability activities.

## International study opportunities

An international student exchange offers an amazing opportunity to study overseas as part of your degree. Study for a semester or a year at one of our partner universities around the world, immerse yourself in another culture, make lifelong friends and get international experience before you graduate.

## Helping you succeed in your studies

Our library and learning support team offers a wide range of services and resources designed to help develop your academic skills. The Library also runs a range of workshops to help you get the most out of your studies, and our peer mentoring programme enables students to learn from others who have already completed the same paper.

## Top internships around the world

A good internship can be the foundation of a great career. That's why AUT Internz places students and graduates with top companies in New Zealand, North America, Asia and Europe – including Paramount Recording Studios, the Sundance Institute and Westpac Institutional Bank in New York.

## A launchpad for entrepreneurs

Every entrepreneur starts somewhere. At AUT, the best place for aspiring entrepreneurs is CO.STARTERS@AUT. This nine-week programme helps you turn your entrepreneurial ideas into a viable business.

## An outstanding learning environment

At AUT you study in an innovative and interactive environment that embraces creativity, collaboration, and the sharing of ideas and culture. A number of our buildings have won prestigious architecture awards, and we're constantly improving our built environment to offer students the best possible learning experience.

## Free access to digital tools and resources

We offer students all the digital tools needed to succeed, including free Wi-Fi on campus, the full Office 365 suite for up to five devices and free access to lynda.com, a world-leading online learning platform.

## Getting involved in campus life

Joining a club is a great way to meet like-minded people and make lifelong friends outside of lectures. Choose from a range of student-run social, sustainability, academic and cultural clubs – a great way to meet new people, participate in events and get involved in campus life.

## Join a gym or sports team

AUT is New Zealand's leading sports university, with state-of-the-art sports facilities, on-campus gyms and a huge number of sports teams and events. As an AUT student you can participate in a wide variety of sports, from social on-campus games to elite international competitions.

## Holistic approach to wellness

AUT offers comprehensive medical, counselling and mental health services. We also run Te Puna Oranga, an integrated programme that regularly hosts wellness-related events on campus.

## Disability student support and resources

Our Disability Support team is committed to helping you participate as fully as you can in learning and student life. We work with students before they start at AUT to help identify their specific needs and ensure they're set up for success.

## Getting around

Whether it's finding your way to campus or getting around between lectures, AUT offers a range of resources to help you navigate your new environment, including shuttle buses that travel between campuses and interactive online maps.

## Safe and friendly campuses

We make sure that our students are – and feel – safe. Our friendly security staff are available day and night to help if you have any concerns.
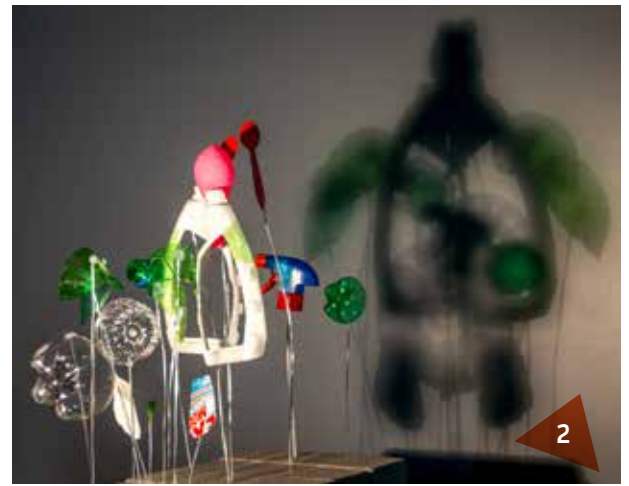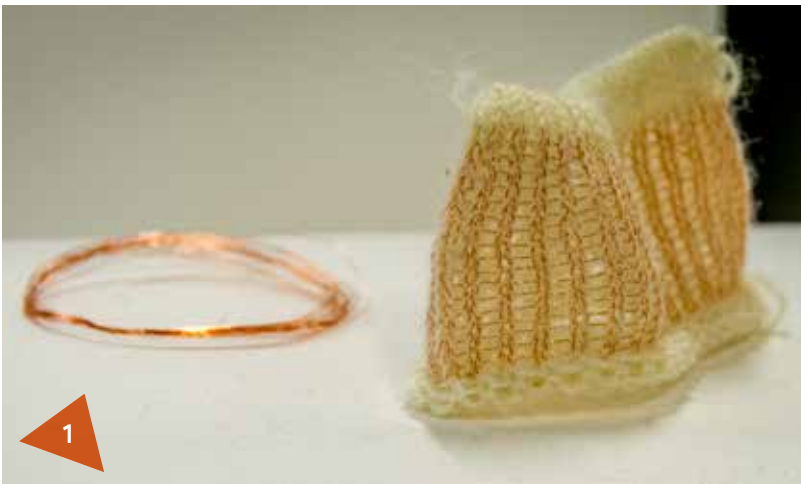
**1** Formbric by Charlotte Pryce Jones (Year 3, BCT)  **2** Project X by Ilham Akhlaqi, Denver Jones, David Tukunga, Cadence Hillier, Tanyapon Tongnual (Year 1, BCT)
**3** Blue Skies by Olivia Hobman (Year 2, BCT)  **4** AUT Creative Technologies Mid–Year Show 2018
**5** Dyslexi–AR by Vaanipriya Diwan, Daniel Ha, Kelsea Wall (Year 2, BCT)  **6** Human Residue by Liam Ball, Gianni Gambassi, Shades Misa (Year 2, BCT)
**7** Interactive Garden by Hugo Chan, Alan Lau, Sunny Lin, Hanrui Shen (Year 3, BCT)  **8** Desire by Nora Jeaneé Stewart and Jade Seran (Year 3, BCT)

# Bachelor of Creative Technologies [ BCT | AK1305 ]
# Overview

The Bachelor of Creative Technologies was developed with the future in mind and – like the future – it continues to evolve. Your learning is project-based and takes place in studios where you collaborate with your classmates on a range of projects. Half of your study time is allocated to studio work, developing new ideas or working on a range of projects. You study programming, and explore how to make films, create animations and soundscapes, and CAD design interactive multimedia environments or games. You also learn to apply your ideas to different fields, think entrepreneurially, and present and promote your ideas.

## Entry requirements

### Minimum entry requirements
University Entrance or equivalent.

### English language requirements
IELTS (Academic) 6.0 overall with all bands 5.5 or higher; or equivalent.

### Useful New Zealand school subjects
Design (Practical Art), Design and Visual Communication, Digital Technologies, Technology, Processing Technologies, Construction and Mechanical Technologies, Drama, Media Studies, Music, Mathematics, Science, Statistics, Calculus.

## What this qualification covers

### Year 1
You're introduced to key concepts of creative technologies and develop these through diverse studio projects. Projects will vary and you'll learn how to express your ideas in a variety of digital and physical media – whether it's through video, sound, mechatronics, games or smart objects.

### Core papers
• Creative Technologies Studio I
• Introduction to the Creative Technologies
• Programming for Creativity
• Creative Technologies Studio II
• Physical Computing
• Integrative Practice

## QUICK FACTS

| | |
|---|---|
| Level: | 7 |
| Points: | 360 |
| Duration: | 3 years F/T only |
| Campus: | City |
| Starts: | 24 Feb 2020 |

## KEY FEATURES:

→ Multidisciplinary – bringing together creative arts, design, digital media, computing, engineering and entrepreneurship
→ Focus on innovation and entrepreneurship
→ Project-based, with opportunities to work with industry partners
→ Studio environment that reflects the working world of creative professionals

## SEE YOURSELF AS:

→ Someone who thinks outside the square
→ Creative and imaginative
→ Technologically skilled
→ Collaborative and team-centred

# Bachelor of Creative Technologies
## Overview continued

A launchpad for tech entrepreneurs

**Izac Hancock**
**Chief Technical Officer, Nudge Analytics, New York**
**Bachelor of Creative Technologies**

"As the chief technical officer, I work with the development team to make sure we're building the right features for our products. I also help set up new clients on our content analytics platform, and work with the rest of the leadership team to create and integrate new partnership deals. I'm always trying to improve myself and our products by solving problems that seem unsolvable, and am proud of the fact that our company has already won a number of advertising awards. What I liked about AUT's creative technologies degree was that it was the perfect mix of art, technology and business, all combined in one degree. I think this is what makes AUT the university for a changing world – it puts a lot of effort into staying up with technology trends, and gives students the freedom to explore and use these."

### Year 2 & 3

In your second and third year you have more choice of studio projects. Each semester has a number of themes that provide a degree of focus, but you're encouraged to develop your studio projects in creative, unexpected or provocative ways.

We encourage you to work in teams or with people outside AUT, including industry partners. Your studio project could take the form of a public exhibition, transmedia project, game design, smart system or interactive installation.

### Student projects

Student projects are at the heart of the Bachelor of Creative Technologies. You'll work on a wide range of projects, often collaborating with your classmates or industry partners.

Recent student projects included:
- Doodle Dolls – a charity transmedia project that allows under privileged communities to design children's games, books and toys made from recycled fabrics.
- Cloudy Apple – empowering community initiatives by creating bespoke web presences.
- Down to Talk – a multi-modal co-design workshop system encouraging empathy between two parties
- Flattie – an interactive website to help others find cheap rooms to rent in Auckland
- Edubot – a prototype of a simple to use robotics platform and ecosystem to be used in schools for education
- Electric queen – wearable tech e-textiles dress, made from smart phones, that activates based on social media hashtags
- Adventuary – a prototype of an interactive children's space developed for an international airport
- Kraken – a virtual reality game that explores scale
- Shape Me – collaborative interactive communication game using body tracking technology
- Root directory – alternate reality game (ARG) style immersive story told on an old abandoned computer and workdesk
- Dyr – a short film projected on to a lenticular surface

## Career opportunities

- Artificial intelligence
- Augmented and virtual reality
- Creative enterprises
- Creative technologies
- Digital media
- Electronic music and sound
- Film and sound post-production
- Games and interaction
- Internet of things
- Mechatronics
- Mobile and web applications
- Smart environments
- Smart textiles
- Technology start-ups
- Transmedia
- Wearable technologies

## Minors and electives

You can study a minor or elective papers from another AUT degree, enabling you to pursue an area of interest from a wide range of subjects.

AUT encourages early application. Places are limited.

Real industry projects – work in consultation with one of our many industry partners

**Claudine Nalesu**
**Creative Technologist, DotDot**
**Bachelor of Creative Technologies**

"For the 2017 AUT Excellence in Business Support Awards, we designed a Twitter jacket to be worn at the awards, and together with some product design students we also made 65 interactive table pieces. Other wearable garments I created at AUT are my second-year project The Colourless Clown, which was pre-selected for the World of Wearable Arts Show 2016, and Look but Don't Touch, which received the Spark/Colab Unleashing Potential Award. Technology allows me to find creative ways to solve problems. You combine all these different disciplines to create amazing projects. I believe creative technology should innovate and educate. My role now is very close to what I did at university – conceptualising and creating interactive installations and digital solutions. The most recent project I worked on was part of our installation at MOTAT for Night Lights and MOTAT's new Accelerate exhibition."

For more details visit **www.aut.ac.nz/creativetechnologies**

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T only |
| Campus: | City |
| Starts: | 24 Feb 2020 |

**Charlotte Alexander**
Digital Programmes Assistant,
V&A Museum, London
Master of Creative Technologies
Bachelor of Creative Technologies (Honours)
Bachelor of Creative Technologies

"My job is the perfect blend of creativity and technology. I help to run the museum's digital programme, which explores emerging digital art and design through workshops, practitioner-led talks and festival events. I love the job because I'm exposed to a range of ideas, and get to see artists and designers engaging creatively and critically with technology in a variety of ways. This role is fantastic because no two days are the same. There's such a variety of things happening, not only in my department but all around the museum. When I was at AUT, I worked on a number of multidisciplinary projects, with groups from different departments. This gave me the skills to work across a diverse team. That's really important when you work in a large organisation like this."

# Bachelor of Creative Technologies (Honours)

BCT(Hons) | AK1306

**The Bachelor of Creative Technologies (Honours) is designed as the first year of postgraduate study in a variety of emerging interdisciplinary fields. This is your chance to undertake more independent, research-based and interdisciplinary projects in association with industry partners. At the centre of your study is the research project. This could be a sponsored industry project or part of a research programme, and might include an industry placement or an internship.**

## Entry requirements

### Minimum entry requirements
Bachelor of Creative Technologies with a B grade average or higher in papers at level 7, or equivalent.

### English language requirements
IELTS (Academic) 6.5 overall with all bands 6.0 or higher; or equivalent.

## What this qualification covers

You'll develop your research, problem solving, communication and analytical skills to a professional standard. You'll be based in the studio with other students, working on a variety of practical projects.

Papers include:
- Research Methods (15 points)
- Transdisciplinary Practice (15 points)
- 30 points at level 8 as approved by the programme leader
- Research Project (60 points)

## Career opportunities

- Artificial intelligence
- Augmented and virtual reality
- Creative enterprises
- Creative technologies
- Digital media
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- Film and sound post-production
- Games and interaction
- Internet of things
- Mechatronics
- Mobile and web applications
- Smart environments
- Smart textiles
- Technology start-ups
- Transmedia
- Wearable technologies

AUT encourages early application. Places are limited.

For more details visit **www.aut.ac.nz/creativetechnologies**

# Master of Creative Technologies

MCT | AK1320

Extend your potential with our Master of Creative Technologies. You develop your research skills and understanding of research in the creative industries, drawing on the links between art, design, communications, engineering, computer science and mathematics. At the heart of the programme is the thesis, an opportunity for in-depth exploration of the creative potential of emerging technologies. Our students' research projects focus on future-oriented themes, and typically include practical elements like animation and transmedia storytelling, performance technologies, bio feedback systems, smart textiles, virtual environments and intelligent agents. There's an emphasis on entrepreneurship and innovation that encourages you to explore potential commercial applications of your project work.

## Entry requirements

### Minimum entry requirements
- Bachelor of Creative Technologies or any other degree in a relevant subject with a B grade average or higher in papers at level 7 or above
- Applicants are required to submit a form outlining their research interests

### English language requirements
IELTS (Academic) 6.5 overall with all bands 6.0 or higher; or equivalent.

## What this qualification covers

You complete 60 points of research-based papers and a 120-point research thesis within the broad creative technologies field.

### Papers
You must complete:
- Research Methods

You also complete three papers from [1]:
- Transdisciplinary Practice
- Entrepreneurial Strategies
- Transmedia
- Serious Play
- Embodiment
- Post-Material Practices
- Readings
- Special Topic A
- Special Topic B

**Niko Meredith**
**Co-director, No Six**
**Master of Creative Technologies**
**Bachelor of Creative Technologies**

"I would highly recommend studying creative technologies. The programmes challenge you to be both creative and critical, and the creative environment allows innovation to thrive. As creative technologies is a relatively new area of study, there's an opportunity to be innovative and stake a claim in this emerging field. The academic staff are renowned for their expertise and industry connections. They're supportive of students and go the extra mile. In my role now, I enjoy using technology as a tool to respond to social issues. No Six is a digital ecosystem that produces content and inspires young content creators in disadvantaged communities to find what they love, and be inspired by their creations. We've been in operation for one year and our business is thriving."

Focus on entrepreneurship
and innovation

**Alejandro Davila**
**Virtual Reality Storytelling / VR Producer,
Conical Ltd.**
**Master of Creative Technologies student**

"When I started my research at AUT, I
learned that storytelling was going to
play a big role in the new wave of virtual
reality projects. The Green Fairy project
– a virtual reality film about fairies that
light up the inside of traffic lights –
has become an important case study
because it's New Zealand's first virtual
reality movie. It was widely covered
by the media and toured across New
Zealand, and also in Los Angeles and
even Paris. The project has now received
funding from the New Zealand Film
Commission to be produced as a pilot
episode for a virtual reality series with its
international release later in 2017, based
on the prototype created at AUT. We're
living in a technology revolution and we
need to stay tech savvy to thrive in this
fast-changing world. AUT is the leading
university when it comes to technology,
with a strong brand and amazing
facilities."

# Master of Creative Technologies
continued

### Research thesis
Your research thesis can contain elements of written and practical
work, depending on your topic. It could be based on your own
proposals or related to ongoing research projects within AUT or
industry.

## Career opportunities

- Artificial intelligence
- Augmented and virtual reality
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- Games and interaction
- Internet of things
- Mechatronics
- Mobile and web applications
- Smart environments
- Smart textiles
- Technology start-ups
- Transmedia
- Wearable technologies

AUT encourages early application. Places are limited.

1. Paper offerings are subject to availability.

For more details visit **www.aut.ac.nz/creativetechnologies**

# Master of Philosophy

MPhil | AK3720

**The Master of Philosophy (MPhil) is a one-year, research-only master's degree. It provides an opportunity for you to undertake a research topic of your interest under the supervision of creative technologies staff. It can also serve as a pathway to more advanced research at doctoral level.**

## Entry requirements

### Minimum entry requirements
Must have completed one of the following with the equivalent of a B grade average or higher:
- Four-year bachelor's degree OR
- Bachelor's honours degree OR
- Bachelor's degree and postgraduate diploma OR
- Bachelor's degree and at least three years of experience relevant to the proposed research

### English language requirements
IELTS (Academic) 6.5 overall with all bands 6.0 or higher; or equivalent.

### Other requirements
May be required to complete an approved research methods paper.

## What this qualification covers

You complete an original thesis during this year of your study. Staff in creative technologies are available to supervise Master of Philosophy research on a wide range of topics.

## Career opportunities

As a graduate with a Master of Philosophy you have the necessary skills and qualifications to follow an academic or research career leading to a PhD. Alternatively, your research topic may lead you to a position of expertise in your chosen field.

AUT encourages early application. Places are limited.

### QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 years P/T |
| Campus: | City |
| Starts: | Any time |

For more details visit **www.aut.ac.nz/creativetechnologies**

## QUICK FACTS

| | |
|---|---|
| Level: | 10 |
| Points: | 360 |
| Duration: | 3 to 6 years |
| Campus: | City |
| Starts: | Any time |

**Sana Alyaseri**
Doctor of Philosophy candidate

"We're working on developing an evolutionary algorithm to use it in procedural content generation of games. I'm interested in the enjoyment of the gamer, and for my PhD I'm investigating how to make this procedure a good experience for the gamer, focusing on the quality of the game content. I've been a lecturer in computing and IT for 20 years, but started to realise that I really enjoy being involved in research. As part of my work I was involved in developing courses on creative software, including games, augmented reality and virtual reality. I found this area very interesting, and after some research I discovered creative technologies at AUT. Whenever I'm on campus at AUT, the ideas keep on coming and I feel very creative, and can find the answers I'm looking for. That's why I like coming here every day. AUT has a positive energy."

# Doctor of Philosophy
PhD | AK3518

The Doctor of Philosophy (PhD) is the University's highest qualification. The degree is undertaken by research only and leads to advanced academic and theoretical knowledge in a specialist area. The PhD is suitable for students who want to pursue an academic or research career, or a senior position in the public or private sector. Doctoral studies present you with the opportunity to generate new ideas that can benefit business and society. You will make a significant original contribution to knowledge and understanding in your field of study and meet recognised international standards for your work. Our academic supervisors are recognised world-class researchers in their fields who have the expert knowledge to guide and advise you throughout your PhD. The opportunities to apply the knowledge and skills you gain will be extensive, both in industry and academia.

## Entry requirements

### Minimum entry requirements
Must normally have completed the following in a specialisation appropriate to the proposed research:
- Master's degree with first-class or second-class (first division) honours OR
- Bachelor's degree with honours (equivalent to 4 years of study), normally with first-class or second-class (first division) honours

The degree should include advanced learning in research, execution of a research project and a written report on the research.

### English language requirements
IELTS (Academic) 6.5 overall with 7.0 in Writing and all other bands 6.0 or higher; or equivalent.

### Other requirements
Acceptance is subject to the availability of staff for supervision, prior research preparation and appropriate facilities.

## Planning your PhD

You are required to prepare a brief proposal for your intended research, specifying the field of research and a general research question you wish to investigate. You should provide official copies of academic transcripts, and evidence of previous independent research outputs, like an honours-level dissertation or master's-level dissertation or thesis. You should also provide evidence of successful completion of studies in research methodology at a postgraduate level. Our staff supervise PhD research on a wide range of topics that cover all aspects of creative technologies.

Visit **www.aut.ac.nz/creativetechnologies** for current research and supervision.

## PhD research allowance

PhD research allowances are normally available to support PhD candidates with expenses associated with data collection and analysis, conference funding, and other resources associated with completing their research.

## Scholarships/graduate assistantships

Research scholarships and graduate assistantships may be available to approved PhD candidates. For more information about scholarships, visit **www.aut.ac.nz/scholarships**

AUT encourages early application. Places are limited.



Learn from leading research–active staff

**Antonio Esparza**
*Mexico*
**Doctor of Philosophy candidate**

"Thanks to the flexibility of 3D printing, we can make our products as complex as we want as long as they're inside the production volume, and we can change the products' architecture without capital investment. Therefore, when we start businesses with 3D printers we can change our business networks and future affordances every time we change the product architecture. My research explores how this flexibility is changing the behaviour of entrepreneurs. After experimenting with additive manufacturing for a while, I realised that the implementation of 3D printing in new business creation is complicated. I decided to explore this further and was attracted to AUT because of the transdisciplinary nature of the creative technologies programmes. This space in not commonly found in postgraduate studies. I would highly recommend creative technologies for projects like mine that can't be embraced by only one study area."

For more details visit **www.aut.ac.nz/creativetechnologies**

# HOW TO APPLY

Below is the step-by-step guide to the applications process. For more information visit www.aut.ac.nz/apply

## 1

### APPLY EARLY

Places are limited. Submit your application well before the semester starts.

APPLYING FOR 2020
- Semester 1
  – apply by 2 December 2019
- Semester 2
  – apply by 1 May 2020

**Applying for the Master of Philosophy (MPhil) and Doctor of Philosophy (PhD)**

If you are planning to enrol in a Master of Philosophy (MPhil) or Doctor of Philosophy (PhD) at AUT, email the Graduate Research School
**doctoral.and.mphil.admissions@aut.ac.nz**

## 2

### COMPLETE THE APPLICATION FORM

- Apply online
- Indicate your programme(s) of choice and major (if known)

International students can also apply using an AUT approved international agent. For a list of AUT registered agents visit
**www.aut.ac.nz/international-agents**

### SUBMIT YOUR APPLICATION

### WE ACKNOWLEDGE YOUR APPLICATION

- We will send you an acknowledgment email, which explains how to check the status of your application
- We will contact you if we need more information

## WE ASSESS
## YOUR APPLICATION

- We assess your application to ensure you have met the entry criteria for the programme(s) you are applying for
- We consider your academic history and relevant experience to ensure you can succeed in your programme
- We let you know if your application has been successful

## POSSIBLE OUTCOMES

**CONFIRMED**  We would like to offer you a place to study at AUT

**PROVISIONAL**  You have met some of the criteria for entry to your chosen programme of study and we would like to offer you a provisional place to study at AUT. If you don't meet the rest of the requirements, then this offer will be withdrawn

**CONDITIONAL** You have to meet the conditions and approvals listed in your conditional offer to be able to secure a formal offer of place

**DECLINED**  If you don't meet the entry requirements or all places are taken, we may offer you an alternative programme

**DECISION PENDING**  We are unable to make a decision just yet, but will let you know when we expect to make a decision

**3**

## ACCEPT YOUR OFFER

# University admission to AUT bachelor's degrees

**For New Zealand citizens and residents and international students studying in a high school in New Zealand**

To gain admission to bachelor's degrees, you must have met the requirements for University Entrance plus any specified admission requirements for a programme, such as specific subjects, portfolios and interviews.

For more information on entry requirements, including entry requirements for international students, refer to the AUT Calendar or visit **www.aut.ac.nz/calendar**

**Please note:** AUT, like all other New Zealand universities, is required to manage enrolments. This is because of government policies that restrict the number of funded places available for domestic students in tertiary education.

**Admission categories**

You may be granted University Entrance under one of the following categories:

- NCEA University Entrance
- Ad Eundem Statum admission (at an equivalent level) – this includes Cambridge International Examinations (CIE) and International Baccalaureate Diploma Programme (IB)
- Discretionary Entrance
- Special Admission

## Common University Entrance requirements

| STANDARD | NCEA | CIE | IB[2] |
|---|---|---|---|
| **Overall** | Require **NCEA level 3** certificate which consists of 80 credits, including at least 60 credits at level 3 or higher. Can include up to 20 credits at level 2. <br>**Note:** Credits to achieve NCEA level 3 may include unit standards from non–approved subjects. <br>**Subject credits** <br>Total of 42 level 3 credits including: <br>• 14 credits from one approved subject <br>• 14 credits from a second approved subject <br>• 14 credits from a third approved subject | A minimum of 120 points on the UCAS Tariff[1] at A or AS level from an approved list (equivalent to NCEA approved subject list). <br>Must include at least three subjects (excluding Thinking Skills) with grades D or above. | IB Diploma with minimum 24 points |
| **Numeracy** | At least 10 level 1 (or higher) numeracy credits (can be achieved through a range of subjects) | A minimum grade of D in IGCSE[3] mathematics or any mathematics subject at AS or A level. | Any mathematics subject – IB Group 5 |
| **Literacy** | Total of 10 level 2 (or higher) literacy credits including: <br>• 5 reading credits <br>• 5 writing credits <br>From specific standards in a range of NZQA English language rich subjects. | A minimum grade of E in English Language and/or English Literature subject at AS or A level. | Literature or language and literature (SL or HL) – IB Group 1, with English as the language. |

1. UCAS (Universities and Colleges Admissions Services for the UK) Tariff = system which converts AS and A level grades into points.
2. New Zealand residents who have taken IB but have not been awarded the Diploma may apply for discretionary entrance.
3. IGCSE = International General Certificate of Secondary Education.

Where programmes require a specific subject, it is expected that a student will have achieved a minimum of 14 credits in that subject (unless indicated otherwise).

### NCEA approved subjects

For a list of NCEA approved subjects for University Entrance visit the NZQA website, **www.nzqa.govt.nz**

### AUT language rich subject list

Art History, Business Studies, Classical Studies, Drama, Economics, English, Geography, Health Education, History, Media Studies, Physical Education, Social Studies, Te Reo Māori, Te Reo Rangatira.

### Alternative pathways into AUT bachelor's degrees

Students who have just missed University Entrance or did not get into their chosen degree could consider enrolling in one of the foundation studies certificates offered at AUT. Please visit **www.aut.ac.nz/universityentrance**

### Discretionary Entrance

Discretionary Entrance is available to applicants who have attained a high level of achievement in Year 12 and want to undertake university study.

International students can't apply for Discretionary Entrance.

### You can apply if you:
- Have not completed Year 13 in a New Zealand secondary school or have done Year 13 but not attempted to gain University Entrance
- Have not otherwise qualified for admission (or have attempted University Entrance)
- Are a domestic student (New Zealand or Australian citizen or permanent resident). If Australian, your most recent schooling must have been in New Zealand
- Are under 20 years of age on the first day of the semester in which you begin study and meet other requirements of the programme for which you apply

People who missed University Entrance in Year 13 may be considered for mid-year admission in the following year.

You can't apply for admission for Semester 1 if you studied in Year 13 after 1 June. However, you can apply for admission into Semester 2.

### Minimum academic criteria for Discretionary Entrance
- NCEA level 2 certificate endorsed with minimum of Merit or CIE/IB equivalent
- Minimum of 14 credits in each of four NCEA level 2 (or higher) subjects, at least three of which must be on the approved subject list
- Meet UE literacy and numeracy standards, or their equivalent.

The application is a two-step process. First, you indicate you want to apply through Discretionary Entrance on the standard application form. If you meet the criteria you are sent a second form in which you provide further information and a school recommendation.

The recommendation will provide proof of your maturity, motivation, capability and readiness to undertake degree-level study and also verify that you were not enrolled in Year 13 beyond 1 June in the year prior to admission. Please refer to the AUT Calendar or visit www.aut.ac.nz/calendar

Please note: Applicants are considered on a case-by-case basis and must also meet other selection criteria for the programme for which they have applied. There is a non-refundable assessment fee of $50.00.

### Admission at equivalent level (Ad Eundem Statum)
An applicant will be considered for Ad Eundem Statum admission if they:

- Have successfully gained University Entrance through CIE or IB or an approved qualification from a New Zealand secondary school of special character
- Have successfully completed a recognised foundation programme or other recognised tertiary qualification/study of at least 120 points at level 3, or at least 60 points at level 4 in one course of study and have completed Year 13 at a NZ secondary school, or equivalent.
- Have qualifications from an overseas secondary school or tertiary institution deemed by AUT to be sufficient for entry into an undergraduate degree programme.

Please note: Applicants will be required to supply an official academic transcript with their application.

### Bursary
If you sat Bursary (prior to 2004) rather than NCEA please refer to the AUT Calendar or visit www.aut.ac.nz/calendar

### Special Admission
New Zealand citizens or residents who are over 20 years of age on or before the first day of semester can apply for degree-level entry through Special Admission.

# English language requirements

If you don't have English as your first language, you may have to show evidence of your English language skills.

International students studying at secondary school and applying for University Entrance must achieve UE Literacy through New Zealand secondary school qualifications NCEA, CIE or IB. IELTS can't be substituted.

In all other cases another form of English language testing is required. Minimum IELTS requirements for each programme are included on the relevant pages in this publication. For other recognised English tests and more information, visit www.aut.ac.nz/englishrequirements

# International students

Contact us for information regarding studying at AUT if you're not a citizen or permanent resident of New Zealand or Australia, or a citizen of the Cook Islands, Niue or Tokelau islands.

Visit www.aut.ac.nz for entry requirements for specific countries.

Email: internationalstudy@aut.ac.nz

# Fees & scholarships

**Cost is an important factor when thinking about university study. This page gives you an idea of the approximate tuition fees at AUT, and different options to help you fund your education including scholarships, student loans and allowances.**

To give you an idea of approximate costs, the 2019 tuition fees are shown below (based on full-time study and completing 120 points per year). All fees are in NZ dollars and include GST. The 2020 tuition fees will be advertised on **www.aut.ac.nz/fees** as soon as they have been set.

## Domestic student tuition fees

First-time domestic students are entitled to one year of fees free.

Undergraduate programmes

| Fee (per year) | Approximately $6,580.00-$6,677.00[1] |
|---|---|

Doctor of Philosophy

| Fee (per year) | Approximately $6,750.00[1] |
|---|---|

Other postgraduate programmes

| Fee (per year) | Approximately $6,750.00-$8,540.00[1] |
|---|---|

1. Part-time students pay a proportion of the fee based on the number of academic points they are studying.

## International student tuition fees

Undergraduate programmes

| Fee (per year) | Approximately $32,850.00 |
|---|---|

Doctor of Philosophy

| Fee (per year) | Approximately $36,950.00[1] |
|---|---|

Other postgraduate programmes

| Fee (per year) | Approximately $33,855.00-$36,370.00 |
|---|---|

1. International doctoral students who conduct the majority of their studies in New Zealand will be eligible for the approved 2018 domestic tuition fees of $6,750.00.

## Other fees you may have to pay:

- 2019 Compulsory Student Services Fee – $646.00 for 120 points or $5.38 per academic point
- 2019 Building Levy – $71.00 for 120 points or $0.59 per academic point
- Additional fees for course materials or elective papers (check with your faculty if there are additional fees for your programme)

Please note that you have to pay your fees in full by the date specified on your fees invoice.

To find out more about fees call **+64 9 921 9779** or the AUT Student Hub on **0800 AUT UNI** (0800 288 864).

## Free fees for your university study

New government policy means that eligible domestic students starting tertiary education receive one year of full-time study fees-free[1].

To check if you're eligible for fees-free study in 2020 visit **www.aut.ac.nz/fees**

1. Domestic students only, not available to international students.

## Scholarships and awards

Scholarships and awards are a great way to fund your university study. There is a wide range of scholarships and awards available to AUT students at all stages of their study. Visit the scholarships website for a current list of scholarships offered by AUT and external funders, as well as application forms and closing dates. You can also contact AUT's Scholarships Office for advice on scholarships, awards and the scholarship application process.

To find out more call **+64 9 921 9837** or visit **www.aut.ac.nz/scholarships**

## Support for scholarship students

Undergraduate scholarship students – whether the scholarship was awarded for academic endeavour or for excellence in sports, culture or leadership – have access to an extensive programme of support, including professional development and networking opportunities, and one-on-one support.

## Student loans and allowances[1]

If you are a full-time domestic student, you may qualify for a student loan or allowance. Student loans and allowances are administered and paid by StudyLink. The application process can take some time, so it's a good idea to apply early. You can apply for a student loan or student allowance before your enrolment at AUT is complete.

To find out more call **0800 88 99 00** or visit **www.studylink.govt.nz**

1. For domestic students only

## Help with planning and budgeting

We know that sometimes things happen and financial stress can impact your academic success. That's why we offer financial support that ranges from offering grocery or fuel vouchers, to helping with that unexpected bill.

## StudyLink website

Visit **www.studylink.govt.nz** for tools, tips and information to help you plan and understand the costs you will have while studying.

# Find out more

## AUT Open Day

Our Open Day at the City Campus will showcase everything AUT has to offer to help you make an educated decision about university study. To find out more visit **www.aut.ac.nz/live**

## Visit our website

For the latest information on AUT programmes and to keep up-to-date with what's happening at AUT visit **www.aut.ac.nz**

## Contact us online

If you have any questions about studying at AUT, you can contact us at **www.aut.ac.nz/enquire**

## Secondary schools

If you are a secondary school teacher or career advisor, our Future Students Team can help you with any questions you may have. Contact the team on **+64 9 921 9239.**

## Connect with us

AUT has a range of social media channels to keep our students and the general public aware of what is going on around the university.

**Connect with us now:**

@autuni        #autuni

## Drop in and see us

### AUT Student Hub

**City Campus**
Level 2, ground entry, WA building, 55 Wellesley Street East, Auckland

**North Campus**
AS building, 90 Akoranga Drive, Northcote, Auckland

**South Campus**
MB building, 640 Great South Road, Manukau, Auckland

## Campus tours

If you want to check out the campus and facilities, contact us and we will arrange a campus tour for you and your family. Call **0800 AUT UNI** (0800 288 864) for more information.

To take a virtual tour of our campuses visit **www.aut.ac.nz/virtualtour**

# Campus map

WELLESLEY STUDENT APARTMENTS AT MOUNT STREET

**WR**

**WW**

MOUNT STREET

SYMONDS STREET

WALKWAY

**WN**

PLAZA

**WZ**

**WS**

**WM**

**WO**

WAKEFIELD STREET

**WU**

**WF**

PLAZA

ST PAUL STREET

NGĀ WAI O HOROTIU MARAE

**WD**

**WP**

**WC**

**WE**

GOVERNOR FITZROY PLACE

MAYORAL DRIVE

**WY**

AIREDALE STREET

TO MOTORWAYS

GATE 1

HIKUWAI PLAZA

PLAZA

**WA**

**WG**

**WB**

PLAZA

GATE 4

WAKEFIELD STREET

QUEEN STREET

LORNE STREET

**WT**

WELLESLEY STREET EAST

GATE 2

PEDESTRIAN BRIDGE

RESERVED CARPARK

MAIN ENTRY GATE 3

PLAZA

MAYORAL DRIVE

**WH**

RUTLAND STREET

AOTEA SQUARE

PRINCES STREET

ALBERT PARK

AUCKLAND PUBLIC LIBRARY

## Key

- (i) AUT Student Hub
- Café
- Conference facility
- Intercampus shuttle bus stop
- Mobility parks
- Student lounge
- Gym
- Library
- Creche
- Breastfeeding and baby change room

## City Campus

55 Wellesley Street East
Auckland Central

**AUT**

**0800 AUT UNI (0800 288 864)**
Auckland University of Technology
Auckland, New Zealand
www.aut.ac.nz

Enquire now
www.aut.ac.nz/enquire

CITY CAMPUS
55 Wellesley Street East, Auckland Central

NORTH CAMPUS
90 Akoranga Drive, Northcote, Auckland

SOUTH CAMPUS
640 Great South Road, Manukau, Auckland

**Connect with us now:**

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