# DESIGN & CREATIVE TECHNOLOGIES

## POSTGRADUATE PROGRAMME GUIDE 2018

AUT

TOP 2% UNIVERSITIES WORLDWIDE


AUT has over 60 research centres and institutes with world class expertise

TOP 20 in the world & 1st in Australasia for international outlook

Times Higher Education rankings


Over 150 professors teaching across 17 professional schools

# Welcome to postgraduate study

In today's world there is an ever-increasing demand for advanced research skills and for the people who possess them. Postgraduate qualifications provide you with deep learning, and the skills to meet the demand for challenging and interesting roles in the workforce. Graduates from postgraduate programmes demonstrate the capacity to master and apply specialist knowledge, practice and theory, and to design, manage and complete a research project.

In addition, leadership roles now typically require postgraduate qualifications because they produce people with currency, depth and breadth in their field of specialist expertise. At AUT we have attracted a great community of postgraduate students who study on many types of programmes. These range from one-semester postgraduate certificates and one-year postgraduate diplomas, to multi-year master's degrees and doctorates. Whatever your motivation, we encourage you to explore the world of opportunities available in the Faculty of Design and Creative Technologies through postgraduate studies and research.

**Professor Guy Littlefair**
MSc PhD FIEAust CPEng EngExec NER APEC Engineer IntPE(Aus) MIPENZ MDINZ MRSNZ

Pro Vice-Chancellor
Dean, Faculty of Design and 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

## Course information



## About AUT



## Applying for your programme



**Key:** F/T = full-time, P/T = part-time


Image 3 on page 5 by Stefan Marks. Image on pages 48–49 by Simon Devitt Photographer.


**Cover:** Top 2% (Universities New Zealand website **www.universitiesnz.ac.nz**), International outlook (Times Higher Education ranking)
International students should visit **www.aut.ac.nz/international** for entry requirements and detailed fee information.

# Postgraduate qualifications

## School of Art and Design

**Te Kura Toi a Hoahoa**

| | | | |
|---|---|---|---|
| BACHELOR'S DEGREE WITH HONOURS (120 POINTS) | **Bachelor of Art and Design (Honours)** (1 year) | | |
| POSTGRADUATE CERTIFICATE (60 POINTS) | **Postgraduate Certificate in Cultural and Creative Practice** (½ year) | | |
| MASTER'S DEGREE (120 POINTS) | **Master of Philosophy** (1 year) | | |
| MASTER'S DEGREES (180 POINTS) | **Master of Design** (1 ½ years) | **Master of Visual Arts** (1 ½ years) | **Master of Cultural and Creative Practice** (1 ½ years) |
| DOCTORATE (360 POINTS) | **Doctor of Philosophy** (3 years) | | |

## Colab: Creative Technologies

**Marautanga Matatini**

| | | |
|---|---|---|
| BACHELOR'S DEGREE WITH HONOURS (120 POINTS) | **Bachelor of Creative Technologies (Honours)** (1 year) | |
| POSTGRADUATE CERTIFICATE (60 POINTS) | **Postgraduate Certificate in Social Innovation** (½ year) | |
| POSTGRADUATE DIPLOMA (120 POINTS) | **Postgraduate Diploma in Social Innovation** (1 year) | |
| MASTER'S DEGREE (120 POINTS) | **Master of Philosophy** (1 year) | |
| MASTER'S DEGREE (180 POINTS) | **Master of Creative Technologies** (1 ½ years) | **Master of Social Innovation** (1 ½ years) |
| DOCTORATE (360 POINTS) | **Doctor of Philosophy** (3 years) | |

## School of Communication Studies

**Te Kura Whakapāho**

| | | |
|---|---|---|
| BACHELOR'S DEGREE WITH HONOURS (120 POINTS) | **Bachelor of Communication Studies (Honours)** (1 year) | |
| POSTGRADUATE CERTIFICATE (60 POINTS) | **Postgraduate Certificate in Communication Studies** (½ year) | |
| POSTGRADUATE DIPLOMAS (120 POINTS) | **Postgraduate Diploma in Communication Studies** (1 year) | **Postgraduate Diploma in Brand Communication** (1 year) |
| MASTER'S DEGREE (120 POINTS) | **Master of Philosophy** (1 year) | |
| MASTER'S DEGREE (180 POINTS) | **Master of Communication Studies** (1 ½ years) | |
| DOCTORATE (360 POINTS) | **Doctor of Philosophy** (3 years) | |

**Please note:**

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

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

3) The academic year is from February to November.

4) Part-time study options are available for many of these programmes. Refer to the relevant programme page in this guide.

**For further information, contact the AUT Student Hub on 0800 AUT UNI (0800 288 864) or visit www.aut.ac.nz/postgraduate**

## School of Engineering, Computer and Mathematical Sciences

**Te Kura Mātai Pūhanga, Rorohiko, Pāngarau**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BACHELOR'S DEGREES WITH HONOURS (120 POINTS) | **Bachelor of Computer and Information Sciences (Honours)** (1 year) | **Bachelor of Science (Honours)** (1 year) | | | | | |
| POSTGRADUATE CERTIFICATES (60 POINTS) | **Postgraduate Certificate in Computer and Information Sciences** (½ year) | **Postgraduate Certificate in Science** (½ year) | **Postgraduate Certificate in Engineering** (½ year) | | | | |
| POSTGRADUATE DIPLOMAS (120 POINTS) | **Postgraduate Diploma in Computer and Information Sciences** (1 year) | **Postgraduate Diploma in Science** (1 year) | **Postgraduate Diploma in Engineering** (1 year) | | | | |
| MASTER'S DEGREES (120 POINTS) | **Master of Construction Management** (1 year) | **Master of Engineering** (1 year)[1] | **Master of Engineering Project Management** (1 year) | **Master of Philosophy** (1 year) | | | |
| MASTER'S DEGREES (180 POINTS) | **Master of Computer and Information Sciences** (1½ years) | **Master of Service-Oriented Computing** (1½ years) | **Master of Analytics** (1½ years) | **Master of Health Informatics** (1½ years) | **Master of Information Security and Digital Forensics** (1½ years) | **Master of Engineering**[1] (1½ years) | **Master of Science (180 points)** (1½ years) |
| MASTER'S DEGREE (240 POINTS) | **Master of Science (Research)** (2 years) | | | | | | |
| DOCTORATE (360 POINTS) | **Doctor of Philosophy** (3 years) | | | | | | |

1. Applicants with a four-year engineering degree may be able to complete the Master of Engineering in one year full-time (120 points). Applicants with a three-year undergraduate engineering degree will be enrolled in the 180-point Master of Engineering, which takes one and a half years of full-time study.

# Postgraduate study in design and creative technologies

In 2018, AUT's Innovation Precinct will co-locate engineering, design and technology

A launchpad for tech entrepreneurs

Student access to high-tech labs network




1 WG building is home to many of the faculty's postgraduate programmes 2 The new Engineering, Technology and Design building at the AUT City Campus (expected to open in February 2018) 3 AUT offers an innovative approach to postgraduate study

## Challenging traditional thinking

AUT offers a new approach to postgraduate study, one that is innovative, supportive, and collaborative. Our students and staff constantly look at new ways of doing things – from creating life-changing medical equipment and novel approaches to computational intelligence, to more sustainable fashion and safer ways to measure road surface quality. QS World University Rankings place AUT in the top 2% of universities worldwide, with five-star ratings for teaching, employability, internationalisation, access and facilities. We're in the top 150 of universities worldwide that are under 50 years old, and Times Higher Education rates us as number 19 in the world for our international outlook. They're all reasons why 9 out of 10 AUT graduates recommend us as a great place to study.

## A place to collaborate and share ideas

Studying at AUT is never an isolated experience. You learn in an interactive environment where you collaborate with your classmates, debate and apply your knowledge to find innovative solutions. Our schools and faculties work together in a collaborative teaching and research environment. This sharing of ideas, resources and skills not only fosters better results, it gives you the opportunity to work in interdisciplinary teams and apply your skills across a diverse range of areas.

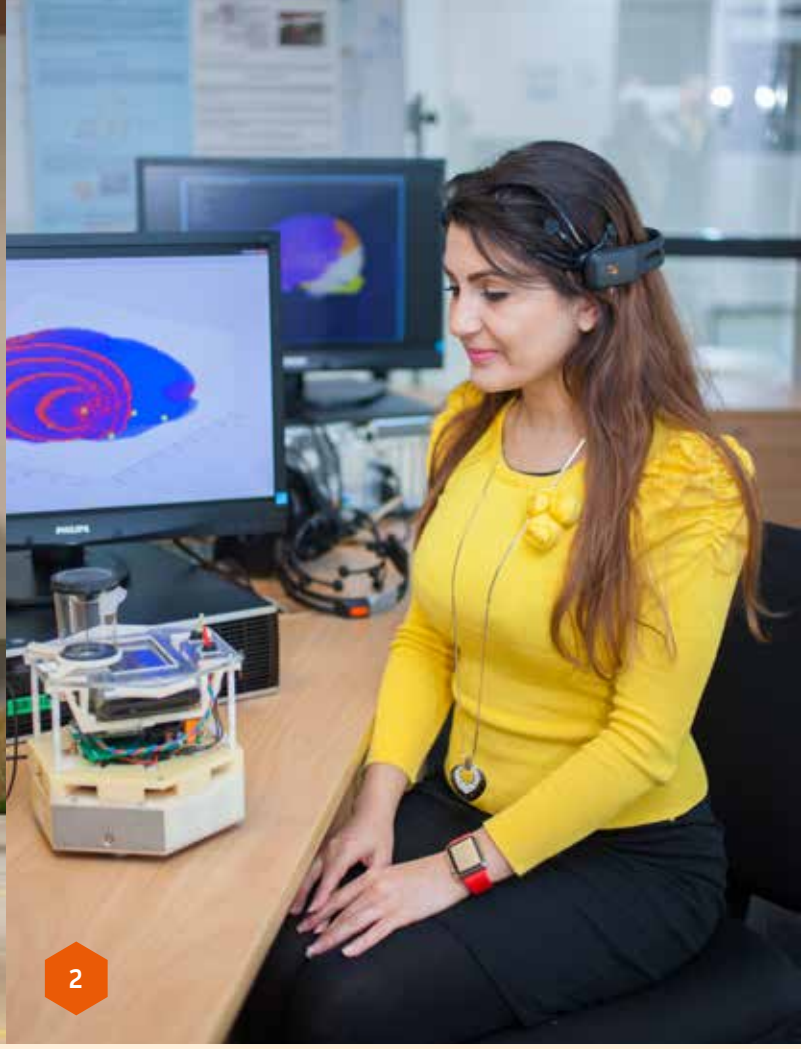
## Research that matters

Research is a key focus for us, and we pride ourselves on delivering ground-breaking research in all areas of design and creative technologies.

We're proud of our strong partnerships with industry and the wider community, and often collaborate with businesses or community organisations on research and other projects. For example, the Design for Health and Wellbeing Lab, a collaboration between AUT and Auckland District Health Board, won a Best Award for its efforts to use design to improve the experiences of hospital staff, patients, families and visitors. Bioengineering research from our Centre for KODE Technology Innovation is now being used in a potential breakthrough therapy for cancer. Researchers from our Institute for Radio Astronomy and Space Research are working with scientists from around the globe on the multi-billion dollar Square Kilometre Array (SKA) project, the world's largest radio telescope. These are just some of the many inspiring research projects within our faculty.

## Passionate and experienced staff

Our academics are passionate about their subjects and constantly draw on their own experience and research to inform their teaching. Many of our staff and postgraduate supervisors are globally known as experts in their field, including Professor of Communication Studies and Pacific Journalism David Robie, Professor of Bioengineering Ahmed Al-Jumaily, Professor of Astronomy Sergei Gulyaev, Professor of Artificial Intelligence Nik Kasabov, Professor of Spatial Design Tina Engels-Schwarzpaul, Associate Professor Frances Joseph and Professor of Graphic Design Welby Ings.



# Renowned research institutes, centres and labs

We're home to a number of well-known research institutes and centres that deliver leading research and attract experts from around the world. As a postgraduate student you may well find yourself working closely with these research entities. You also have access to a range of high-end labs and facilities – the same facilities industry and creative professionals often come in to use.

**Colab**
Colab is AUT's catalyst for collaboration, innovation and entrepreneurship. It brings together staff and students with a range of backgrounds and interests, including interactive art, software engineering, mechatronics, affective computing, design, media, game development, social entrepreneurship and business.

**Engineering Research Institute (ERI)**
The Engineering Research Institute focuses on creating novel research and innovative ideas in interdisciplinary and industry priority fields. Our expertise spans advanced manufacturing, controls, signals, power engineering and industrial management.

**Institute of Biomedical Technologies (IBTec)**
This inter-faculty research institute specialises in research on biomedical applications. Our research centres include the Centre for Bio-Medical Materials, Centre for Cardiovascular Diagnostics and the Centre for Respiratory Therapies.

**Institute for Radio Astronomy and Space Research**
Since installing New Zealand's first modern 12-metre radio telescope at Warkworth, the institute has been conducting exciting radio astronomical research with world-leading observatories and space agencies. The addition of a 30-metre radio telescope makes the AUT observatory a world-class facility.

**Knowledge Engineering and Discovery Research Institute (KEDRI)**
KEDRI develops novel information processing methods and applications across science and engineering. It includes the Centre for Adaptive Pattern Recognition Systems, Centre for Bioinformatics, Centre for Data Mining and Decision Support Systems, Centre for Neuroinformatics and Neurocomputing, Centre for Novel Methods for Computational Intelligence, and Centre for the Study of Creativity.


1 The Design for Health and Wellbeing Lab focuses on designing better healthcare experiences 2 Maryam Gholami Doborjeh, researcher at the Knowledge Engineering and Discovery Research Institute (KEDRI) 3 The research conducted at AURA focuses on radiofrequency identification applications, which can be applied to many fields

**Centre for Artificial Intelligence Research**
The Centre for Artificial Intelligence Research is a stimulating environment for the development of innovative IT products.

**Centre for KODE Technology Innovation**
KODE Biotech Ltd is a New Zealand biotech company that has developed the KODE™ Technology Innovation, which could revolutionise the way we treat cancer.

**Centre for Performance Research**
The Centre for Performance Research aims to promote research into the broad field of performance.

**Centre for Robotics and Vision**
The Centre for Robotics and Vision is the home of a community of researchers in robotics and computer vision. Our research is centred on image and video technology, and robotics and automation.

**Data Science Research Group**
This group focuses on large-scale data management, data mining with an emphasis on stream mining, Statistical Machine Learning (SML), Information Visualisation (IV), and Data Analytics (DA). The primary goal is to design and implement new algorithms that will use a data driven approach to knowledge extraction and prediction of future behaviour.

**Geoinformatics Research Centre**
This centre focuses on data mining and modelling, trend analysis and prediction systems, speech and voice recognition, signal and image processing, remote sensing and geographic information systems applications, wireless sensor networking with associated databases, and web interface technologies.

**Industrial Information and Control Centre**
This centre focuses on world-class research in industrial information and control. It aims to raise capability in advanced process simulation and control.

**Journalism, Media and Democracy Centre**
This centre aims to make AUT a centre of excellence for journalism and media scholarship.

**Mathematical Sciences Research Group**
This group focuses on research in the areas of analytics and applied mathematics. The primary goal is to facilitate collaborative activity both within the clusters but also with external researchers in order to develop new models and techniques for some of the key problems in these fields.

**Multimodal Research Centre**
This centre focuses on multimodal mediation and phenomenology across communication, linguistics, psychology, anthropology and sociology.

**Pacific Media Centre**
This centre is the only media research, resource and publication centre of its kind in NZ and focuses on Māori, Pacific, Asia-Pacific and diversity media, and community development communication.

**Popular Culture Research Centre (PCRC)**
This centre is a focal point for research in popular culture at AUT.

**Sensor Network & Smart Environment Research Centre (SeNSe)**
SeNSe is a research incubator in the field of intelligent sensor networks.

**Statistical Consultancy Centre**
This centre draws together practising and theoretical statisticians from a range of backgrounds and co-ordinates the provision of statistical advice to AUT researchers and external organisations.

**STEM Tertiary Education Centre**
This centre aims to raise the number and quality of STEM graduates through research, best practice for STEM education, and creating new opportunities.

# Renowned research institutes, centres and labs
Continued

**AUT Radiofrequency Identification Applications Laboratory (AURA)**
AURA has a wide range of equipment including LF, HF and UHF Tags and Readers, active tags and NFC-enabled mobile devices. The lab has strong industry links and is a member of the New Zealand RFID pathfinder group.

**BioDesign Lab**
This lab combines biomedical engineering methodologies and expertise in human physiology with industrial and engineering design to deliver new and innovative therapeutic devices and treatments.

**Design for Health and Wellbeing Lab**
Located inside Auckland City Hospital, the Design for Health and Wellbeing Lab is a collaboration between AUT and Auckland District Health Board. Our focus is on designing better healthcare experiences for hospital patients, families and staff – from better wayfinding to staff uniforms and child-friendly medical equipment.

**Emergent Ecologies Lab**
This is a creative practice lab for indigenous and urban ecologies. The lab focuses on post-carbon urban design futures through co-creative research projects and public events.

**High Performance Computing Research Lab**
The High Performance Computing Research Lab is active in big data processing, distributed and mobile systems, energy efficient computing, exascale and supercomputing, graphics and computer vision, scalable software and computer architectures. Besides the Square Kilometre Array mega project, it works with industry in exascale computing and middleware, core and parallel software development, and GPU-accelerated mobile computer vision.

**Motion Capture Lab**
The Motion Capture Lab is dedicated to innovative motion capture research, teaching, and practice across animation, gaming, visual effects, digital cinema, previsualisation and virtual production, documentary, dance, performance, installation and the visual arts.


Our ST Paul St Gallery is one of the leading university galleries in New Zealand; one of many reasons why our School of Art and Design is one of the top art schools in New Zealand.

**Network and Security Research Lab**
This lab aims to solve industry problems in network design and management, performance evaluation, wireless networking, information security, surveillance and networking services. It has three research areas: networks and security, surveillance and security, and security and digital forensics.

**Pigsty**
This virtual Play Interactivity and Games Lab connects games projects to resources, funding and research across AUT, Auckland, New Zealand and the world. Working closely with academia and industry, Pigsty provides opportunities for commercial, non-profit and research projects.

**Radiofrequency Identification Application Lab**
Radiofrequency identification (RFID) is a technology for auto-identification of objects, which does not require a line of sight. This lab works in many areas including supply-chain, medical and disability applications, RFID security and RFID data management.


**Service and Cloud Computing Research Lab**
This lab offers a range of specialist facilities for research programmes in security, network performance, cloud-based application performance and monitoring, and energy efficient distributed computing models. It has its own data centre with very high-speed networking capability to support researchers.

**Software Engineering Research Laboratory**
This lab focuses on improving the practice of software professionals, covering a range of software provision – bespoke development, package and component customisation, free/libre open source software (FLOSS) development, and delivery of software as a service (SaaS).

**The UFO Bureau (of Investigation)**
This group focuses on producing artworks and ideas that model and propose heterogenic paradigms of transdisciplinary praxis.

**Textile and Design Lab (TDL)**
This lab focuses on innovation and value creation through design and new textile technologies in the areas of smart textiles, seamless knitted products and wearable technologies. Its resources include technical and design expertise and the latest computer aided design systems for knit design and programming, computerised flatbed knitting technology, digital textile printing, and needle felting.

**3D Printing Lab**
The 3D Printing Lab is a centre for rapid prototyping using 3D printing, working with students, staff and industry on a range applications and projects. Our staff are also researching new additive manufacturing technologies and developing methods to make most effective use of the available technologies to produce complete product prototypes in very short times.

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 120 |
| Duration: | 1 year F/T, up to 3 years P/T |
| Campus: | City & South |
| Starts: | Any time |

**Josh Munn**
**Industrial Designer, Healthcare Human Factors, Toronto, Canada**
**Master of Philosophy**
**Bachelor of Art and Design (Honours)**
**Bachelor of Design in Product Design**

"My research project focused on how 3D printing can help facilitate co-design in a clinical context. I worked alongside healthcare professionals to identify and develop prospective design opportunities in a number of areas. I chose this project because I have a genuine interest in 3D printing, and strongly believe in the power of involving end users in the design process. This project went far beyond just making something – it was much more about your process, about how decisions are made and why. It took a long time for me to understand this but my supervisor offered great support whenever I needed it. It was fulfilling to see the way in which I practise and understand design evolve and mature."

Refer to page 12 for more about our art and design programmes.

# 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 an applied or professional nature under the supervision of design and creative technologies staff. Alternatively, the MPhil can provide 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

### 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 study. Our staff are available to supervise MPhil research on a wide range of topics within design and creative technologies. For a list of academic supervisors in your area of interest, get in touch with the postgraduate contacts for your study area (refer to the relevant section in this publication).

## Career opportunities

It is expected that as a graduate with a Master of Philosophy you will have gained 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.

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

# 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.**

## Entry requirements

### Minimum entry requirements

One of the following in a specialisation appropriate to the proposed research:

- Master's degree with first-class or upper second-class honours OR
- Bachelor's degree with honours (equivalent to 4 years of study), normally with first-class or upper second-class honours

The programme must have included advanced learning in research and a research thesis/dissertation.

### English language requirements

IELTS (Academic) 6.5 overall with 7.0 in Writing and no band less than 6.0 (Engineering, Computer and Mathematical Sciences require a 6.5 in Writing)

### 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.

## PhD research expenses

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

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

## QUICK FACTS

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

**Jarek Beksa**
**CEO, Sonnar Interactive Ltd**
**Doctor of Philosophy candidate**

"I was motivated by a comment by a blind gamer who said, 'Nobody makes games for us.' I did some research, and noticed that while there are games for visually impaired users, most of them are of very poor quality. I wanted to change this. That's how the Audio Game Hub was born. It initially started as a prototype for my PhD, designed to perform usability studies and evaluate its potential. However, we discovered something amazing – over 50,000 people from around the world were loving it. Since our launch, we've adapted multiple genres of video games into accessible audio equivalents, each with unique interaction patterns and gameplay mechanics. Our app has had over 50,000 downloads, as well as excellent reviews and feedback. I love the atmosphere, the attitude and the people at AUT! It's a good environment to unlock your creative potential."

Refer to page 30 for more about our engineering, computer and mathematical sciences programmes.

# Art & Design

RANKED

TOP 100
WORLDWIDE

**Propel your career and creative practice with postgraduate study at one of New Zealand's top art schools. Our School of Art and Design is ranked in the top 100 worldwide – so why would you choose to study anywhere else?**

**Our programmes bring together visual artists, spatial designers, fashion designers, filmmakers, curators, entrepreneurs, graphic designers, digital designers, product designers and other disciplines. Students are supervised by leading art and design researchers, and encouraged and supported to publish their work through exhibition, symposia and festivals, as well as engage with art and design institutes, industry mentors and professional networks.**
**As a postgraduate student you have access to specialist lab facilities and studio time.**

## Our postgraduate programmes

- Bachelor of Art and Design (Honours) – see page 14
- Master of Design – see page 15
- Master of Visual Arts – see page 16
- Master of Cultural and Creative Practice, and Postgraduate Certificate in Cultural and Creative Practice – see page 17
- Master of Philosophy – see page 10
- Doctor of Philosophy – see page 11

## Our research expertise includes

### Communication design
- 3D design applications
- Graphic design for screen
- Illustration
- Narrative
- Photography
- Short film
- Typography

### Digital design
- 3D animation
- Augmented reality
- Digital film
- Games
- Interactive environments
- Performance capture

### Fashion design
- Menswear
- Womenswear and fashion accessories
- Sustainability

**Kritteka Gregory**
**Digital Artist, Red Square Motion, Toronto**
**Master of Art and Design**
**Bachelor of Design in Digital Design**

"I've always been fascinated by visual effects, and I love working at the crossroads of creativity and technology. I'm now based in Canada, working for Toronto post-production house Red Square Motion. We specialise in post-production, colour correction and editing. I love the problem-solving part of my role – our clients come in with a film that may need some post-production work and I enjoy finding a solution for them. I've learnt so much. I didn't realise all the different things you need to consider when you film something. Throughout my time at AUT, I had access to state-of-the-art facilities and technologies, including motion capture and a green screen room. I developed skills in Adobe After Effects, Photoshop, Premiere and 3D software, which was extremely helpful when I started working."

### Industrial design
- Design innovation
- Rapid prototyping
- Sustainability
- User experience

### Spatial design
- Design for public spaces and the built environment
- Interior architecture, including event and exhibition design
- Investigation of cultural space
- Performance, screen and installation

### Textile design
- Smart textiles
- Seamless knit technologies
- Textiles for fashion
- Textiles for product design

### Visual arts
- Documentary film
- Drawing
- Installation
- Moving image
- Painting
- Performance
- Photography
- Print
- Sculpture
- Sound

### Across disciplines
- Art and management
- Creative technologies
- Curation
- Design and business
- Design innovation
- Event management

## Contact us

Art and Design Student Central
Phone: **09 921 9663**
Email: **pgartdes@aut.ac.nz**
Visit **www.aut.ac.nz/art-design/postgraduate**

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

Industry-leading studios, labs and technology

**Olivia Labb**
**Master of Philosophy student**
**Bachelor of Art and Design (Honours)**
**Bachelor of Design in Spatial Design**

"At the end of my Bachelor of Design I realised that there were specific areas of design that really excited me. The honours year seemed the perfect way to delve into these areas. My research explored designing small spaces of privacy at Auckland City Hospital. I was particularly interested in designing spaces for breastfeeding mothers, enabling them to be a part of the public experience while determining their own level of privacy. For my research project, I worked closely with the Design for Health and Wellbeing Lab, a collaboration between AUT and the Auckland District Health Board, which is transforming the hospital experience for patients, their families and hospital staff. After finishing my honours degree I went to Stanford University Hospital to complete work experience in the field I've studied, before returning to AUT to start my master's degree."

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T |
| Campus: | City |
| Starts: | 26 Feb 2018 |
| Apply by: | 1 Dec 2017 & 15 June 2018[1] |

**Yuxi (Leona) Wang**
**Master of Design student**
**Bachelor of Art and Design (Honours)**
**Bachelor of Design in Fashion Design**

"After completing my Bachelor of Design, I wanted to take my knowledge of fashion even further so decided to enrol in the honours degree. I attended an information meeting for the Bachelor of Art and Design (Honours), which was extremely helpful. It was a great opportunity to talk to current honours students, and we were also invited to nominate a study topic for the honours year. For my honours dissertation, I focused on the Miao/Hmong people, the largest ethnic minority group of China. Their clothes and design philosophy have greatly influenced my understanding of both modern design and traditional handicrafts. For my honours year project at AUT I explored how historical and cultural heritage can be incorporated into contemporary fashion. I learned a lot through the project-focused research during my honours year."

# Bachelor of Art and Design (Honours)

BArtDes(Hons) | AK3670

**If your appetite for art and design has been stimulated by your undergraduate studies, it's time to consider taking those studies further. The Bachelor of Art and Design (Honours) is an intensive one-year degree that enables you to undertake research within the field of art and design.**

**The Bachelor of Art and Design (Honours) is mainly aimed at high-achieving bachelor's degree students who want to advance their skills and make their CV stand out. It can also prepare you for further study at master's or doctoral level.**

## Entry requirements

### Minimum entry requirements

One of the following (or equivalent) with a B grade average or higher in level 7 papers:

- Bachelor of Design OR
- Bachelor of Visual Arts

Must submit a research proposal for approval prior to enrolment.

May be required to submit a portfolio of work and attend a selection interview.

## What this qualification covers

The focus of the year is a single large studio project where you can develop your skills to a professional standard. The project is underpinned by a research methods and theory paper to help you contextualise your work.

### Specialist areas in art and design:

- Communication design (typography, illustration, animation and short film, photography and graphic novel)
- Digital design (animation, moving image, gaming, web, post-production and film)
- Fashion design (menswear, womenswear and fashion products)
- Industrial design (product and furniture)
- Spatial design (interior, furniture, urbanism, performance, installation, moving image, digital environments, exhibition design and spatial theory)
- Textile design (knit, print, digital textile technologies, smart textiles, textiles for product)
- Visual arts (painting, print, photography, sculpture, drawing, moving image, installation, sound and performance)

1. Late applications will be accepted if there are places available.

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

# Master of Design

MDes | AK1328

**The Master of Design is a research degree aimed at developing your design expertise and empowering your decision-making. Specialising in industrial design, fashion design and textile design, communication design, digital design or spatial design, you will work on interdisciplinary projects. Implementing creative research strategies, and continuing to develop expertise in your chosen field, you will contribute to a vibrant, collaborative design culture. Through this degree you will advance your creative research skills, become ethically responsible and socially aware, and develop an understanding of the implications of working across cultural, social, and industrial contexts.**

## Entry requirements

### Minimum entry requirements

Bachelor of Design or equivalent with a B grade average or higher in the papers at level 7 or above.

### Other requirements

Applicants may be required to submit a portfolio of work and attend a selection interview.

## What this qualification covers

As part of this programme you complete either a 120-point thesis or a 90-point design research project. You also develop an understanding of research methods, and can choose from a range of elective papers.

**Possible pathways within the Master of Design are:**

- Health and Wellbeing Design
- Virtual Production
- Strategic Leadership in Design

**Specialist areas within these pathways include:**

- Product design (product and furniture)
- Communication design
- Spatial design (interior, furniture, urbanism, performance, installation, moving image, digital environments, exhibition design and spatial theory)
- Digital design (animation, moving image, gaming, web, post-production and film)
- Fashion and textile design (knit, print, textile, fashion and costume design)

AUT encourages early application. Places are limited.

1. Late applications will be accepted if there are places available.

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

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 1 Dec 2017 & 15 June 2018[1] |

**Glenn Maxwell**
**Master of Art and Design student**
**Postgraduate Diploma in Art and Design**

"My design is a reimagining of the archtop acoustic guitar, using traditional construction techniques augmented by CAD, CNC and 3D printing technologies. The top and back of the guitar are made from Monterey Cypress and the sides from New Zealand Kauri. My primary goal for this design was to increase the soundboard active resonance zone, to allow for more sound production. It was amazing to see my design nominated for New Zealand's best product design student project, and even better to take home the Silver award. Research played a huge role in evaluating the design for the guitar, and the research skills I've developed throughout my postgraduate studies are extremely useful. The lab spaces are very impressive, from the 3D Lab and 3D workshops to the Textile and Design Lab and Motion Capture Lab. There's no limit to what you can create – the art and design facilities are epic."

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 1 Dec 2017 & 15 June 2018[1] |

**Cathy Carter**
**Photographer and Installation Artist**
**Master of Art and Design**
**Bachelor of Visual Arts**

"I had completed my Bachelor of Visual Arts at AUT, and I wanted to continue to develop my art practice. The programme itself is challenging, but that's a good thing. Students have access to great work spaces on campus, and there was plenty of flexibility to fit your study around your other commitments. My research project explored how an art encounter can connect the viewer to interior feelings and imaginative associations to form a visceral, psychologically-compelling experience. The project used a multi-sensory approach – including photography, moving image and installation – to investigate seeing art as experience rather than solely observation. AUT is a wonderful environment full of like-minded people who are supportive and encouraging, critical and ambitious, and interested in the exploration of art and life. It's great for sharing ideas and expertise, and there are many opportunities to take part in projects and exhibit your work outside of the actual curriculum."

# Master of Visual Arts

MVA | AK1327

**The Master of Visual Arts is an interdisciplinary research degree for visual art graduates and creative professionals. The degree is highly flexible and caters for students from a variety of backgrounds. You will select a learning pathway that reflects your art practice and professional interests. You will work within the supportive culture of a studio environment involving group discussion, and critique of each other's work. You will have access to individual studio spaces, supervisory support and well-equipped specialist facilities. Your research will contribute to diverse and emerging dialogues around creative practice.**

## Entry requirements

### Minimum entry requirements

Bachelor of Visual Arts or equivalent with a B grade average or higher in the papers at level 7 or above.

### Other requirements

Applicants may be required to submit a portfolio of work and attend a selection interview.

## What this qualification covers

As part of this programme you complete a 120-point thesis, which can be either a practice-based or a more theoretical research project in an area of visual arts. You also develop an understanding of research methods and ethics, and complete a number of elective papers.

**Specialist areas in visual arts include:**

- Multimedia
- Installation
- Digital or moving image or new media
- Painting
- Photography
- Printmaking
- Sculpture
- Drawing
- Sound
- Film
- Performance
- Social art practice
- Collaboration
- Other culturally relevant media

AUT encourages early application. Places are limited.

1. Late applications will be accepted if there are places available.

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

# Master of Cultural and Creative Practice

(incorporating the Postgraduate Certificate in Cultural and Creative Practice)

**The Master of Cultural and Creative Practice is aimed at developing expertise in cultural expression. You will implement creative strategies while developing expertise related to your chosen field, contributing to a vibrant creative community and critiquing notions of leadership and entrepreneurship in the cultural and creative sector. Creative thinking will empower your decision-making and inform your professional encounters. Considerate of cultural and ethical issues and their implications when working across cultural, social, and historical contexts, you will be thoughtful and respectful in your research and production.**

## Entry requirements

### Minimum entry requirements

A bachelor's degree or equivalent with a B grade average or higher in the papers at level 7 or above.

## What this qualification covers

Mixing live projects with coursework, you can tailor your journey and specialise in a diverse array of subjects, including arts management, cultural production, curatorial practices, the interarts, interactive and mixed reality, heritage promotion, and cultural and creative production.

In the second part of the programme, you research an area of your interest through the Applied Research Project (60 points).

Topics include:

- Research methods
- Creative enterprise
- Creative leadership
- Culture and sovereignty
- Curatorial practice
- Māori media
- Mediated practice
- Soundculture and sonic practice

AUT encourages early application. Places are limited.

Master of Cultural and Creative Practice
MCCP | AK1335

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1 ½ years F/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 1 Dec 2017 & 15 June 2018[1] |

Postgraduate Certificate in Cultural and Creative Practice
PgCertCCP | AK1336

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 60 |
| Duration: | ½ year F/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 1 Dec 2017 & 15 June 2018[1] |

1. Late applications will be accepted if there are places available.

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

# Colab: Creative Technologies

Entrepreneurial-focused degree structure

**Colab is a new kind of academic unit – it's a transdisciplinary department, a cutting-edge research institute and a creative industries network. You could be a designer or a computer scientist, artist or engineer, media guru, gamer or social entrepreneur. Our postgraduate students come from a range of backgrounds – what unites them is the creative vision for a sustainable future, critical perspectives, technical know-how and practical engagement to make it happen. Wherever your research interests lie, we can guide you and help you bring your vision to life.**

## Our postgraduate programmes

- Bachelor of Creative Technologies (Honours) – see page 20
- Master of Creative Technologies – see page 21
- Master of Social Innovation (incorporating the Postgraduate Diploma and Certificate in Social Innovation) – see page 22
- Master of Philosophy – see page 10
- Doctor of Philosophy – see page 11

## Our research expertise includes

### Innovation & entrepreneurship

- Explores different concepts of entrepreneurship, including creative, social, educational and collaborative applications
- Investigates new economic models and how value can be identified, developed and managed through creative technologies, social innovation, education and future work patterns

### Games and play

- Explores theories and practices of imagination, interaction and play as drivers of new research
- Includes game rationales, principles, genres, languages, development processes, commercialisation and pedagogies for serious game design, programming, audio-visual cultures, aesthetics and artificial environments
- Considers applications across multiple fields including entertainment, learning, health, global and local development, communication, the environment, social innovation, mediated communities and commercial products

### Virtual worlds

- Researches multi-sensory, interactive and immersive ways of representing, translating, and interpreting data - visually, acoustically, haptically, spatially, performatively, and narratively
- Develops computational model prototyping, visualization, data navigation and interpretation technologies
- Investigates immersive narrative, augmented and virtual reality for education, training, design, therapy, health and other areas

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

"The Green Fairy project – a virtual reality film about fairies that light up the inside of traffic lights – is my master's degree project. 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 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. The promotion AUT offered for my project was amazing, and I couldn't believe the amount of backing I was getting."

**Mediated materials**

- Explores and speculates on new opportunities and practices for making smart objects, environments, systems and tangible, embodied, embedded or intelligent networks
- Includes areas of wearable technologies, smart textiles, smart environments, interactive art and track and trace systems as well as issues of digital materiality, embodiment theory, making and physical computing
- Investigates affect and expression using sensors, data, materiality and media sound, light, scale, time, and space

**Creative computing**

- Development and use of meta-technologies to coalesce knowledge in computing across other creative disciplines such as arts, entertainment/games, mobile applications, multimedia, product/web design and other interactive systems
- Development of software tools and techniques to both understand and aid creativity and creative processes

**Expanded media**

- Explores theories, tools and practices of transmedia, understood here as the creation and circulation of stories and narrative content across multiple media formats, networks, devices and technological platforms
- Includes imagined worlds, games, toys, interactive and immersive narratives, pervasive and locative media, web, time and screen-based media, branding, social media and social technologies
- Emphasises transdisciplinary connections and reciprocities between producers, consumers, audiences and "prosumers" arising from processes of collective intelligence
- Encompasses digital civics, iDocs (interactive documentary), citizen and digital journalism, open data, collaborative economies and participatory culture
- Engages mobile communities, art, politics, and literacy, mobile video production, mobile-mentaries (mobile documentaries), mobile networks and economies, mobile media in education and civics, mobile devices and apps, innovation and future developments

## Contact us

Pat Jones
Manager
Phone: **09 921 9999** ext **6469**
Email: **pgcolab@aut.ac.nz**

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

Real industry projects

**Donna Cleveland**
**Doctor of Philosophy candidate**
**Bachelor of Art and Design (Honours)**

"I'm highly committed to increasing understanding and practices of sustainability, especially within fashion design. Textiles account for a significant amount of waste sent to New Zealand landfills, and I'm looking at ways to reduce this. My research identifies some of the issues surrounding an unsustainable apparel manufacturing cycle and consumer textile waste. These continue to cause considerable environmental problems. My study demonstrates the potential for textile production to reconnect people with the value of the original fibres while highlighting the future possibility for a closed-loop production system. My doctoral research involves collaboration with three organisations: AUT's fashion and textiles department, the academic dress hire organisation run by the Kate Edger Trust and Lothlorian Knitwear, New Zealand's largest possum and merino fashion company."

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T |
| Campus: | City |
| Starts: | 26 Feb 2018 |

**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.

## 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)
- Research Project (90 points)
- A 15-point paper at level 8 as approved by the programme leader

## 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

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, social or creative applications of your research.**

## 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

## What this qualification covers

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

Topics include:

- Research methods
- Transdisciplinary practice
- Entrepreneurial strategies
- Transmedia
- Serious play
- Embodiment
- Post-material practices

### Research thesis

Your research thesis may contain elements of written and practical work, depending on the topic under study. The thesis may be based on your own proposal or related to ongoing research projects within the university or industry.

AUT encourages early application. Places are limited.

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

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T, 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb 2018 |

**Amy Tielu**
**Master of Creative Technologies**

"AUT is the only university that offers something like creative technologies in a highly experimental way. It also has a strong focus on practical skills, blended with a theoretical foundation. That sounded like a good balance to me. If you want to explore something that crosses more than one field, and that has a technological aspect, like developing new tech or assessing the use of existing tech, then do it through the Master of Creative Technologies. I researched an indigenous mode of Samoan storytelling, fāgogo; combining Samoan oral traditions with online, digital storytelling. Cultures tell stories in distinct ways. My research was about bringing forward the strengths of Samoa's oral traditions with the best current practices online. I wanted to look for ways to share these stories that connect us to each other and our history. I want to connect with Samoan audiences separated by time and distance."

Master of Social Innovation
MSI | AK1332

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T |
| Campus: | South |
| Starts: | 26 Feb 2018 |

Postgraduate Diploma
in Social Innovation
PgDipSI | AK1333

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 years P/T |
| Campus: | South |
| Starts: | 26 Feb 2018 |

Postgraduate
Certificate in Social Innovation
PgCertSI | AK1334

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 60 |
| Duration: | 6 months F/T, 1 year P/T |
| Campus: | South |
| Starts: | 26 Feb 2018 |

# Master of Social Innovation

(incorporating the Postgraduate Diploma and Postgraduate Certificate in Social Innovation)

**Social innovation is a dynamic, interdisciplinary area that focuses on innovative responses to complex societal issues. Concerns like climate change, social injustice and inequality, health crises and social displacement require new tools, skills and community-centred understanding to address these issues on many different scales.**

**If you're interested in creating new ideas or more effective solutions for social problems, these programmes further your practice and understanding. They will provide you with a network of community and organisational connections, as well as ethical awareness, practical skills, and technological and design know-how. You can apply your skills to any organisation, or use them as a foundation for your own venture.**

## Entry requirements

### Minimum entry requirements

- Bachelor's degree or equivalent with a B grade average or higher in the papers at level 7 or above[1]
- An applicant must normally have relevant professional experience approved by the dean (or representative)
- Selection interview may be required

## What this qualification covers

These programmes are inclusive and flexible, embracing different ways of learning, knowing and doing. You're encouraged to base assignments in your own community and work contexts so material is relevant and useful. You can include electives from across AUT as part of your programme.

All papers are taught using a mix of interactive seminar, public symposia and workshops that may be open to community participation. Many events will be conducted with community partners and may take place at sites other than AUT (but limited to southern Auckland).

### Master of Social Innovation

You complete the master's degree with papers and the Applied Research Project (60 points).

You take the following papers:

- Research Methods and Evaluation
- Social Innovation
- Strategies for Impact
- People, Systems and Dynamics
- Applied Research Project (60 points)
- Plus 60 points from other relevant postgraduate papers as approved by the programme leader

## Postgraduate Diploma in Social Innovation

The Postgraduate Diploma in Social Innovation consists of 120 points of papers from the Master of Social Innovation, and doesn't include a research project.

You take the following papers:

- Research Methods and Evaluation
- Social Innovation
- Strategies for Impact
- People, Systems and Dynamics
- Plus 60 points from other relevant postgraduate papers as approved by the programme leader

## Postgraduate Certificate in Social Innovation

The Postgraduate Certificate in Social Innovation consists of 60 points of papers from the Master of Social Innovation.

You take the following papers:

- Research Methods and Evaluation
- Social Innovation
- Strategies for Impact
- Plus one more relevant postgraduate paper as approved by the programme leader

AUT encourages early application. Places are limited.

1. B grade average only required for the Master of Social Innovation.

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

# Communication Studies

The only dedicated Pacific Media Centre in Australasia

**Michael Neilson**
**Journalist, Gisborne Herald**
**Postgraduate Diploma in Communication Studies**

"There are a few postgraduate diplomas in journalism around the country, but I chose AUT because it has an incredible modern media centre and the academics I spoke to were awesome. I had been in contact with the Pacific Media Centre in the past, and wanted to get involved with that. It's the only journalism programme in New Zealand that has an Asia-Pacific element, which really interests me. I became much more confident during my time at AUT. We were working as journalists every week, so I learned a lot. Each week we had guest lecturers – people from the Asia-Pacific region and experts in the field. The Asia-Pacific region is often overlooked by our mainstream media, so it has been great learning about it and exploring how to increase coverage of the important issues they face."

**We're a leading education provider in communication and media in New Zealand. Our graduates are highly sought after by industry – locally and internationally. As a student, you will be well supported throughout your studies, and our flexible postgraduate study options mean you can choose part-time or full-time study. You can choose from different study pathways to build a programme that relates to your professional field – for example, public relations, journalism, digital media or screen production – or sample papers from many different areas of postgraduate study.**

## Our postgraduate programmes

- Bachelor of Communication Studies (Honours) – see page 26
- Postgraduate Certificate and Postgraduate Diploma in Communication Studies – see page 27
- Postgraduate Diploma in Brand Communication – see page 28
- Master of Communication Studies – see page 29
- Master of Philosophy – see page 10
- Doctor of Philosophy – see page 11

## Our expertise includes

### Creative industries

Our creative industries papers and research explore the marketing of creativity in New Zealand and internationally. At the intersection of creative talent, marketplace, creative work and creative organisations, this study area explores various aspects of organisational communication, managing creative people, and the commercialisation of creativity.

### Digital media, radio, television and screen production

Our flagship programmes involve the production of media content in the form of radio, television, screen media, websites, social media, mobile media, interactive applications and visual communication. Our state-of-the-art production facilities include two television studios, a live radio station, chromakey facilities, a sound design studio, editing suites, and specialist computer labs.

### Journalism

If you live and breathe the news, then our journalism courses might be right for you. AUT's journalism programme is the largest in New Zealand, and the quality of the programme has been recognised both nationally and internationally. Our graduates work as news reporters for newspapers, magazines, television, radio and online media, as freelance journalists and media analysts.

### Media communication

This study area critically discusses and advances the theoretical aspects of communication. You can also explore newer areas of communication, including developmental communication, communication for social change, health communication, community and not-for-profit communication, environmental communication, trauma and crisis communication, and advocacy and activism.

**Online and social media communication**
If you're digitally savvy, can move between media platforms and communication gadgets, studying online and social media communication might be for you. You explore the ever-changing digital media landscape, online and social media management tools and systems, the production of online assets, and the planning of inclusive digital communication strategies.

**Pacific media and journalism studies**
The Pacific Media Centre is NZ's only specialist Asia-Pacific journalism and communication research and publication unit. It publishes *Pacific Journalism Review*, news websites PMC Online and Pacific Scoop and runs the Pacific Media Watch freedom-monitoring programme in collaboration with Reporters Sans Frontieres in Paris and Freedom House in New York. Doctorate and master's supervisions in international and digital journalism, and development communication are available.

**Popular culture studies**
Media studies and popular culture studies advance the study of communication and media through popular culture frameworks. Our programmes explore the issues surrounding the popular media, aspects of popularity, fame and celebrification, and the place of popular culture in social structures. AUT's Popular Culture Research Centre and the Performance Research Centre support research into various aspects of media studies, culture studies and popular media.

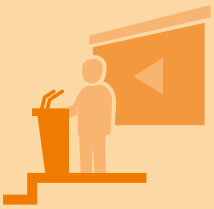
**Public relations**
This area focuses on current communication theory and practice in digital advisory, project management, international public relations and managing reputations. We're proud of our strong links with the industry, and regularly collaborate with key industry organisations on projects and internships.

**The political economy of media and communication**
The landscape of media ownership, the transformation of global media industries, globalisation of communication, and the influence of mass media on politics and policy are pressing concerns in democratic societies. AUT's Journalism, Media and Democracy Research Centre advances knowledge in the history of media and journalism, media ownership, journalism and democracy, media ethics and human rights.

## Contact us

Jessie Hsu
Postgraduate Programme Administrator
Phone: **09 921 9999** ext **6283**
Email: **pgcommqueries@aut.ac.nz**

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



Learn from industry professionals

**Saing Te**
**Doctor of Philosophy candidate**
**Master of Philosophy**

"When bad news happens, the media reports it. But what happens when the news is about a long-term systemic change to the earth's climate? How do you keep people informed without overwhelming them? Audiences rarely sustain interest in major news events for long periods; either more recent events usurp attention or same-as-it-ever-was reporting leads to 'compassion fatigue'. This experience entails a sense of anxiety, weariness, and/or pessimism about addressing disasters or injustices. I hope that my research will advance public knowledge about the causes and consequences of climate change, as well as its mediated representation in New Zealand. What is required is an analysis of the vested interests associated with the perpetuation of global warming, alongside a critique of mass media coverage, which, by blocking systemic causes, induces a sense of hopelessness."

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 19 Jan & 22 June 2018 |

**Hayley Wadmore**
**Communications and Administration Assistant, Go Media**
**Bachelor of Communication Studies (Honours)**
**Bachelor of Communication Studies in Television and Screen Production**

"I chose AUT for my undergraduate degree because it had a strong reputation with anyone in the media industry I talked to. When I was looking at postgraduate study options, AUT stood out again because it offers the best courses in New Zealand in the areas I'm interested in. Papers like Online and Social Media Management, for example, provided us with up to the minute updates on current media trends. We also had plenty of discussions about current changes in the media, including Instagram's new logo and algorithm, or Twitter's character limit changes. The honours degree is highly flexible. I only took papers I was genuinely interested in and enjoyed everything I studied. I also loved that the timetables are flexible, which helped me juggle study and work."

# Bachelor of Communication Studies (Honours)

BCS(Hons) | AK1261

**The Bachelor of Communication Studies (Honours) is mainly aimed at high-achieving students in the Bachelor of Communication Studies who want to advance their skills and make their CV stand out. It can also prepare you for further study at master's or doctoral level. The programme is a mix of creative, academic and research options, and students usually spend the entire second semester working on an individual research project.**

## Entry requirements

### Minimum entry requirements

Bachelor of Communication Studies (or equivalent) with a B grade average or higher in level 7 papers.

## What this qualification covers

Paper choice is flexible and includes a core research methods paper and at least one paper that contextualises developments in media and communication studies.

Topics include:

- Research methods
- Media context
- Digital, mobile and social media
- Journalism
- Public relations
- Radio
- Television and screen production
- Brand communication

### Dissertation

At the centre of the programme is the dissertation, developed in consultation with the programme leader and a supervisor who advises you about the design of your research. Your dissertation can be in a traditional academic format or include a creative research component, for example a screenplay, in-depth journalism piece, digital media artefact, radio programme or public relations campaign. Dissertations with a creative component also need to include an analysis that places the creative work in its critical, theoretical, historical and personal context.

AUT encourages early application. Places are limited.

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

# Postgraduate Diploma and Postgraduate Certificate in Communication Studies

**From investigative journalism to screenwriting, from digital media to public relations, and from critiques of creative organisations to radio, the Postgraduate Diploma in Communication Studies and Postgraduate Certificate in Communication Studies provide a relevant and flexible entry into postgraduate study.**

## Entry requirements

### Minimum entry requirements

- Bachelor of Communication Studies or equivalent OR
- Relevant professional qualification or experience approved by the Dean to be equivalent to a bachelor's degree

## Postgraduate Diploma in Communication Studies

This is a one-year intensive postgraduate qualification. You can choose a pathway without a specialisation or a specialised pathway.

### Standard pathway (no specialisation)

This option is for students who want to cover a broad range of communication areas before embarking on further study or their career.

**Public Relations**

This pathway prepares you for management roles in corporate communication, consultancy work and internal communication. Close relationships with industry leaders and professional associations ensure strong dialogue and mentoring opportunities.

**Journalism**

This pathway focuses on the professional demands of the news media and the skills required to meet those demands. You gain experience in news reporting, different writing specialisations, bicultural reporting, media law and ethics.

**Digital Media**

This pathway allows you to develop skills across digital media applications and platforms. It is particularly suited to students with a background in digital media, and will be offered if there is demand.

**Screen Production**

Develop critical knowledge and professional skills for roles in the screen industries, including skills in pre-production, production and post-production.

## Postgraduate Certificate in Communication Studies

Students will be guided in their choice of papers so that their study forms a coherent programme in their chosen field. You need to complete 60 points from the Master of Communication Studies.

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

Postgraduate Diploma in Communication Studies
PgDipCS | AK1299

### QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 19 Jan & 22 June 2018 |

Postgraduate Certificate in Communication Studies
PgCertCS | AK1322

### QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 60 |
| Duration: | ½ year F/T, 2 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 19 Jan & 22 June 2018 |

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 19 Jan & 22 June 2018 |

**Camilla Wyness**
**Design and Content Marketer, TimeZoneOne, Chicago**
**Postgraduate Diploma in Brand Communication**
**Bachelor of Design in Communication Design**

"As part of my communication design degree, I minored in advertising creativity, which I think really was the making of who I am. I loved the combination of clever thinking and artistic flair that comes with advertising. I've told so many people that going back to study the Postgraduate Diploma in Brand Communication was one of the best decisions I ever made. I learned so much more about the world of branding, marketing and advertising. The academic staff and the quality of what they teach is incredible – you learn so much in such a short period of time! I love AUT because they're genuinely interested in helping you get a foot in the door. I have friends who studied elsewhere that have said that their university didn't seem to be overly interested in helping them achieve this."

# Postgraduate Diploma in Brand Communication

PgDipBC | AK1326

**When advertising was king, ad agencies were the brand guardians. They were the voice of the consumer and took great pains to translate product benefits into consumer needs and desires. Now that's all changed. We live in a society where promotion is everywhere and everything from goods and organisations to people, ideas and cultures are seen as a brand.**

**The Postgraduate Diploma in Brand Communication has been developed to address demand for a qualification in this growing field. You will study brand storytelling, brand co-creation and the synergy between brand strategy, brand experience, brand expression and corporate responsibility. Throughout your studies you develop the critical knowledge and professional skills that are essential for marketing and communication roles in various industries and organisations, including not-for-profit, NGOs, and the commercial and corporate sectors.**

## Entry requirements

### Minimum entry requirements

One of the following:

- Bachelor of Communication Studies or equivalent OR
- Relevant professional qualification or experience approved by the Dean to be equivalent to a bachelor's degree

## What this qualification covers

Papers cover creative and applied practice and process from agency and supplier perspectives. At the heart of the programme is an in-depth creatively-focused project relevant to a particular genre of practice, working closely with an industry partner to complete a project capable of implementation.

Topics include:

- Creating the brand manifesto
- Implementing the brand story
- The importance of authenticity to brands
- Influencing societal behaviours

## Further study

Graduates of the Postgraduate Diploma in Brand Communication with a merit standing of B or higher are eligible to staircase into the second semester of the Master of Communication Studies.

AUT encourages early application. Places are limited.

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

# Master of Communication Studies

MCS | AK1323

**The Master of Communication Studies is your opportunity to research an area of your interest in the field of communication studies. In your first year, you complete papers that are a mix of creative and academic work, and cover current developments in media and communication studies. The research thesis is at the core of the programme. You will work with our experienced supervisors to design and develop your thesis. Many of our students produce a creative component as part of their thesis, for example a screenplay, an in-depth journalism piece, digital media artefact, radio programme or public relations campaign.**

**Our supervisors have expertise across a range of fields – from journalism to organisational communication, radio to critical discourse analysis, political economy to digital media production, and film studies to public relations.**

## Entry requirements

### Minimum entry requirements

Must have completed the Bachelor of Communication Studies or an equivalent qualification with a B grade average or higher in Level 7 papers.

May be required to attend a selection interview.

## What this qualification covers

In the first part of your study you choose papers to suit your individual interests, including a core research methods paper and at least one paper on current developments in media and communication studies.

In the second part of your study, you focus on your thesis. The thesis can be produced in a traditional academic form or may include a creative component as part of your research inquiry. A thesis that includes a creative component also needs to include a written exegesis that analyses and critically reflects on the creative work in its critical, theoretical, historical and personal context.

Topics include:

- Research methods
- Media context
- Public relations
- Creative industries
- Digital, mobile and social media
- Journalism
- Radio
- Television and screen production
- Brand communication

AUT encourages early application. Places are limited.

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T, 4 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |
| Apply by: | 19 Jan & 22 June 2018 |

**Claudio Varoli Piazza**
**Master of Communication Studies student**

"If you work in journalism, film or advertising, not to mention social media or mobile, you have to rely on a digital media engine to successfully power your message and reach your audience. Digital media is 'the' technical and creative toolkit you're likely going to need in communications. I had been checking postgraduate programmes for a while and I found that AUT was the only university offering such an innovative curriculum. I had always dreamt of moving to New Zealand, and AUT's hands-on approach and outstanding facilities made it the obvious choice for me. I like that the programme consists of real life projects and workflows. If you study, for example, the Moving Image paper, you end up writing, producing, shooting, editing and post-producing a short movie. It's an excellent learning experience."

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

# Engineering, Computer & Mathematical Sciences

14

Internationally recognised research centres

**Roneel Sharan**
**Postdoctoral Research Fellow, University of Queensland, Brisbane, Australia**
**Doctor of Philosophy**

"My PhD research was in the area of sound event recognition, which is essentially a pattern recognition problem, similar to automatic speech recognition and fingerprint recognition. The aim of my research was to improve the sound recognition rate in the presence of environmental noise. Pattern recognition requires a high degree of numerical analysis, which highly interests me. While AUT is a relatively new university, it's already one of the largest in New Zealand, with internationally recognised research programmes, good research facilities, and well-qualified and experienced staff. My time at AUT has helped broaden my knowledge and skillset, and enabled me to make new professional contacts and friends from all over the world. The research experience at AUT has also helped me get a postdoctoral research fellowship at a highly ranked university in Australia."

**Where to next? Postgraduate study is your opportunity to ask big questions about the future of engineering and ICT, identify problems and challenge yourself to create the solutions. You'll be based in our brand new Engineering, Technology and Design building at the AUT City Campus, and can choose from a broad range of flexible postgraduate study options, from postgraduate diplomas to master's degrees and PhDs.**

**We have a strong focus on industrial research in collaboration with industry partners, and our research directly informs our teaching. This means that you will be exposed to the latest developments across engineering, computer and mathematical sciences. As a postgraduate student you have many opportunities to work closely with AUT's world-class research entities and internationally renowned academics, and have access to state-of-the-art facilities, systems and development tools.**

## Our postgraduate programmes

**Computer and mathematical sciences**

- Bachelor of Computer and Information Sciences (Honours) – see page 34
- Bachelor of Science (Honours) – see page 35
- Postgraduate Diploma and Postgraduate Certificate in Computer and Information Sciences – see page 36
- Master of Computer and Information Sciences – see page 37
- Postgraduate Diploma and Postgraduate Certificate in Science – see page 38
- Master of Science (180 points) and Master of Science (Research) – see page 39
- Master of Analytics – see page 40
- Master of Health Informatics – see page 41
- Master of Information Security and Digital Forensics – see page 42
- Master of Service-Oriented Computing – see page 43
- Master of Philosophy – see page 10
- Doctor of Philosophy – see page 11

**Engineering**

- Postgraduate Diploma and Postgraduate Certificate in Engineering – see page 44
- Master of Engineering – see page 45
- Master of Engineering Project Management – see page 46
- Master of Construction Management – see page 47
- Master of Philosophy – see page 10
- Doctor of Philosophy – see page 11

## Computer and mathematical sciences research expertise includes

**Computer sciences**

- Artificial intelligence, including pattern recognition and signal processing, data mining, natural language processing, computational intelligence and robotics
- Software engineering, including software development methods, requirements engineering and metrics
- Mobile and distributed computing including mobile systems, high performance computing, multi-agent systems, grid and parallel computing
- Networks and security, ad-hoc mobile networks and RFID applications
- Human-computer interaction, including usability
- Nature-inspired computing, including artificial immune systems and quantum computing
- Graphics, including real-time rendering, computer vision and augmented reality
- Pedagogical issues concerning the teaching and learning of computing
- Research activities in networks and security, forensic IT and cloud computing infrastructure

**Mathematical sciences**

- Applied mathematics, including mathematical modelling in economics and finance, numerical algorithm development and implementation, algorithmic game theory and stochastic optimisation, topology and applications, dynamical systems, mathematical and computational modelling in physical electronics and charged particle optics, vibration of composite structures, linear wave theory in fluids, non-standard axiomatic theory, mathematical modelling in statistical physics
- Applied statistics/analytics, including computational statistics, advanced inference and multivariate analysis, Bayesian interference method and optimisation, stochastic modelling, mixture modelling, continuous and discrete time Markov chains, semi-Markov processes with applications to queuing models, Monte Carlo Markov chains, Markov decision processes, warranty analysis, industrial risk assessment
- Astronomy and radio astronomy, including astrophysics, physics of stars, galaxies, and interstellar matter, astrospectroscopy and interferometry, advanced computer simulations and analysis of astronomical data
- Pedagogical issues concerning the teaching and learning of mathematics


Rated 'Excellent' for our IT infrastructure

**Su Yuan Chan**
**Master of Science student**

"Mathematics is everywhere, and it has so many applications. For example, my current research project is on influence games. It's an analysis of social networks and how an individual's level of influence can affect each coalition. I chose this topic as it enables me to model real-life situations, using both coalitional game theory and graph theory as the basis of my research. I would definitely recommend the Master of Science. Along with receiving a great education, my time at AUT has also led to meeting new friends and colleagues from various backgrounds and cultures. These people have been an integral part of my experience as AUT, and have contributed immensely to my academic development. The postgraduate supervisors have been very welcoming, and they share similar passions in their own study and research. They deeply care about guiding me on my research project and have always been approachable and happy to provide critical feedback."

# Engineering, Computer & Mathematical Sciences
Continued

Student access to high-tech labs network

**Nurul Hidayah Razak**
**Doctor of Philosophy candidate**

"I find mechanical engineering interesting. When I was a child I was always wondering how a vehicle can move from one point to another. It was questions like this that first made me interested in mechanical things and engineering. My PhD research focuses on nickel-based superalloys and their effect on tool deterioration for her doctoral thesis. Because of their ability to maintain mechanical strength and corrosion resistance at high temperature, nickel-based superalloys are widely used in aerospace engineering. But this ability also reduces the tool life of cutting tools. While there has been a lot of research on tool deterioration during the machining of nickel-based superalloys, how the tool deteriorates and the modes of tool failure are not yet fully understood. My research aims to answer these questions. Studying here is the best thing that has happened in my life. AUT has one of the best support systems for research students."

## Engineering research expertise includes

**Biomedical technologies**
- Biomedical signal processing
- Cardiovascular system dynamics
- Respiratory system dynamics and devices
- Bio-smart materials

**Computer engineering**
- Reconfigurable and high performance computing
- Reliability of devices and integrated circuits
- Embedded systems
- Image processing

**Construction management**
- Procurement and decision support systems
- Supply chain management
- Construction logistics
- Lean construction
- Defects reporting and quality management
- Transaction cost measurement in construction projects
- Retention strategy
- Security of payments in construction
- Productivity in construction
- Corporate social responsibility

**Emerging research areas**
- Sports and rehabilitation engineering
- Engines and vehicles
- Vehicle crash analysis

**Industrial optimisation, modelling and control**
- Industrial computing and numerical analysis
- Operations research and model-based control
- Industrial control auditing and control performance analysis
- Neural networks, fuzzy control
- Robotics and mechatronics

**Materials and manufacturing technologies**
- Microstructure and property analysis
- Phase transformation (solid state and solidification)
- Materials for aeronautical and aerospace vehicles
- Building materials
- Smart optics (polymers)
- Welding metallurgy
- Metal forming

- Machining and machinability
- Friction stir processing
- Rapid prototyping and additive manufacturing
- Simulation and modelling of manufacturing processes

**Power and energy engineering**
- Power system operation and control
- Deregulated power systems
- Energy management
- Power electronics/induction power transfer
- Renewable energy
- Solar energy research
- Smart grid

**Signal processing**
- Speech recognition
- Pattern recognition

**Telecommunications**
- Sensor networks and network-embedded intelligence
- Smart homes
- Emerging broadband wireless technologies
- Ambient intelligence

## Contact us

**Computer and mathematical sciences**
Programme Administrator (PhD and MPhil)
Phone: **+64 9 921 9895**
Email: **sphdteam@aut.ac.nz**

Postgraduate Academic Administrator
Phone: **921 9999** ext **5123**

Programme Administrator
(Mathematical sciences postgraduate programmes)
Phone: **09 921 9999** ext **5123**
Email: **mathspg@aut.ac.nz**

**Engineering**
Postgraduate Programme Co-ordinator
Phone: **09 921 9871**

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


2nd highest number of students in New Zealand studying computer and mathematical sciences

**Sunil Dhunnookchand**
**Project Manager, Coca-Cola Amatil (NZ) Ltd**
**Master of Service-Oriented Computing**

"Cloud computing is here to stay and I would highly recommend the Master of Service-Oriented Computing if you're interested in this field. The programme is closely connected to the industry, and lots of the papers focus on real-life case studies, looking at what businesses around the world are doing in the service oriented world. It gives you an idea of the value of service oriented computing for the industry, and there were many opportunities to create contacts and network with people in the industry. I now feel more productive when it comes to identifying solutions to business issues, and more confident that I've chosen the right solution. Juggling work, family commitments and study was not always easy, but AUT was clearly aware of those challenges. They organised specific sessions early on to help us get back into academic writing and planning for upcoming assignments."

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

# Bachelor of Computer and Information Sciences (Honours)

BCIS(Hons) | AK3687

**The Bachelor of Computer and Information Sciences (Honours) is for students who have graduated with a Bachelor of Computer and Information Sciences, or a similar qualification. It will give you a competitive advantage in the global information communication and technology job market, and can fast-track your progress to doctoral studies.**

**Advance your understanding of the latest developments in computer and information sciences, and choose from papers that range from artificial intelligence and software systems engineering to knowledge engineering and information systems technology. In the second semester you investigate a topic of your choice through your research project.**

## Entry requirements

### Minimum entry requirements

Bachelor of Computer and Information Sciences (or equivalent) with a B+ grade average or higher in level 7 papers.

## What this qualification covers

In Semester 1, you will take a range of papers that suit your interests. In Semester 2, you undertake your honours dissertation – normally a small-scale research project, under the guidance of an academic supervisor.

Topics include:

- Research methods
- Software architecture and development
- Data mining, data warehousing and big data
- Health informatics and bioinformatics
- Artificial intelligence
- Autoidentification
- Geocomputation

AUT encourages early application. Places are limited.

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

# Bachelor of Science (Honours)

BSc(Hons) | AK1040

**The Bachelor of Science (Honours) is for students with an undergraduate degree in applied mathematics or computer science. It will prepare you for higher-level careers or a master's degree or PhD. At the heart of the programme is the honours dissertation, an independent small-scale research project on a scientific topic. We have strong links with key industry organisations, and many students complete their research project in collaboration with an industry partner. Papers focus on the latest developments in applied mathematics or computer science – including astronomy and astrophysics, modelling, statistics, optimisation and operations research, system development, computer graphics and high performance computing.**

## Entry requirements

### Minimum entry requirements

Bachelor of Mathematical Sciences or Bachelor of Science (or equivalent) with a B grade average or higher in level 7 papers.

## What this qualification covers

The degree consists of six papers (90 points) and a dissertation (30 points), where you undertake a supervised research project, sometimes in collaboration with an industry partner. You can specialise in applied mathematics or computer science.

### Applied Mathematics pathway

The Applied Mathematics pathway equips students with advanced mathematical methods and techniques, and their applications in modern science, astronomy, engineering and finance.

### Computer Science pathway

The Computer Science pathway covers advanced industry technologies including: Java's JPA and JSF, EJB and Spring framework, smartphone platforms, bleeding edge and emerging technologies such as manets, web 2.0 techniques such as REST and mashups, advanced real-time graphics programming, and parallel and grid computing.

Topics include:

- Research methods
- Advanced topics in applied mathematics, numerical analysis, analytics and computer graphics
- Astronomy
- Mathematical modelling and stochastic modelling
- Mobile system and server system development

AUT encourages early application. Places are limited.

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

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

**Biyuan Wang**
**Bachelor of Science (Honours) student**
**Bachelor of Mathematical Sciences in Analytics and Applied Mathematics**

"I love maths. For my future research, I would like to focus on mathematical modelling. Eventually I would like to do a PhD in mathematics, and I believe that completing the Bachelor of Science (Honours) will be a great experience for my future career. AUT's reputation for being a student-focused university is a key reason I chose AUT. What I love about AUT is that if you ever have trouble with your studies, your teachers will help you patiently. I like that AUT students are encouraged to discuss academic problems in the tutorials. I enjoy being able to share my knowledge with others. I would definitely recommend studying mathematical sciences at AUT. If I ever feel that I need help with my research project, my supervisors – Professor Jiling Cao, the head of AUT's mathematics department, and Dr Wenjun Zhang – always help me patiently."

# Postgraduate Diploma and Postgraduate Certificate in Computer and Information Sciences

Postgraduate Diploma in Computer and Information Sciences
PgDipCIS | AK3745

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

Postgraduate Certificate in Computer and Information Sciences
PgCertCIS | AK3746

## QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 60 |
| Duration: | ½ year F/T, 1 year P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

**These coursework-based qualifications include papers from the Master of Computer and Information Sciences. You can choose from a wide range of papers that cover the latest thinking and developments in computer and information sciences – including artificial intelligence, big data, bioinformatics, 3D technologies and software architecture.**

**Throughout your studies you will broaden your knowledge within specialist fields of computer and information sciences, and develop advanced analytical, planning and critical thinking skills. Graduates may progress from these programmes to further study at master's level.**

## Entry requirements

### Minimum entry requirements

One of the following:

- Bachelor of Computer and Information Sciences or equivalent OR
- Graduate Diploma in Computer and Information Sciences or equivalent OR
- Relevant professional qualification or experience approved by the Dean (or representative) to be equivalent to a bachelor's degree

## What these qualifications cover

You must complete 120 points for the Postgraduate Diploma in Computer and Information Sciences or 60 points for the Postgraduate Certificate in Computer and Information Sciences.

Topics include:

- Research methods
- Intelligent surveillance
- 3D displays and spatial interaction
- Nature inspired computing
- Video and image processing
- eSystems design and development

AUT encourages early application. Places are limited.

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

# Master of Computer and Information Sciences

MCIS | AK1329

**The Master of Computer and Information Sciences is for those looking to advance their undergraduate degree, improve their career opportunities, or explore a specialist area of interest. You develop skills that can be applied in practice, in industry and in academic research, and complete a significant research project in an area of your interest.**

**Research is at the heart of this programme. Research topics range from interdisciplinary research to specialised topics within data mining, knowledge engineering, information systems, robotics, bioinformatics, health informatics, mobile applications, radio frequency identification (RFID), artificial intelligence, information security, computational astronomy, geocomputation or networking. Many of our students work closely with one of our research institutes or laboratories for their research project. Successful graduates are well prepared for further study at doctoral level.**

## Entry requirements

### Minimum entry requirements

Must have completed the Bachelor of Computer and Information Sciences or an equivalent qualification with a B grade average or higher in Level 7 papers.

## What this qualification covers

The Master of Computer and Information Sciences allows you to focus your studies on one of the discipline clusters below, or combine papers from different clusters.

Discipline clusters include:

- Artificial Intelligence and Knowledge Engineering – including bioinformatics, health informatics, neuroinformatics, data mining and knowledge engineering, artificial intelligence, machine learning, nature-inspired computing and geocomputation
- Information Systems and Technology – including data warehousing and big data, IT strategy and policy, ICT issues in the SME sector, eSystems design and development, visual information processing, information visualisation, human computer interaction
- Software Systems Engineering – including usage centred design, software requirements engineering, software architecture, software development methods

You will take the core paper Research Methods, and will complete either a research project or thesis, which may involve the creation of a software artefact.

AUT encourages early application. Places are limited.

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

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T, 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

**Sagorika Datta**
**Master of Computer and Information Sciences student**

"I decided to come to AUT because of its positive and inclusive environment. AUT seemed like the place that would help me if I needed it, without me even having to ask. For someone who was travelling almost 12,000 kilometres to a new home, this was a strong form of reassurance. I'm passionate about emerging technology and the speed at which social media and mobile technology have become significant industries. The advent of streaming sites like YouTube where people offer tutorials, the rise of independent entrepreneurs selling handcrafts, the popularity of vlogs – these have all evolved into full-blown earning professions. Yet despite their popularity there is little information available about them in the academic world. That was the impetus for my research proposal – how could a topic that is so extensively prevalent be almost completely unacknowledged by the academic community?"

# Postgraduate Diploma and Postgraduate Certificate in Science

**These coursework-based qualifications include papers from the Master of Science. You can choose from a wide range of papers and broaden your knowledge within specialist fields of computer and information sciences. Throughout your studies you develop advanced analytical, planning and critical thinking skills. Graduates may progress from these programmes to further study at master's level.**

## Entry requirements

### Minimum entry requirements

- Bachelor of Science or equivalent OR
- Graduate Diploma in Science or equivalent OR
- A relevant professional qualification or professional experience approved by the Dean (or representative) to be equivalent to a bachelor's degree [1]

## What these qualifications cover

These qualifications cover a variety of topics, including:

- Logic, games and automata
- Financial models, mathematics and decision analysis
- Multivariate analysis
- Optimisation and operations research

AUT encourages early application. Places are limited.

1. For the postgraduate certificate only.

Postgraduate Diploma in Science
PgDipSc | AK1038

### QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

Postgraduate Certificate in Science
PgCertSc | AK1039

### QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 60 |
| Duration: | ½ year F/T, 1 year P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

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

# Master of Science (180 points) and Master of Science (Research)

**Staffed by research-focused academics, the Master of Science has advanced papers in applied mathematics, applied probability, astronomy, computer science, modelling and the emerging field of analytics. This is your opportunity to engage in cutting-edge research, and be exposed to advanced computer, mathematical and analytical methods. The curriculum is contemporary, relevant and wide-ranging, and accesses our outstanding facilities, including the two radio telescopes at Warkworth and high performance computing systems.**

## Entry requirements

### Minimum entry requirements

One of the following (or equivalent) with a B grade average in papers at level 7:

- Bachelor of Science OR
- Graduate Diploma in Science

## What these qualifications cover

In Year 1, you choose papers that suit your interests.

**Master of Science (180 points)**

In the third semester you undertake a Research Project (60 points), gaining skills in critical analysis and expertise in research methods, analysis, evaluation, and drafting a paper in a format suitable for publication.

**Master of Science (Research)**

In Year 2 you focus on your research thesis.

Topics include:

- Official statistics
- Astronomy and astrophysics
- Advanced topics in applied mathematics, numerical analysis, analytics and computer graphics
- Mathematical modelling and stochastic modelling
- Mobile system and server system development
- Philosophy of computing technology

AUT encourages early application. Places are limited.

Master of Science (Research)
MSc | AK1037

### QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 240 |
| Duration: | 2 years F/T, 4 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

Master of Science (180 points)
MSc | AK2037

### QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1 year F/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

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

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T, 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

**Rory Bunker**
**Data Science Intern, Loyalty New Zealand**
**Master of Analytics**

"I worked at Air New Zealand prior to starting the master's degree, and found that the business world is becoming increasingly data-driven. Organisations are starting to move from business intelligence reporting, which is mainly focused on analysing the past, to advanced analytics techniques that focus on predicting future events. I felt that the Master of Analytics at AUT offered the right combination of computing, statistics and mathematics to give me a broad base of knowledge in the analytics field. The degree also has a strong technical focus, which appealed to me. I love that as part of the Master of Analytics, students have the opportunity to work on a research project based on their interests and background. I would definitely recommend the Master of Analytics. It helps you develop a wide range of technical, research and communication skills, which are all important if you want a career in analytics."

# Master of Analytics

MAnalytics | AK1321

**Today's businesses and government bodies deal with huge quantities of data. There is global demand for professionals with strong analytics skills who can help organisations meet the increasing challenges of organising, storing and manipulating data. The Master of Analytics addresses this demand, and provides you with the mathematical, statistical and computational skills for large-scale data modelling. It caters for students from a variety of disciplines, as well as professionals already working in the industry.**

**Through your studies you develop advanced analytics and database skills as well as an understanding of the latest theory, tools and techniques for statistical modelling and mathematical simulation.**

## Entry requirements

### Minimum entry requirements

Relevant bachelor's degree in mathematical sciences (or equivalent) with a B grade average in papers at level 7 or above.

## What this qualification covers

You will complete a range of papers, as well as a research project on a topic of your interest. Depending on your choice of papers, you could qualify for a Statistical Analysis System (SAS) Joint Certificate in Advanced Analytics.

Topics include:

- Computational mathematics and statistics
- Optimisation and operations research
- Data mining and machine learning
- Data warehousing and big data
- Mathematical modelling and simulation

AUT encourages early application. Places are limited.

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

# Master of Health Informatics

MHI | AK1319

**During their healthcare journey patients may interact with a range of services and electronic systems that need to work effectively to provide quality care. These may include mobile devices (mhealth), monitoring and communication systems (telehealth), hospital and community electronic health records (EHRs) and government systems. However there is a shortage of professionals who understand the needs of clinical staff to develop effective health informatics IT tools.**

**The Master of Health Informatics addresses this demand. It's aimed at IT graduates and IT professionals interested in the latest developments and trends in the area. Graduates may work in many different sectors including the healthcare software industry, hospitals or district health boards, government, private healthcare providers, non-governmental organisations or primary health organisations.**

## Entry requirements

### Minimum entry requirements

- Relevant bachelor's degree (or equivalent) with a B grade average or higher in level 7 papers
- In exceptional circumstances an applicant who does not meet the requirements above but who has an appropriate combination of academic and professional experience may be considered for admission subject to completion of any relevant prerequisite papers

## What this qualification covers

The core papers and electives take one year to complete. The final part of the programme is a one-semester applied research project, which may be in collaboration with health sector organisations and research groups at AUT.

Topics include:

- Understanding the use of information in the health sector
- Standards in health information
- Health-related information systems
- Issues with the use of health IT
- Analysis of health data
- Methods of collecting health data

AUT encourages early application. Places are limited.

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T, 3 years P/T |
| Campus: | City & South |
| Starts: | 26 Feb & 16 July 2018 |

**Ayush Narula**
**Software Developer, Invenco Group Ltd**
**Master of Health Informatics**

"My background is in computer science but I've always been intrigued by the human body and ways to improve its health. The Master of Health Informatics was a great way to pursue two of the things I love; computers and human health. This has been one of the best experiences for me, and it has given me memories I will cherish my whole life. Studying health informatics has helped me learn a lot about the New Zealand health industry, and its health organisations and systems. Professor Dave Parry has been really helpful and is great at breaking down tough concepts to make them easy for students to understand. I love that the programme focuses on practical learning. As part of the Autoidentification paper, for example, a friend and I developed an automated robot car to present to the children at Rongomai School. That was a great experience."

# Master of Information Security and Digital Forensics

MISDF | AK1324

**Security of computer systems and networks is a major concern for organisations and individuals. With the rapid expansion of the Internet, cybercrime and malicious software deployments are on the increase. There is a need for security professionals who can protect assets and information by securing networks and computer systems. The Master of Information Security and Digital Forensics also develops skills in discovering and recording digital forensic evidence of crimes and malicious behaviour by extracting data from networks, hard drives, cell phones and other digital devices.**

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T, 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

**Nicole Girvan**
**Master of Information Security and Digital Forensics student**

"I've mainly worked in analysis and software delivery project roles, and wanted to branch out and explore a new and complementary area of information technology. My goal is to work in the security and forensics area, and eventually pass on my knowledge to others. After looking at various university programmes, I decided the combination of practical labs, hands-on learning and interesting academic content offered by the Master of Information Security and Digital Forensics would give me the best education and help me kick start my career into research and employment in this area. I would absolutely recommend this programme if this is an area of passion for you. I've most enjoyed the hands-on tools labs where we can apply our learning to real-life scenarios, using industry standard software applications. The interaction with my classmates and lecturers who have similar academic interests has also been a highlight for me."

## Entry requirements

### Minimum entry requirements

- Bachelor of Computer and Information Sciences (or equivalent) with a B grade average in papers at level 7
- May be required to supply references and attend a selection interview

## What this qualification covers

The programme offers a choice of two pathways to complete the required 180 points and is primarily a mix of security and digital forensics papers with some elective papers available. You can choose to complete six papers and undertake a 90-point thesis, or eight papers and a 60-point project.

The programme is a mix of academic study and practical labs supported by workshop sessions. Dedicated specialist hardware and software is provided for students' use in these sessions and is available to them for the research component of the qualification.

Topics include:

- Protecting computer and network systems
- Critically analysing current security threats and planning mitigation strategies
- Seizing and securing IT and other digital equipment used for criminal activity
- Interpreting and analysing the content of hard disks and other electronic media to build an understanding of the processes underpinning possible criminal activity
- Gathering evidence from electronic media and other sources of potential criminal activity in a systematic and rigorous way
- Presenting such evidence in a court of law in a way that is intelligible to non-experts

AUT encourages early application. Places are limited.

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

# Master of Service-Oriented Computing

MSOC | AK1318

**Service science, cloud computing and service-oriented computing are growth sectors, and there's high demand for skilled IT professionals equipped to work in this environment. The Master of Service-Oriented Computing addresses this demand.**

**This master's degree builds on your professional experience in the information technology industry and prepares you for a career in cloud computing, service science and service-oriented computing. It's also suitable for high-quality graduates from other disciplines who meet the entry criteria and want to develop their practical competencies. You will be challenged by some of the latest trends in practice and research, and learn to plan and complete a piece of original research.**

## Entry requirements

### Minimum entry requirements

One of the following with a B grade average or higher in papers at level 7 or above:

- Relevant three-year bachelor's degree OR
- Relevant bachelor's degree with honours OR
- Relevant postgraduate diploma

## What this qualification covers

The programme is a mix of technical and professional skills, and includes a range of papers as well as a research project.

Topics include:

- Fundamentals of services and service science
- Principles of cloud computing and virtualisation
- Technical aspects of developing software in the services platform
- Development and deployment of sophisticated services
- Managing the roles of client and service providers
- Understanding technologies and issues in the field of contemporary web-based information systems

AUT encourages early application. Places are limited.

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1½ years F/T, 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

**Mumbi Monica Makau**
**Master of Service-Oriented Computing student**

"My research project is on creating effective learning environments through cloud computing adoption in primary schools. I believe the study will help the education sector, students, parents and researchers understand the importance and some of the success factors in creating such learning environments at the grassroot level. The use of cloud computing in primary schools could also encourage more girls to consider careers in computing and technology. I believe students start envisioning their ideal careers at the tender age of 10. My country, Kenya, is actively championing IT initiatives that encourage women to get involved in science, technology, engineering or mathematics for the country's economic, technological and social growth. I would be humbled to be at the forefront of creating equal opportunities for young women, especially in rural or poor areas."

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

# Postgraduate Diploma and Postgraduate Certificate in Engineering

**Are you ready to take your engineering career to the next level? These coursework programmes cover the latest developments in engineering. You can choose from a wide range of papers in electrical, electronic, mechanical or production engineering. Throughout your studies you advance your engineering knowledge, as well as your technical and analytical skills. Graduates of these programmes will be well placed for further study at postgraduate level.**

## Entry requirements

### Minimum entry requirements

Completed one of the following:

- Bachelor of Engineering Technology or equivalent OR
- A professional qualification or relevant professional experience approved by the dean (or representative) to be equivalent to a bachelor's degree

## What these qualifications cover

**Postgraduate Diploma in Engineering**

The postgraduate diploma can serve as a pathway for graduates from the three-year Bachelor of Engineering Technology who want to progress to study at master's degree level.

**Postgraduate Certificate in Engineering**

This postgraduate certificate consists of specialist engineering topics designed to enable students to move from undergraduate to postgraduate level.

Topics include:

- Digital signal processing
- Real time systems
- Wireless sensor networks
- Robotics and automation
- Advanced fluids and heat transfer

AUT encourages early application. Places are limited.

Postgraduate Diploma in Engineering
PgDipEng | AK3566

### QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

Postgraduate Certificate in Engineering
PgCertEng | AK1296

### QUICK FACTS

| | |
|---|---|
| Level: | 8 |
| Points: | 60 |
| Duration: | ½ year F/T, 1 year P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

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

# Master of Engineering

ME | AK1325

**The Master of Engineering is designed to help you develop your research skills and enhance your knowledge in the field of engineering. There are two pathways: Research (includes a thesis), or Coursework (includes a research project). We're proud to be home to a number of renowned research institutes and centres, and many of our students complete their research project in collaboration with these well-known research entities. As a successful graduate, you will be well-prepared to return to the workforce or pursue further study.**

## Entry requirements

### Minimum entry requirements

Bachelor of Engineering, Bachelor of Engineering Technology or equivalent with a B grade average or higher in papers at level 7 or above.

## What this qualification covers

Research areas include:

- Telecommunications
- Power and energy engineering
- Computer engineering
- Signal processing
- Industrial optimisation, modelling and control
- Engines and vehicles
- Biomedical technologies
- Image and video processing
- Materials and manufacturing technologies

Please refer to pages 32–33 for more details on these research areas.

Topics include:

- Engineering research methodology
- Advanced control systems
- Innovation management
- Sustainable energy systems
- Biomedical thermofluids modelling
- Advanced manufacturing technology
- Intelligent systems
- Electrical power systems
- Computer-aided engineering and analysis

AUT encourages early application. Places are limited.

1. Applicants with a four-year engineering degree may be able to complete the Master of Engineering in one year full-time (120 points). Applicants with a three-year undergraduate engineering degree will be enrolled in the 180-point Master of Engineering, which takes one and a half years of full-time study.

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

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 180 |
| Duration: | 1–1½ years F/T, 2–3 years P/T[1] |
| Campus: | City |
| Starts: | Any time |

**Madona Bekhit**
**Discover Graduate, Vodafone New Zealand**
**Master of Engineering**
**Bachelor of Engineering Technology in Computer and Mobile Systems Engineering**

"My dad is an engineer, and when I was growing up I thought he was a superhero. He was always fixing things around the house and making them better. I really wanted to be that superhero for others, and that's why I decided to study engineering. The fact that AUT has an entire building equipped with the latest technology in the labs is awesome. I really enjoyed the 3D printing lab and using the different software available on the computers. I'm now part of Vodafone's sought-after graduate programme, which means I get to rotate around the different departments within the broad range of tech teams at Vodafone. I get to try out different roles within the tech areas and gain insight into the different departments."

# Master of Engineering Project Management

MEPM | AK1317

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 to 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

**Rajarajeshwari (Raji) Ashwin Rai**
**Assistant Project Manager, The Building Intelligence Group**
**Master of Engineering Project Management**

"There is a strong need for project management skills for engineering projects. My background is in mechanical engineering, but I was really interested in the project management side of things. AUT's Master of Engineering Project Management was perfect for me as it integrates engineering with project management skills. Having a master's degree is also extremely helpful if you want to progress your career. The papers covered a wide range of topics related to engineering projects – from advanced project management, human resources and asset management to corporate social responsibility and finance. It wasn't just theory-based learning; the emphasis was on the practical application of knowledge. I also appreciated that the academics didn't just cover standard textbook project management but also took you through non-conventional areas of project management. That's great preparation for the engineering projects you're likely to work on in your career."

**Leaders of 21st century engineering companies need to be technically proficient individuals understanding design, funding, engineering and assembly processes. They also need advanced communication skills and the ability to manage and motivate the people delivering engineering products.**

**The Master of Engineering Project Management is the first of its kind in New Zealand. It's intended to attract a range of engineering professionals for career development. The qualification is delivered by the School of Engineering, Computer and Mathematical Sciences but can incorporate appropriate business papers. The programme has two aims – to provide an exciting career development opportunity for practising engineering project managers aspiring to senior positions, and to provide recent graduate engineers with business and project management skills for modern engineering companies.**

## Entry requirements

### Minimum entry requirements

One of the following (or equivalent) with a B grade average or higher:

- Relevant four-year bachelor's degree OR
- Relevant bachelor's degree with honours OR
- Relevant postgraduate diploma
  AND
- Relevant project engineering or managerial professional experience approved by the Dean (or representative)

## What this qualification covers

The qualification is designed to be flexible and fit in with a working professional's life. Many papers are delivered as block courses.

Topics include:

- Supply chain management
- Engineering resource efficiency
- Employment relations
- Corporate social responsibility

AUT encourages early application. Places are limited.

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

# Master of Construction Management

MCM | AK1290

**The Master of Construction Management has been developed in partnership with construction industry leaders to meet the demand for professional managers who are technically competent in construction and able to manage the complexity of modern construction projects.**

**The programme is aimed at construction professionals including engineers, quantity surveyors and architects.**

## Entry requirements

### Minimum entry requirements

One of the following with a B grade average or higher in level 7 papers:

- Relevant bachelor's degree OR
- Relevant graduate diploma OR
- Relevant professional qualification or experience approved by the Dean (or representative) to be equivalent to at least a three-year bachelor's degree

  AND
- Relevant engineering or managerial work experience approved by the Dean (or representative) to be equivalent to one year of advanced study

## What this qualification covers

The qualification is designed to be flexible and many of the papers are delivered by block course mode.

Topics include:

- Advanced built environment
- Law for construction
- Procurement and contract management
- International construction
- Built asset management

AUT encourages early application. Places are limited.

## QUICK FACTS

| | |
|---|---|
| Level: | 9 |
| Points: | 120 |
| Duration: | 1 year F/T, 2 to 3 years P/T |
| Campus: | City |
| Starts: | 26 Feb & 16 July 2018 |

**Ioane (John) Tagiilima**
**Building Control Inspector, Auckland Council**
**Master of Construction Management student**

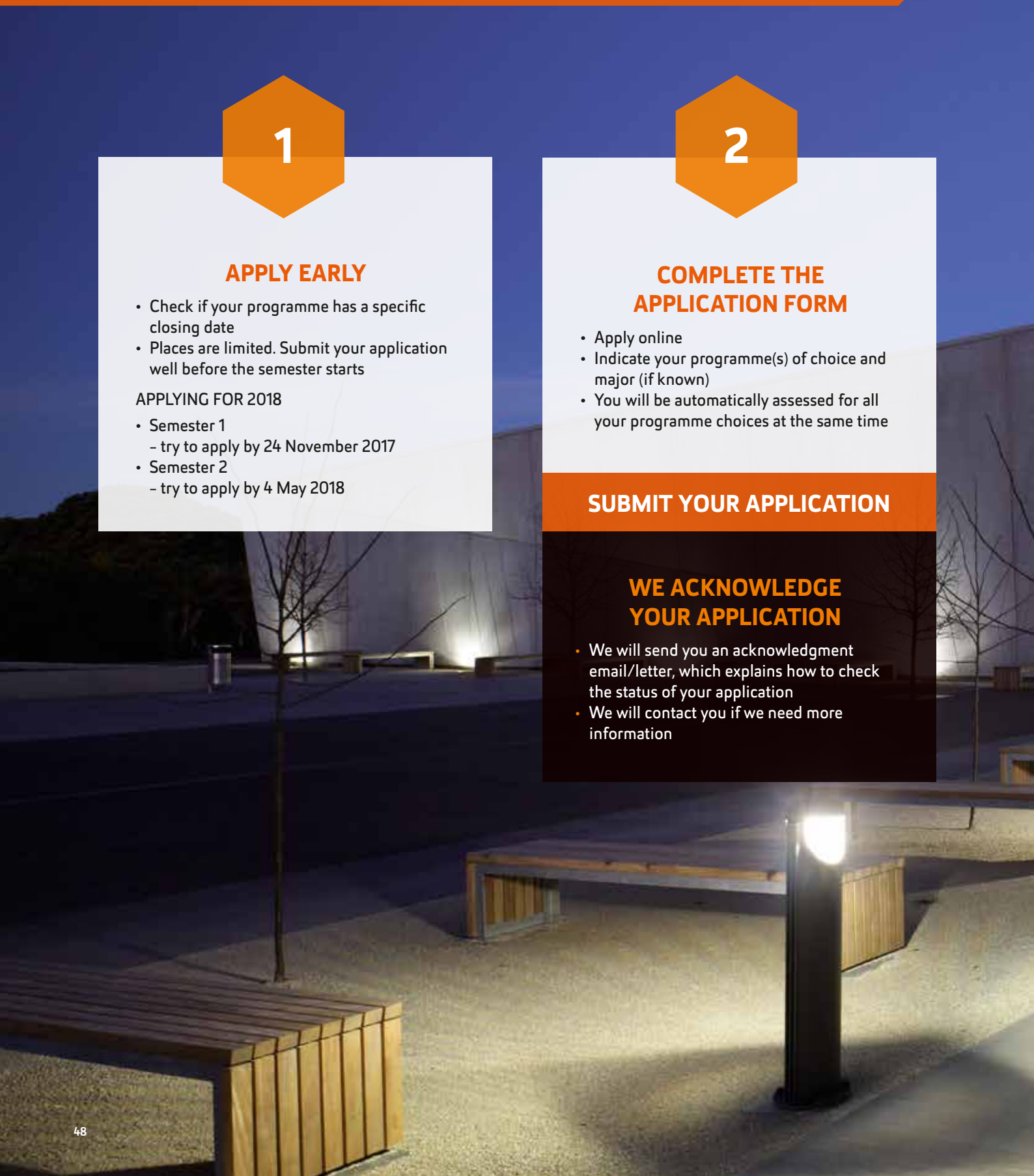
"I have the privilege of working alongside some AUT alumni and have been impressed by the way they approach tasks. I knew the programme would be a good transition from my work experience. Now that I'm studying the Master of Construction Management myself, I definitely see my work differently. The programme is highly relevant for the workplace and can set you up well for the future. The skills I'm learning are so relevant for my work. One of my assignments, for example, was on an ongoing construction project and involved meeting the project managers and engineers involved on the ground. Their dedication to their work and the everyday management of the different stages of their work was an eye opener. I found it inspiring."

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

# How to apply

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

International students should visit www.aut.ac.nz/international



1

## APPLY EARLY

- Check if your programme has a specific closing date
- Places are limited. Submit your application well before the semester starts

APPLYING FOR 2018

- Semester 1
  – try to apply by 24 November 2017
- Semester 2
  – try to apply by 4 May 2018

2

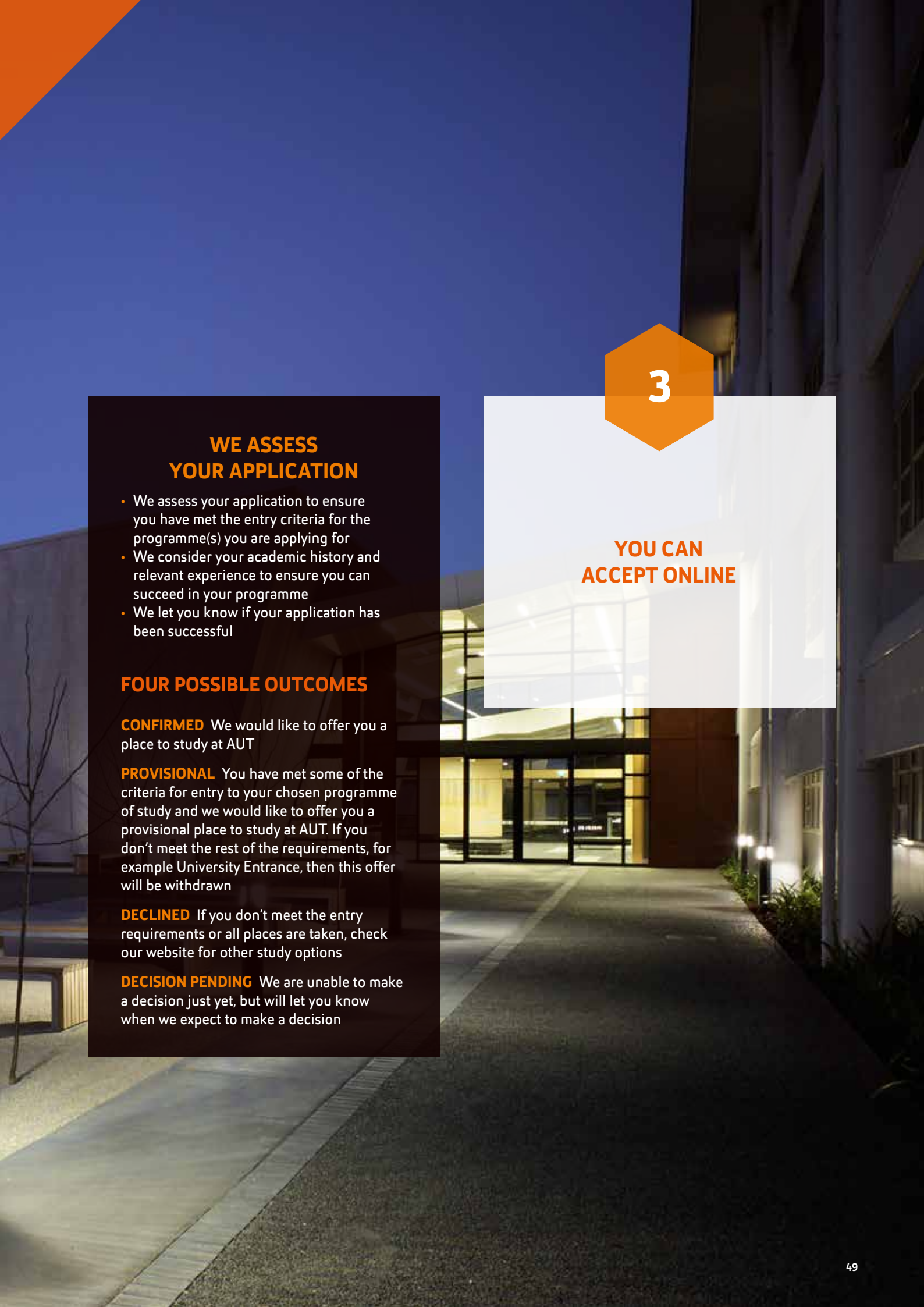
## COMPLETE THE APPLICATION FORM

- Apply online
- Indicate your programme(s) of choice and major (if known)
- You will be automatically assessed for all your programme choices at the same time

## SUBMIT YOUR APPLICATION

## WE ACKNOWLEDGE YOUR APPLICATION

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



3

## 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

## FOUR 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, for example University Entrance, then this offer will be withdrawn

**DECLINED** If you don't meet the entry requirements or all places are taken, check our website for other study options

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

## YOU CAN ACCEPT ONLINE

# 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.**

## Fees

To give you an idea of approximate costs, the 2017 tuition fees for domestic students are shown below (based on full-time study and completing 120 points a year). The 2018 tuition fees will be advertised on **www.aut.ac.nz/fees** as soon as they have been set.

**Postgraduate qualifications**

Doctor of Philosophy and Master of Philosophy

| | |
|---|---|
| Fee (per year) | **Approximately $6,503.00[1] (GST inc)** |

Other postgraduate programmes

| | |
|---|---|
| Fee (per year) | **Approximately $8,211.00[1] (GST inc)** |

1. Part-time students (part-time isn't applicable to the Doctor of Philosophy) pay a proportion of the fee based on the number of academic points they are studying.

If you are an international student, please visit **www.aut.ac.nz/fees** for fees and information.

## Other fees you may have to pay:

- 2017 Compulsory Student Services Fee – $641.80 for 120 points or $5.12 per academic point (GST incl)
- 2017 Building Levy – $68.20 for 120 points or $0.57 per academic point (GST incl)
- 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 **(09) 921 9779** or the AUT Student Hub on **0800 AUT UNI (0800 288 864)**.

## 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 **(09) 921 9837** or visit **www.aut.ac.nz/scholarships**

## Student loans and allowances

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**

## Help with planning and budgeting

We know that studying can be hard on your finances, and can help students manage their money and stay within budget. We also assist students in financial hardship through food and transport grants, and provide assistance with student loans and allowances.

For more information visit **www.aut.ac.nz/student_services/financial**

## StudyLink Sussed website

A useful financial resource is the StudyLink Sussed website. The website has handy tools, tips and information to help you plan and understand the costs you will have while studying.

Visit **www.studylink.govt.nz**

## How to pay your fees

| | |
|---|---|
| **ONLINE** | You can pay by credit card or by internet banking online at **www.aut.ac.nz.** Your login details will be required.<br>OR<br>Bank transfer: You can make a direct fee payment into AUT's bank account. Visit **www.aut.ac.nz/payment-options** |
| **POST** | Pay by cheque, credit or debit card by completing the payment slip on your statement/tax invoice, detach and post to: Fee Payment, AUT, Private Bag 92006, Auckland 1142 |
| **FAX** | Pay by credit or debit card by completing the payment slip on your statement/tax invoice and fax to (09) 921 9985 |
| **IN PERSON** | City Campus: AUT Student Hub, WA building<br>North Campus: AUT Student Hub, AS building<br>South Campus: Campus Reception, MB building |
| **STUDENT LOAN (STUDYLINK)** | StudyLink will pay your fees directly to AUT. See your student loan documentation for more information. |

# Find out more

### 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**

### Call or email us

To speak to one of our friendly advisors call the AUT Student Hub on **0800 AUT UNI** (0800 288 864). If you need help with your application to study at AUT, want more information or would like to order a brochure – we're here to help.

You can also email **futurestudents@aut.ac.nz**

International students should email **internationalstudy@aut.ac.nz**

### AUT Open Day

Our Open Day on Saturday 2 September 2017 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**

### 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.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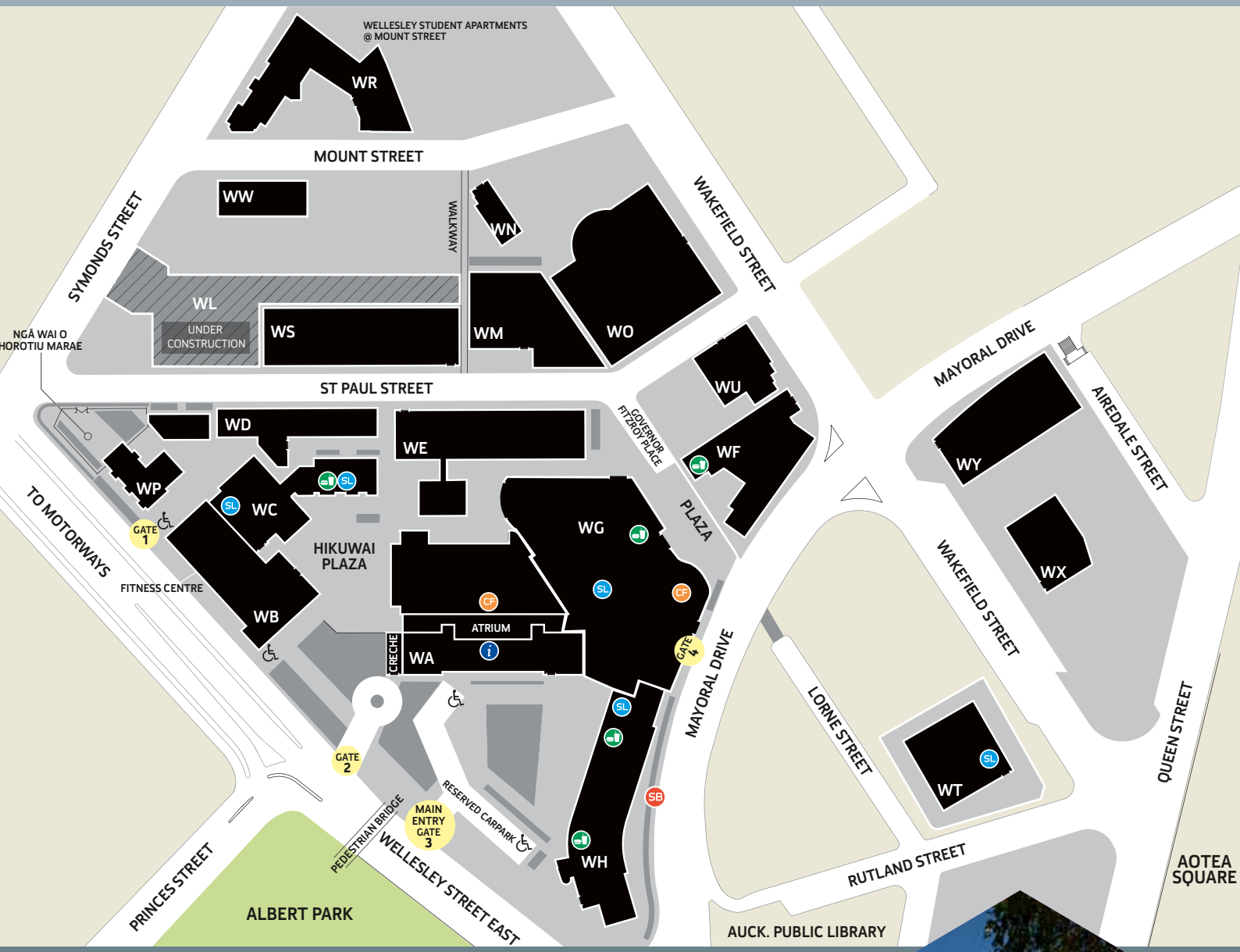
# Campus maps

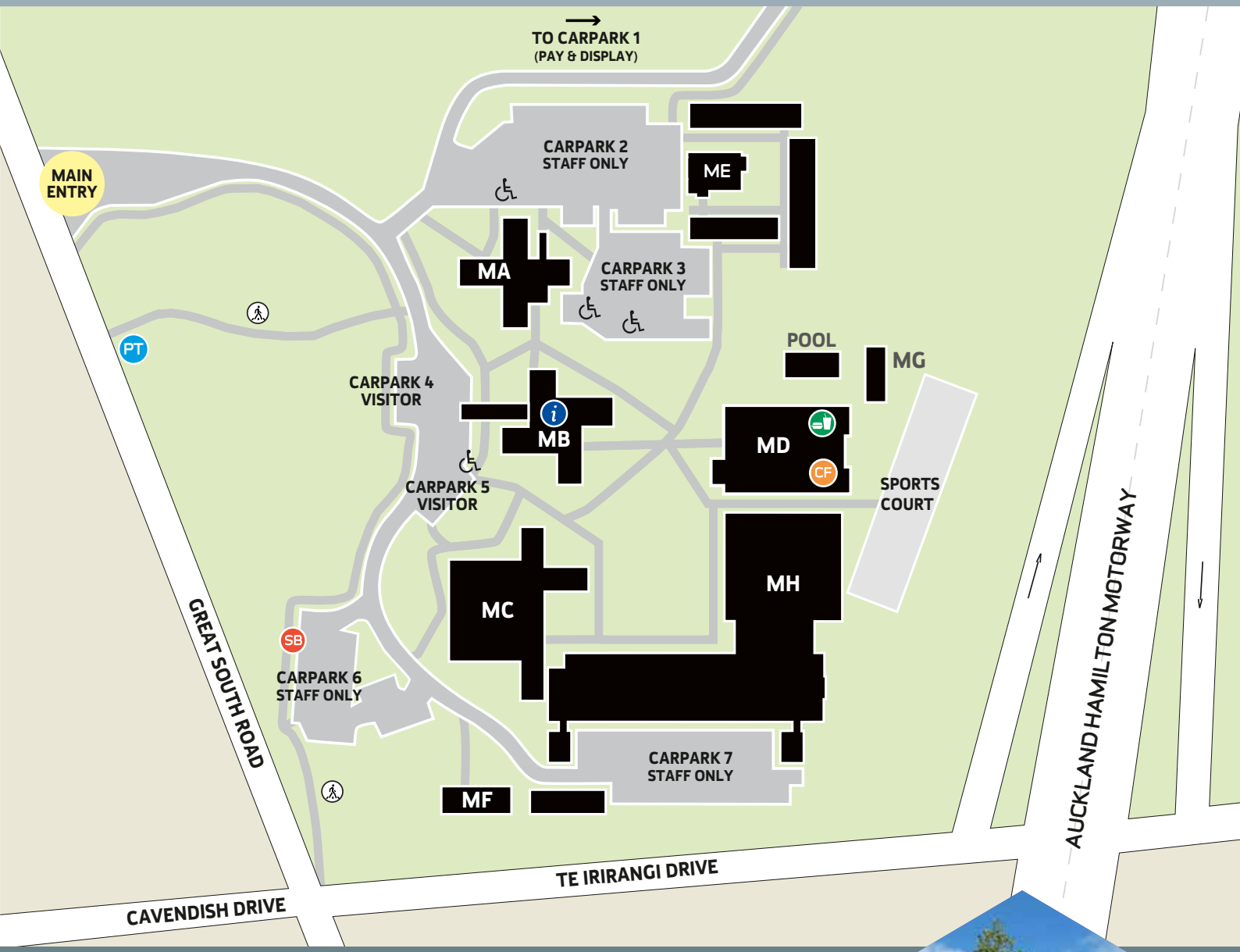



## City Campus

55 Wellesley Street East
Auckland Central

### Key

- AUT Student Hub
- Café
- Conference facility
- Intercampus shuttle bus stop
- Mobility parks
- Student lounge




# South Campus

640 Great South Road
Manukau, Auckland

**Key**

- AUT Student Hub
- Café
- Conference facility
- Intercampus shuttle bus stop
- Mobility parks
- Pedestrian access
- Public transport

DESIGN & CREATIVE TECHNOLOGIES

POSTGRADUATE PROGRAMME GUIDE 2018

**0800 AUT UNI (0800 288 864)**
Auckland University of Technology
futurestudents@aut.ac.nz
www.aut.ac.nz

**International future students**
internationalstudy@aut.ac.nz
+64 9 921 9099

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:**

@autuni #autuni

09/2017 - 1,000