





# Welcome to the Faculty of Engineering



### Supporting the world's leaders of technological innovation

The Faculty of Engineering is ideally positioned to address tomorrow's global challenges. Our postgraduate programmes are designed to ensure that you have a solid grounding in discipline-based expertise. Our culture of collaborative teams and dynamic research themes, fosters the free flow of ideas across disciplines, and result in exciting innovation and technology solutions between industry and academia.

Whether you choose a research or taught programme, the technical and industry insights that you gain here will stand you in good stead for a successful career.

I look forward to welcoming you to New Zealand's largest and most influential research organisation, the University of Auckland.

Nic Smith

PROFESSOR NIC SMITH Dean of Engineering, The University of Auckland

# Is postgraduate study in the Faculty of Engineering worth the investment?

As a postgraduate student in the Faculty of Engineering you are poised to embark on an exciting new chapter in your professional life. Here are some of the reasons why studying at the University of Auckland is worth the investment.

- You will have the opportunity to work in the nation's leading engineering faculty. We are ranked 1st in New Zealand and 66th in the world in the QS World Ranking 2014.\* The Faculty of Engineering is also one of the biggest and most influential research institutes in the country with one of the largest engineering libraries anywhere in the world.
- You will have ready access to a vibrant research environment with more than ten research units and centres. Our world-class facilities and future-focused research themes are supported and led by inspiring subject matter experts.
- You will have the opportunity to apply for the University's scholarship funding. Each year we offer over \$26 million worth of scholarships, awards and prizes to help fund your studies.
- You can take advantage of extensive academic and professional networks with pre-eminent international universities and organisations within New Zealand.

\*QS World University Rankings by Faculty 2014/15. www.auckland.ac.nz/international-rankings



Cover Image: Emily Hargrave-Thomas, PhD Candidate, Chemical and Materials Engineering.



The Centre for Advanced Composite Materials (CACM) at Newmarket Campus

# A world leader in education and research

At New Zealand's leading engineering faculty nestled within the biggest research organisation in the country, we offer many exciting research opportunities to you.

Whether you are considering a postgraduate certificate, masters or PhD, we look forward to supporting you through your specialist study to gain a competitive edge in the market.

There are four research themes in the faculty. Each of these have been selected as emerging fields with global demand. If research is your focus, then our goal is to build research excellence in these key areas.

### Our four research themes

#### **Energy Research**

This research theme aims to improve energy supply and use. This includes new sources of energy, sustainability of current forms of energy supply, and novel low energy usage technologies.

#### Infrastructure and Environment Research

This broad research theme encompasses transport systems; building materials and intelligent buildings; efficient delivery of water, power and telecommunications; the environmental impact of infrastructure and increasing the resilience of the built environment.

#### Innovation in Manufacturing and Materials Research

This research theme covers new manufacturing technologies and novel materials and the creation of new and value-added products. The theme provides a 'one stop shop' from product design, materials, analysis, and manufacturing to commercialisation.

#### **Technologies for Health Research**

A research theme dedicated to improving quality of life by developing practical technologies for the prevention, treatment and management of illness, and the preservation of mental and physical wellbeing. The theme includes product design, prototype development, testing and optimisation.

### Next generation research at the Newmarket Campus

The recently opened Newmarket Campus forges strong collaborative ties with industry and hence opens up plenty of post-study career opportunities. In 2015, around 200 doctoral students, 100 staff and 3,000 pieces of specialist equipment were relocated to the new campus in Newmarket.

# Answering tomorrows challenges today

The University of Auckland's Faculty of Engineering offers unparalleled access to top research facilities and one-of-a-kind equipment. The faculty houses specialist and often unique equipment not found elsewhere.

#### Centre for Advanced Composite Materials (CACM)

The Centre is part of the Department of Chemical and Material Engineering. CACM possess the only drop weight impact tester in the southern hemisphere.

www.cacm.auckland.ac.nz

#### Hydraulic Engineering Laboratory

The Department of Civil and Environmental Engineering possess a 45-metre long flume capable of pumping sediment and water. The flume is the biggest flume in New Zealand and is large on a world scale. It enables engineers to simulate conditions in rivers, including flows and erosion in rivers beds and at hydraulic structures.

www.engineering.auckland.ac.nz/ hydraulic-engineering-lab

# We're invested in your career

Whether you're looking to upskill to work a new sector; you want to advance your position within an organisation; or you are interested in a career in research – the Faculty of Engineering's postgraduate programmes will significantly boost your career.

Our programmes offer the right mix of practical experience, research skills and industry insights that will enable you to become a leader in your field.

# Job outlook for engineers

Work opportunities for professionals with skills in high value manufacturing, engineering and ICT will be impressive in the coming decades. Small, medium and large companies as well as universities and research institutions value skills and knowledge in smart devices, machines, systems and processes. A postgraduate engineering degree delivers your skillset to a burgeoning global economy. For more information visit the New Zealand Government's Occupation Outlook website http:// mbie.govt.nz/occupation-outlook.

#### Infomechatronics and Industrial Automation Laboratory

A world-leading laboratory within the Department of Electronic and Computer Engineering. They test prototypes for automated controllers made for industrial and manufacturing settings.

www.engineering.auckland.ac.nz/ infomech-and-IA-lab

#### Nano-Mechanical Research Laboratory

The Department of Chemical and Materials Engineering have a cutting edge nanomechanical testing machine – a TriboIndentor. The only one in New Zealand, the TriboIndentor tests the composition of nanoparticles, from cellular tissues to industrial materials.

#### www.engineering.auckland.ac.nz/ nanomech-lab

#### The NZProduct Accelerator

Based at Newmarket Campus, this research group is part of the Department of Chemical and Material Engineering. The <sup>NZ</sup>Product Accelerator involves a network of 10 research institutions across New Zealand. They use novel combinations of materials, manufacturing and design to come up with new products for New Zealand companies.

http://nzproductaccelerator.co.nz

#### Robotics and Intelligent Systems Laboratory

This laboratory is a part of the Department of Electrical and Computer Engineering. They provide expertise in robot programming, human interaction and intelligent systems including artificial neural nets and speech communication.

#### www.engineering.auckland.ac.nz/RIS-lab

#### **Yacht Research Unit**

The YRU is part of the Department of Mechanical Engineering. Their Twisted Flow Wind Tunnel has been used to rigorously test yacht sails and has helped several America's Cup and Volvo 70 designers to create winning designs. A new wind tunnel will be completed at the Newmarket Campus by mid-2015; it will be the largest in New Zealand. The wind tunnel will test building aerodynamics, wind energy, and aerodynamics for sports such as cycling.

#### www.yru.auckland.ac.nz

### Mechatronics to change the face of innovation

In 2016, an exciting masters specialisation is set to commence in the faculty – Mechatronics.\* It's the combination of mechanical, electronics, computer and software engineering. The result of this fusion, via the design, control, intelligence and programming, is remarkable smart devices such as robots and intelligent systems. Students get hands on experience with sensors, actuators, robots, 3D printers, laser cutters, embedded programming, PCB makers, as well as simulation software.

Applicants can choose the Mechatronics specialisation in either the Master of Engineering Studies (MEngSt); Master of Engineering (ME); or doctoral study in Mechatronics. Applications are welcome from people with bachelors degrees in mechatronics, mechanical, electrical, computer and biomedical engineering are currently being sought.

### **Mechatronics research**

Chair of Mechatronics, Professor Peter Xu leads the inaugural Mechatronics specialisations. Current mechatronics research highlights at the University include, but are not limited to:

- **Smart surgical tools:** These surgical tools integrate fibre optics into slender surgical implements, thereby extending a surgeon's haptic sense deep into the body.
- Soft-bodied robotic instruments: These novel bio-inspired scientific instruments simulate neuromuscular peristaltic motions of internal human organs.
- Micro-systems and smart materials research: The deployment of materials such as piezoceramic, ZnO, conducting polymers as micro-actuators and sensors for various novel applications.
- **Rehabilitation robotics:** The development of exoskeleton technology to assist people with stroke, cerebral palsy or other disabilities with physical therapy and mobility.
- Neuroprosthetic devices: These devices use neuromuscular electrical stimulation to help people with spinal cord injury or disease towards improved motor control and mobility.

\*The 2016 Masters specialisations in Mechatronics are subject to CUAP approval.

### Learning pathways





Mechatronics research at the University of Auckland is interesting and varied

### **Research projects**

Exciting and ground-breaking research projects are currently underway within Faculty of Engineering's departments, research centres and institutes. For a full list of available research topics, visit **www.findathesis.auckland.ac.nz** 

### **Research funding**

In 2014, the Faculty of Engineering earned almost \$20 million in research funding for a range of advanced technology projects.

Subjects available					
	PGCert	PGDip	Taught masters	Research masters	Doctorate
Bioengineering				✓	<ul> <li>Image: A second s</li></ul>
Chemical and Materials Engineering	1		1	1	1
Civil Engineering	1		1	1	1
Computer Systems Engineering	1		1	✓	1
Construction Management			1		
Disaster Management			1		
Electrical and Electronic Engineering	<ul> <li>Image: A second s</li></ul>		1	✓	1
Energy <sup>1</sup>			1	✓	
Engineering Management <sup>2</sup>			1		
Engineering Science	1		1	1	1
Environmental Engineering	1		1	1	
Food Process Engineering			1	✓	
Geotechnical Engineering			1		
Geothermal Energy Technology	<ul> <li>Image: A second s</li></ul>				
Light Metals Reduction Technology	<ul> <li>Image: A set of the set of the</li></ul>		1		
Mechanical Engineering	<ul> <li>Image: A second s</li></ul>		1	✓	1
Mechatronics Engineering			✓3	✓ <sup>3</sup>	1
Medical Devices and Technologies			1	✓	
Operations Research <sup>4</sup>		1		1	1
Plastics	1		1		
Software Engineering	1		1	1	
Transportation Engineering	<ul> <li>Image: A start of the start of</li></ul>		1		
Yacht Engineering			1	1	

#### Key

Interfaculty with Science and Business.
 Subject to CUAP approval.

2 Interfaculty with Business.4 Interfaculty with Science.

# Our programmes

Gain a competitive edge in the market. Whether you're considering a postgraduate certificate, diploma, masters degree or PhD, we look forward to supporting you through your study and on towards your successful career.

## Engineering degrees and diplomas

#### Postgraduate Certificate in Engineering (PGCertEng)

60 point certificate

Full-time: 6 months

Part-time: 2 years

#### Taught

A certificate that provides graduate engineers with advanced technical or management foundation skills and industrial perspectives.

You can specialise in: Chemical and Materials Engineering; Civil Engineering; Computer Systems Engineering; Electrical and Electronic Engineering; Engineering Science; Environmental Engineering; Mechanical Engineering and Software Engineering.

**Professional opportunities:** You will gain new industrial perspectives and knowledge that can expand your employability in different sectors.

#### Closing dates for 2016

Semester 1: 8 December 2015 Semester 2: 4 July 2016

www.engineering.auckland.ac.nz/pgcerteng

#### Postgraduate Certificate in Engineering Plastics (PGCertEngPlastics)

#### 60 point certificate

Full-time: Not available

Part-time: 2 years

#### Taught

This part-time certificate gives professional engineers and science graduates advanced knowledge of plastics materials and processing. The teaching portion of the programme is delivered as a one week block of courses each semester, in order to minimise time away from work, with the remainder completed by distance learning.

**Professional opportunities:** Project engineer, process development engineer or product engineer; or an R&D role within the healthcare, technology or the manufacturing sector.

Closing dates for 2016 Semester 1: 8 December 2015 Semester 2: 4 July 2016

www.engineering.auckland.ac.nz/ pgcerteng-plastics

#### Postgraduate Certificate in Geothermal Energy Technology (PGCertGeothermTech)

60 point certificate

Full-time: 6 months

Part-time: 1 year

#### Taught

This world recognised postgraduate certificate allows engineers and scientists to gain practical and applied skills in the geothermal energy industry. The programme includes two week-long field trips and has a block structure to fit in with work commitments.

**Professional opportunities:** Diverse roles in the geothermal energy sector, such as operations management, energy consultancies, environmental agencies and government departments.

Closing date for 2016

Semester 2: 30 April 2016

www.engineering.auckland.ac.nz/ pgcertgeothermtech

#### Postgraduate Certificate in Light Metals Reduction Technology (PGCertLMRTech)

60 point certificate

#### Not scheduled for 2016, offered biennially

**Taught** (includes a 3 week residential course)

A prestigious and globally respected certificate that equips engineers with highly valuable and lucrative skills to run light metal smelters across the world. Includes a stimulating three week residential course at a working smelter; along with distance learning carried out at home to minimise disruption to your career.

**Professional opportunities:** Senior chemical and process engineers, quality control supervisors, senior plant managers and technical consultants for the light metals sector.

www.engineering.auckland.ac.nz/ pgcertlmrtech

#### Master of Engineering (ME)

120 point degree Full-time: 1 year Part-time: 2 years

#### 180 point degree

Full-time: 18 months Part-time: 3 years

#### Research

This research masters allows you to study at world-class facilities and with leading academics



and researchers in the specialisation of your choice. Undertake a stimulating mix of theoretical and experimental research to solve real world problems at the very cutting edge of engineering advancement.

**Professional opportunities:** Whether you want a career in industry or research, this degree puts you at the forefront of innovation and allows you to master your chosen specialisation.

#### Closing dates for 2016

Semester 1: 8 December 2015 Semester 2: 4 July 2016

www.engineering.auckland.ac.nz/ master-of-engineering

#### Master of Engineering Studies (MEngSt)

120 point degree Full-time: 1 year Part-time: 2 years

#### 180 point degree

Full-time: 18 months

Part-time: 3 years

#### Taught

A taught or research masters with 16 diverse specialisations allowing you to tailor your learning to your professional goals and interests. Gain applied technical knowledge in your area of specialisation. Some specialisations offer the option of a research portfolio while others are only taught.

**Professional opportunities:** Graduates of this programme find themselves in roles with a regulatory, management or product development scope.

#### Closing dates for 2016

Semester 1: 8 December 2015

Semester 2: 4 July 2016

www.engineering.auckland.ac.nz/master-ofengineering-studies

#### Doctor of Philosophy (PhD)

Full-time: 3-4 years

**Part-time:** Available to domestic students only.

#### **Doctoral Research**

The PhD programme involves advanced, independent and original research that typically takes 3–4 years to complete and is carried out under qualified supervision. The PhD is available in the following subject areas: Bioengineering; Chemical and Materials Engineering; Civil Engineering; Computer Systems Engineering; Electrical and Electronic Engineering; Engineering Science; Mechanical Engineering; Mechatronics Engineering; Operations Research.

**Professional opportunities:** A career in teaching or academia, R&D for organisations, specialised industry positions or engineering consulting.

Closing dates for 2016: Apply at any time of year.

www.engineering.auckland.ac.nz/phd

# Interfaculty degrees and diplomas

#### Postgraduate Diploma in Operations Research (PGDipOR)

120 point diploma

Full-time: 1 year

Part-time: 4 years

#### Taught

A taught diploma offered by the Faculties of Engineering and Science that equips engineers with the skills to solve problems in the design and management of large or complex systems found in business, industry and government.

**Professional opportunities:** Analytics (predictive or prescriptive analytics roles) in various industries such as energy and healthcare along with resource scheduling, routing and rostering in diverse sectors such as healthcare, transport, finance, energy, telecommunications, government and manufacturing.

#### Closing dates for 2016

Semester 1: 8 December 2015 Semester 2: 4 July 2016

www.engineering.auckland.ac.nz/pgdipor

#### Master of Disaster Management (MDisMgt)

**120 point degree** Full-time: 1 year

Part-time: 2 years

180 point degree

Full-time: 18 months

Part-time: 3 years

#### Taught

MDisMgt is a taught masters degree that prepares students for leadership roles within disaster management. The programme draws on expertise from across the university: Engineering, Development Studies, Science, Population Health, Environmental Law and Architecture and Planning.

**Professional opportunities:** Suitable for diverse professionals who are interested in disaster risk reduction, readiness, response and recovery, disaster resilience and disaster management, and those keen to understand the impact of disasters on society.

Closing dates for 2016

Semester 1: 8 December 2015

Semester 2: 4 July 2016

www.engineering.auckland.ac.nz/ master-of-disaster-management

#### Master of Energy (MEnergy)

120 point degree

Full-time: 1 year

Part-time: 2 years

#### Taught or research

This masters programme is ideal for engineering, science or commerce graduates who want to develop their technical, business or policy-related expertise in the energy industry. Choose between completing a 90 point research project or a smaller 45 point research project that explores the technical, policy, environmental or economic aspects of energy.

**Professional opportunities:** Roles as energy consultants, project managers, energy modelling analysts all over the world.

Closing dates for 2016

Semester 1: 8 December 2015 Semester 2: 4 July 2016 www.engineering.auckland.ac.nz/

master-of-energy

### Master of Engineering Management (MEMgt)

120 point degree Full-time: 1 year Part-time: 2 years

#### 180 point degree

Full-time: 18 months

Part-time: 3 years

Taught

A prestigious masters programme offered by the Faculty of Engineering and the University of Auckland Business School. Graduates gain valuable business acumen and project management skills to help them reach the highest levels of engineering management. Includes a major project conducted within an approved organisation.

**Professional opportunities:** Gain the technical foundations and practical skills to become a true innovator, manager and leader in engineering management, research and development, project management and engineering consultancy.

#### Closing dates for 2016

Semester 1: 8 December 2015 Semester 2: 4 July 2016

www.engineering.auckland.ac.nz/ master-of-engineering-management



"One of the things I particularly enjoyed about the Master of Engineering Management was sharing knowledge. As the students and most of the tutors are already in the workforce and have some years of experience, it's very easy to bounce ideas off each other. Suddenly you have more than one teacher, the whole class is your teacher!"

"Engineering project management is a very exciting career. The sacrifices that prospective students may make to complete the course are well worth the effort. They'll learn a lot and make friends along the way, so I would encourage everyone to do it."

Mercedes Santos, is a Senior Project Manager at the New Zealand Transport Agency (NZTA). She graduated from the University of Auckland in 2012 with a Master of Engineering Management (MEMgt). Her work on the Waikato Expressway for the NZTA saw her become the Project Management Institute's (PMINZ) Project Manager of the Year 2014.

www.engineering.auckland.ac.nz/ master-of-engineering-management

"People in the energy sector often struggle with perspectives outside their area of expertise. The strength of the Master of Energy programme is that it provides a broad base of understanding. The programme gave me an excellent introduction to a wide range of concepts relevant to a career in the electricity industry, from technology fundamentals to market structure and regulatory issues. I doubt that I would have been able to achieve what I have so far without the knowledge that the MEnergy gave me."

*Tim Crownshaw,* Market Operations Analyst and Systems Operator at Transpower, New Zealand, Master of Energy.

www.engineering.auckland.ac.nz/mast<u>er-of-energy</u>

# The Auckland Bioengineering Institute (ABI)

The Auckland Bioengineering Institute (ABI) builds novel instrumentation and develops computational models of the human body to understand human physiology. The ABI is a large-scale research facility with over 100 graduate students. They lead robust international collaborations and have a student exchange programme with leading universities across the world, such as MIT and Oxford.

The institute hosts the MedTech Centre of Research Excellence, and works with other New Zealand institutions to develop technologies that improve healthcare outcomes. These innovations contribute to the New Zealand economy and the burgeoning MedTech business sector. The ABI has achieved international pre-eminence for research into the heart and cardiovascular system; the lungs and respiratory system; the musculoskeletal system and the digestive system.

Read more about the ABI's extensive research areas online: www.abi.auckland.ac.nz

#### Master of Operations Research (MOR)

120 point degree

Full-time: 1 year

Part-time: 2 years

#### Research

The MOR is a two-semester, research-based masters that gives students the skills in network design simulations, dynamic programming and a whole lot more. Students perform rigorous intellectual analysis and use maths and computers to solve complex problems for organisations.

**Professional opportunities:** The MOR offers highly developed skills in independent research. Graduates are greatly valued by industry and find roles in predictive and prescriptive analytics, resource scheduling, routing and rostering; in diverse sectors such as healthcare, transport, finance, energy, telecommunications, government and manufacturing.

#### Closing dates for 2016

Semester 1: 8 December 2015 Semester 2: 4 July 2016

www.engineering.auckland.ac.nz/master-of-operations-research





"My research investigates the potential etiology of osteoarthritis and the differences between men and women with regards to cartilage stress. The Auckland Bioengineering Institute is a well-established and internationally recognised research institution in the bioengineering field, which made it a great option for my postgraduate study. The researchers here are really pushing the boundaries and doing innovative work which is exciting to be a part of. Musculoskeletal modelling is really fun, especially if you like maths or coding. Best of all, since nobody has done this work before, you get to discover the answers first."

"In the future, I can see myself working in both academia and in industry or potentially running my own business. Bioengineering is still a relatively young field, with many opportunities around the world. I know that my studies at the University of Auckland and the ABI have formed a solid foundation for anywhere I go later on."

Marco Tien-Yueh Schneider, PhD Candidate, Bioengineering. www.abi.auckland.ac.nz

# Funding and admission

The Faculty of Engineering aims to support and encourage you in your education and day-to-day life. Part of this is providing you with access to a broad postgraduate scholarship database.

### Postgraduate scholarships

The University of Auckland offers nearly 400 postgraduate scholarships with a total value of approximately \$26 million each year. Scholarships may be awarded based on academic merit or additional criteria, such as ancestry, gender or financial hardship. The University of Auckland's Scholarship Office provide access to an extensive database of external scholarships. To view scholarship information, criteria, closing dates and application forms visit

www.engineering.auckland.ac.nz/scholarships

#### Fees

Tuition fees for postgraduate study in the Faculty of Engineering in 2016 are set towards the end of 2015. Your annual tuition fees will vary according to the subjects you enrol in and your workload. View current fees at **www.auckland.ac.nz/fees** 

#### Estimated 2015 annual tuition fees\* for domestic students

Postgraduate programmes	Estimated annual tuition fees NZD**
Postgraduate certificates	\$4,725 - \$15,793
Postgraduate diplomas	\$8,038 - \$9,450
Masters programmes	\$8,830 - \$9,450
PhD	\$6,503

\*In addition to tuition fees, every student pays a student services fee once a year. As an indication, this fee was \$738 in 2015 for students studying 120 points of courses. Parttime students pay a pro-rata fee.

\*\*2016 tuition fees are based on annual 2015 tuition fees and a study workload of 120 points. Taking fewer courses means that you pay proportionately lower tuition fees.



#### International students

For up-to-date international student fees visit **www.auckland.ac.nz/is-fees** 

#### PhD funding

**PReSS accounts:** All University of Auckland doctoral students receive an annual stipend which is paid into a PReSS (Postgraduate Research Student Support) account for up to four years. This is intended to cover direct research costs such as attending conferences, printing, research-related travel and accommodation.

### Admission to postgraduate programmes

This is intended as a general guide for entry into different postgraduate engineering programmes. However you will need to check the University of Auckland Calendar for specific entry requirements for particular programmes.

#### www.auckland.ac.nz/calendar

#### **English-language requirements**

- If English isn't your first language, then evidence of English language proficiency is required. Find out more at **www.auckland.ac.nz/is-english**.
- If you're a new doctoral student, you must take a Diagnostic English Language Needs Assessment (DELNA) as a part of your provisional goals.

#### Alternate pathways to masters study

If you have completed a BE or BE (Hons) but don't meet the requirements for entry into a masters programme, you can still apply for a postgraduate certificate. After completing this you can continue on and study towards a masters programme, if you achieve grades of B or higher.

#### Entry into a postgraduate certificate

Acceptance into a postgraduate certificate programme is generally based on you having a relevant bachelor level or honours degree. Some postgraduate certificate programmes accept students with an equivalent qualification or professional work experience.

#### Entry into a postgraduate diploma

In general, you will have completed a relevant undergraduate degree at a recognised institution, with passes in the specified prerequisite courses in your area of specialisation.

#### Entry into a masters degree

Acceptance into a masters programme is at the discretion of the Dean of Engineering. As a general rule, entry criteria is a completed bachelor (honours) degree; postgraduate certificate; or postgraduate diploma at a recognised institution, with grades of B or higher (or equivalent). There are also 18 month, 180 point masters programmes that are open to applicants with a relevant three year bachelors degree.

#### Entry into a doctoral degree

Acceptance into a PhD programme is based on academic merit. You will have extensive and demonstrable research skills and a high level of theoretical understanding of your area of study. In general, PhD entry requires a relevant bachelors (honours) degree with first class or second class (division 1) honours; or a masters degree with first class or second class (division 1) honours; or its equivalent at a recognised institution.

# How to apply

The Faculty of Engineering warmly welcomes students from all over the world.

# Applying for a non-doctoral programme

If you have not been enrolled at the University of Auckland in previous years, you need to talk to the relevant postgraduate adviser. If you are an international student, you must contact staff at the International Office.

Research masters programmes may require you to contact an appropriate supervisor for your research project or thesis as a part of admission to the programme.

Apply online at **www.auckland.ac.nz/ applynow**. We will acknowledge your application with an email containing login details that will allow you to track your application online. The email will list the certified documents that the University requires to verify your personal details and entrance qualifications.

If you were enrolled at the University of Auckland in the semester prior to beginning your postgraduate programme, you should make an application by completing an Add/Change Programme request online.

After your application is assessed, you will be notified of the decision by the faculty or International Office. If you have any questions regarding the process, speak to the relevant postgraduate advisor.

# Applying for a PhD programme

You should decide on an area of research interest. Read the faculty websites for your area of research interest, potential supervisors and any specific requirements. Always read the University Calendar's PhD Statute and Guidelines to ensure that you meet academic eligibility criteria for entry into the PhD programme.

Apply online at **www.auckland.ac.nz/ applynow**. We will acknowledge your application with an email containing login details that allow you to track your application online. The email will list the certified documents that the University requires to verify your personal details and entrance qualifications.

Your application will then be considered by the appropriate academic staff, and you will be informed of the decision by the School of Graduate Studies.

### International applicants

Apply online at **www.auckland.ac.nz/ applynow**. We recommend you start your application as soon as possible to allow sufficient time for your visa application. The University has a number of official representatives overseas who can assist you with the application process in person. To find a representative near you, visit **www.auckland.ac.nz/overseasrep**.

#### Costs

All costs are shown in New Zealand dollars and are expressed inclusive of New Zealand Goods and Services Tax if applicable.

#### Privacy

The University of Auckland undertakes to collect, store, use and disclose your information in accordance with the provisions of the Privacy Act 1993. Further details of how the University handles your information are set out in a brochure available from the ClockTower Call Centre or by phoning 0800 61 62 63.

#### Disclaimer

Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the current Calendar of the University of Auckland, to ensure that they are aware of and comply with all regulations, requirements and policies.

"The Centre for Advanced Composite Materials where I study is internationally renowned and works with many local and international companies, so it was naturally the best place to pursue my PhD."

"The research I'm working on isn't just going to be hidden in some research journal. We're working alongside industry to make it as useful as possible to them.

"I am creating a tool which can be used to predict the manufacturing properties of materials. This enables manufacturers to choose the correct parameters for their manufacturing processes, thereby producing high quality parts at minimal cost.

"Many fields around the world integrate composite materials: automotive, aerospace, renewable energy generation, sport and rehabilitation so career opportunities after I finish are endless.

"With a PhD you have such great freedom to choose what to do, what to focus on and where you want it to take you."

Elinor Swery, Doctoral candidate, Mechanical Engineering.

www.engineering.auckland.ac.nz/phd





### Useful web addresses

The Faculty of Engineering homepage www.engineering.auckland.ac.nz

Information for postgraduate students www.engineering.auckland.ac.nz/postgrads

Important dates www.auckland.ac.nz/dates

Apply for postgraduate study www.auckland.ac.nz/applynow

AskAuckland www.askauckland.ac.nz

Career Development and Employment Services www.cdes.auckland.ac.nz

Centre for Learning and Research in Higher Education

www.clear.auckland.ac.nz

Childcare www.auckland.ac.nz/childcare Current postgraduate students www.postgrad.auckland.ac.nz

Disability Services www.disability.auckland.ac.nz

**Doctoral Skills Programme** www.auckland.ac.nz/doctoralskills

#### Finances, scholarships and fees

www.auckland.ac.nz/scholarships www.auckland.ac.nz/fees www.auckland.ac.nz/ studentloansandallowances

Health services www.auckland.ac.nz/healthservices

International students www.international.auckland.ac.nz

Libraries and learning services www.library.auckland.ac.nz Māori student support www.auckland.ac.nz/maoristudents

Pacific student support www.auckland.ac.nz/pacificstudents

Postgraduate Students' Association www.pgsa.org.nz

School of Graduate Studies www.auckland.ac.nz/school-of-graduatestudies

University of Auckland Calendar www.auckland.ac.nz/calendar



Faculty of Engineering Student Centre

Level 4, Building 401 20 Symonds Street, Auckland

Phone: 923 6726 (within Auckland) 0800 61 62 65 (outside Auckland) +64 9 923 6726 (international) Email: foe-postgrad-admin@auckland.ac.nz Web: www.engineering.auckland.ac.nz Online help: www.askauckland.ac.nz