



The University of Auckland

Faculty of Engineering

Postgraduate Prospectus



Welcome from the Dean

Welcome to the Faculty of Engineering, and congratulations on taking the first step to furthering your studies at New Zealand's world-ranked university*.



NIC SMA PROFESSOR NIC SMITH Dean of Engineering The University of Auckland

Engineering technologies mean that the leading edge of knowledge is advancing more quickly than ever before. Driving a major part of this advancement is the cutting-edge research undertaken by graduate students such as you. As postgraduate engineers, this is most often research that has the capacity to change the lives of individuals and communities for the better.

In addition to becoming an expert in your technical domain, the research contribution you will make to increasing our understanding of the world and deploying the knowledge you will create will be for all our benefit. Importantly you also now have a unique opportunity to develop skills that are in high demand. The capacity to develop creative problem-solving skills, seek new ways to understand observations and define the right questions to ask, are more important for both society and industry than they have ever been.

The challenges you will overcome during your research project will not always be easy. These difficulties are often the cost of working at the leading edge on problems to which we do not yet have the answers to. Remember however, that overcoming hurdles will be incredibly personally rewarding, career enhancing and valuable to society as a whole.

I wish you all the best for this journey.

*See www.worldranked.ac.nz

Why choose postgraduate study with us?

The Faculty of Engineering offers a range of rich and challenging postgraduate opportunities. As a postgraduate student you will have the opportunity to work with our internationally recognised researchers on innovative engineering solutions.

International reputation

Throughout the world, the University of Auckland is known for its quality learning, so your degree will be internationally recognised.

The University of Auckland is the top university in New Zealand based on the three major international ranking systems: the Times Higher Education World University Ranking, the QS World University Rankings and the 2013 Academic Ranking of World Universities (Shanghai Jiao Tong University).

Please visit **www.worldranked.ac.nz** for more information.

The Faculty of Engineering has strong teaching and research collaborations with universities and institutes around the world.

Our academics

Our University has the largest number of top-rated researchers of any New Zealand university and the highest level of research income*.

We have outstanding academic staff, many of whom have received national and international awards.

Leading research and programmes

Research topics being investigated at the University are very diverse and a great deal of effort goes into discovering answers to questions you may wonder about. As this is an integral part of postgraduate study, postgraduates work side-by-side with staff and explore new ideas together.

The faculty's four research themes – Energy; Infrastructure and Environment; Innovation in Materials and Manufacturing; and Technologies for Health – are all crucial to today's modern society.

Industry involvement is an important component of many programmes, allowing you to gain practical insight and experience as you study. For more information on research projects visit **www.engineering.auckland.ac.nz/research**

Resources and facilities

The faculty is home to the Auckland Bioengineering Institute, the Centre for Advanced Composite Materials, the Centre for Healthcare Robotics, the Geothermal Institute, the Energy and Fuels Research Unit and the Yacht Research Unit.

The faculty has state-of-the-art equipment including the country's only Triboindenter Nanomechanical Testing System, a Twisted Flow Wind Tunnel (TFWT), a cascade refrigeration test facility that can achieve temperatures as low as -45°C, as well as the Environmental Scanning Electron Microscope used by food and biological scientists and surface and materials researchers.

You will have at your disposal the biggest university and engineering libraries in New Zealand. Visit our libraries online at **www.library.auckland.ac.nz**

Front cover image: Part of a flat flame micro combustor. Thank you to Zerrin Turkeli-Ramadan and the Department of Mechanical Engineering. *Performance Based Research Fund (PBRF) report 2012.

Our postgraduate programmes

Engineering postgraduate programmes have been designed to respond to the needs of those aspiring to both academic and practising careers. Our postgraduate study options include both research and taught programmes. The Associate Deans Postgraduate are responsible for the development and oversight of policies and procedures for graduate programmes in the Faculty of Engineering.

Research programmes provide the opportunity to develop advanced research skills and to present findings in a documented scholarly form such as a thesis. Your research should make an independent contribution to learning or offer a critical perspective on existing scholarship or methodology.

Taught programmes provide you with advanced specialist training in your chosen field and are normally completed by coursework.

Part-time study options are available for most programmes to enable you to fit study around employment or other commitments. Refer to "Programme information" in this prospectus for an overview of postgraduate programmes offered.

For more information visit www.engineering.auckland.ac.nz/pghelp

For general postgraduate enquiries contact the Faculty of Engineering Student Centre Room 401, Level 4, 20 Symonds Street **Phone:** +64 9 923 6726 **Email:** foe-postgrad-admin@auckland.ac.nz

Note: Please refer to *The University of Auckland Calendar* **www.calendar.auckland.ac.nz** for programme and course regulations.

Engineering postgraduate pathways



*It is possible to transfer from a Postgraduate Certificate to MEngSt, MEMgt, MEnergy or MDisMgt; please refer to The University of Auckland Calendar.

Where can postgraduate study take you?

Careers

Once you have completed your postgraduate studies, a world of opportunities can open up for you. Graduates from our postgraduate programmes are working in a rich and exciting range of careers, including:

- Research and development
- Engineering consultancy
- Analysis, development, design and automatic control of processes in the dairy, food and beverages, pharmaceutical, pulp and paper, steel, aluminium and polymer industries
- Planning, designing and supervising the construction of buildings, roads, water supply plants, dams, canals and flood protection systems
- Designing and manufacturing electromechanical systems, and thermal devices and processes including engines and control systems for automobiles and aircrafts, power generation plants, lifesaving medical devices and consumer products
- Development and application of semiconductor devices, data processing systems, robotics, embedded systems and software engineering
- Engineering telecommunications and radio systems, power systems and wireless technologies for communications and power delivery.

Academic careers

An academic career is a great way to use your skills and knowledge to help the next generation of engineers. At the same time, you can pursue research in your field, build a network of international contacts and colleagues, and continue to remain part of the University culture.

Careers service and support

The Faculty of Engineering actively supports their students' search for employment and provides extensive career planning support. For more information visit **www.engineering.auckland.ac.nz/employmenthelp**

Careers consultants are available in the faculty to discuss your career opportunities; you can attend job hunting workshops, have your CV and cover letter checked, practice for interviews, access the wide range of online information and resources and find out about University internships, vacancies and potential employers.

In addition, you will have access to further support and opportunities from the University's Career Development and Employment Services Centre. For more information visit **www.auckland.ac.nz/pgcareers-service**

For further information, including a listing of career fairs, internships, employer presentations and Auckland CareerHub job vacancies, visit **www.auckland.ac.nz/careers**

Postgraduate research

The University of Auckland is a powerhouse of innovation and the Faculty of Engineering is New Zealand's pre-eminent engineering faculty when it comes to research. Our talented postgraduate students have the opportunity to work alongside internationally respected researchers on projects of global significance.

Excellence in research

Research is a key activity in the faculty. In many of our research programmes, our academics and students are leading the world in their discoveries and developments. For instance, the faculty is a recognised world leader in Wireless/ Inductive Power Transfer (IPT) research, which is used througout the world and for which researchers in the Faculty of Engineering received the prestigious Prime Minister's Science Prize in 2013.

The faculty is also home to the Yacht Research Unit, which manages the world's first Twisted Flow Wind Tunnel (TFWT). Designed to simulate the flow of wind over yacht sails, the TFWT was

For more information visit:

Postgraduate research: www.auckland.ac.nz/postgradresearch

University research by faculty and institute: **www.auckland.ac.nz/researchinterests**

Our researchers on YouTube: www.youtube.com/researchworkswonders

Find a research topic and supervisor: www.engineering.auckland.ac.nz/research

The University of Auckland Research Office: www.research.auckland.ac.nz

made famous around the world for its role in Team New Zealand's America's Cup victories in 1995 and 2000. Since then it has also been used by a number of the other racing syndicates.

Programme information

The following information is provided as a summary only. Full course prescriptions can be found in *The University of Auckland Calendar* (www.calendar.auckland.ac.nz).

This information is not intended to replace the information in *The University of Auckland Calendar* and in all cases of conflict the Calendar shall have precedence.

Academic year start dates

Semester One2 March - 29 June 2015Semester Two20 July - 16 November 2015

Postgraduate diplomas and certificates

The Faculty of Engineering offers postgraduate diplomas and certificates that provide advanced learning in a specific area. You will be required to complete coursework within the approved options available. Applicants should hold an appropriate bachelors degree, or equivalent qualification, or have extensive relevant experience.

For more information on regulations and course prescriptions, refer to the University of Auckland Calendar at www.auckland.ac.nz/calendar

Postgraduate Certificate in Engineering - PGCertEng

Full-time: 1 semester (not available for Plastics – see comments below) Part-time: 4 semesters Points: 60

This is a course-based programme aimed at providing an advanced technical or management foundation and industrial perspective. Students can choose to study in the general, non-specialised option or in the specialisations listed below. Most students in the programme are enrolled in the general option but then choose to focus on courses from one department or field in engineering, for example:

- Chemical and Materials Engineering
- Civil and Environmental Engineering
- Computer Systems Engineering
- Electrical and Electronic Engineering
- Engineering Science
- Environmental Engineering
- Mechanical Engineering
- Software Engineering

Entry requirements: 4 year BE, BE(Hons) degree or other appropriate bachelors degree with sufficient grades.*

www.engineering.auckland.ac.nz/pgcerteng

Specialisations:

Plastics

This programme is designed for students in full-time industry employment.

One course is delivered each semester as a week-long block that includes both theory and practical exercises, accompanied by selfdirected learning and assignments. Assessment for each course includes three assignments and a final examination; students must complete all coursework requirements in order to pass courses.

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

Postgraduate Certificate in Geothermal Energy Technology -PGCertGeothermTech

Full-time: 1 semester Part-time: 2 semesters Points: 60 This programme is only available in Semester Two. This postgraduate certificate is aimed at training engineering and science graduates for work in the geothermal industry. The postgraduate certificate consists of two compulsory introductory courses and one elective, as well as a small industryfocused research project. Topics covered are:

- Geothermal Resources and Their Use
- Geothermal Energy Technology
- Geothermal Exploration
- Geothermal Engineering

Entry requirements: 4 year BE, BE(Hons) degree or equivalent level of qualification in Science or Engineering with the specified Grade Point Average (GPA).

www.engineering.auckland.ac.nz/pgcertgeothermtech

Postgraduate Certificate in Light Metals Reduction Technology - PGCertLMRTech

Full-time: 1 semester (not available part-time)
Points: 60

This programme teaches advanced concepts in chemical and materials engineering specific to light metals reduction technology, especially aluminium. The programme content draws on recent advances in technology and leadingedge research, and uses experts from academia and industry as lecturers and tutors. The postgraduate certificate is a key qualification for operating smelters and should be completed in one semester.

Entry requirements: Candidates must have completed the requirements for an approved bachelors degree with sufficient grades.

www.engineering.auckland.ac.nz/pgcertlmrtech

* Students who hold a four year degree may apply to transfer to MEngSt or ME, providing they have shown excellent academic performance after completing a required number of courses and have otherwise satisfied all other admissions requirements.

Postgraduate Diploma in Operations Research - PGDipOR

Full-time: 2 semesters Part-time: 8 semesters Points: 120

This postgraduate diploma is for students wishing to take advanced study in operations research, to prepare them for industry or more advanced research, ie, the Master of Operations Research (MOR). Topics include optimisation under uncertainty, searching techniques, financial statistics and computational algorithms, with applications in machine and resource scheduling, routing and rostering.

Entry requirements: Candidates must have completed the requirements for a bachelors degree with an average grade of B- or higher in at least 75 points at Stage III or above in approved subjects and an average grade of B or higher in STATS 320 and ENGSCI 391 or equivalent. Candidates with an equivalent level of practical experience in the operations research profession may be considered.

www.engineering.auckland.ac.nz/pgdipor

Masters degrees

A masters degree from the Faculty of Engineering allows you to build on your previous study by increasing your knowledge in a specific subject area and enhancing your career prospects. Depending on your choice of subject major or specialisation, a masters degree will involve either a research thesis, research project and coursework, or coursework only.

Master of Engineering - ME

Full-time: 2 semesters (120 point option) or 3 semesters (180 point option) Part-time: 4 semesters (120 point option) or 6 semesters (180 point option) Points: 120 or 180

This research-based masters qualification demonstrates mastery of specialised knowledge and an ability to perform rigorous intellectual analysis, independent problem solving and conduct fundamental or applied research under supervision. It comprises a thesis worth 120 points (120 point option) or a thesis worth 120 points and additional coursework (180 point option).

Entry requirements: Depending on your entry qualifications and GPA you may be admitted to the 120 point option (suitable for those with a 4-year BE or BE(Hons)), or the 180 point option (suitable for those with an appropriate 3-year bachelors degree). Candidates must submit a thesis proposal endorsed by the supervisor and the departmental postgraduate adviser, describing the timeline and methodology for achieving the identified goals within the maximum allowable time.

www.engineering.auckland.ac.nz/me

Master of Engineering Management - MEMgt

Full-time: 2 semesters Part-time: 8 semesters Points: 120

This programme is designed to accelerate the development of management and business expertise amongst professional engineers, and to support them in advancing their career in modern business environments. It is a taught masters degree offered jointly with the University of Auckland Business School, and provides an advanced academic and professional qualification for engineering management.

Entry requirements: 4 year BE, BE(Hons) degree or appropriate technology qualification, with sufficient grades, industry experience and competency in communication skills.

www.engineering.auckland.ac.nz/memgt

Master of Engineering Studies - MEngSt

Full-time: 2 semesters (120 point option) or 3 semesters (180 point option) (Plastics specialisation is not available full-time) Part-time: 8 semesters (120 point option) or 12 semesters (180 point option) Points: 120 or 180

This is a coursework-based masters degree available in the specialisations listed below. The programme is aimed at providing an advanced technical or management foundation and industrial perspective.

Entry requirements: Depending on your entry qualifications and GPA you may be admitted to the 120 point option (suitable for those with a 4 year BE or BE(Hons)), or the 180 point option (suitable for those with an appropriate 3-year bachelors degree).

www.engineering.auckland.ac.nz/mengst

Specialisations:

Chemical and Materials Engineering (120 point option only)

This specialisation offers students advanced study options including chemical and materials engineering, materials characterisation, process dynamics and control, materials manufacturing and mechanics of materials. It also offers students the opportunity to learn from internationally renowned researchers in Chemical and Materials Engineering.

www.engineering.auckland.ac.nz/ mengst-chemmat

Civil Engineering (120 point and 180 point options)

This specialisation provides advanced education in the field of civil engineering, an enhanced ability

to contribute to civil engineering practice. It offers a large range of flexible courses and optional research projects so the programme can be tailored to a student's area of interest.

www.engineering.auckland.ac.nz/mengst-civil

Computer Systems Engineering (120 point and 180 point options)

This specialisation provides an insight into advanced concepts of computer engineering with relevant theoretical and practical skills. The programme provides a wide range of courses including embedded and distributed systems, digital systems, intelligent systems, industrial automation systems, real-time control systems, cyber-physical systems and model based engineering. The research projects provide hands-on learning experience.

www.engineering.auckland.ac.nz/ mengst-compsys

Construction Management (120 point and 180 point options)

This specialisation is aimed at current and future professionals in the construction industry, willing to develop their management skills with regard to clients, contractors and consultants. The programme provides a range of courses at an advanced level with flexible electives and optional research projects.

www.engineering.auckland.ac.nz/ mengst-construction-management

Electrical and Electronic Engineering (120 point and 180 point options)

This specialisation offers a range of advanced courses and research options related to energy, communication, control and systems. It also offers the opportunity to work with world-class academic teachers, many of whom have experience in research, commercialisation and collaboration with industry. These areas include control systems, forensics and biometrics, power electronics, power systems, telecommunication and electromagnetics.

www.engineering.auckland.ac.nz/mengstelecteng

Engineering Science (120 point and 180 point options)

This specialisation provides knowledge and training in advanced mathematical modelling and computational techniques, and includes options in operations research and mechanics modelling. The programme has limited entry, requiring a strong background in relevant subjects (mathematics, programming, operations research and/or mechanics).

www.engineering.auckland.ac.nz/mengst-engsci

Environmental Engineering (120 point and 180 point options)

This specialisation provides a wide range of advanced courses in environmental engineering covering the design of water and wastewater treatment devices, storm water management and remediation technologies. Students may also supplement these areas of study with courses in policy, law or environmental sciences from other faculties. In addition, the degree offers the potential for a research project.

www.engineering.auckland.ac.nz/mengst-enveng

Food Process Engineering (120 point option only)

This specialisation is offered as either a taught (four courses plus a research project) or a research (two courses plus a research portfolio) option. It aims to help graduates prepare for jobs in the food industry worldwide and to equip them with the the technical, engineering, food, economic and regulatory knowledge required for innovation in this field.

www.engineering.auckland.ac.nz/mengstfood-process

Geotechnical Engineering (120 point option only)

This specialisation aims to build on the geotechnical content of the BE(Hons) Civil degree and develop graduates with enhanced ability to contribute to geotechnical engineering practice. It has been designed with courses relevant to the New Zealand geotechnical environment.

The programme has limited entry, requiring a BE(Hons) Civil with knowledge of geomechanics to the level of CIVIL 324.

www.engineering.auckland.ac.nz/mengstgeotechnical

Light Metals Reduction Technology (120 point option only)

This is an advanced specialisation targeted at the international light metals industry. It is linked to the Postgraduate Certificate in Light Metals Reduction Technology and aims to extend skills in advanced design and research.**

www.engineering.auckland.ac.nz/mengst-lightmetals-reduction

Mechanical Engineering (120 point and 180 point options)

This specialisation builds on and extends the content of the BE(Hons) Mechanical degree and develops graduates with enhanced ability to contribute to mechanical engineering practice. It offers a variety of advanced courses and optional research projects so the programme can be tailored to a student's area of interest.

www.engineering.auckland.ac.nz/mengst-mech

Medical Devices and Technologies (120 point option only)

This specialisation provides knowledge in medical devices technology and practice, and is designed for students with engineering, medical or science backgrounds. It involves understanding all aspects of medical device design, from future clinical needs and assessment of devices, to implementation of regulations during design. The programme fills the large demand for these skills in the global and domestic medical devices industry.

www.engineering.auckland.ac.nz/ mengst-medical-devices

Plastics (120 point option only)

This specialisation provides students with the advanced knowledge and research experience in plastics materials and processing to support research and development within the plastics industry.

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

Software Engineering (120 point and 180 point options)

This specialisation provides students with advanced software development skills, offering elective courses and optional research projects, in a wide range of topics to suit the student's personal interests. Some topics include high performance computing, agile software development methodologies, advanced software tools and design.

www.engineering.auckland.ac.nz/mengst-softeng

Transportation Engineering (120 point and 180 point options)

This specialisation provides a wide range of advanced courses across the transportation infrastructure spectrum from pavements to transportation planning, plus the potential for a research project. Employment and/or experience in the transportation industry are an advantage.

www.engineering.auckland.ac.nz/mengsttransportation

Yacht Engineering (120 point and 180 point options)

This specialisation is aimed at engineers and marine professionals, and will provide them with a broad range of knowledge in the various technologies that underpin yacht design and performance prediction, which will enable them to enhance their contributions to the marine and yachting industries.

www.engineering.auckland.ac.nz/mengst-yacht

Master of Disaster Management - MDisMgt

Full-time: 2 semesters (120 point option) or 3 semesters (180 point option) Part-time: 8 semesters (120 point option) or 12 semesters (180 point option) Points: 120 or 180

This programme provides graduates with the multidisciplinary knowledge and skills required to underpin successful approaches to addressing the management of disasters in complex urban environments. It concentrates on key issues such as disaster resilience and risk management. It is a highly relevant programme for people seeking careers and leadership roles in disaster management.

Entry requirements: Depending on your entry qualifications and GPA you may be admitted to the 120 point option (suitable for those with a 4-year BE, BE(Hons) or appropriate bachelors degree), or the 180 point option (suitable for those with an appropriate 3-year bachelors degree).

www.engineering.auckland.ac.nz/mdismgt

Master of Energy - MEnergy

Full-time: 2 semesters Part-time: 4 semesters (Research Masters) or 8 semesters (Taught Masters)

8 semesters (Taught Masters)
Points: 120

This is an interfaculty masters degree addressing energy science, technology and business issues. Two compulsory 15 point courses give an overview of technology and business issues. Research is undertaken via either a 90 point research thesis or a 45 point research project. Technical, economic, environmental, regulatory and business issues may be considered. Students in the 45 point research project will also take three additional 15 point electives.

Entry requirements: Candidates must have a 4 year BE or BE(Hons), BSc(Hons), BCom(Hons) or equivalent qualification(s) with the specified grades in the most advanced courses taken towards the entry qualification.

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

Master of Operations Research - MOR

Full-time: 2 semesters Part-time: 4 semesters Points: 120

This programme provides advanced study in operations research through supervised research and a thesis. You will negotiate a research topic with your supervisors and undertake relevant background reading before being admitted to the programme.

Entry requirements: Candidates must have either a BA(Hons), BCom(Hons), BE or BE(Hons), BSc(Hons) or Postgraduate Diploma in Operations Research and passed the prerequisite courses.

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

PhD in Engineering

Full-time: 3-4 years or 6-8 semesters

The PhD is a programme of advanced, independent and original research carried out under qualified supervision. The results are presented in a thesis, which must be an original contribution to the intellectual knowledge of the field and meet recognised international standards.

Entry requirements: Candidates must have completed the requirements for the ME or BE(Hons) with a minimum second class honours division one.

www.engineering.auckland.ac.nz/phd

Admission to programmes

Dates to remember

Closing dates for applications for admission in 2015 are:

Semester One: 8 December 2014

PGCertEng (Plastics): 15 February 2015

Semester Two: 4 July 2015

Entry into a postgraduate engineering programme

Please refer to the programme information for entry requirements.

English language requirements for international students

All applicants whose first language is not English will be required to provide evidence of their proficiency in English. This can be demonstrated by:

- An IELTS or other approved English language test score, or
- Successful completion of the Foundation Certificate in English for Academic Purposes or the English Pathway for Postgraduate Studies offered by the University of Auckland's English Language Academy.

Minimum proficiency requirements at postgraduate level:

- Academic IELTS 6.5 with no band less than 6.0, or
- Foundation Certificate in English for Academic Purposes (FCertEAP) B-, or
- English Pathway for Postgraduate Studies (EPPS) B-

Higher scores are required for admission to some programmes. To see the list of

approved alternatives to IELTS, please visit **www.auckland.ac.nz/is-english**

Entry pathways

Students who have completed a BE or BE(Hons) degree but do not meet the entry requirements for entry to a Master of Engineering Studies or Master of Engineering, may apply for the Postgraduate Certificate in Engineering programme. Students who achieve the specified grades in this programme and who otherwise satisfy the entry requirements may be permitted to continue to a Master of Engineering Studies or Master of Engineering.

For more detailed information on admission requirements refer to *The University of Auckland Calendar*

www.calendar.auckland.ac.nz

How to apply

Applying for a non-doctoral programme

If you are new to the University of Auckland

If you have not been enrolled at the University of Auckland in previous years, you need to talk to the postgraduate adviser in the Faculty of Engineering Student Centre or for more information visit **www.askauckland.ac.nz** or email postgradinfo@auckland.ac.nz

- Research programmes (such as the ME or PhD) will require you to contact an appropriate supervisor for your project.
- Apply for admission using the online application form (www.auckland.ac.nz/ applynow). You will receive an acknowledgement email asking you to provide any documentation or other additional requirements that we need from you in order to complete the processing of your application. We will also send you a Student ID Number. You can use this to sign into your Application for Admission, check your application status and see the documentation you need to provide.
- Once your application for admission has been assessed, you will be informed of the decision by email.

If you are an international applicant

International applicants requiring assistance with the application process or advice about your eligibility for entry to postgraduate programmes should contact Applications and Admissions (admission@auckland.ac.nz). We recommend you start the application process as early as possible so you have sufficient time to apply for your visa.

For all you need to know about becoming an international student at the Faculty of Engineering, please visit:

www.engineering.auckland.ac.nz/ international

Apply at www.auckland.ac.nz/applynow

If you are returning to the University of Auckland

- Students who are enrolled at the University of Auckland in the semester prior to beginning their postgraduate programme should contact the relevant postgraduate adviser and make their application by making an Add/Change Programme request online. A supplementary application may also be required.
- Returning students who have not been enrolled at the University of Auckland in the semester prior to their postgraduate application will need to complete the online application for admission form.
- A supplementary application may also be required. www.auckland.ac.nz/applynow
- Once your application for admission has been assessed, the Faculty of Engineering will inform you of its decision.

Applying for a PhD

If you are interested in a PhD you must:

• Decide upon your area of research interest or potential research topic.

 Identify a research topic and supervisor. Details of supervisors in the Faculty of Engineering and their areas of research can be found at:

www.engineering.auckland.ac.nz/uoa/phd

- Read the PhD Statute and Guidelines and ensure you meet the academic eligibility requirements (including having demonstrated an ability to pursue doctoral level research) for entry into the PhD programme.
- Meet the English language requirements for the programme.
- Arranged for two reference letters to be sent directly to the School of Graduate Studies by your referees.
- Apply for admission using the online application form

www.auckland.ac.nz/applynow

Before you begin, have available, in electronic format:

- Relevant academic transcripts
- Statement of Research Intent (this needs to be prepared in conjunction with your supervisor)
- CV and/or resume.

Once your application for admission has been assessed, you will be informed of a decision by the School of Graduate Studies.

Support for postgraduate study

When you embark on postgraduate study, it is important to feel confident that you have the support you need to succeed. The University's and faculty's extensive range of student services ensures that help is readily available if you need it.

The School of Graduate Studies

The School of Graduate Studies is a centralised service division of the University and has overall responsibility for the development and oversight of policies and procedures for graduate programmes, and the promotion of graduate study and advocacy for graduate students. The range of services offered includes dedicated postgraduate advisers to assist with doctoral enquiries and examination processes, doctoral thesis submission and PhD funding account enquiries. You can seek information and advice by visiting the Graduate Centre in the East Wing of the ClockTower or at:

www.auckland.ac.nz/school-of-graduate-studies

Learning support

The Student Learning Centre (Tā te Ākonga) is dedicated to helping postgraduate students at the University of Auckland succeed in their academic careers.

For more details visit: www.library.auckland.ac.nz/student-learning

Support networks

In addition to your lecturers, tutors, academic and personal support, there are many engineering networks to help you succeed, including the Engineering Postgraduate Society (EPS), the Women in Engineering Network (WEN), and the South Pacific Indigenous Engineering Students (SPIES), which is a network for Māori and Pacific engineering students. For more information see the Faculty of Engineering website: www.engineering.auckland.ac.nz

Fees and money matters

As a university student, you will be expected to contribute towards the total cost of your study through tuition fees. When you are calculating how much it will cost to study at the University, remember to include your textbooks, accommodation, transport and other living costs.

Domestic students

Fees are based on a full-time course load of 120 points per annum*. In addition to these tuition fees, students undertaking a full-time load of 120 points in 2015 will pay approximately \$726 for student services*. Part-time students pay student services fees on a pro-rata basis.

International students

The University of Auckland offers a wide range of student benefits as well as an extremely affordable tuition fee for its international PhD students. Since 2006, the New Zealand Government allows most new international PhD students to pay the same annual tuition fee as New Zealand PhD students. A list of all international postgraduate programme fees can be found on the website*.

*For updated information on fees visit: www.auckland.ac.nz/fees

Scholarships

The University of Auckland believes in investing in our postgraduate students, which is why we offer nearly 400 postgraduate scholarships to a total value of \$18 million each year. For more information, including selection criteria, application forms and closing dates, visit www.auckland.ac.nz/scholarships or email foe-scholarships@auckland.ac.nz

Student loans

Student loans are available to students who are New Zealand citizens and permanent residents to support their costs. You must be studying fulltime (or limited full-time with approval) or part-time for a minimum of 32 weeks per year, with no less than 30 points or more, at an approved tertiary institution.

For more information, contact StudyLink on 0800 88 9900 or visit **www.studylink.govt.nz**

Accommodation

As a postgraduate student, you need a living environment that allows you to focus on your studies, while enjoying all the social and recreational opportunities that the University and City of Auckland have to offer.

For more information contact Accommodation Solutions www.accommodation.auckland.ac.nz

Disclaimer: Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only 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.



NEW ZEALAND CITIZENS OR PERMANENT RESIDENTS Contact:

Faculty of Engineering Postgraduate Office, Engineering Student Centre, Level 4, 20 Symonds Street, Auckland 1142 Phone: 923 6726 (within Auckland) 0800 61 62 63 (outside Auckland) +64 9 923 6726 (overseas) Fax: +64 9 373 7428 Email: foe-postgrad-admin@auckland.ac.nz Web: www.engineering.auckland.ac.nz

INTERNATIONAL STUDENTS Contact:

International Office Room G23, Old Choral Hall, 7 Symonds Street, Auckland 1142 New Zealand Phone: +64 9 923 1535 Fax: +64 9 373 7405 Email: int-questions@auckland.ac.nz Web: www.auckland.ac.nz/international