Welcome to the Faculty of Engineering

Engineers create solutions to global technological and environmental challenges. Be a part of a community that plays a role in improving our future.

Within New Zealand’s leading engineering faculty*, you will have the opportunity to learn from and engage with experts who are internationally respected in their fields. You will be studying alongside many others who share your passion for science, maths and problem solving.

As part of your undergraduate degree, you will be introduced to cutting-edge engineering technologies across nine specialisations, all of which deliver unique opportunities to shape and design future research and commercial outcomes in a vast variety of environments. The opportunities that an Engineering degree and career can offer you are unique, exciting and critical not only for your future, but for the entire global community.

On behalf of the faculty I invite you to take the challenge and join us.

*QS World University Rankings by Faculty, 2015/2016.

Professor Nic Smith
Dean of Engineering
The University of Auckland
Why study with us?

A degree from the University of Auckland’s Faculty of Engineering will give you the skills to shape our world. Engineers contribute to the health of our nation, the growth of our economy and the future of our cities.

Leading the way
You’ll be studying at New Zealand’s highest ranked engineering faculty.* We also host an extensive engineering library, offering you access to a huge array of print and electronic resources.

International recognition
All University of Auckland BE(Hons) specialisations are accredited by the Institution of Professional Engineers New Zealand (IPENZ), a signatory to the Washington Accord. IPENZ accreditation makes your degree a recognised qualification in many overseas countries.

Competitive admission
We have a guaranteed entry scheme for high-performing high school students so you’ll be studying alongside the best. Limited places are also available under our Targeted Admission Schemes for eligible students.

Exclusive specialisations
We are the only university in New Zealand to offer specialisations in Engineering Science, Biomedical Engineering, and a combination of Chemical and Materials Engineering.

World-class facilities
You’ll have access to leading research, equipment and study facilities including the renowned Auckland Bioengineering Institute, a specialised Nanoindenter machine and the Twisted Flow Wind Tunnel.

Women in engineering
Women are highly represented in our undergraduate student body, making up around 25% of students – one of the highest participation rates of females in tertiary-level engineering across Australia and New Zealand.

Combine your degrees
You can combine specialist fields across two faculties by taking a conjoint degree, such as Engineering with Commerce or Law.

Practical experience
You’ll gain experience in the workplace, alongside industry professionals, as you carry out the 800 hours of practical work required over the duration of your degree.

First-class research
We have the largest number of top-rated researchers and the highest level of research income of any university in New Zealand. You’ll have access to our leading research institutes including the Centre for Advanced Composite Materials and the Centre for Automation and Robotic Engineering Science.

Strong career and employment outcomes
The University of Auckland has a QS 5 Star PLUS rating for excellence in eight categories, including employability.**

*QS World University Rankings by Faculty, 2015/2016.
**QS Stars University Ratings 2015.
What can you study?

Bachelor of Engineering (Honours)

Full-time: 4 years
Points per degree: 480
Taught at: City Campus
Application closing date: 8 December 2016
Classes start: 6 March 2017 and 24 July 2017

The BE(Hons) degree at the University of Auckland is a four-year programme that can lead to Chartered Professional Engineer status after graduation and suitable work experience. It consists of 480 points usually divided into four 120-point parts (each equivalent to one year of study).

Part I is a common first year. You gain exposure to each of the nine different engineering specialisations and study a broad base of engineering and professional fundamentals. At the end of Part I, you will be invited to select one of the nine different disciplines that you wish to specialise in for the remainder of your degree. Places are limited.

Parts II, III and IV are customised over the following three years according to your area of specialisation. All students study a common core of mathematical modelling, technical communication and professional development, in addition to specialist subjects relevant to your chosen field. You will also have opportunities to choose elective courses, allowing you to further specialise in topics that interest you most.

Throughout your degree, your courses will involve a mixture of lectures, tutorials, assignments and exams, group projects, interactive learning and presentations.

Sample BE(Hons) degree structure

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<tbody>
<tr>
<td>Part I</td>
<td>ENGGEN 204 Managing Design and Communication</td>
<td>ENGSCI 211 Mathematical Modelling 2</td>
<td>Specialisation course</td>
<td>Specialisation course</td>
<td>Specialisation course</td>
<td>Specialisation course</td>
<td>Specialisation course</td>
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<tr>
<td>Part II</td>
<td>ENGGEN 303 Managing Projects and Innovation</td>
<td>ENGSCI 311 Mathematical Modelling 3</td>
<td>Specialisation course</td>
<td>Specialisation course</td>
<td>Specialisation course</td>
<td>Specialisation course</td>
<td>Specialisation course</td>
<td>Elective</td>
<td>Elective</td>
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<tr>
<td>Part III</td>
<td>ENGGEN 403 Managing a Business</td>
<td></td>
<td>Specialisation course</td>
<td>Research Project</td>
<td>Elective</td>
<td>Elective</td>
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<tr>
<td>Part IV</td>
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</tbody>
</table>

Common core courses  Specialisation courses  Elective courses  General Education courses  Part IV research project  Compulsory degree components

Practical work

There are two compulsory practical work requirements of the BE(Hons) degree. In Part II, you will need to complete a zero-point, 40-hour workshop practice course. You are also required to gain at least 800 hours of practical work experience throughout your degree. This will involve exposure to general trade and sub-professional skills relevant to your engineering specialisation, ensuring you’re ready for the workforce by the time you graduate.

Conjoint programmes

Full-time: 5 years (6 years with LLB)
Points for BE(Hons): 405 points
Points for other degree: 270 points (390 points for LLB)
Conjoint combinations: Arts, Commerce, Law, Music*, Property, Science**

Conjoint programmes enable you to complete a BE(Hons) and another degree faster than if you were to complete them separately. They can be an excellent choice if you know that the other degree component will be beneficial in your proposed career, or if you are a capable student wanting skills in various areas.

As with the standalone BE(Hons) degree, you will cover Part I of the BE(Hons) in the first year of your conjoint programme (although you will take 90 points of engineering courses, rather than 120 points). You will then select your preferred specialisation for Parts II-IV, and complete the requirements of your other degree around it.

The workload for a conjoint programme is higher than that of a single degree (usually 135 points per year, compared with 120 points per year for a single degree). As the BE(Hons) programme alone is considered to have a high workload, conjoint students should be prepared for an even greater challenge.

There are higher entry requirements for conjoint programmes. They can be structured in several ways and planning your timetable can be complex. Before applying, consult with both faculties concerned and refer to the Conjoint Degrees Regulations in The University of Auckland Calendar.

*Subject to CUAP approval
**The BE(Hons)/BSc conjoint is subject to prior approval from the Faculty of Engineering.

General Education

General Education courses are a distinctive feature of the University of Auckland’s bachelors degrees that are designed to broaden your education. As a BE(Hons) student, you must pass one General Education course (15 points) in Part I. Special arrangements may apply if you transfer from another tertiary institution with credit. For more information, visit www.auckland.ac.nz/generaleducation.

All successful applicants will gain entry into the BE(Hons) programme. The BE(Hons) degree is awarded to students who achieve a sufficiently high Grade Point Average (GPA) in Parts II, III and IV. Students who successfully complete the programme but do not achieve a sufficiently high GPA to be awarded the Honours degree will be awarded the BE degree.
Choose your specialisation

Engineering Science
Engineering scientists are problem solvers committed to the “science of better”. They use their intellect and advanced mathematical skills to design ways to optimise and improve systems. How can a forest be managed to make a profit while still remaining environmentally friendly? How can a sail be designed to work in low wind conditions? What prices should be charged for airline tickets to maximise the revenue from a given flight? These are all questions an engineering scientist would relish.

Career opportunities
The diverse range of options available throughout your degree will directly contribute to your professional versatility. You might end up developing software, modelling production processes for a large manufacturer, or in a management position. Our graduates can be found in leading New Zealand companies like Fonterra, Air New Zealand, and Meridian Energy; in government organisations including NIWA and Transpower; and in consultancy firms such as Beca and Maunsell.

"I was the only person from my all-girls school to do engineering. The further I get into it, the more I realise how diverse it is. Being an engineer is like being an inventor – we learn to use scientific knowledge to be creative, and design solutions that can change people’s lives. You don’t need to be a doctor to help people! Studying engineering opens so many doors. I also feel that a degree in technology is smart and future-proof.

“The Engineering Science specialisation is exclusive to the University of Auckland. It’s a varied programme – it has some big maths but also incorporates open ended design projects and a lot of teamwork, which is great. It’s always amazing to see what can be achieved. Engineering Science is also a small specialisation so we really get the chance to know our lecturers personally and interact with them one-on-one.

“Not only is the University prestigious, but there are so many exciting things to do in this city. I’m never bored! I love being outdoors, so I am happy that despite being a big city, Auckland has so many beautiful parks and beaches.”

Lucy McSweeney is studying for a Bachelor of Engineering (Honours) in Engineering Science.

Biomedical Engineering
Biomedical engineers combine engineering, medicine, and biology to resolve challenges in the healthcare industry. They respond to problems like: how can we diagnose ill health sooner? How can we design medical solutions for more effective treatment and quicker recovery? How might autonomous technology and telemedicine improve healthcare delivery? It is a field of rapid diversification, and as the role of technology in healthcare becomes more prominent, biomedical engineers find themselves at the forefront of real-world, life-changing outcomes.

Career opportunities
Biomedical engineers often gain employment in biomedical companies, research facilities, hospitals and government regulatory agencies. They design medical devices, prostheses or implants, develop drugs or drug delivery systems, improve sports and injury assessment, and work in medical IT. As some of the most versatile engineers, biomedical engineers can also be found in fields like software development, electronics, consulting, financial modelling, and the food/meat/wool industries.

"I was a big science nerd throughout high school and was intending to get into medicine until I found out about biomedical engineering at a science forum in Year 13. It just sounded like the perfect combination of what I was interested in: biology and medical science, plus the maths and problem solving aspects native to engineering. I was hooked.

“The exciting thing about biomedical engineering is that the field is so vast. Because it’s so new, industry positions are still being created in New Zealand. There are opportunities to work overseas with this degree, but my next step is probably going to be postgraduate studies. The Auckland Bioengineering Institute is involved with some world-class research.

“I really like the culture here. There’s a certain sense of pride that surrounds being called an engineer. Even though there are nine different specialisations, I think we all share that. We’re also really well catered for in terms of facilities and faculty support, so Biomedical Engineering really does feel like a family. Although the work is tough, we have staff and each other to help us through.”

Rachel Love is studying for a Bachelor of Engineering (Honours) in Biomedical Engineering."
Electrical and Electronic Engineering

Modern society is highly dependent on reliable power, communications and electronic systems. Electrical and electronic engineers design the equipment and systems that provide these essential services. The discipline encompasses a range of exciting and diverse fields, from heavy electrical power generation, to sophisticated medical electronics, computer modelling, electromagnetics, information technology and the global telecommunications network. We will have electrical and electronic engineers to thank when new forms of green electricity are developed and electric vehicles replace our fossil fuel-powered fleet.

Career opportunities

This engineering discipline changes so rapidly that it may be difficult to envision the types of technology you will be working on by the time you graduate – they may not even be invented yet! Today, our graduates are employed in roles relating to communications, wireless computing technologies, electronics, instrumentation, power electronics and motor-control. Opportunities also exist in processing industries such as timber, pulp and paper, steel, aluminium, meat and dairy.

"Electrical and electronic engineering is an area that’s rapidly developing in research and day-to-day use. I am interested in designing products that will be used regularly, like smart devices. I’d like to do this type of work early in my career. Later, I want to do research in making electricity generation highly efficient, cheap and clean, resulting in a healthy environment and low costs for consumers.

“One of the things that stands out to me in my studies is the different ways of thinking to solve engineering problems. We don’t just consider economic impacts but also environmental, social and cultural aspects. The lecturers and teaching assistants here are outstanding. They genuinely care and want students to succeed. They really go out of their way to help us develop as engineers.

“I enjoy living in the city – it is quite different to my hometown, Rotorua. Living in a Hall of Residence in my first year helped me transition from living away from home. I’ve also made some good friends here which I’m really grateful for. There’s a large variety of clubs at the University, which is a great way to meet people and do something different.”

Murali Krishna Magesan is studying for a Bachelor of Engineering (Honours) in Electrical and Electronic Engineering.

Software Engineering

Software engineering is behind many of the things we now take for granted – internet banking, online shopping, and mobile payments. Consider the apps on your smart phone, the games on your computer, and the cloud storage you depend on to back up your devices. This area of engineering is being propelled by widespread demand for faultless software support. The creative possibilities are limited only by your imagination.

Career opportunities

As infrastructure, government agencies, businesses, and individuals are increasingly reliant on intuitive, dependable, cloud-based solutions, software engineers are emerging as the newest generation of IT workforce leaders. As a graduate, you could end up in virtually any company, managing their information storage and sharing technologies. You might choose to join a dedicated software consultancy firm, or work your way up to management. Or, you might extend your Part IV project with postgraduate research, and use this to kick-start your very own start-up company.

“I picked the University of Auckland because of its excellent reputation for engineering and computer science. I’d like to get into user interface or games. I enjoy looking at how easy things are to use – being able to work with people to make things accessible and intuitive is really interesting.

“We’ve done some big projects and it’s so rewarding to see the connection between lectures and what actually happens in a work environment. Later in my career I’d like to be able to apply everything we’ve learned about usability to what I do. I’d like to work in very graphical media, analyse how people interact with programs and work towards making products more user friendly. I’d love to go to a big company like Google or Microsoft, or Weta Workshop. I’m working at Google in Sydney for 12 weeks over summer.

“It’s good to be involved in Uni outside of study, too. The Software Engineering Association runs game nights and networking events, and WEN (Women in Engineering Network) is really cool. I’m also a Tuākana tutor for first year Māori and Pacific students. It’s so much fun and really rewarding; I love to come in and help out with projects.”

Hannah Sampson (Ngāti Porou) is studying for a Bachelor of Engineering (Honours) in Software Engineering.
In high school I enjoyed maths and physics, and I realised engineering would be a good career for implementing those two subjects. I wanted to do civil engineering – specifically structural engineering – and there were really only two universities in New Zealand that did it to IPENZ accreditation standard. That was important to me.

One of my projects this year was about the MV Rena and her grounding on Astrolabe Reef in the Bay of Plenty. Our challenge was to analyse the economic, cultural, environmental and social impacts that the collision, spillage of oil and cargo, and resulting wreckage had and will have. The affected parameters included health of marine life, tourism/local business and Māori customs. Analysing these parameters allowed us to understand the problem more and gives us better knowledge to implement a more effective solution for the future.

The most valuable thing I’m getting out of my studies is a broader knowledge of how the world works; in the first year you get a taste of nine engineering disciplines, so you get an appreciation for how everything works. Another highlight is being independent and learning about things I enjoy, plus meeting a range of people – it’s such a diverse community here.”

Joel Kavenga is studying for a Bachelor of Engineering (Honours) in Civil and Environmental Engineering.

“Computer Systems Engineering is an intersection between Electrical and Software Engineering, so we cover a wide range of topics. I feel this helped me quickly learn new and unfamiliar skills, and to define the specific areas I’d like to work in when I finish University.

“My courses provided a hands-on approach to learning. You could often see the impact of your code in the real world, like making an LED blink, or programming a robot to turn.

“I really enjoyed working on my Part IV project, a vision control system for a lightweight inflatable robot arm. It involved building the whole system so we had a lot of control over the project and got to make and evaluate many different design options. I had the opportunity to travel to a university in Japan to complete the project. It was a great experience – I learned a lot, not only about my project, but also about their student culture and environment.

While group projects are interesting in themselves, I like working with friends and making new ones. This just makes studying at University more fun!”

Forest Fraser is studying for a conjoint degree: Bachelor of Engineering (Honours) in Computer Systems Engineering and Bachelor of Commerce.
Mechanical Engineering

If you’re interested in the design, development, installation, operation or maintenance of just about anything that has moveable parts then Mechanical Engineering could be the programme of study for you. Mechanical engineers use science and technology to design and produce mechanical devices, machinery and systems – think robots, wind turbines and cars. Their work spans from nanotechnologies to large-scale industrial machinery and processes, such as paper mills or car assembly plants. Mechanical engineers also understand how to efficiently use energy in processes, so they might be involved in designing a heating system for a hospital or a refrigeration plant for a food export company.

Career opportunities

As a graduate, you might pursue opportunities in the manufacturing or transport industries, or in major primary process plants that produce things like wood pulp, dairy products, meat, steel, petroleum and electricity. Graduates enjoy the variety involved in consultative engineering, where they are commissioned by companies to plan, design and implement projects often confined by interesting and industry-specific parameters.

Claire Wang is studying for a conjoint degree: Bachelor of Engineering (Honours) in Mechanical Engineering and Bachelor of Commerce.

“I love learning about the world we live in and how things work. It’s the simplest way to say what I enjoy about studying Mechanical Engineering – discovering how to get from the start of something with some manufactured parts to a system that works together to complete a function. Engineering offers many possibilities, and doing a conjoint degree opens up even more options for me.

“Undoubtedly, the student culture is the absolute best. Because of the degree structure, you become very well acquainted with your peers who also study Engineering in the first semester of your first year. I’m surrounded by students who not only are extremely hardworking and have astounding ambitions and aspirations, but are some of the most fun people I know. Everyone is also going through something similar which bonds you together as a student body.

“Engineering also performs extremely well in the Interfaculty Sports Championship. We won the Colin Maiden Shield for the top sporting faculty at the University, and this adds to the pride felt amongst students. I also like that the faculty has some excellent support systems in place for students – tutoring for your first year, specific support networks for various minority groups, and career advice for finding summer internships.”

Mechatronics Engineering

Mechatronics engineering integrates specialist knowledge in mechanics, electronics and computer systems to design and develop automated systems, such as chassis-stabilising systems, anti-lock brakes, engine control units, disk drives, cameras, service and surgical robots and medical devices. All of these systems are largely mechanical in nature, but could not function without their essential electronic and computer control system components. As “jacks of all trades”, mechatronics engineers are often generalists rather than specialists, with a versatility that is highly valued in the workforce.

Career opportunities

This specialisation is fully in line with the modern world’s desire for a high-tech, knowledge-based economy. As society moves toward “smart” homes, cities and grids, mechatronics engineers will be in high demand. Our graduates can be found in a wide range of jobs that involve the design and improvement of high-tech products, such as home appliances, medical devices and machine tools, and processes related to precision agriculture and remote sensing.

“I’d really love to do special effects. When I went to see Taylor Swift’s show, part of the stage lifted out and swung around while she was standing on the end of it – five or six metres in the air. I knew an engineer had to be responsible for that!

“Getting into a specialisation is competitive, but the great thing is that engineers are all very supportive of each other. People are very interested in working together rather than working against each other. In terms of lecturers, the passion in what people do is definitely present and that’s what I really enjoy about the faculty.

“When I’m studying, I’ll go to the library or Albert Park; on a sunny day there’s nowhere better to be. Or I might be at the University’s Queerspace, which is a safe physical space for queer people to just hang out. Engineering has the Rainbow Engineering Network which holds regular social meetings to chat about what’s going on.

“I’m also part of the University’s Photographic Society, and that’s really fun. I’m constantly busy, but it’s very rewarding when you know that you’re learning new skills and gaining so much knowledge. An engineering degree can open doors around the world.”

Tomas Haver is studying for a Bachelor of Engineering (Honours) in Mechatronics Engineering.
Chemical and Materials Engineering

Do you wonder how products like petrol, plastic bottles and synthetic polyester are produced from oil? Or are you more interested in developing new, sustainable replacements to these everyday items? These topics fall under Chemical and Materials Engineering, a discipline that involves understanding how to chemically or physically alter a substrate in order to produce something useful. As “big picture” professionals, these engineers are often responsible for the overall design, operation and quality of giant-scale processes.

Career opportunities

Major industries employing chemical and materials engineers include dairy and food, pharmaceuticals, paper and pulp, petrochemicals, energy processing and production, construction and cement, timber, water treatment, resource development and management, electronics, and mineral processing industries such as aluminium and steel production. As sustainable practices become increasingly critical, chemical and materials engineers will also be required to re-evaluate and re-design many of the fundamental products and processes that these industries have been built upon.

“I enjoy the variety in my engineering degree. It covers a lot of different topics: from energy and resources, to process engineering, and materials. I’m really interested in energy and resources, renewables and nano-materials. Choosing Chemical and Materials Engineering gives me a lot of career options.

“The best thing about the Faculty of Engineering is the sense of community; there are events and seminars constantly. And everything you need is here -- there are ample facilities for study and work. My ideal job would be in the renewable energy sector as I think it’s the future of energy worldwide. It would be awesome if I could work on developing solar energy in New Zealand. Chemical and materials engineering also offers work opportunities overseas which is really exciting.

“Coming to Auckland from Hastings was one of the best decisions I’ve made because I had to step out of my comfort zone. I’ve made a whole bunch of friends up here. I looked at going to other universities but they offered nowhere near what Auckland offered in terms of specialisations. The University of Auckland had the better reputation. My advice is to follow your interests -- not your friends.”

Cole Simons is studying for a Bachelor of Engineering (Honours) in Chemical and Materials Engineering.
What’s it like to study with us?

The Faculty of Engineering is dedicated to providing a relaxed and supportive atmosphere for our students, so academic and pastoral support are always available. Events are held throughout the year and you can get involved with a variety of student groups, clubs and associations.

Part I Assistance Centre
Part I students can receive academic assistance from high-achieving Part II and III mentors every teaching week during Semester One and Two. The mentors are trained and maintain close contact throughout the semester with the course coordinators for all Part I courses. The service is also provided at O’Rorke Hall for engineering students who are living there.

Tuākana Tutorial Programme
The Faculty of Engineering employs high-achieving Part II and Part III students to provide targeted tutorials in all core Part I Engineering courses. Academic support programmes are also provided for Māori and Pacific engineering students.

Clubs and associations
Our faculty has a vibrant student culture. Beyond studying, we ensure that you have the safe spaces and opportunities to make new friends and enjoy student life. You may choose to join specific groups, such as the Women in Engineering Network (WEN), the South Pacific Indigenous Engineering Students Network (SPIES) and the Rainbow Engineering Network. Alternatively, there are plenty of clubs for different areas of interest, including the Engineering Revue, the University of Auckland Formula SAE Team, Engineers Without Borders and more.

Student Engagement team
The Student Engagement team supports you to be successful academically, personally and professionally. The team is there from Orientation through to employment, and provides academic help, pastoral services and links to key support services. These include health and counselling, career development services and learning services. Email foe-engagement@auckland.ac.nz for more information.

International students
The Faculty of Engineering welcomes applications from international students. If you intend to seek admission to Part I of the BE(Hons) on the basis of New Zealand secondary school qualifications, you will require the same guaranteed entry score as domestic students. If you gained your university entrance qualification outside of New Zealand, the qualification will need to be approved by the University of Auckland. More information can be found at www.engineering.auckland.ac.nz/international-entry.

Scholarships
More than 40 engineering undergraduate scholarships ranging from $1,000 to $7,500 have been generously established by individuals, societies, businesses and industry bodies. The Faculty of Engineering Kick Start Scholarships are targeted specifically toward school leavers applying to Part I of a BE(Hons). These scholarships are a one-year award of $2,000 aimed at assisting with the initial costs for your first year at the University of Auckland. For a full list of undergraduate scholarships and awards, visit www.engineering.auckland.ac.nz/scholarships.

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<th>Academic year 2017</th>
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<tr>
<td>Summer School</td>
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<td>Semester One</td>
<td>Monday 6 March to Monday 3 July</td>
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<tr>
<td>Semester Two</td>
<td>Monday 24 July to Monday 20 November</td>
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How do you get in?

The following information details the requirements for admission to the BE(Hons).

University Entrance Standard

If you are applying for admission to the University of Auckland in 2017 based on secondary school qualifications, you will be required to meet the University Entrance Standard established by Universities New Zealand. For details please see The University of Auckland Undergraduate Prospectus or visit www.auckland.ac.nz/entry-requirements.

BE(Hons) programme requirements

In addition to achieving university entrance, you must meet specific programme requirements for admission to a BE(Hons) programme. The following table indicates the rank score, credit and subject requirements that will guarantee you a place in a BE(Hons) programme in 2017.

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<th>Programme</th>
<th>NCEA (Level 3)</th>
<th>CIE (taken in NZ)</th>
<th>IB</th>
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<tbody>
<tr>
<td>Bachelor of Engineering (Honours) (BE(Hons))**</td>
<td>260 with 17 external Level 3 credits in Calculus and 16 external Level 3 credits in Physics</td>
<td>310 with Mathematics and Physics at A levels*</td>
<td>33 with Mathematics and Physics at HL level*</td>
</tr>
<tr>
<td>Bachelor of Engineering (Honours) conjoints</td>
<td>275 with 17 external Level 3 credits in Calculus and 16 external Level 3 credits in Physics</td>
<td>330 with Mathematics and Physics at A levels*</td>
<td>36 with Mathematics and Physics at HL level*</td>
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*For CIE students, AS level Mathematics and Physics may be accepted based on level of grade achieved. For IB students, SL level Mathematics and Physics may be accepted based on level of grade achieved. **The Faculty of Engineering will give consideration to students who missed out on admission to BE(Hons) who are able to demonstrate sufficient ability in engineering-related and approved study in the Bachelor of Science (BSc) programme, for admission in Semester Two.

For more information, see www.engineering.auckland.ac.nz/behons-alt-pathway.

How your rank score is calculated

National Certificate of Educational Achievement (NCEA) Level 3

To be admitted to the University of Auckland you must gain the University Entrance Standard and be selected into a programme. You will be allocated a rank score based on your best 80 credits at Level 3 or higher over a maximum of five approved subjects, weighted by the level of achievement attained in each set of credits. If you achieve fewer than 80 credits, the rank score will be based on those credits you have gained at Level 3 over a maximum of five approved subjects and weighted by the level of achievement.

The rank score will be calculated by awarding the following points for up to 24 credits in each approved subject taken at Level 3: 4 for ‘Excellence’, 3 for ‘Merit’ and 2 for ‘Achieved’. The maximum rank score is 120.

- Credits obtained in any required subjects do not have to be among the best 80 credits used for ranking purposes.
- NCEA Level 3 credits achieved in previous years may be counted towards the 80 best credits used for ranking purposes.
- Level 3 subject requirements for a specific programme may be met in Year 12.
- You are strongly encouraged to take achievement standards as preparation for University study.

University of Cambridge International Examinations (CIE) (taken in New Zealand)

To be admitted to the University of Auckland you must gain the University Entrance Standard and be selected into a programme. You will be allocated a rank score using the UCAS Tariff for the best six subject units at AS or A Level, provided that no more than two subject units are included from any one syllabus group in the table of available syllabus groups, which are broadly equivalent to those in the list of approved subjects for NCEA. (1 AS level = 1 subject unit; 1 A level = 2 subject units.) (Thinking Skills and the General Paper will be excluded.)

- The rank score will be calculated from your UCAS Tariff points by awarding points for each syllabus group (to a maximum of six subject units). The maximum rank score is 420.

International Baccalaureate (IB)

To be admitted to the University of Auckland you must gain the University Entrance Standard and be selected into a programme. You will be allocated a rank score according to your IB score. For example, if you achieve 27 points for IB, your rank score will also be 27 points. The maximum rank score is 45.

Academic English Language Requirement (AELR)

The AELR aims to ensure that you have a sufficient level of competence in academic English to support your study at University. It will not affect whether you are offered a place on a programme, and may be met through your entry qualification or satisfactory completion of an approved course in your first year of study. Applicants who have not met the AELR through their entrance qualification will be provided with advice at the time of enrolment. For further information, see www.auckland.ac.nz/aelr.

Alternative pathways into Engineering

For those students who do not have the appropriate secondary school qualification, subjects and/or rank score, there are a number of alternative pathways for gaining admission into the BE(Hons). These range from a semester or two of successful study in a Bachelor of Science programme, a New Zealand Diploma of Engineering, or Manukau Institute of Technology’s foundation-level Pre-Degree Certificate in Engineering Studies. For details, visit www.engineering.auckland.ac.nz/entry-pathways.
It’s time to apply

It’s a two-step process to apply and enrol for your chosen programme.

Apply

Go to www.apply.auckland.ac.nz and complete the Application for Admission. If you haven’t already, you’ll be asked to sign up for a new account. To be considered under the Māori and Pasifika Targeted Entry Scheme (MAPTES), select the appropriate option.

You will receive an acknowledgement email asking you to provide certified documents (and in some cases to complete other requirements*) before your application can be assessed.

You can apply for more than one programme. We’ll be assessing your application, and you can check your application status online at any time. Be patient though – documents can take 3-4 weeks to process during peak admission periods. Some of your documents might take longer to process than others, despite being sent in at the same time.

If your application is successful, we’ll email you an offer – normally from mid-January**.

*For some programmes, you may be required to submit supplementary information (eg, a portfolio of work, referee reports, an online form) or to attend an interview.

**If you are not offered a place in the programme(s) of your choice, you will receive an email outlining alternative options. Your final offer of a place depends on two things: your admission to the University (which for school leavers may depend on your final school results) and your assessment by the relevant faculty.

Enrol

Once you’ve accepted an offer of place in a programme, you can enrol in a course. If you need some help with the enrolment process, visit www.auckland.ac.nz/enrolment for an online tutorial. To find out more about the courses you’ll need to enrol in for your engineering degree, go to www.engineering.auckland.ac.nz/enrolment.

Next, you need to make sure to pay your fees! You’ll find all the details at www.auckland.ac.nz/fees.

If you feel stuck at any point in the process, you can find answers to your questions at www.askauckland.ac.nz. There’s also someone who can help during business hours at 0800 61 62 63 or at studentinfo@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.

Publication date: March 2016

Money matters

The table below is based on the 2016 fees scheduled for a first-year BE(Hons) student enrolled in a full time load of 120 points. It should be used as a guide only. Fees for 2017 will be set later in 2016.

For updated fees information, refer to www.auckland.ac.nz/fees

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<tr>
<td></td>
<td>$7,692</td>
<td>$40,633</td>
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</tbody>
</table>

All fees are charged on a per point basis. Part-time students taking fewer than 120 points will pay proportionately lower fees. Workshop practice course fees are not included in the above. In addition to tuition fees, a Student Services Fee is also charged. Students studying full-time (120 points) in 2016 paid $754.80. The fee for 2017 will be set later in 2016.

Targeted Admission Schemes

The Faculty of Engineering is committed to equity within its programmes and offers admission schemes for eligible Māori students, Pacific students, students with disabilities, students from refugee backgrounds and students from low socio-economic backgrounds (decile 1, 2 or 3 schools). The faculty reserves a number of places in our undergraduate programme for these students who have met the University Entrance Standard but have not met the guaranteed entry score for the BE(Hons). Places are limited.

Māori and Pasifika Targeted Entry Scheme (MAPTES)

The Faculty of Engineering invites applications from all eligible Māori and Pacific students. Places under MAPTES will be allocated based on academic performance and the applicant’s potential to successfully complete the BE(Hons) degree. It is important that you apply for MAPTES even if you don’t think you will have the grades to get in. Gaining entry via MAPTES makes you eligible to participate in Tūkana, the academic and mentoring support programme offered within the Faculty of Engineering.

For further information, contact the Engineering Student Centre or:

Dennis Matene, Kāiārahi Māori
Phone: +64 9 923 3251
Email: d.matene@auckland.ac.nz
www.engineering.auckland.ac.nz/maptes

Closing dates for applications for admission in 2017

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Closing date</th>
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<tbody>
<tr>
<td>MAPTES</td>
<td>25 November 2016</td>
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<tr>
<td>BE(Hons) Semester One entry</td>
<td>8 December 2016</td>
</tr>
<tr>
<td>BE(Hons) Semester Two entry</td>
<td>4 July 2017</td>
</tr>
</tbody>
</table>

Some late applications may be accepted after 2016 school results are received. It is advisable, however, to apply for all programmes that you might wish to study before the published closing date. Multiple applications are acceptable and all applications will be considered when 2016 academic results are available.