## Ara Pūhanga <u>me te</u> Hoahoanga

# **Engineering**& Architecture





### **Engineering**

#### Become a technically savvy innovator with the expertise to change the way the world works.

Engineering is an exciting career option that suits practical people with enquiring minds and the ingenuity to find practical and cost-effective solutions to technical problems. It's also a hugely diverse and dynamic area with exciting opportunities to invent, collaborate and make a difference – potentially on a global scale.

We focus on practical and applied engineering with the aim of preparing you for a diverse spectrum of employment opportunities, both in New Zealand and overseas. You can be confident that your qualification gives employers a clear signal that you have the skills, knowledge and practical experience needed to be effective in the workplace from day one.





#### **New Zealand Diploma in Engineering**



Level 6



Christchurch



Full-time: two years Part-time: up to five years



February, July\*

#### Gain the skills and knowledge needed to work as an engineering technician.

With an emphasis on sound thinking and problem-solving skills, this diploma has been designed in conjunction with industry to meet the needs of the New Zealand engineering sector.

Available in four specialties (civil, mechanical, electrical and electronics), it includes core and elective courses focused on the design and implementation of engineering technology.

You'll gain a solid grounding in engineering theory and the principles of engineering science. You'll also acquire skills, knowledge and hands-on experience relating to your specialty.

\*Electrical and electronic specialisations start in February only







#### **Bachelor of Engineering Technology**



Level 7



Christchurch



Full-time: three years Part-time: up to 10 years



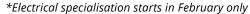
February, July\*

#### Prepare for an exciting career in engineering design and development.

Our Bachelor of Engineering Technology is a three-year degree available in three specialties: civil, mechanical and electrical. It's fully accredited by Engineering New Zealand and is recognised internationally under the Sydney Accord.

In your first year of study, you'll develop core engineering skills in computing, mathematics, management and the engineering sciences, plus some discipline-specific topics. This forms the foundation upon which you'll build your degree. Critical thinking, problem solving, and innovation will be a key part of your success.

In your second and third years you'll continue to deepen your understanding in your specialist area and engage in projects that allow you to apply your knowledge. You'll undertake an industry-related capstone project which may be sponsored by a local or international business. This offers the chance to test your skills against industry standards in a real-world scenario, while building your professional portfolio and developing important industry







Visit ara.ac.nz for all entry requirements and fee information.











### **Construction Management** and Quantity Surveying

#### Excel in the construction industry with sought-after expertise.

Skilled professionals are needed up and down the country to work on residential, commercial, industrial and infrastructure projects. Taught by experts, our programmes in construction management and quantity surveying can equip you to make a significant contribution in the construction industry.



#### **New Zealand Diploma in Architectural Technology**



Level 6



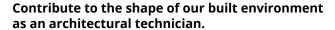
Christchurch



Full-time: two years Part-time: up to five years



February, July



This programme will equip you with the essential knowledge and skills required to enter the architectural field as a technician working on domestic and commercial building projects.

You'll learn how to produce working drawings and documentation for small and medium scale projects that meet with the requirements of New Zealand legislation, codes of practice and New Zealand and Australian standards. The emphasis is on building technology, sound construction detailing and communication.









#### **New Zealand Diploma in Construction**

Level 6



Christchurch



Full-time: two years Part-time: available



February, July

#### Gain the specialist skills needed for a career in construction management or quantity surveying.

This programme offers specialisations in construction management and quantity surveying. It will equip you with the essential skills and knowledge needed to work in either discipline, on both residential and commercial building projects.

The construction management specialty covers the skills required at all stages of building projects, from conception to completion, with an emphasis on building technology, communication and health and safety. Other relevant vocational skills covered include planning, methodology and site management, procurement, programming and financial administration of contracts.

The quantity surveying specialty covers means measurement, estimating and cost planning, as well as procurement, programming and financial administration of contracts.

Work experience components are included in the second year of the programme for full-time students.

#### **Bachelor of Construction**



Level 7



Christchurch



Full-time: three years Part-time: up to eight years



February, July

#### Become a sought-after professional in the construction industry.

The Bachelor of Construction offers two specialisations: construction management and quantity surveying. It's designed to equip you with the skills and knowledge needed to work at a high level in the construction industry, as a leader who's able to innovate and contribute to new ways of creating the built environment.

The programme starts with an introduction to the knowledge, skills, attributes and academic abilities required of a construction manager or quantity surveyor. You'll gain discipline-specific skills and knowledge, starting with a focus on small domestic buildings and moving on to low-rise and large commercial construction, followed by heavily serviced, multi-faceted projects.

Your year-three project work and assessments will require problem solving, independent research skills and application of cultural approaches and aspects of sustainability. Also in your third year, you'll be required to source and organise technical, project and academic research information, and evaluate, critique and propose well-rationalised solutions.



Visit ara.ac.nz for all entry requirements and fee information.









#### **Graduate Diploma in Construction Management**

Level 7



Christchurch



Full-time: one year Part-time: up to four years



February, July

#### Expand your knowledge and skills for senior roles in the construction industry.

Designed to enhance your existing knowledge and skills in the construction industry, this programme will equip you with specialised construction management skill sets.

It will enable you to perform with a strong sense of responsibility for your own practice and to be capable of effectively collaborating with other construction-related disciplines. During the programme you'll extend your technical, applied and legal knowledge and critically review practice within the construction industry.

You'll also learn how to improve the productivity of construction projects and advise on construction methodology through the life cycle of a project. An industry project will allow you to apply your research and critical thinking skills.

#### Graduate Diploma in **Quantity Surveying**



Level 7



Christchurch



Full-time: one year Part-time: up to four years



February, July

#### Develop your quantity surveying skills for a rapidly evolving industry.

This programme is designed to enhance your knowledge and skills in quantity surveying by equipping you with specialised occupation skill sets. It will enable you to perform with a strong sense of responsibility for your own practice and to be capable of effectively collaborating with other construction-related disciplines.

During the programme you'll extend your technical, applied and legal knowledge and critically review practice within the construction industry. You'll also learn how to provide strategic, budgetary and financial advice on development options through the life cycle of a construction project, and how to apply elements of construction economic theory to provide advice on the risks and uncertainty associated with cost-related project outcomes.

An industry project will allow you to apply your research and critical thinking skills.









### **Architectural Studies**

#### Create a career shaping the buildings we live, work and come together in.

Whether you choose to study architectural studies or interior design, our team of industry professionals will inspire, guide and support you to achieve your study goals.

You'll gain the technical capabilities required for industry, learn about the variety of solutions that can be applied to design challenges, and discover how excellent visual, oral and written communication can help smooth a project's way. Your tutors will also connect you with their industry contacts to enhance your abilities through real-world workplace experience.



#### **New Zealand Diploma in Interior Design**



Level 5



Christchurch



Full-time: one year Part-time: up to four years



February



With this programme you'll study both the theory and practical aspects of interior design, and learn about light and colour, design principles, materials and finishes, lighting, soft furnishings, window treatments, ergonomic principles, New Zealand art and cultural/historical influences in interior design.

You'll also learn about architectural communication, building codes, laws and regulations, personal and business presentation, and business management. In addition, you'll develop your freehand drawing and manual drafting abilities, and learn how to use software such as Computer Aided Design and Photoshop. Your studies will include work-integrated learning in industry, and you'll participate in a public exhibition of your work alongside your fellow students.



Visit ara.ac.nz for all entry requirements and fee information.











#### **Bachelor of Architectural Studies**

Level 7



Christchurch



Full-time: three years Part-time: up to five years



**February** 

#### Add technical skills and knowledge to your creative abilities for a career in architectural design.

During the first two years of your degree, we'll take you through foundation studies in drawing and design, computer-aided design, architectural design and related technologies. You'll also study building legislation and codes as they relate to architecture.

You'll spend about 40 hours a week in practical workshops, lectures and undertaking your own independent research and practice.

In your final year you'll learn about industrial practice laws for architecture, and you'll participate in EXIT, a showcase of student work which embeds architecture in context with city making.

### Become an in-demand leader in construction,

Graduate Diploma in

Christchurch

February, July

Full-time: one year Part-time: up to two years

architecture and civil engineering.

Level 7

**Building Information Modelling** 

This qualification builds on the four foundational courses within the Graduate Certificate in Building Information Modelling. It will provide you with higher-level learning in construction-related fields, plus give you the opportunity to apply your knowledge to an industry-negotiated, applied BIM project.

It can lead to roles such as BIM lead, BIM specialist and BIM/CAD engineer or designer. Upon completion of the programme, you'll be ready to make an immediate impact in the construction industry and lead the way in driving innovation and efficiency.

#### **Graduate Certificate in Building Information Modelling**



Level 7



Christchurch



Full-time: six months Part-time: up to five years



February

#### Be part of the future of construction, architecture and civil engineering.

As a methodology, Building Information Modelling (BIM) makes a significant contribution to the efficient design, construction and use of buildings. It's used by individuals, businesses and government agencies who plan, design, construct, operate and maintain diverse physical structures.

This programme—developed in response to industry demand for BIM-qualified team members—is a perfect professional development opportunity for anyone with a degree (or degree-equivalent qualification) in construction management, quantity surveying, architecture, civil engineering or facilities management. It provides a broad understanding of Building Information Modelling and can lead to roles such as BIM coordinator and BIM Manager.









### Notes

### Notes



### You belong here

TE RANGI TŪHURA

**Christchurch and Timaru campuses** 

Thursday 13 June 2024 **3pm - 6pm** 

Register at ara.ac.nz



# **Apply now for 2024**

ara.ac.nz

info@ara.ac.nz

0800 24 24 76

#### **City campus**

130 Madras Street, Christchurch Mon-Fri, 8am-4.30pm

#### Manawa campus

276 Antigua Street, Christchurch Mon-Fri, 8.30am-4.30pm

#### **Woolston campus**

Ensors Road, Christchurch Mon–Fri, 8am-4.30pm

#### **Timaru campus**

32 Arthur Street, Timaru Mon-Fri 8am-4.30pm

#### **Ashburton campus**

37 Alford Forest Road, Ashburton Mon-Fri, 8.30am-4.30pm

#### **Oamaru** campus

44 Humber Street, Oamaru Mon-Fri, 8am-4.30pm

#### **Ara Connect**

City campus, Madras Street, Christchurch Timaru Campus, 32 Arthur Street, Timaru Woolston Campus, Ensors Road, Christchurch

