

ENGINEERING AND INDUSTRIAL DESIGN



Engineering and industrial design are key drivers of economic success for our country. At the same time, numerous jobs in these industries are listed on the government's long-term skills shortage list.

Our Centre for Engineering and Industrial Design produces highly skilled graduates in these fields. By working closely alongside key players in the industry, our training provides students with skills that are in demand and meet the needs of employers.

With numerous national infrastructure projects planned for the next decade and both a local and global shortage of engineers, we are responding by offering qualifications in engineering technology, architectural technology, and quantity surveying.

Our Centre for Engineering and Industrial Design focuses on flexible, student-centred and project-based learning. Students get the chance to put their skills into practice by getting involved in industry projects that take place in real workplaces.

Our ultra-modern \$25 million state-of-the-art engineering and trades facility opened at our Rotokauri campus in early 2014. The facility provides our engineering students with an opportunity to learn in an environment that better reflects industry standards and uses the latest techniques, technologies and equipment.

Meanwhile, we're working with industry to provide 'real-world' research solutions to real-world industry challenges. For example, in 2013 we acquired New Zealand's first ultra-high definition, mass production,

liquid resin 3D printer. With it, we're working with companies to radically improve the way they think about and perform industrial design. In less than 24 hours, we can take a customer's prototype drawing, translate it into a computer model, print it and deliver it into their hands. In 2017, we added two more Fused Deposition Modelling (FDM) hot filament 3D printers to our capability.

Wintec is also part of the Engineering Education to Employment (Engineering e2e) programme set up by New Zealand government in 2014 and managed by the Tertiary Education Commission (TEC). We collaborate with Hamilton high schools with the aim of smoothing transitions between secondary school and tertiary education to help address New Zealand's critical shortage of engineers. While students spend a part of their week with us to do practical work, we support teachers at the school to deliver maths and physics in an engineering context. Some of the students have also the opportunity to complete one paper towards the New Zealand Diploma in Engineering.

Our graduates work as:

- Architectural technicians
- Civil engineers
- Civil technicians and technologists
- Construction contractors
- Drafting technicians
- Draftsmen
- Electrical technicians and technologists
- Mechanical technicians and technologists
- Project managers
- Quantity surveyors and surveying technicians

