



# New Zealand Diploma in Engineering (Civil Engineering)



Location	Dunedin
Duration	Two years full-time; part-time options
Delivery	On campus (this programme is very practical and you will learn using real-life scenarios)

Credits	240
Level	6
Start	February and July
Apply	Now

## Shape the world. Become a Civil Engineering Technician.

Civil Engineers work on the design, construction management and maintenance of civil works such as roads, dams, earthquake engineering, water and sewerage systems. Civil engineering graduates are responsible for the project management of these jobs and often work internationally as New Zealand graduates have a good reputation worldwide.

During this programme, you will gain a sound knowledge, understanding and practical appreciation of civil engineering processes and theory by developing your ability to apply learning in a practical and innovative way.

There is presently a significant shortage of trained civil engineer technicians, particularly in roading. This shortage is expected to become more acute in the short term so your skills and experience will be highly sought after.

Graduates of this qualification may find career opportunities with local authorities, construction companies, mining companies or civil engineering consultancies. Employers often seek new staff directly from our programme.

This Diploma is recognised by Engineering New Zealand and internationally under the Dublin Accord.

Please note: Places are limited across all disciplines so early application is advisable.

### Graduate attributes

All courses within this qualification contribute towards the skills, knowledge and attributes of the New Zealand Diploma in Engineering qualification and the Engineering Technician as recognised by the International Engineering Dublin Accord.

At the completion of this Diploma, all graduates will be able to:

**Domestic fee:** Free - normally \$8,696 for first year!

Due to the Government's Targeted Training and Apprenticeship Fund.

- > You will still need to pay for any additional course-related costs such as textbooks (see more info in Additional Costs section).
- > You can pay for this yourself or apply for a loan/allowance via Studylink.

**International fee:** \$23,400 (first year) **plus compulsory student levy >**

\*Fees are approximate, subject to change and exchange rates



<b>Differentiating characteristic</b>	<b>Dublin Accord - New Zealand Diploma in Engineering Graduate</b>
<b>Engineering knowledge</b>	Apply knowledge of mathematics, natural science, engineering fundamentals, within specialist discipline to wide practical procedures and practices
<b>Problem analysis</b>	Identify and analyse well-defined problems reaching substantiated conclusions using codified methods of analysis specific to specialist field
<b>Design development of solutions</b>	Design solutions for well-defined technical problems and assist with design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural and societal and environmental considerations
<b>Investigation</b>	Conduct investigations of well-defined problems, locate and search relevant codes and catalogues, conduct standard tests and measurements
<b>Modern tool usage</b>	Apply appropriate techniques, resources, and modern engineering and IT tools to well-defined engineering problems with an awareness of the limitations
<b>Engineer and society</b>	Demonstrate knowledge of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technician practice and solutions to well defined engineering problems
<b>Environment and sustainability</b>	Understand and evaluate the sustainability and impact of engineering technician work in the solution of well-defined engineering problems in societal and environmental contexts
<b>Ethics</b>	Understand and commit to professional ethics and responsibilities and norms of technical practice
<b>Individual and team work</b>	Function effectively as an individual, and as a team member in diverse technical teams
<b>Communication</b>	Communicate effectively on well-defined engineering activities with the engineering community and society at large, by being able to comprehend the work of others, document their own work, and give and receive clear instructions
<b>Project management and finance</b>	Demonstrate knowledge and understanding of engineering management principles, apply these to ones' own work, as a member or leaders in a technical team and to manage projects in a multidisciplinary environment
<b>Lifelong learning</b>	Recognise the need for, and have the ability to engage in independent updating in the context of specialised technical knowledge

## Skills required

- > A passion for civil engineering and working outdoors
- > Spending time on large construction sites
- > Good problem-solving ability
- > People skills
- > Good communication skills
- > The ability to plan, organise and adapt.

## Entry requirements

- > 48 NCEA credits at Level 2 in four subjects including 12 in mathematics\* OR equivalent qualifications/skills/experience.
- > 8 NCEA literacy credits at Level 1 or higher, including 4 credits in reading and 4 in writing.
- > International students will be individually assessed to ensure they meet diploma-level entry requirements.

\*Please note: Statistics and Probability credits are not categorised under "Mathematics credits" within the NCEA framework and therefore cannot count towards 12 required Mathematics credits.

- > If English is not your first language, you must provide:
  - > New Zealand University Entrance OR
  - > Overall Academic IELTS 6.0 with no individual band score lower than 5.5 (achieved in one test completed in the last two years), OR
  - > Acceptable alternative evidence of the required IELTS (see here for NZQA proficiency table and here for list of recognised proficiency tests).

If you need to improve your English Language skills, we offer a wide range of English programmes.

### **Don't meet the entry criteria? Don't worry!**

If you don't meet any of the entry requirements for this qualification, or have been out of learning for a while, enrol in our great, one-semester long preparation programme. Successful completion will give you a New Zealand Certificate in Study and Career Preparation (Level 3) and direct entry into this Diploma.

If you don't meet the [maths entry requirement](#) for this qualification but meet all of the other criteria, enrol in our great Engineering Maths Summer School and upskill so you can apply.

## Recognition of prior learning

If you have extensive knowledge and skills due to practical experience in this area, enquire about our recognition of prior learning process at Capable NZ. You may have already gained credits towards this qualification.

## Additional documentation

You must supply certified copies of proof of identify, academic records and proof of residency (where appropriate).

## Selection procedure

Applicants are accepted using the entry criteria on a first-come, first-in basis with places limited to no more than 50 per year. Should the number of applicants exceed the available places, applicants will be placed on a waiting list in order of the date they applied. All applicants will be interviewed.

## Qualification structure

Course Title	Level	Credit
YEAR ONE COMPULSORY		
DE4101 Engineering Fundamentals	4	15
DE4102 Engineering Mathematics 1	4	15
DE4103 Technical Literacy	4	15
DE4201 Materials (Civil)	4	15
DE4202 Land Surveying 1	4	15
DE5201 Structures 1	5	15

DE5202 Civil and Structural Drawing	5	15
DE5207 Geotechnical Engineering 1	5	15
YEAR TWO COMPULSORY		
DE5203 Hydraulics (Civil)	5	15
DE5204 Highway Engineering 1	5	15
DE6101 Engineering Management	6	15
DE6102 Engineering Project (Civil)	6	15
ELECTIVES (select four, only one can be Level 5)		
DE5205 Engineering Surveying	5	15
MG6046 Structures 2 (Bachelor)	6	15
DE6201 Geotechnical Engineering 2	6	15
DE6202 Highway Engineering 2	6	15
DE6203 Traffic Engineering	6	15
DE6205 Water and Waste Systems	6	15
DE6206 Water and Waste Management	6	15
PROGRAMME TOTAL		240

Please note: Alternatives to those listed above may be available following consultation with the Programme Manager. Subjects offered subject to minimum class numbers.

#### Programme specific risks

You are alerted to the requirement that you must be able to demonstrate an ability to work safely in all practical situations.

#### Your workload

Your workload will be significant as assessment is continuous throughout the year with assignments issued regularly and end of semester exams. If you are studying full-time, you will be expected to undertake approximately 40 hours per week of civil engineering study which consists of formal lectures, laboratory sessions, tutorials and your own study time.

#### Further study options

Upon successful completion of this qualification, there are opportunities for you to move in to the Bachelor of Engineering Technology at Otago Polytechnic or engineering degree programmes at either Canterbury or Auckland Universities. Completion of the New Zealand Diploma in Civil Engineering can reduce the length of these degrees by a year and a half, or with appropriate experience, two years on application.

#### Additional costs

Please click [here](#) for a course equipment list.

## Student loans/allowances with TTAF

Whilst this programme is free for you to study via the Trades and Apprenticeship Fund (TTAF), this fund only covers tuition fees and compulsory costs such as student levies. It does not cover any additional costs or living costs. You can pay for additional and living costs by yourself if that is possible for you or by applying for a loan or allowance through Studylink.

It is important to apply for your student loan/allowance at the same time as you apply for this programme, due to the length of time Studylink take to process. Loan/allowance applications can be cancelled at any time if you decide to withdraw your programme application or if it is unsuccessful.

> For information about student loans and allowances please visit the Studylink website

Please note: Student Loans and Allowances and TTAF are available for domestic students only.

## Disclaimer

While every effort is made to ensure that this sheet is accurate, Otago Polytechnic reserves the right to amend, alter or withdraw any of the contained information. The fees shown in this document are indicative ONLY. Both domestic and international fees are subject to change and are dependent on the development and implementation of Government policies. Please note that additional fees may from time to time be required for external examination, NZQA fees and/or additional material fees.



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