

Bachelor of Engineering Technology (Civil Engineering)

The Bachelor of Engineering Technology with a major in Civil Engineering is for people with an aptitude for mathematics and science who want to work as a technologist with professional engineers. Civil engineering technologists are concerned with the design, construction and maintenance of roads, bridges, building structures, water and waste-water plants and environmental protection works.

Qualification code OP700502

Level > 7	Credits > 360
Workload >	Allow 10 hours of study per credit. Your workload may be higher around assessment due dates
Study type >	Trimester
Cost >	See the qualification page on the website.
Student loan >	You can get a student loan for this qualification if you meet the criteria. Visit studylink.govt.nz for more information.

Career Opportunities

The Bachelor of Engineering Technology (Civil Engineering) enables you to hold a responsible position within an organisation's management team in a local authority, in a consulting engineer's practice or for a civil engineering contractor.

How to apply

Go to the **choose courses** tab on the qualification page on our website. Select ENM1600 Engineering Mathematics and click **add to enrolment plan** you'll be taken through our step-bystep enrolment process which you can save and exit from at any time.



Qualification structure

This programme is made up of twenty-four 15 credits courses, plus five practice units and one work experience unit.

Course Code	Course Name	Level
YEAR 1 COMPULSORY COURSES		
ENM1600	Engineering Mathematics	5
ENG1002	Introduction to Engineering and Spatial Science Applications	5
ENG1003	Problem Solving in Engineering and the Built Environment	5
ENG1100	Introduction to Engineering Design	5
CIV1501	Engineering Statics	5
MEC1201	Engineering Materials	5
SVY1500	Spatial Science for Engineers	6
YEAR 1 PRACTICE UNIT		
ENG1901	Engineering Practice 1	5
YEAR 2 COMPULSORY COURSES		
ENG2002	Technology, Sustainability and Society	6
CIV2403	Geology and Geomechanics	6
ENV2103	Hydraulics 1	6
CIV2502	Structural and Building Technology	6
CIV2701	Road Design and Location	6
CIV2605	Construction Engineering	7
CIV2503	Structural Design 1	7
ELECTIVE GROUP 1		
SVY1104	Surveying Computations A	6
YEAR 2 PRACTICE UNITS		
CIV2901	Geology and Geomechanics Practice	6
ENV2902	Hydraulics Practice	6
CIV3906	Civil Materials Practice	7

YEAR 3 COMPULSORY COURSES		
ENG3003	Engineering Management	7
MEC2402	Stress Analysis	7
ENV3105	Hydrology	7
ENG3111	Technology Design Project	7
CMG2001	Job Organisation	6
CIV2702	Municipal Services	6
ELECTIVE GROUP 2 – CHOOSE THREE COURSES		
CIV3506	Concrete Structures	7
ENM2600	Advanced Engineering Mathematics	6
CIV3603	Construction Methods	7
ENV4204	Environmental Technology	7
ENG4004	Engineering Project and Operations Management	7
YEAR 3 PRACTICE UNITS		
CIV3907	Civil Systems Practice	7
ENG3909	Work Experience Technologist	7

Entry requirements

To enrol in this programme you need to have NCEA Level 3 which includes:

- 14 credits at Level 3 in each of Physics, Mathematics, and one other subject from the NZQA list of approved subjects. Mathematics credits must be taken from AS91578, AS91579, AS91575, AS91577, AS91573, and
- Literacy - 10 credits at Level 2 or above, made up of five credits in reading and five credits in writing, and
- Numeracy - 10 credits at Level 1 or above from specified achievement standards, or unit standards 26623, 26626, 26627, or equivalent.

20 years old or over

If you are 20 years of age or over and do not hold the minimum entry requirements you will be eligible to be enrolled where your previous educational, work or life experience indicates you have a reasonable likelihood of success.

What you will learn

When you achieve this qualification you will be able to:

- Apply knowledge of mathematics, science, engineering fundamentals to broadly-defined engineering procedures, processes, systems or methodologies
- Identify, formulate, research literature and analyse broadly defined engineering problems reaching substantiated conclusions using appropriate analytical tools
- Design solutions for engineering technology problems and contribute to the design of systems, components or processes to meet specified needs
- Conduct investigations of broadly-defined problems; locate, search and select relevant data, design and conduct experiments to provide valid conclusions
- Select and apply appropriate techniques, resources, and modern engineering and IT tools
- Demonstrate understanding of the societal, health, safety, legal and cultural issues and responsibilities relevant to engineering technology practice and solutions
- Understand and evaluate the sustainability and impact of engineering technology work
- Understand and commit to professional ethics and responsibilities and norms of engineering technology practice
- Function effectively in a diverse team, as a member or leader
- Communicate effectively on broadly-defined engineering activities
- Demonstrate knowledge and understanding of engineering management principles

English language requirements

Domestic students for whom English or Māori is not their first language must also have an IELTS (Academic) score of 6.0 with no band score lower than 5.5, or equivalent.

Visit openpolytechnic.ac.nz/englishlanguage to view our English language criteria.

Pre-entry courses

We have bridging courses available if you do not meet the above entry criteria. Go to the plan your study tab for more information.

Computer and online access

This programme is delivered 100% online. To complete this programme you will need access to a laptop or desktop computer, reliable broadband internet connection and a data plan able to support online learning such as streaming of videos (including YouTube), downloading content, and writing and submitting online assessments. If you are unsure if your current computer or internet access allows you to complete your online learning with us, please contact us before applying to enrol.

Visit openpolytechnic.ac.nz/online to view our online learning and study tools.

Practice units

Practice units contain activities that will enable you to acquire the practical competencies appropriate to your field of study.

Practice units are currently held on the Toowoomba Campus of the University of Southern Queensland (USQ) in Australia. After enrolling in a practice unit you will receive an information package from USQ covering all aspects of your Australian voyage. A practice unit will normally consist of a one-week residential school held on the Toowoomba Campus of the University of Southern Queensland in Australia. All costs associated with practice units will be at your expense.

International students and domestic students living overseas

You can not study this qualification if you are:

- an international student living in New Zealand or overseas
- a New Zealand student living overseas

Visit openpolytechnic.ac.nz/internationalstudent for more information about the special conditions and fees that you'll need to meet.

