

New Zealand Diploma in Engineering (Fire Engineering) (Level 6)

Get your fire engineering career moving with the New Zealand Diploma in Engineering (Fire Engineering) (Level 6). This qualification has been designed by the New Zealand Board for Engineering Diplomas (NZBED) in consultation with the Institution of Fire Engineers, Society of Fire Protection Engineers, Fire Protection Association, and Fire and Emergency New Zealand. It is designed for people working in or planning a career in fire engineering.

Programme code NZ261205

Level > 6	Credits > 240
Workload >	Allow 10 hours of study per credit. Your workload may be higher around assessment due dates
Study type >	Trimester
Cost >	\$11,600 NZ Domestic Not including annual administration fees, course materials or external exam fees.
Student loan >	You can get a student loan for this programme if you meet the criteria. Visit studylink.govt.nz for more information.

Career Opportunities

This qualification will prepare you for a career in fire engineering at a technician level.

How to apply

Go to the choose courses tab on the programme page on our website. To apply, choose one of either DE4101 Engineering Fundamentals, DE4103 Technical Literacy or DE4102 Engineering Mathematics and click **add to enrolment plan**. If a course is not available in the Qualification Structure table, contact the NZDE programme leader.



Programme structure

To achieve the New Zealand Diploma in Engineering (Fire Engineering) (Level 6) you need to complete 16 courses from the list below.

It is recommended you speak to a student mentor to workout a study plan.

Course Code	Course Name	Level
DE4101	Engineering Fundamentals	4
DE4102	Engineering Mathematics	4
DE4103	Technical Literacy	4
DE4302	Mechanics	4
DE4303	Material Properties	4
DE5201	Structures 1	5
DE5301	Thermodynamics and Heat Transfer	5
DE6301	Fluid Mechanics	6
DE6425	Engineering Design Practice	6
DE6426	Means of Escape	6
DE6427	Fire Dynamics	6
DE6428	Fire Risk Assessment and Fire Hazard Analysis	6
DE6429	Fire Protection Systems - Active	6
DE6430	Fire Protection Systems - Passive	6
DE6101	Engineering Project *	6
DE6102	Engineering Management *	6

*Note these courses are intended to be completed last.

Entry requirements

To gain admission into the New Zealand Diploma in Engineering (Fire Engineering) (Level 6), you are required to have:

- NCEA Level 2*, and a minimum total of 48 credits at Level 2 in four subjects including at least 12 credits in mathematics (preferably achievement standards in algebra, calculus or trigonometry), or
- Equivalent qualifications (e.g. International Baccalaureate or Cambridge), or
- Equivalent credits from appropriate trades training and/or demonstrated skills and experience

*including a minimum of 10 literacy credits at level 1 or higher for those who have achieved NCEA Level 2 before 2013

What you will learn

When you achieve this qualification you will:

- competently perform technical operations to the standards, ethical and professional responsibilities required by the engineering profession
- work collaboratively within team environments to provide a comprehensive engineering service in the relevant specialist area
- apply the principles of the Treaty of Waitangi, the Resource Management Act and Health & Safety in Employment Act while carrying out engineering activities
- apply engineering theory to practice working within well-defined engineering problems relevant to their specialist field of fire engineering
- use your engineering knowledge to make informed problem solving decisions in fire engineering and to implement these decisions
- identify, evaluate and manage risks within well-defined engineering problems relevant to their field of fire engineering

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.

Practical experience

Some courses have practical components that need to be attended at WelTec in Petone, Wellington which may require you to travel at your own expense. See the individual course pages on our website for details.

Textbooks

You will need to purchase textbooks for some courses at an additional cost to your course fees.

English language requirements

The ability to read and write well in English is required to study this programme.

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

International students and domestic students living overseas

You will be unable to study this programme if you are:

- an international student living in New Zealand or overseas.
- a New Zealand citizen or permanent resident living overseas.

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