



New Zealand Certificate in Mechanical Engineering (Level 3)



Domestic fee: \$8,634

International fee: \$23,400

Compulsory student levy >
StudyLink >

*Fees are approximate, subject to change and exchange rates

Location Dunedin
Duration One year full-time; no part-time options

Level 3
Start February
Apply Until start date

Are you a practical kind of person who enjoys making things work? Or perhaps you are seeking an engineering apprenticeship?

Either way, this is the programme for you and is the perfect qualification for those wishing to enter the engineering trades.

Mechanical Engineering involves the design, manufacture and maintenance of machinery, equipment and tools, and the industry has experienced significant growth over recent years due to developments in engineering processes.

Due to this, there are numerous employment opportunities in areas such as toolmaking, fitting and machining, and trades associated with the heavy and light fabrication industries. With a responsible attitude, you may even step up into project management.

This hands-on, pre-apprenticeship programme will give you ample opportunity to work within our workshops and to gain valuable off-site work experience.

Upon completion, you will have achieved the academic requirements of the first year of an industry apprenticeship*. This may reduce the time for you to complete out in industry down to two years.

Mechanical Engineering roles may include a CNC Machine Operator, Machine Operator, Specialist Production Welder, Metal Worker/Fabricator, Ducting Fabricator, Pipe Fitter/Welder, Metal Polisher or a Pattern Maker Trade Assistant.

Programme contacts:

Rowena Gregg (Administrator): Rowena.Gregg@op.ac.nz | 03 4704354
John Stocks (Programme Leader): John.Stocks@op.ac.nz | 03 4703959

*Apprenticeship opportunities within New Zealand are only available for domestic students.

Entry requirements

- > NCEA Level 1 with 10 credits in Numeracy (algebra, trigonometry, measurement recommended) and 10 credits in Literacy, OR
- > Equivalent knowledge and skills, OR
- > Successful completion of engineering literacy and numeracy assessment.
- > In exceptional circumstances, an applicant under 20 who does not meet the academic entry requirements may be granted entry to the programme where they supply evidence of their ability to succeed on the programme.
- > International students will be individually assessed to ensure they have an acceptable level of secondary school achievement.
- > If English is not your first language, you must provide:
 - > New Zealand University Entrance OR
 - > Overall Academic IELTS 5.0 with no individual band score lower than 5.0 (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.

Want your existing skills recognised?

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.

Skills required

- > Practical thinking
- > Analytical and problem-solving skills
- > Good computer skills
- > Planning and organisational ability
- > Excellent communication skills.

Additional documentation

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

You will study

The Certificate is made up of nine compulsory modules (listed below). These are made up of a mixture of practical and theoretical components. The nine modules incorporate assessment against 27 registered NQF unit standards.

1. Health and Safety
2. Calculations
3. Drawing
4. Machining
5. Fabrication
6. Welding
7. Workshop skills
8. Process quality
9. Communication

Off-site practical work experience is also incorporated within the programme and will comply with Otago Polytechnic health and safety requirements and requirements for contracts with employers.

Your workload

You will be expected to complete up to 30 hours of contact time at Otago Polytechnic and up to 15 hours of additional self-directed study per week; with an additional 120 hours of work experience will be required for completing as part of the programme. Usual timetable hours are Monday to Friday, 8:00am-4.30pm, which will include some self-directed hours.

Programme specific risks

You will be working with the latest industry-relevant technology, machines, pressing equipment and chemical dyes and may also spend time working in industry. All safety requirements will be explained in detail at the beginning of the programme. Safety shoes and safety glasses are required to be worn in all workshops at all times .

Further study options

This qualification can lead to, but is not a prerequisite for, the following qualifications (an apprenticeship within industry at Level 4 Mechanical Engineering):

- > New Zealand Certificate in Mechanical Engineering (Trade) (Level 4) with strands in Fitting and Machining, General Engineering, Machining, Maintenance Engineering, Metal Forming, and Toolmaking
- > New Zealand Certificate in Engineering Fabrication (Trade) (Level 4) with strands in Heavy Fabrication, Light Fabrication, and Steel Construction

Domestic students

Expand your employment potential by completing an apprenticeship and then advancing your skills with our New Zealand Diploma in Engineering (Mechanical).

International students

Whilst you cannot enter an apprenticeship within New Zealand, you do have the option of progressing into our New Zealand Diploma in Engineering (Mechanical) to enhance your knowledge and skills.

Additional costs

You need to buy all of your stationery, safety equipment and clothing before the programme starts. However, please do not buy anything until you have been offered a place on the programme and have accepted that place. You will only need your writing materials on the first day so please only bring these along.

Stationery

- > Pens (blue)
- > 2 x Highlighters
- > 1 x 0.5 mechanical pencil with H replacement leads
- > 1 x 0.5 mechanical pencil with HB replacement leads
- > 40 cm Ruler
- > Eraser
- > Small Protractor
- > 2 x Sharpie permanent marker pen
- > 4 x A4 L Pocket File
- > Calculator - FX82 Scientific

- > A5 Note book Esselte (hard cover)
- > USB 8 GB Data storage
- > Earplugs - wireless or corded (must have 3.5mm plug for i-pad)

Safety equipment and clothing (all items are compulsory)

We offer competitive pricing for suppliers listed below:

Available from Road Materials (4-6 Forth Street, Dunedin) - please show your student ID

- > 2 pairs of navy/yellow cotton zip overalls - \$73.91
- > 1 x pair of safety boots (lace-up or slip-on) (AS/NZS 2210.3) - \$78.26
- > 1 x earmuffs (neckband grade 5) (AS/NZS 127-:2002) - \$24.87
- > 1 x welding gloves (gauntlet - blue or red) - \$11.00
- > 1 x welding Tigga gloves - \$12.90
- > 1 x riggers gloves (leather, general purpose) - \$6.90
- > 1 x machining gloves (Honeywell Spectraknight Cut 5) - \$6.90
- > 1 x safety glasses (clear only) (AS/NZS 1337.1:2010) - \$POA

Please note: Safety glasses must fit correctly and meet approved AS/NZ standards. Safety overspec glasses required for prescription glasses.

Available from BOC Gasses (4 Orari Street, Dunedin) - quote cash account number 1055084

- > 1x welder auto darkening helmet - \$62.64
- > 1x welding gloves - gauntlet (black) - \$6.91
- > 1x welding Tigga gloves - \$9.97
- > 1x welders cap (cotton) - \$8.06
- > 1x riggers gloves - leather (general purpose) - \$4.96
- > 1x earmuffs (neckband grade 5) (AS/NZS 1270:2002) - \$29.32
- > 1x MIG welding pliers - \$18.58
- > 1x safety boots (lace-up or slip-on) (AS/NZS 2210.3) - \$89.68
- > 1x safety glasses (clear only) (AS/NZS 1337.1:2010) - \$POA

Please note: Safety classes must fit correctly and meet approved AS/NZ Standards. Safety overspec glasses required for prescription glasses.

Student loans and allowances

Student loans and allowances are for domestic students only. For information about student loans and allowances please visit the Studylink website. 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 from your programme application or if it is unsuccessful.

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.

International **+64 3 477 3014**
 New Zealand **0800 762 786**
 Email **info@op.ac.nz**

Dunedin Campus
 Forth Street, Dunedin
 Private Bag 1910
 New Zealand 9054

Central Otago Campus
 Corner Erris & Ray Streets
 PO Box 16, Cromwell
 New Zealand 9342

Auckland Campus
 Level 2, 350 Queen Street
 PO Box 5268, Auckland
 New Zealand 1141