

New Zealand Certificate in Automo	otive
Engineering (Level 3)	

## Location

Dunedin

**Duration** 

One year full-time

Delivery

On campus

**Credits** 

120

DescLevel

120

**Intakes** 

February

## **Apply**

By early December APPLY NOW Download PDF →

# Learn how to service general automotive systems.

This qualification is designed for people who are beginning a career in the industry. You will gain the generic and industry specific skills you need to work in a range of

roles in the automotive industry. Upon successful completion, you will graduate as a work-ready, highly competent individual who will be able to hit the ground running from day one.

Alternatively, you can choose to engage in one of our managed apprenticeship programmes at Level 4 (New Zealand Certificate in Light Automotive Engineering, New Zealand Certificate in Automotive Electrical Engineering or New Zealand Certificate in Heavy Automotive).

#### **Entry requirements**

- 10 NCEA Level 1 literacy credits (reading and writing) and 10 NCEA Level 1 numeracy credits OR be able to demonstrate suitable knowledge and skills.
- Domestic applicants aged 20 and above who do not meet the academic entry requirements, but who can demonstrate their skills, education and/or work experience, may be eligible for special admission.
- 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:
  - o 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 <u>wide range of English programmes</u>.

#### Skills required

- The ability to work with tools and equipment
- Sound communication and people skills
- Alertness and adaptability
- Good hand-eye coordination
- Good memory
- Flexibility to change.

#### Youth Guarantee Scheme information

If you are a 16-19 year old and feel that school didn't work out for you, you may be able to study this programme via our <u>Youth Guarantee Scheme</u> and pay no fees. This also applies if you are going to be 15 years old at the time that this programme starts and you have an early exemption from school.

To be eligible for Youth Guarantee funding, you must:

- Be a domestic student between 16-19 years old
- OR be 15 years of age at the time when you commence the programme AND have an early leaving exemption from your school
- Not already hold a Level 3 qualification in any subject
- Have been thinking about leaving school and getting a job OR prefer to be

working towards a career rather than staying at school OR have left school and are not sure how to enter higher education or employment

- Want to learn practical skills
- Be more motivated in a non-school setting and be prepared to enrol in a full-time programme.

#### Fees and allowances

The Youth Guarantee Scheme will cover tuition fees, material and equipment costs of your programme of study. 18-19 year olds enrolled in fees-free Youth Guarantee qualifications will now be able to access the course-related costs part of the student loan and student allowances if they meet the eligibility criteria. Those under 18 years old will not be able to access any part of the student loans. Funding for travel is available, conditions apply. Please visit the <a href="Studylink">Studylink</a> website for full details. We strongly recommend that you read this carefully prior to applying for this programme.

#### The process

- There is not a separate Youth Guarantee application form. Please apply for this programme by using our standard Otago Polytechnic application form. To apply online, or to download a paper version, click the apply button at the top right hand corner of this page.
- If you meet the criteria for Youth Guarantee funding you will be offered the funding if it is available. We will ask you to let us know within two weeks if you do not wish to take up the funding.
- If there is no Youth Guarantee funding available, we will send you a letter
  advising you of this. Along with this letter, you will receive an invoice, terms and
  conditions, a Studylink brochure and an equipment list advising what you will
  need to purchase before starting your programme.

#### Additional documentation

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

#### Additional costs

You need to buy all of your textbooks, stationery, tools, 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.

Textbooks (optional - online digital access will be provided):

- CDX Fundamentals of Automotive Technology (ISBN: 978-1-284-10689-3)
- CDX Medium and Heavy Duty Diesel Engines (ISBN: 978-1-284-06705-7)
- CDX Medium and Heavy Commercial Vehicle Systems (ISBN: 978-1-284-04116-3)

#### Stationery (essential):

- 1 x A4 lever arch file
- 1 x 5 tab subject dividers
- 1 x calculator
- Pens/pencils/eraser etc.

#### Smart device (essential:

 Laptop or tablet which is wifi capable, able to take photos and use Windows 365 applications

Safety equipment and clothing (essential):

- Approved safety footwear (i.e. steel caps)
- Two pairs of overalls (long sleeved, 100% cotton, zip, TWZ overall black)
- Two pairs of work trousers (black, work cotton)
- Two work shirts (black/blue Nitro)
- Welding gloves gauntlet (red or blue)
- Fitted safety glasses clear (Scope Phat Boxa)
- Leather rigger gloves

All clothing and equipment can be purchased at:

Road Materials 4-6 Forth Street Dunedin

Otago Polytechnic will provide embroided patches for your overalls that will be sewn on by Road Materials. Overalls will then be sent through to Otago Polytechnic to be available for you on your first day.

#### Further study options

Continue studying at Otago Polytechnic with a managed apprenticeship at Level 4 - either the New Zealand Certificate in Light Automotive Engineering (Level 4) or New Zealand Certificate in Automotive Electrical Engineering (Level 4). This is a work-based apprenticeship programme where you will attend night classes and block courses to complete your apprenticeship.

Alternatively, you could complete your apprenticeship through the MITO Training programme.

### Programme specific risks

In the Otago Polytechnic automotive engineering workshop and during your work experience, there is the risk of injury through lifting, welding, welding flashes, the use of tools, motor vehicles, fixed and portable motors, heavy equipment and any other equipment relevant to the automotive industry. There is also the hazard posed by fumes from welding and chemicals which you may be allergic to and the possibility of Occupational Overuse Syndrome through computer use.

## You will study

Learn how to carry out basic automotive engine servicing, service a four stroke spark ignition engine, carry out basic automotive underbody service procedures and repair light vehicle hydraulic braking systems. Gain the fundamental electrical knowledge and servicing skills required for working with ignition systems, automotive electrical circuits, electronic fuel injection systems and automotive wiring and lighting systems and discover the engineering and welding skills required for working in the automotive industry.

#### 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 100 hours of work experience will be required for completing as part of the programme. Usual timetable hours are Monday to Friday, 8:00am-5:00pm, with either a Thursday or Friday on work experience.

### Qualification structure

You must successfully complete 120 credits with a minimum of 40 credits at Level 3.

Course Title	Level OP Credit	
Automotive Workshop Safety	3	10
Basic Workshop Engineering Tasks, Tools and Equipment	3	15
Engines	3	15
Engine Systems	3	10
Driveline Systems	3	10
Electrical and Electronic	3	15
Starting and Charging Systems	3	10
Electronic Controls, High Voltage Systems and HVAC	3	10
Brake Systems	3	10
Steering and Suspension Systems	3	15
		120

#### Student loans/allowances

Student loans and allowances are for domestic students only. For information about student loans and allowances please visit the <u>Studylink website</u>. 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.

## 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 <u>Capable NZ</u>. You may have already gained credits towards this qualification.

#### Links to useful websites

- Visit the Otago Polytechnic Automotive Engineering Facebook Page
- Engineering New Zealand
- What could I earn as an engineer?
- Make the World

#### For more information

Please email <a href="mailto:EngTrades@op.ac.nz">EngTrades@op.ac.nz</a>

Programme leader: <a href="mailto:hamish.miller@op.ac.nz">hamish.miller@op.ac.nz</a> | 03 4796115

#### Intakes:

Course Description Dates 25-DUN-FY Dunedin 17 Feb 2025