

# Automotive Engineering



“ I enjoy the hands-on style of learning where we get to operate machinery in a safe and controlled learning way. ”

TRADES ACADEMY STUDENT

Head to our website [tradesacademy.ac.nz](http://tradesacademy.ac.nz) to read the personal accounts of our past graduates and students.



CELEBRATING  
10 years  
OF TOP OF THE SOUTH  
TRADES ACADEMY!

## TRAINING PATHWAYS

TRADES ACADEMY TRAINING

Industry Employment/  
Apprenticeships and ITO Training

Tertiary Pre-Employment Training at NMIT in L3 Automotive Engineering

University Studies:  
• Engineering  
• Energy and Fuel Research

## EMPLOYMENT OPPORTUNITIES

- Small Engine Mechanic
- Vehicle Groomer or Sales
- Automotive Dismantler
- Automotive Electrician
- Motorcycle Mechanic
- Brake Service Technician
- Powerboat Technician
- Fuel Injector Engineer
- Wheel Alignment Technician
- Hydraulic Engineer
- Marine Engineer
- Automotive Engineering (light, heavy, diesel, marine, road)

If you enjoy working on cars and problem-solving then Automotive Engineering could be just the career for you.

This programme will give you a real taste for the industry. You'll spend your time getting your hands dirty in NMIT's automotive workshops learning how cars and engines work and finding out about fault-finding and what automotive engineers do in their jobs. You'll have the opportunity to pull apart and reassemble car engines, change tyres and balance wheels, while learning about the location and function of vehicle systems and components.

Give it a go and see if Automotive Engineering is for you!

► For more information on what you will learn and the credits you can achieve in this programme, go to the Trades Academy website and follow the course information links.

On completion of this course you will be able to:

### Year 1

- Identify emergency procedures in the motor and related industries.
- Identify the general locations and functions of motor vehicle systems and main components.
- Demonstrate knowledge of petrol and diesel engines.
- Disassemble and reassemble a single cylinder or multi-cylinder four stroke engine under supervision.
- Demonstrate knowledge of interchanging and balancing road wheels in the motor industry.
- Remove, replace, balance road wheels and replace vehicle lamps.

### Year 2

- Demonstrate knowledge of motor vehicle documentation and primary systems of a vehicle.
- Bleed a hydraulic brake system.
- Demonstrate knowledge of brake systems, clutches, manual transmissions and tools and equipment used in the motor industry.
- Select and use hand tools and workshop equipment for an automotive application.

Some unit standards may change. Final information on the standards specific to your course will be available prior to starting your programme.



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TOP OF THE SOUTH  
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**NCEA: Level 2 and 3**  
This programme offers two year levels



**Starts:** February 2022



**Time:** 9am to 2.30pm  
Thursday (Marlborough)  
or Friday (Nelson)



**Location:** NMIT Nelson  
and Marlborough

Note: If circumstances change there could be a mix models of delivery e.g online, face to face one day per week or block options.