

Engineering and Automotive

 Levels 2/3

 43 credits

 Whitireia Porirua Campus

 Monday & Tuesday

 9am–2:30pm (inc. ½ hour lunch)

Equipment

Students must wear closed-in shoes.

Travel

This is provided free, subject to students meeting MoE requirements.

Dates

Monday 9 February – Tuesday 10 November 2026 (34 weeks), normal school and public holidays apply.

Application

Students must be enrolled in a secondary school in the Wellington region and be enrolled in a WTA course by their secondary school/kura.

Interview

Students may be requested to attend an interview with a family member or school representative.

Qualification

NCEA Level 2 with credit towards Vocational Pathway award.

Credits

On successful completion of this course, students will have gained 43 credits – 11 Level 3 and 32 Level 2 credits.

Assessment

Assessment is competency based against unit standard outcomes and related evidence requirements.

Assessments will follow the processes required by NZQA and relevant industry requirements.

Learning outcomes

A student successfully completing this strand will be able to:

- Apply engineering industry health and safety, including using and maintaining engineering measuring equipment and hand tools
- Describe the operation of two and four stroke petrol and diesel engines
- Perform detailed service checks and brake servicing on motor vehicles
- Understand and apply automotive industry fundamentals, including automotive electrical testing, locations and functions of motor vehicle systems and components
- Interchange and balance road wheels and basic motor body repair dismount and mount tyres from road wheels

Vocational Pathways



DISCLAIMER: The information contained in this information sheet describes the programmes/courses we intend to offer via Te Pūkenga trading as Whitireia and WelTec. The information is correct at the time of design (September 25). Please note that programmes and courses are subject to change.

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Students will be assessed against the following criteria:

Course title		Level	Credits	Version
Automotive Comprises of the following unit standards:		2	15	
229	Identify the general locations and functions of vehicle systems and main components	2	4	11
2387	Assemble mechanical components under supervision	2	2	7
30476	Demonstrate knowledge of tools and equipment used in the motor industry	2	2	1
21679	Demonstrate knowledge of interchanging and balancing wheels in the automotive industry	2	2	3
21715	Select and use fastening systems in the motor industry	2	2	4
21722	Balance a wheel off a vehicle in the motor industry	2	2	2
21869	Remove and refit road wheels on a vehicle	2	1	5
Engineering Equipment and Tools Comprises of the following unit standards:		2	12	
2395	Demonstrate and apply knowledge of the selection, use, and care of engineering hand tools	2	4	9
4435	Select, use, and care for engineering dimensional measuring equipment	2	3	8
4436	Select, use, and care for engineering marking-out equipment	2	3	7
21912	Apply safe working practices on an engineering worksite	2	2	3
Engineering Fundamentals Comprises of the following unit standards:		2 3	5 11	
30477	Demonstrate knowledge of petrol and diesel engines	3	4	1
30518	Bleed a hydraulic brake system	3	2	1
247	Prepare a vehicle or machine for use, and shutdown after use	2	2	10
30558	Test and repair automotive electrical circuits	3	5	1
21690	Perform general servicing checks on a motor vehicle	2	3	3



Further pathways:

- New Zealand Certificate in Automotive Engineering (Level 3)
- New Zealand Certificate in Automotive Refinishing (Level 3)
- New Zealand Certificate in Automotive Collision Repair (Level 3)
- New Zealand Certificate in Electrical Pre-Trade (Level 3)