

# Automotive Engineering

Level 3



WAIKATO TRADES ACADEMY

Wintec

# Automotive Engineering (Level 3)

This NCEA Level 3 programme applies fundamental principles of engineering, physics, and materials science for the design, analysis, manufacturing, and maintenance of mechanical systems. It is the branch of engineering that includes the design, production, and operation of machinery; including hand tools and portable power tools, dimensional measuring, engineering marking out equipment, various steel cutting and welding procedures, assembly, and most importantly, safe work practises and procedures. This take-home, project-based course will introduce you to the exciting world of engineering. It will provide you with the ability to consider an engineering apprenticeship or start a higher-level mechanical engineering qualification. Personal protective gear will be provided.

Location: Hamilton Rotokauri Campus		
Level 3	31 Weeks	Credits
3856	Demonstrate knowledge of carrying out emergency procedures in the automotive and related industries	2
30434	Service a vehicle or machine	3
30568	Demonstrate knowledge of brake systems	4
30517	Service a brake system on a vehicle or machine	4
30518	Bleed a hydraulic brake system	2
30566	Demonstrate knowledge of steering and suspension systems	2
30519	Service steering and suspension systems on a vehicle or machine	4
30479	Service an automotive cooling system	3
30480	Demonstrate knowledge of automotive cooling systems and engine coolant	2
30516	Replace driveline components	3
Total NZQA Credits		29

## How do I enrol?

If you are interested in studying at Waikato Trades Academy (WTA), please speak to your school's career advisor. They will discuss your options and how studying one-day-a-week at WTA will work around your school subjects. Your advisor is responsible for contacting WTA on your behalf to secure a place.

**If you are interested, please ask your career's advisor to email [wta@wintec.ac.nz](mailto:wta@wintec.ac.nz). Visit [wintec.ac.nz/wta](https://wintec.ac.nz/wta) to find out more.**

You may be eligible for WTA if you are in Year 11 to Year 13. Adult students and school leavers do not qualify for entry into the WTA programme. Information correct at time of publishing (September 2024).