



If you are into cars and motors then this 1 year certificate is the right course for you. Turn your passion into a career and enter the automotive industry.

## You will learn how to:

- Follow workplace policies, procedures and current legislative requirements to work safely and effectively in an automotive workshop.
- Use tools and equipment to complete basic workshop engineering and servicing tasks.
- Apply fundamental automotive engineering knowledge to service engine, and driveline systems.
- Check operation of, and perform minor repairs on, electrical and electronic systems
- Apply fundamental automotive engineering knowledge to service steering, suspension, tyres and brake systems.
- Apply fundamental automotive engineering knowledge to light diesel servicing and component operation.

## Programme Specific Information:

This programme requires students to undertake a compulsory 40 hour work placement. Students are encouraged to undertake 240 hours of work experience for the remainder of the programme following the compulsory work placement. Doing so will consolidate course content, establish relationships with industry and open up employment/apprenticeship opportunities.

**Career Options:** Automotive Engineer, Motorcycle Engineer, Automotive Electrical Engineer, Automotive Machinist, Accessories & Parts Sales, Power Boat Servicing, agricultural engineering, light and heavy diesel engineering

## Programme Information

Course Code	Course Title	Purpose
CAE2.001	Workplace Safety	Demonstrate good work habits and safe work practices in the automotive industry; Demonstrate knowledge of good work habits and safe work practices in the automotive industry; Demonstrate knowledge of hazardous materials used in the motor industry. Units 29580, 29579, 21718
CAE2.002	Brakes & Tyres 1	Remove and replace light vehicle brake pads and shoes; Demonstrate knowledge of hydraulic brake fluid, fluid replacement, and brake bleeding procedures; Balance wheels off a vehicle in the motor industry; Change the fluid and bleed a brake hydraulic system; Demonstrate knowledge of interchanging and balancing road wheels in the motor industry. Units 5466, 21689, 21722, 242, 21679
CAE3.003	Brakes & Tyres 2	Remove and replace steering and suspension components on motor vehicles or machines; Demonstrate knowledge of vehicle steering and suspension systems; Identify the general locations and functions of motor vehicle systems and main components; Demonstrate knowledge of light vehicle tyres and wheels. Units 24564, 21721, 229, 24457
CAE3.004	Electrical Fundamentals 1	Demonstrate knowledge of automotive electrical principles and circuit testing; Service a lead-acid automotive battery; Demonstrate knowledge of automotive starting and charging systems and their operation; Select test equipment and test an automotive



electrical circuit; Rectify simple vehicle lighting faults, and adjust vehicle lamps. Units 29371, 233, 234, 21676, 24093

CAE3.005	Electrical Fundamentals 2	Identify a wiring diagram and translate information to a circuit in the motor and related industries; Carry out automotive wiring repairs and replace a wiring circuit; Demonstrate knowledge of electronic components and their application in the automotive industry; Demonstrate knowledge of automotive air conditioning; Demonstrate knowledge of automotive ignition systems and their operation; Demonstrate knowledge of protecting vehicle electronics in the motor industry. Units 898, 24106, 24131, 15373, 235, 3877
CAE3.006	Fundamentals 1	Select and apply lubricants and sealants for automotive and related industry applications; Service automotive cooling systems; Carry out general service checks in the motor industry; Remove, repair, and/or replace a vehicle and/or machine exhaust system; Demonstrate knowledge of cooling system operation, and factors that affect system efficiency on vehicles or machines; Demonstrate knowledge of vehicle driveline components. Units 21716, 21717, 15406, 21678, 24269, 24307
CAE2.007	Fundamentals 2	Demonstrate knowledge of the operation of two and four stroke petrol and diesel engines; Demonstrate knowledge of petrol fuel systems; Perform minor servicing tasks on a diesel fuel system; Check a four stroke petrol engine for condition using hand held test equipment; Demonstrate knowledge of a diesel fuel system. Units 231, 240, 21692, 3400, 21677
CAE2.008	Tools & Equipment	Select and use hand tools and workshop equipment for an automotive application; Demonstrate knowledge of general engineering tasks in the motor industry; Carry out general engineering tasks in the motor industry; Demonstrate knowledge of MIG welding in the motor industry; Use a MIG welding plant in the motor industry; Use an oxy-acetylene welding plant in the motor industry. Units 21859, 21670, 21671, 21683, 21684, 21685

## Programme Fees and Additional Expenses

### Programme Fees

Domestic \$6,708.00 (approx)

International \$POA

### Additional Expenses

Item	Expected Approximate Cost
Overalls – no exposed zip at front	\$60 - \$150
Safety Boots (steel capped)	\$100 - \$250
Stationery - A4 lever arch folder, lined A4 refill, calculator, pencil, pens, etc	\$25