# **Automotive Technology A/V**

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The Automotive Technology course offers students opportunities to develop the skills and knowledge necessary to safely maintain and repair single cylinder, two & four stroke motors, multi cylinder engines, drive-trains and a variety of electrical equipment related to motor vehicles.

In addition it enables students to gain nationally recognised automotive technology vocational qualifications (Cert II in Automotive Vocational Preparation), and advanced standing into Automotive Technology Trade courses offered by the CIT and TAFE institutions in other states.



- Automotive Principles
- Automotive Electrical Systems
- Vehicle Components and Systems
- Automotive Drive Systems
- Independent Study

#### What is in the course?

The Automotive Retail and Repair industry has positions each year for apprentices and trainees. Training in Automotive Technology contributes, in part, to job roles such as:

Automotive Mechanics
Auto-Electricians
Diesel Mechanics
Auto body Repairers and Refinishers
Automotive Parts Suppliers
Accessories and Vehicle Sales persons
Tyre Fitters

Specialised Transmission Fitters

Automotive Glaziers

Commencement in this Automotive

Training Course may lead students to
gaining an Australian School Based

Apprenticeship in the Automotive

Technology Industry. Students have the



advantage of an early start to their training while gaining their Senior Secondary Certificate.

#### **Unit Descriptions**

Units are semester-long (value 1.0) except for early exit units. (0.5)

## **Automotive Principles**

In this unit, students investigate the systems within engines. Students develop knowledge and understanding of systems and faults. They evaluate and apply skills for repairs using appropriate tools and techniques in line with WHS practices. They examine the nature, purpose, and differences of automotive engine systems in various vehicles.

#### **Automotive Electrical Systems**

In this unit, students investigate the electrical systems and their configurations that are found within the automotive industry. Students examine the nature, purpose, and differences of interrelated automotive electrical systems in various vehicles. They develop knowledge and understanding of systems and elementary faults and failures. Students apply skills for repairs using appropriate tools and techniques in line with WHS practices.

## **Vehicle Components and Systems**

Students explore vehicle components and systems. They investigate the function of various traditional and modern components and systems and identify functional concerns. Students investigate the repair and maintenance of components, proposing and considering environmental and sustainable practices. They develop skills utilising industry specific equipment, practices and tools in the maintenance and repair of vehicle components and systems complying with WHS practices.

## **Automotive Drive Systems**

Students will investigate various existing and emerging drive systems. They develop and understanding of multicylinder engines, their energy sources and the systems used in the transfer of power to the drivetrain. They examine the nature, purpose, and differences of automotive drive systems in various vehicles. Students evaluate and apply skills for repairs using appropriate tools and techniques in line with WHS practices.

### **Independent Study**

Available to Year 12 students who have completed 3 units of the course.

