

## Industrial Technology - Automotive

### What is this subject about?

The Automotive Technology course is for all students who enjoy working with their hands. Elective Automotive Technology will provide these students with many new skills that will form the basis for the creation of projects that will give great satisfaction and pleasure.

This course involves experiential discovery learning about a wide range of vehicles and automotive systems. This includes how to fabricate, and repair metal based mechanical components. We will explore the internal combustion engine and its various components.

### Why study this subject?

The automobile is integral to life in a modern economy. It can be useful to know what to look for when purchasing and maintaining a roadworthy vehicle. This subject will extend your mechanical skills and know-how. Some students may even utilise this opportunity to develop skills toward a career as a diesel mechanic (eg mining industry), automotive mechanic, auto electrician, aircraft engineer (LAME), mechanical engineer and many other possibilities. This subject is intensely practical. Students who enjoy creating something and working with their hands will find this course very satisfying.

### Learning experiences

The Automotive Technology course is workshop-based giving “hands on” experiences in a variety of traditional and contemporary technologies. The course is approximately 70% practical and 30% theoretical and aims to develop basic skills necessary for future vocation or recreation.

Students will learn primarily with their hands actively engaged in fabrication of a toolbox, disassembly and assembly of automotive components using specialised equipment. Some of the required tools (eg mechanic creeper) will be manufactured by the students from steel bar, drawings and a wide range of hand and industrial machinery (metal lathes, milling machine etc). The major project involves the fabrication of a hammer, toolbox, custom-designed hammer and a go-kart in Year 10.

No prior metal experience is required for this course. All students are taught to use the equipment they need for their projects. Students who enter the course with substantial skills are given work appropriate to their advanced ability. All ability levels are catered for in this course.

There is no requirement for a household to own any tools when a student undertakes this course. All work is completed in the classroom.