

Curriculum Planning

Enrich Academy



Motor Vehicle Studies



Intent

The Level 1 Motor Vehicle Studies curriculum is designed to provide learners with a strong foundation in basic vehicle systems, workshop practices, and essential employability skills required for progression within the automotive sector. The intent of this course is to introduce students—many of whom may be at the early stages of their education or re-engaging with learning—to the core principles of motor vehicle technology in a supportive and practical environment.

This curriculum aims to develop learners' confidence, independence, and motivation through hands-on, skills-based learning. Students will gain an understanding of key automotive components such as engines, braking systems, wheels and tyres, as well as health and safety procedures within a workshop setting. A strong emphasis is placed on safe working practices, tool identification and use, and maintaining a clean and organised workspace, reflecting industry expectations.

In addition to technical knowledge, the course is structured to build transferable skills including teamwork, communication, problem-solving, and time management. These skills are embedded across all units to ensure learners are prepared not only for further study—such as progression to Level 2 Motor Vehicle qualifications—but also for entry-level employment or apprenticeships within the automotive industry



Implementation

The Motor Vehicle Studies curriculum is delivered through a blend of practical workshop sessions and classroom-based learning, ensuring students develop both hands-on skills and underpinning knowledge. Teaching is structured around clear, progressive units that build core competencies in vehicle systems, health and safety, and basic maintenance tasks.

Learning activities are designed to be engaging and accessible, with a strong emphasis on demonstration, repetition, and guided practice to support skill development. Assessment is continuous and primarily practical, allowing learners to demonstrate competence in real-world scenarios, supported by simple written or verbal evidence where appropriate.

Impact

Students leave the course able to carry out basic vehicle checks, maintenance, and workshop tasks safely and independently. They demonstrate improved confidence, practical skills, and understanding of key automotive systems. These skills support progression to further training and prepare them for entry-level roles within the motor vehicle industry.



Unit: TV9 Routine Mechanical Servicing of Equipment

Objectives

Engine Oil and Filter Service

Understand why engine oil must be replaced regularly

Locate the oil drain plug, oil filter housing, and oil filler cap on a Corsa 1.2

Safely drain hot engine oil and replace an eco-cartridge filter element.

Accurately refill and check engine oil levels using a dipstick

Tubeless Tyre Puncture Repair (Plug/Patch Combination Method)

Assess if a puncture is legally and safely repairable (BS AU 159 standards).

Safely operate a Sealey tyre changer and wheel balancer.

Perform a professional vulcanised plug-patch puncture repair.

Corsa Front Brakes (strip and Replace

Understand brake component functions

Safely use lifting equipment

Correctly follow a disassembly/reassembly sequence

Front Coil Spring Replacement

Understand component functions

Safely use lifting equipment

Correctly follow a disassembly/reassembly sequence

Replacing a Wishbone (Control Arm)

Identify what a wishbone (control arm) does in a suspension system

Recognise key components (ball joint, bushes, mounting points)

Understand the basic process of removing and refitting a wishbone

Follow safe working practices when working on vehicles

Work as a team to complete a structured mechanical task

Replacing a Rocker Cover Gasket

Explain the purpose of a rocker cover gasket

Identify key engine components (rocker cover, bolts, coils, breather hoses)

Safely remove and refit a rocker cover

Replace a gasket correctly

Understand causes and symptoms of oil leaks

Rear Suspension Coil Spring Replacement

Understand the function and safety hazards of suspension springs

Safely support a vehicle's rear axle under tension.

Remove and refit rear coil springs without using external spring compressors.

Inspect rubber spring seats for wear and deterioration.

Basic Wiring and Fuses

Identify basic electrical components, including wires, connectors, and fuses.

Understand the purpose of fuses and their role in protecting vehicle electrical circuits.

Recognise different fuse types and ratings used in motor vehicles.

Demonstrate safe working practices when handling basic electrical systems.

Carry out a simple task, such as checking and replacing a fuse, following guidance.

Describe, at a basic level, how electricity flows in a simple vehicle circuit.