

HIGHER NITEC IN AUTOMOTIVE ENGINEERING

MODULE OBJECTIVES

Core Modules

Automotive Mechanics

On completion of the module, students should be able to observe workplace health and safety, extract technical information, select and use lifting equipment and hand tools [to disassemble and reassemble automotive systems and components, perform basic maintenance of chassis and undercarriage as well as transmission system and components, and handle proper disposal of automotive wastes.

Control and Transmission Technology

On completion of the module, students should be able to carry out servicing and perform inspection of the brake system, chassis and undercarriage, transmission system and supplemental restraint systems on a vehicle.

Engine Technology

On completion of the module, students should be able to perform inspection of the air intake system, fuel system, engine management system, emission control system, and engine mechanical system on a vehicle.

Automotive Electrics

On completion of the module, students should be able to interpret diagnostics results and rectify faults in vehicle electrical systems, electronic circuits and air-conditioning system.

Engine and Electrical Systems Diagnostics

On completion of the module, students should be able to conduct system fault finding with the use of diagnostic tools and equipment, and rectify faults in engine electrical, body electrical, air-conditioning, fuel, lubrication and cooling, engine mechanical, engine management and emission control systems, as well as service alternative powered vehicle's motor and battery.

Control and Transmission Diagnostics

On completion of the module, students should be able to interpret diagnostics results and rectify faults on vehicle wheel alignment, drive-line, suspension and steering, braking and transmission systems on petrol or diesel powered vehicles as well as service alternative powered vehicle's powertrain.

Industry Attachment

Students will undergo a six-month internship in an automotive company to deepen their skills and knowledge acquired in ITE, and develop competencies in other specialized areas that may be unique to their attachment companies.