NITEC IN AUTOMOTIVE TECHNOLOGY

MODULE OBJECTIVES

CORE MODULES

Automotive Principles and Systems

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, check automotive components dimensions and basic electrical readings as well as the proper disposal of automotive wastes.

Basic Chassis and Drivetrain Technology

On completion of the module, students should be able to service and replace automotive drivetrain and chassis components like manual transmission clutch and brakes on a vehicle.

Basic Engine Technology

On completion of the module, students should be able to service engine system components of spark ignition and compression ignition engines on a vehicle.

Autotronic

On completion of the module, students should be able to interpret, measure, diagnose and rectify faults in vehicle electrical systems, electronic circuits and air-conditioning systems on a vehicle.

Engine Technology and Powertrain Management

On completion of the module, students should be able to conduct system fault finding with the use of diagnostic tools & equipment and rectify the system faults in engine electrical, fuel injection pump, lubrication and cooling, engine mechanical, engine management, emission control, forced air induction system on a vehicle.

Chassis and Drivetrain Technology

On completion of the module, students should be able to troubleshoot and rectify faults in automotive chassis and drivetrain systems components.

Industry Attachment

Students will undergo a 6-month internship in an automotive company to deepen their skills and knowledge acquired in the institution, as well as develop competencies in other areas specific to the company.