

## WORK-STUDY DIPLOMA IN LAND TRANSPORT ENGINEERING (VEHICLE)

S/N	Module
1.	<p><b>Workplace Safety &amp; Health</b></p> <p>On completion of the module, trainees should be able to implement relevant workplace safety and health regulations and carry out risk assessment and inspection.</p>
2.	<p><b>Technical Communication</b></p> <p>On completion of the module, trainees should be able to effectively communicate and document technical specifications and requirements with stakeholders (both internal and external) in both verbal and written forms.</p>
3.	<p><b>Engineering Materials</b></p> <p>On completion of the module, trainees should be able to perform various non-destructive testing (NDT) methods to detect defects and carry out analysis on the NDT results.</p>
4.	<p><b>DC &amp; AC Circuits</b></p> <p>On completion of the module, trainees should be able to analyze, connect and troubleshoot DC and AC circuits.</p>
5.	<p><b>Sensors &amp; Actuators</b></p> <p>On completion of the module, trainees should be able to install and inspect sensors and actuators, as well as perform circuit troubleshooting.</p>
6.	<p><b>Electrical Machines</b></p> <p>On completion of the module, trainees should be able to install and maintain electrical motors and drive systems.</p>
7.	<p><b>Workshop Operations</b></p> <p>On completion of the module, trainees should be able to plan corrective, preventive and predictive maintenance activities that ensure equipment and systems are fully functional and in optimal operating condition.</p>
8.	<p><b>Data Analytics for Predictive Maintenance</b></p> <p>On completion of the module, trainees should be able to perform data cleaning, transformation and analysis for predictive maintenance.</p>
9.	<p><b>Engine Management System</b></p> <p>On completion of the module, trainees should be able to install, maintain &amp; diagnose engine management system faults.</p>
10.	<p><b>Chassis &amp; Driveline</b></p> <p>On completion of the module, trainees should be able to install, maintain &amp; diagnose transmission, driveline, power steering, suspension, brake and safety system faults.</p>
11.	<p><b>High Voltage Vehicles</b></p> <p>On completion of the module, trainees should be able to diagnose and rectify hybrid and full electric vehicle system faults.</p>

12.	<b>Off-Road Vehicles</b> On completion of the module, trainees should be able to maintain electro-hydraulics control systems of off-road vehicles.
13.	<b>Company Project</b> On completion of the module, trainees should have applied their acquired competencies in an authentic project that would value-add to the company.
14.	<b>On-the-Job Training</b> On completion of the module, trainees should be able to apply the skills and knowledge acquired at ITE College and workplace to take on the full job scope, including supervisory function where appropriate, at the company.