

Course Content:

Semester one

- ✓ **Workshop Organisation**
Basis of Business organisation
Customer Care

- ✓ **Maintenance vehicles systems**
Underlying principles of Maintenance, Active Service System
Fluids and lubricants

- ✓ **Fundamentals of Motor Vehicle Electrics/Electronics 1**
Sensors / Machines in Motor Vehicles
Wiring Diagrams
Fundamentals Controller Area Network
 - ✓ **Chassis and active safety: Brakes**
Fundamentals of Braking and Adaptive Brake System
Sensotronic Brake Control (SBC), Continuous Brake systems

- ✓ **Chassis and active safety: Suspension and damping**
Fundamentals of Car Air Suspension System / Active Body Control (ABC), Four wheel Drive.
- ✓ **Chassis active safety: Chassis**
Dynamic Stability Control Systems (DSC)

Semester two

- ✓ **Fundamentals of Motor Vehicle Electrics/Electronics 2**
Network Electrics – electronics / Programmable Special Module
- ✓ **Chassis and active safety: Steering, Wheels and Tyres**
Wheels and Tyres / Compressed-air monitoring systems
Fundamentals of Steering geometry, wheel alignment and
Electro-hydraulic Power Steering Servotronic
- ✓ **Telematics**
Fundamentals Optical Data Bus system (COMAND System)
High frequency Technology (Telephone network)
Distance Control System
- ✓ **Passive safety: Convenience feat, anti - theft**
Access and Drive Authorization Systems
Supplemental Restraint System (SRS)
- ✓ **Passive safety: Climate Control**
Climate Control Automatic temperature System
- ✓ **Fundamentals of Automatic Transmissions systems**
Automatic transmissions / Continuously Variable Transmission
Telligent Gearshift (Commercial Vehicle)
- ✓ **Power train systems: Engine**
Petrol engine / Supercharging
On – Board Diagnosis (OBD) / Pollutant reduction
Common Rail Direct Injection / Electronic Diesel control (EDC)