



Garage Gyan - CTI Training

Automotive Diagnostic Course

FREE COURSE

Learn to diagnose vehicles like a professional — from the OBD port to live data, special functions, flashing and online programming. Practical, workshop-focused training with Indian vehicle examples.

Lessons	16 video lessons (15-18 minutes each)
Total Duration	Approx. 4.4 hours
Vehicles	Cars, trucks and 2-wheelers
Study Material	PDF notes with every lesson
Practice	Quiz at the end of every level
Live Support	Live doubt-clearing sessions every Monday (morning) and Tuesday (evening)
Language	Hindi / Hinglish

Course Path: OBD Port → Communication → Scanning → Modules → Fault Codes → Live Data → Actuation Test → Special Functions → Flashing → Online Coding & Programming

LEVEL 1 - BASIC OBD port, communication and scanning the right way

01 OBD Port & Pinout

What OBD is, where to find the port in Indian cars, trucks and 2-wheelers, and how to test the 16-pin connector for power and ground.

02 Communication Lines & Protocols

How vehicle modules talk to each other over K-line, CAN and J1939 — and how to check CAN lines with a multimeter.

03 "No Communication" Fault Finding

A step-by-step method to fix "scanner not connecting" problems instead of blaming the scanner.

04 Scanning Methods - OBD vs OEM

Generic OBD mode vs manufacturer (OEM) mode, and vehicle selection by Auto VIN, manual VIN and manual selection.

05 Full System Scan & Reports

Scanning all modules in one go and saving a health report to show the customer.

LEVEL 2 – INTERMEDIATE Modules, fault codes, live data and actuation tests

06 Vehicle Modules & Module Info

What ECM, TCM, ABS, SRS, BCM and other modules do, and how to read part and software numbers.

07 Fault Codes – Type, Status & Freeze Frame

Understanding P/C/B/U codes, active/pending/history status, freeze frame data and the right way to clear codes.

08 Reading Live Data

Selecting the right parameters, using graphs and understanding key engine data like RPM, temperature, MAP/MAF and fuel trim.

09 Fault Finding with Live Data

Real case studies showing how live data points to the actual fault — not just the part to replace.

10 Actuation Test

Operating injectors, fans, pumps and valves from the scanner to find out if the fault is the part, the wiring or the ECU.

LEVEL 3 – ADVANCED Special functions, key programming, flashing and online coding/programming

11 Engine Special Functions

Throttle relearn, idle relearn, injector coding and DPF regeneration — when and how to perform them safely.

12 Chassis & Body Special Functions

Oil service reset, steering angle calibration, EPB, ABS bleeding, TPMS and battery registration.

13 Immobilizer & Key Programming

How the immobilizer system works and how to add keys or program keys when all keys are lost.

14 ECU Flashing

What flashing is, when a software update is needed, and the precautions that keep the ECU safe.

15 Online Coding & Online Programming

Coding and programming modules online after replacement or for feature changes, and what is required to do it.

16 Complete Diagnosis – Final Case Study

One real vehicle diagnosed from start to finish using everything learned in the course, followed by the final quiz.

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