Autotronics Training Course Brief

AUTOTRONICS Courses is designed to turn beginners and experienced mechanics into **professional vehicle electronics experts**. You will learn **diagnostics, repairs, programming, and business skills** to confidently handle any modern vehicle's electronic system — from **ECUs and BCMs** to immobilisers, sensors, and wiring.

Overview

Autotronics Training - Empower Your Skills.

Become a confident vehicle electronics specialist in just four weeks. Our intensive courses combine video lessons, live workshops, practical assessments, downloadable materials, and business mentorship. On successful completion, you earn the title Certified Auto Electronics Specialist (CAES).

Course Format & Duration

Duration: 1-4 week

Format: Video lessons, Live hands-on workshops, Downloadable learning materials, Practical assessments,

Business mentorship

Certification: Certified Auto Electronics Specialist (CAES)

Learning Outcomes

By the end of any course, you'll be able to:

- Diagnose and repair electronic systems—including ECUs/Brainboxes, BCMs, immobilisers, ABS modules
- Use professional diagnostic tools (e.g. Launch, Autel, X-431) like a pro
- Read and interpret wiring diagrams for accurate problem tracing
- Clear dashboard warning lights and reset error codes effectively
- Clone, program, and reset vehicle control modules
- Launch or scale an auto-electronics business with practical strategies

Who Should Attend?

- Mechanics entering vehicle electronics
- Auto electricians expanding their services
- Workshop owners adding new revenue streams
- Engineering and electronics students
- Entrepreneurial technicians starting mobile diagnostic services

Courses Offered

Course Title	Description	Duration
Automotive Diagnostics Course	Focused on diagnostics of vehicle systems—ECU/Brainbox, BCM, immobilisers, ABS, fuel and ignition systems, emission control, and OBD-II workflows.	1-4weeks
Basic Autotronics Course	Entry-level training covering fundamentals of auto electronics, wiring, diagnostics, and basic module repair and programming. Ideal for beginners.	1-4weeks
Advanced Autotronics Course	Deep dive into complex diagnostics and control module repair and programming, module cloning, and advanced troubleshooting. Designed for skilled technicians	1-4weeks

Course Options:

Automotive Diagnostics Course Modules

- 1. Introduction to Automotive Diagnostics
- 2. Engine Management Systems
- 3. Electrical and Electronic Systems
- 4. On-Board Diagnostics (OBD-II)
- 5. Fuel and Ignition Systems Diagnostics
- 6. Emission Control Systems
- 7. ABS and Safety Systems Diagnostics
- 8. Practical Hands-On Diagnostic Sessions
- 9. Case Studies on Popular Vehicles
- 10. Starting Your Auto Electronics Business
- 11. Final Assessment & Certification

Entry Requirements

Educational Qualification: O-Level Certificate (WASSCE/NECO/GCE) with credit passes in **English** and **Mathematics**.

Technical Interest & Aptitude: Prior practical knowledge or a strong interest in vehicle electronics or diagnostics.

Device Access: Laptop or smartphone available for course materials and diagnostic software access.

Commitment to Practical Learning: Eagerness to participate in hands-on sessions and group collaboration.

Safety Readiness: Provision of personal safety gear: overalls, safety boots, gloves.

Location Flexibility: Willingness to attend in-person training at closest specified training center.

Basic Autotronics Course

- 1. Introduction to Autotronics
- 2. Vehicle Electrical Systems
- 3. Sensors and Actuators
- 4. Lighting and Instrumentation
- 5. Introduction to ECU (Engine Control Unit)
- 6. Basic Troubleshooting Techniques
- 7. Using Diagnostic Tools
- 8. Practical Autotronics Skills
- 9. Case Studies on Popular Vehicles
- 10. Starting Your Auto Electronics Business
- 11. Final Assessment & Certification

Academic Qualification

SSS (O-Level) Certificate, with credit passes in:

English Language

Mathematics

Technical Interest & Aptitude

Demonstrable interest in vehicle electronics or diagnostics.

Automotive Technical Skills.

Device Access

A laptop or smartphone for accessing course materials, diagnostic apps, and communication.

Willingness to Learn

Openness to both classroom instruction and hands-on practical sessions.

Collaborative mindset—ready to participate actively in group work or workshops.

Basic Safety Gear

Supply of overalls, safety boots, and gloves—essential for any practical, vehicle-based exercises.

Training Location Flexibility

Ability to attend **in-person sessions** at the designated training facility

Advanced Autotronics Course

- 1. Advanced Vehicle Electronics Overview
- 2. Advanced Vehicle Electronics Repair, Diagnostics and Programming
- 3. Advanced Sensors and Actuators
- 4. Vehicle Networking and Communication
- 5. Hybrid and Electric Vehicle Systems
- 6. CAN Bus System Diagnostics
- 7. Advanced Troubleshooting & Repair
- 8. Practical Advanced Autotronics Sessions
- 9. Starting Your Auto Electronics Business
- 10. Final Assessment & Certification

Academic Qualifications

O'Level (SSS) Certificate (WASSCE, NECO, or GCE) with credits in English Language and Mathematics, and preferably one science or technical subject.

Prior Knowledge/Certification

Completion of a **Basic Autotronics** or **Auto Diagnostics** course, or demonstrable **hands-on experience** with vehicle diagnostic systems.

Technical Aptitude & Soft Skills

Strong technical inclination and analytical reasoning.

Willingness to learn, adapt, and work in team-oriented, practical training environments.

Required Devices

Laptop or smartphone capable of running diagnostic software and accessing digital learning materials.

Safety and Workshop Preparedness

Personal safety gear: overalls, safety boots, and gloves, essential for practical sessions and workshop safety.

Assessment

Entrance exam to evaluate problem-solving skills and understanding of wiring diagrams, OBD-II protocols, sensor data analysis, etc.

Training Format Readiness

Willingness to join **in-person** immersive training sessions

Optional

Basic familiarity with **OBD-II systems**, **ECU functions**, or experience using **scanner tools** for diagnostics—as featured in Autoclinic's offerings.

Final Notes

 $Certification: Upon \ passing \ practical \ and \ theoretical \ assessments, you're \ awarded \ CAES \ status.$

Business Mentorship: Learn how to monetize your new skills, find opportunities, and structure your services