

Car Electrician (Wiring) Course Topics (In English)

1. Basics of Automobile, Its Safety – Hazards & Prevention
 - Common Dangers when working on Cars
 - Importance of Safety – Hazards & Preventions
2. Automobile - Engines
 - a. Types of Engines
 - Various types of Engines used in Automobiles
 - How do Engine types affect Vehicle performance
 - b. Introduction of Engine and its components
 - Key parts of an Engine
3. Battery, Function and Working
 - a. Types of battery
 - Different types of Batteries which are used in Cars
 - Performance and use of Different Batteries in Cars
 - b. Battery Construction
 - Materials used to make the Batteries
 - Design of Battery and how it affects Car Performance
 - c. Battery Operation
 - Working and Operation of Batteries in a Vehicle
 - Important processes involved in battery operation
 - d. Battery Charging and Discharging Process
 - e. Battery checking Process through Multi meter and Hydrometer
 - Using Multimeter to check Battery's Health
 - Usage of Hydrometer in Battery Maintenance
 - f. Battery Maintenance Tips
 - g. Battery Management Process
 - Importance of Battery Management Process
4. Starting System, Function and Working
 - a. Starter Motor Operations
 - Usage and Working of Starter Motor in a Car
 - Importance of Starter Motor
 - b. Starting system wiring diagram
 - Understanding of Starting System wiring diagram
 - Usage of Starting System wiring diagram

5. Starter motor troubleshoot and diagnosis
 - Problems that can occur with Starter motors
 - Fixing of Starter Motor issues
6. Charging System - Function and Working
 - a. Charging System Operations
 - Functions and working of Charging System
 - Processes that are involved in Charging system
 - b. Charging System wiring diagram
 - Understanding of Charging system wiring diagram
7. Charging System - Diagnosis and troubleshoot
 - Common problems which occur in Charging Systems
 - How to Identify and Fix Charging System Issues
8. Basics of Electricity (Current, Voltage and Resistance)
 - a. Ohm's Law
 - Understanding of Ohm's Law and its Importance in Car Electrical System
 - b. Use of Multi meter
 - Usage of Multimeter for checking Electrical Issues
 - Types of measurements which can be taken with a Multimeter
9. Basic Electricity - Fuses, Relay Inspection
 - Working and Usage of Fuses and Relays in a Car
 - How to check and test Fuses and Relays
10. Electrical Wiring - Power Window & CDL (Centre Door Lock)
 - Working of Power Windows and Central Locking System
 - Importance of Power Windows and Central Locking System
11. HVAC and its component
 - a. AC Refrigerant Cycle
 - Operation of AC Refrigerant Cycle
 - Main Components involved in this Cycle
12. EPS and its component
 - a. EPS Operation
 - Understanding of Electric Power Steering (EPS) and its working
 - Essential Components of EPS
13. Engine Management System - Petrol
 - a. Overall wiring tracing
 - Wiring Tracing and its Importance

- How to Effectively Trace Wiring in a Car
 - b. Sensors Checking
 - Types of Sensors in Vehicles
 - How to check if Sensors are working properly
 - c. Actuators Checking
 - Importance of Actuators in Cars
 - Testing and Functioning of Actuators
14. Engine Management System – Diesel
- a. Overall wiring tracing
 - Wiring Tracing and its Importance
 - How to Effectively Trace Wiring in a Car
 - b. Sensors Checking
 - Types of Sensors in Vehicles
 - How to check if Sensors are working properly
 - c. Actuators Checking
 - Importance of Actuators in Cars
 - Testing and Functioning of Actuators
15. Diagnostic Trouble Code (DTC)
- a. Types of DTC's
 - Different types of DTCs
 - Usage of DTC's Troubleshooting
 - b. DTC's Troubleshooting
 - Steps in DTC's Troubleshooting
16. Scanner & Usage of Scanner Tool
- a. Types of Scanner Usage
 - Different Types of Scanners used in a Car
 - Importance of choosing Right Scanner
 - b. Scanner Operations
 - Connecting a Scanner to a Car
17. Sensors and Actuator wiring Inspection
- Checks during a Sensor wiring Inspection
 - Importance of Actuator wiring inspection
18. Cluster Meter Indicator
- a. Types of Indications
 - Information which a Cluster meter display

- Importance of Indicators on a Cluster meter

19. CAN Communication System

- Purpose of CAN Communication System
- Functions and Working of CAN Communication System

20. Immobilizer System

- Usage of Immobilizer System
- Importance of Immobilizer in preventing Car Theft

21. Full Practical on vehicle and fault diagnose

- Problem Solving Sessions



Car Electrician (Wiring) Course Topics (In Hindi)

1. Tools और Equipment का परिचय, Automobile की मूल बातें, Automotive सुरक्षा - Hazards और Prevention
 - Cars पर काम करते समय Common Dangers क्या हैं
 - Safety का महत्व - Hazards और Preventions
2. Automobile - Engines
 - a. Engines के प्रकार
 - Automobiles में उपयोग किए जाने वाले विभिन्न प्रकार के Engines
 - Engine के प्रकार Vehicle Performance को कैसे प्रभावित करते हैं
 - b. Introduction of Engine and its Components
 - Engine के Key Parts
3. Battery, Function और Working
 - a. Battery के प्रकार
 - Cars में उपयोग किए जाने वाले अलग-अलग प्रकार के Batteries
 - अलग-अलग प्रकार के Batteries का Performance और उपयोग
 - b. Battery Construction
 - Batteries बनाने के लिए उपयोग की जाने वाली Materials
 - Battery का Design और यह Car Performance को कैसे प्रभावित करता है
 - c. Battery Operation
 - Vehicle में Batteries का कार्यरत और संचालन
 - Battery Operation में शामिल महत्वपूर्ण प्रक्रियाओं
 - d. Battery Charging और Discharging प्रक्रिया
 - e. Multimeter और Hydrometer के माध्यम से Battery Checking प्रक्रिया करें
 - Multimeter का उपयोग करके Battery's Health की जाँच
 - Battery Maintenance में Hydrometer का उपयोग
 - f. Battery Maintenance सुझावों
 - g. Battery Management प्रक्रिया
 - Battery Management प्रक्रिया का महत्व
4. Starting System, परिचय और कार्यरत
 - a. Starter Motor Operations
 - Car में Starter Motor का प्रयोग और कार्यरत
 - Starter Motor का महत्व
 - b. Starting System Wiring आकृति
 - Starting System Wiring आकृति की समझ
 - Starting System Wiring आकृति का उपयोग
5. Starter Motor Troubleshoot और Diagnosis
 - Starter Motors में होने वाली समस्याएँ
 - Starter Motor समस्या को ठीक करना
6. Charging System - Function और कार्यरत
 - a. Charging System Operations
 - Charging System के Functions और कार्यरत

- Charging System में शामिल प्रक्रिया
- b. Charging System Wiring आकृति
 - Charging System Wiring Diagram की समझ
7. Charging System - Diagnosis और Troubleshoot
 - Charging Systems में आम समस्याएँ
 - Charging System समस्या की पहचान और समाधान
8. Electricity की मूल बातें (Current, Voltage और Resistance)
 - a. Ohm's Law
 - Ohm's Law की समझ और Car Electrical System में इसका महत्व
 - b. Multimeter का उपयोग
 - Electrical Issues की जाँच के लिए Multimeter का उपयोग
 - Multimeter से ली जा सकने वाली Measurements के Types
9. Basic Electricity - Fuses, Relay Inspection
 - Car में Fuses और Relays का Working और Usage
 - Fuses और Relays की जाँच और परीक्षण कैसे करें
10. Electrical Wiring - Power Window और CDL (Centre Door Lock)
 - Power Windows और Central Locking System का कार्यरत
 - Power Windows और Central Locking System का महत्व
11. HVAC और इसके Components
 - a. AC Refrigerant Cycle
 - AC Refrigerant Cycle का संचालन
 - इस Cycle में शामिल मुख्य अवयव
12. EPS और इसके Components
 - a. EPS Operation
 - Electric Power Steering (EPS) की समझ और इसका कार्यरत
 - EPS के Essential Components
13. Engine Management System - Petrol
 - a. Overall Wiring Tracing
 - Wiring Tracing और इसका महत्व
 - Car में Wiring को Effectively Trace करने का तरीका
 - b. Sensors Checking
 - Vehicles में Sensors के प्रकार
 - Sensors का उचित कार्य करने की जाँच कैसे करें
 - c. Actuators Checking
 - Cars में Actuators का महत्व
 - Actuators की Testing और Functioning
14. Engine Management System - Diesel
 - a. Overall Wiring Tracing
 - Wiring Tracing और इसका महत्व
 - Car में Wiring को Effectively Trace करने का तरीका.
 - b. Sensors Checking
 - Vehicles में Sensors के प्रकार
 - Sensors की Proper Working की जाँच कैसे करें
 - c. Actuators Checking
 - Cars में Actuators का महत्व

- Actuators की Testing और Functioning
- 15. Diagnostic Trouble Code (DTC)
 - a. DTCs के प्रकार
 - DTCs के अलग-अलग प्रकार
 - DTC's Troubleshooting का उपयोग
 - b. DTC's Troubleshooting
 - DTC's Troubleshooting के Steps
- 16. Scanner Tool का उपयोग
 - a. Scanner Usage के प्रकार
 - Car में उपयोग किए जाने वाले अलग प्रकार के Scanners
 - सही Scanner चुनने का महत्व
 - b. Scanner Operations
 - Car से Scanner को Connect करना
- 17. Sensors और Actuator Wiring Inspection
 - Sensor Wiring Inspection के दौरान Checks
 - Actuator Wiring Inspection का महत्व
- 18. Cluster Meter Indicator
 - a. Indications के प्रकार
 - Cluster Meter द्वारा Display की जाने वाली Information
 - Cluster Meter पर Indicators का महत्व
- 19. CAN Communication System
 - CAN Communication System का उद्देश्य
 - CAN Communication System के कार्य और कार्यरत
- 20. Immobilizer System
 - Immobilizer System का उपयोग
 - कार चोरी को रोकने में Immobilizer का महत्व
- 21. Vehicle पर Full Practical और Fault Diagnose
 - समस्या समाधान सत्र

Details of Training

Fees – 50,000/- including GST

Hostel Facility – 7,000/- per Month including food

Duration – 30 Days (minimum)

Location – JustAuto Solutions Pvt. Ltd., Plot No: B1, B2, B3/15, Electronics Estate, GIDC, Sector 25, Gandhinagar, Gujarat

Certification and Recognition

JustAuto Solution's Certification – ISO Certified, Startup India Recognized, MSME Recognized, Skill India Recognized.

JustAuto Solution is authorised and affiliated Training Partner/Centre of Automotive Skill Development Council (ASDC) and Skill India

Photo Gallery

