

AUTOMOTIVE CLEAN VEHICLE TECHNOLOGY CERTIFICATE OF ACHIEVEMENT

This certificate is designed to provide students with the fundamentals of alternative fuel and electric vehicle technology as it applies to the automotive industry. The curriculum prepares students for entry-level positions in alternative fuel/hybrid/electric vehicle maintenance, service and repair. Including alternative fuel and electric power technology.

| Code | Title | Units |
|--------------------------|---|-----------|
| Required Courses: | | |
| AUTO 010 | Introduction to Hybrid and Electric Vehicle Technology | 4 |
| AUTO 011 | Electric Vehicle (EV) and Alternative Fuel Vehicle | 3 |
| AUTO 011L | Electric Vehicle (EV) and Alternative Fuel Vehicle - Laboratory | 1 |
| AUTO 064 | Auto/Truck Electrical Systems | 4 |
| or HMDT 064 | Auto/Truck Electrical Systems | |
| AUTO 065 | Electrical Systems Diagnosis and Repair | 4 |
| Total Units | | 16 |

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

This is a Gainful Employment Program

Program Learning Outcomes

At the completion of this program, students will be able to:

- Diagnose and make minor repairs to 12 volt starting and charging systems using schematics, as-well-as demonstrate safety precautions used on electric, hybrid, and hydrogen fuel cell vehicles.
- Demonstrate appropriate personal and shop safety procedures needed to safely work with high voltage and hydrogen fuel systems.
- Evaluate system conditions by entering self-diagnostic mode of a given system, correctly interpret diagnostic trouble codes, and diagnose electronic control system faults using appropriate procedures and strategies.
- Perform basic maintenance, diagnostic and repair related to electric, hybrid and hydrogen fuel cell vehicles.