

ATEC 185 : Electrical Vehicles

Credits 4.00

Quarter Offered Winter, Summer

Survey of how to service, diagnose and repair hybrid-electric vehicles, plug-in hybrid-electric vehicles, and battery-electric vehicles. Emphasis on normal operation of hybrid and electric vehicles, low-voltage and high-voltage battery types, electric motor types and other EV/Hybrid specific components and safety standards pertaining to EV/Hybrid vehicles. This class may include students from multiple sections.

This class has a \$60 Automotive Technology course fee.

Prerequisites

[ATEC 181](#), [182](#), [183](#) and [187](#) or instructor permission

Course Outcomes

Identify laws, regulations, standards, and safety equipment pertaining to high-voltage components on hybrid and electric vehicles.

Define different EV types, driving range, regenerative braking, drivetrain modes, and electric vehicle supply equipment.

Describe normal operation of hybrid and electric vehicles, low-voltage and high-voltage battery types, electric motor types and other EV/Hybrid specific components.

Service, diagnose and repair hybrid-electric vehicles, plug-in hybrid-electric vehicles, and battery-electric vehicles.