

ATEC 182 : Basic Electrical for Automotive

Credits 4

Quarter Offered Fall

Students will learn basic automotive electronics, starting and charging systems, and electrical diagnosis. Emphasis on basic electronics, and properly using a multimeter to identify wiring faults, and evaluating electrical systems performance for new and late model electrical and gas vehicles. This class may include students from multiple sections.

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

Course Outcomes

- Troubleshoot electrical system components and configurations

- Demonstrate knowledge of electrical series, parallel, and series-parallel circuits using principles of electricity

- Demonstrate proper use of a digital multimeter when measuring source voltage, voltage drop, grounds, current flow, and resistance

- Identify cause and effect from shorts, grounds, opens, and resistance problems in electrical/electronic circuits

- Remove, inspect, and replace electrical components