

Automotive Electricity

Outline of Instruction

Course Information

Organization	Monroe County Community College, Applied Science and Engineering Technology
Development Date	12/20/2007
Course Number	AUTO 102
Potential Hours of Instruction	60
Total Credits	4

Description

The practical application of electrical principles will be studied and include theory of operation, design and troubleshooting of starting motors, alternators, regulators and the complex electrical accessories found on modern automobiles. Use of automotive electrical test equipment will be stressed.

Major Units

Batteries
Starting Systems
Charging Systems
Ignition Systems
Computer Ignition and Fuel Injection Systems
Accessories

Textbooks

Duffy. *Modern Automotive Technology*.

Learner Supplies

Calculator.

Prerequisites

ELEC 125

Exit Learning Outcomes

General Education Outcomes

- A. Communicate ideas in writing using the rules of standard American English
- B. Apply mathematical approaches to the interpretation of numerical information
- C. Apply mathematical approaches to the analysis of numerical information
- D. Use computer technology to communicate information

Course Outcomes

1. **Characterize chemical action of lead acid batteries**
2. **Test starting systems**
3. **Test charging systems**
4. **Test accessory systems**
5. **Practice shop safety**
6. **Recognize hybrid automotive operating systems**