

AUT 103 : AUTOMOTIVE ELECTRIC II

Transcript title

Automotive Electric II

Credits

2

Grading mode

Standard letter grades

Total contact hours

40

Lecture hours

10

Lab hours

30

Prerequisites with concurrency

AUT 102.

Course Description

Studies disassembly, testing and rebuilding of various electrical equipment. Stresses troubleshooting and using various test equipment common to the automotive trade.

Course learning outcomes

1. Describe electrical theories as applied to automotive ignition systems.
2. Describe the difference between a conductor, a nonconductor, and a semiconductor as used in automotive ignition systems.
3. Demonstrate procedures for servicing automotive ignition electrical systems.
4. Demonstrate the use of oscilloscopes, multimeters, and scan tools to diagnose computerized automotive engine controls.
6. Identify and interpret the symbols of an electrical schematic for engine ignition systems.
7. Demonstrate proper and safe work habits and procedures when exposed to electrical circuits.

Content outline

1. Ignition System Components and Operation
2. Ignition System Diagnosis and Service
3. Oscilloscopes and Graphing Multimeters
4. Computer Fundamentals
5. On-Board Diagnosis

Required materials

Required text book, see syllabus for details.