

AUT 104 : AUTOMOTIVE ELECTRIC III

Transcript title

Automotive Electric III

Credits

2

Grade mode

Standard letter grades

Contact hours total

40

Lecture hours

10

Lab hours

30

Prerequisites

AUT 103.

Description

A hands-on study and familiarization of repair procedures for air bag, security entry and cruise control systems. Learn diagnostic and repair procedures using body control modules. Learn diagnostics and repair procedures for hybrid and new electrical systems.

Learning outcomes

1. Describe the theory, diagnosis, and repair of vehicle electronic systems as it applies to:
 - a. Air Bag and Restraint Systems.
 - b. Cruise Control and Adaptive Cruise Control Systems.
 - c. Controller Area Network (CAN)
 - d. SAE J2534 program re-flash preparation.
2. Describe emerging topics in transportation including:
 - a. Zero emission and zero fatality goals
 - b. Electric drive vehicle systems including Hybrids (HEV), Electric (EV), and Fuel Cell systems
 - c. Municipal infrastructure development to incorporate autonomous vehicles.
3. Demonstrate proper and safe work habits and procedures when exposed to electrical circuits.