COURSE NUMBER & TITLE: ASES 2023: Automotive Electrical Accessories  
CREDITS: 4 (2 Lec/2 Lab)  
PREREQUISITES: Instructor Approval  

CATALOG DESCRIPTION:  
The Automotive Electrical Accessories course covers operation, diagnosis and repair of various electrically operated accessories found on automobiles. Topics include lighting, windshield wipers and washers, power windows and locks, inflatable restraints, body controllers.

OUTLINE OF MAJOR CONTENT AREAS:  
1. Safety precautions  
2. Lighting systems  
   A. Headlights  
   B. Parking lights  
   C. Turn signals, brake lights  
3. Warning lights and gauges  
4. Windshield wipers and washers  
5. Motor driven accessories  
   A. Power windows  
   B. Power locks  
   C. Power seats  
   D. Power mirrors  
6. Heated window grids  
7. Cruise control  
8. Supplemental Inflatable Restraint-airbags  
9. Audio systems  
10. Body Controllers  
11. Networks  

COURSE GOALS/OBJECTIVES/OUTCOMES:  
1. Students will diagnose the cause(s) of excessive key-off battery drain (parasitic draw) and determine the necessary action.  
2. Students will inspect and test switches, connectors, relays, solenoid solid-state devices, and wires of electrical/electronic circuits, and determine the necessary action.  
3. Students will diagnose (troubleshoot) the causes of brighter-than-normal, intermittent, dim, or no light operation, and determine the necessary action.
4. Students will inspect and test gauges and gauge sending units for causes of abnormal
gauge reading, and determine necessary action.
5. Students will diagnose (troubleshoot) incorrect operation of motor-driven accessory
circuits, and determine the necessary action.
6. Students will diagnose (troubleshoot) supplemental restraint system (SRS) problems,
   and determine the necessary action.

**MNTC GOALS AND COMPETENCIES MET:**
N/A

**HCC COMPETENCIES MET:**
Working Productively & Cooperatively
Communicating Clearly & Effectively
Thinking Creatively & Critically

**STUDENT CONTRIBUTIONS:**
The student will:
1. Attend all class sessions.
2. Participate in class activities and discussions.
3. Request assistance when needed.
4. Complete and hand in assigned work when due.

Attendance is critical: if the student is not present, they cannot participate in or
contribute to the learning process.

**STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS
SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.**

**ADDITIONAL INFORMATION: (MATERIALS, ETC.)**
Tasks lists, handouts, and other materials will be provided.
Safety glasses are required in the lab.

*Curriculum Committee Approval Date: April 3, 2018*

**AASC APPROVAL DATE: April 18, 2018**

**REVIEW DATE: April 2023**