## AUTOMOTIVE ELECTRICAL SYSTEMS CERTIFICATE

12 Semester Credit Hours; Curriculum: 0029

This certificate exposes students to the principles and theory of automotive electrical systems and provides opportunities for students to demonstrate the detailed operation and services of batteries, starters, and alternators. Emphasis is placed on Ohm's Law, diagnosis/repair of electrical systems and different types of communication networks. This certificate is for students seeking entry-level careers in automotive technology or for individuals seeking to learn additional automotive systems to advance their skills and career. This certificate can be completed in one semester.

Code	Title	Hours
Courses for a	a Certificate	
ATA 102	Introduction To Automotive Technology	4
ATA 111	Automotive Electrical Systems I	4
ATA 211	Automotive Electrical Systems II	4
Total Hours		12

## **Program Learning Outcomes:**

- 1. Implement safe work habits in automotive technology.
- Perform automotive diagnostics and repairs in an orderly and clean process.
- 3. Demonstrate the use and care of basic automotive tools and equipment.
- 4. Perform adjustments to oscilloscopes, graphing multi-meters, and graphing scan tools.
- 5. Perform a methodical process to retrieve and analyze electrical data.