## AUTOMOTIVE ENGINE PERFORMANCE AND EMISSIONS CERTIFICATE

16 Semester Credit Hours; Curriculum: 0022

This Certificate exposes students to the principles and theory of automotive ignition and fuel systems and provides opportunities for students to demonstrate the detailed operation and services of ignition and fuel delivery components. Emphasis is placed on diagnosis, analysis, repair, and test procedures. Examine faults of onboard computers and OBDII Emissions with the aid of advanced scan tools. 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 Certificate	
ATA 102	Introduction To Automotive Technology	4
ATA 110	Engine Performance And Fuel Systems	4
ATA 111	Automotive Electrical Systems I	4
ATA 210	Advanced Engine Performance Analysis	4
Total Hours		16

## **Program Learning Outcomes:**

- 1. Implement safe work habits in automotive technology.
- Perform automotive diagnostics and repairs in an orderly and clean process.
- Demonstrate the use and care of basic automotive tools and equipment.
- 4. Identify components of the air-fuel and ignition systems.
- 5. Perform fuel system pressure tests.
- 6. Discuss the purpose and operation of emission related sensors.