

AUTOMOTIVE UNDER CAR CERTIFICATE

16 Semester Credit Hours; Curriculum: 0012

This Certificate exposes students to the principles and theory of automotive under car systems and provides opportunities for students to demonstrate the detailed operation and services of brakes, steering, and suspension. Emphasis is placed on tire construction, diagnosing tire wear, mounting, balancing, repair of tire, and use of (TPMS) Tire Pressure Monitor Systems. 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 111	Automotive Electrical Systems I	4
ATA 113	Brake Systems	4
ATA 114	Steering, Balancing, and Alignment	4
Total Hours		16

Program Learning Outcomes:

1. Implement safe work habits in automotive technology.
2. Perform automotive diagnostics and repairs in an orderly and clean process.
3. Demonstrate the use and care of basic automotive tools and equipment.
4. Discuss tire types and repairs.
5. Identify components of the hydraulic brake, steering, and suspension systems.
6. Perform removal and replacement of defective brake, steering, and suspension components.
7. Differentiate between direct and indirect Tire Pressure Monitor Systems (TPMS) and their operation.