

AUTOMOTIVE TECHNOLOGY: FUNDAMENTALS CERTIFICATE

Program code: AUTO-CC-AF

Location: Naugatuck Valley

Program Description

The Automotive Fundamentals program seeks to meet the needs of individuals interested in a basic exposure to and/or an exploratory opportunity in the automotive technology field.

Purpose:

- To provide an understanding of the basic operating principles of an automobile.
- To provide in-depth theory of brake, steering and suspension systems.

Target Population: Individuals interested in a basic exposure to automotive systems.

Individuals interested in an exploratory opportunity in automotive technology.

Learning Outcomes

Upon successful completion of all program requirements, graduates will be able to:

Program should be able to:

1. Relate knowledge of theory and safety to accomplish certain tasks related to the occupation.
2. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
3. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
4. Relate knowledge of general engine diagnosis and repair, including but not limited to the engine's: cylinder heads, valve train, block, lubrication, and cooling system.
5. Relate knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.
6. Relate knowledge of general disc and/or drum brake system, hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.

The courses in the program are accredited by Automotive Service Excellence Education Foundation (A.S.E.).

This Certificate will prepare students for the Automotive Service Excellence Education Foundation (A.S.E.) G1, A1, A4, A5, A6 exams.

Certificate Requirements

Code	Title	Credits
Required Courses		
AUTO 1030	Automotive Maintenance and Light Repair	3
AUTO 1033	Electrical/Electronics Systems	3
AUTO 1038	Brakes Systems	3

AUTO 1036	Suspension and Steering	3
AUTO 1031	Engine Repair	3
Automotive Elective		3
Total Credits		18

The Automotive Technology curriculum offers four degree options. Students may not complete more than one associate's degree in this area but additional certificates may be earned.

- Automotive Technology: Advanced Engine Performance Certificate
- Automotive Technology: Automotive Management, AS
- Automotive Technology: Comprehensive Automotive Repair and Service (CARS) Certificate
- Automotive Technology: Comprehensive Automotive Repair and Service (CARS), AS
- Automotive Technology: Electric Vehicle Technician Certificate
- Automotive Technology: General Auto Service Certificate
- Automotive Technology: General Motors Automotive Service Certificate
- Automotive Technology: General Motors Automotive Service Education Program (ASEP), AAS
- Automotive Technology: Honda Express Technician Certificate
- Automotive Technology: Honda Professional Auto Career Training (PACT) Auto Service Certificate
- Automotive Technology: Honda Professional Automotive Career Training (PACT), AAS