AUTOMOTIVE TECHNOLOGY: GENERAL AUTO SERVICE CERTIFICATE

Program code: AUTO-CC-GAS

Location: Gateway, Naugatuck Valley

Program Description

The General Automotive Service program is designed to accommodate individuals desiring an understanding of engine operation and repair, along with knowledge of automotive electrical, brake, steering, and suspension systems.

Purpose:

- To provide an understanding of automobile engine operation and repair.
- To provide an understanding of automotive electrical theory and its application.
- To provide in-depth theory of brake, steering, and suspension systems.
- To provide an understanding of the relationship between scientific principles and their application in the automobile.

Target Population:

- Individuals seeking entry-level employment opportunities in the automotive service field.
- Individuals seeking to upgrade their technical skills.
- Individuals preparing for career advancement opportunities in the automotive service field.

Learning Outcomes

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

1. Use scientific methods and critical thinking to solve problems in science related to the occupation, including but not limited to electricity, chemical reactions, heat, motion, and hydraulics.
2. Demonstrate workplace skills related to the occupation, including but not limited to: seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics and teamwork.
3. Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.
4. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
5. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
6. Apply knowledge of general engine diagnosis and repair, including but not limited to the engine's: cylinder heads, valve train, block, lubrication, and cooling system.
7. Apply knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment, and repair.
8. Apply knowledge of general disc and/or drum brake system, hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.
9. Apply knowledge of general electrical/electronic systems, including but not limited to, starting, charging, lighting, wiring, accessories, 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, A7 exams as well as additional automotive elective area selected.

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
AUTO 2037	Heating and Air Conditioning	3
Automotive Elective		3
Total Credits		**21**

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: Fundamentals 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