

AUTOMOTIVE: ENGINE PERFORMANCE AND EMISSION SPECIALIST, CERTIFICATE OF ACHIEVEMENT

Banner code: 2_CN_ATEP

Control number: 18969

Financial aid: Eligible

Students are given two options in order to prepare for a specialized field of study within the Automotive Technology program, the Chassis and Drivetrain option and the Engine Performance and Emissions option. New students entering either option are encouraged to consider taking preparation classes in automotive theory and computer skills before enrolling in the regular required courses for the certificate. This is intended to ensure successful performance in the required courses unless students have received prior training or education related to the recommended courses that would fulfill preparation expectations. These courses may normally be available in sequential patterns that would allow completion of the certificates within a two-year time frame.

Students will be responsible for providing their own textbooks, personal safety equipment, protective clothing, a basic hand tool set, and project related materials. The cost of these items will vary according to the place of purchase.

Program Level Learning Outcomes

Upon completion of this program, students will be able to:

1. Measure and convert assigned unit pieces to interpret the appropriate SAE and metric unit. (Celsius to Fahrenheit and inches to millimeters).
2. Identify a fault (ac no air) and will perform a (repair) to then evaluate a successful (fix) in a lab situation.
3. Analyze and diagnose automotive engines and related components for correct system operation.
4. Demonstrate mastery of diagnostic tools and equipment used for automotive repair.

Certificate of Achievement Requirements

This certificate goes through the State approval process and requires a minimum of 12 units of coursework in a particular academic or occupational area. The certificate programs normally include only those courses which have a direct bearing upon specialized occupational competency since the objective of earning the career certificate is immediate employment in a specialized area. Upon successful completion of the program and completing the application, the student will receive the certificate and be recognized at the graduation ceremony. In order to earn a Certificate of Achievement all courses that apply to the certificate must be completed with a minimum grade of "C" in each course unless otherwise stated. A minimum of 12 units in residence at GWC is required, and 50 percent of the certificate program must be completed at GWC.

Course	Title	Units
Required Courses		
AUTO G110	Engine Repair	5
AUTO G120	Electrical/Electronic Systems: Introductory	5
AUTO G130	Engine Performance: Basic Theory/Diagnosis	4.5
AUTO G131	Engine Performance: Advanced	4.5
AUTO G145	Basic Clean Air Car Course	5
Total Units		24

Recommended Program Sequence

These sequences are general maps for students to finish all requirements for the Certificate. There may be advisories or time requirements that students may want to consider before following these maps. **Students are advised to meet with a GWC Counselor for alternate sequencing.**

Year 1:

Course	Title	Units
Semester 1		
AUTO G110	Engine Repair	5
AUTO G120	Electrical/Electronic Systems: Introductory	5
<i>Units</i>		<i>10</i>

Course	Title	Units
Semester 2		
AUTO G130	Engine Performance: Basic Theory/Diagnosis	4.5
AUTO G131	Engine Performance: Advanced	4.5
AUTO G145	Basic Clean Air Car Course	5
<i>Units</i>		<i>14</i>