

Automotive Technology - Maintenance and Light Repair

Certificate of Proficiency (COP)

Modern automobiles are complex machines requiring service technicians who are highly skilled and knowledgeable about mechanical, electrical, and electronic systems. The Automotive Technology program provides a strong combination of classroom theory and hands-on practice, with courses based on competencies established by the ASE Education Foundation. The LCC Automotive Technology program is certified by ASE Education Foundation, a branch of the National Institute for Automotive Service Excellence (ASE).

For a roadmap that identifies the preferred sequencing of courses and other specific recommendations from faculty, please see the corresponding program map(s):

- [Automotive Technology - Maintenance and Light Repair Certificate of Proficiency \(COP\) \(lowercolumbia.edu/program-maps/trades/COP-Automotive-Technology-Maintenance-Light-Rep air\)](http://lowercolumbia.edu/program-maps/trades/COP-Automotive-Technology-Maintenance-Light-Rep air)

Certificate Requirements

Total credits required to earn this certificate: 69

LCC students must meet distribution requirements for bachelor degrees, associate degrees, and specific certificates. See [Diversity and Distribution Lists \(lowercolumbia.edu/publications/catalog/distribution-lists/\)](http://lowercolumbia.edu/publications/catalog/distribution-lists/) for more information.

General Education Requirements

- **Communications:**

5 credits - ENGL 110 Industrial Communication, ENGL& 101 or 102 English Comp I & II, BUS 119 Business Communications, CMST& 220 Public Speaking, CMST& 230 Small Group Communications

- **Quantitative Skills:**

5 credits - MATH 088 Pre-College Math II, MATH 106 Industrial Mathematics, or higher

- **Human Relations / Social Science:**

5 credits – BUS 144 Management of Human Relations.

Program Requirements

Course Code	Course Title	Number of Credits
AMTC/DHET 100	Essentials of Mechanics	5
AMTC 104	Automotive Electrical Systems	15
AMTC 114	Automotive Chassis	15
AMTC 124	Automotive Engines	15

Course Code	Course Title	Number of Credits
HLTH 105	First Aid, CPR and Bloodborne Pathogens	1
MFG 105	Industrial Safety	3

Program Outcomes

Students completing this program should acquire the following skills and abilities:

- Communicate professionally in writing and speaking as appropriate to an industrial technology work environment (GS).
- Apply objective, valid methods of inquiry and problem solving to draw rational, ethical, and coherent conclusions (GS).
- Apply mathematical information to perform tasks in industrial technology (GS).
- Interact effectively with individuals and groups (GS).
- Display work appropriate behavior including positive attitude, timeliness and teamwork.
- Apply knowledge of computer programs to create professional, academic, or business documents following current industry standards.
- Apply industry standard safety and hazardous material handling guidelines.
- Demonstrate competency in inspection and service of automotive systems including electrical, engines, heating, air conditioning, transmissions drivetrain, suspension, wheels, tires and brakes.
- Demonstrate competency in fluid services of automotive systems.

Notes

Revised March 2021 (effective Fall 2021)

Consult an advisor if you have any questions.