**Associate in Applied Science - Transfer (AAS-T)** 

# **Automotive Technology**

for LCC BAS-OLTM

Modern automobiles are complex machines requiring service technicians who are highly skilled and knowledgeable about mechanical, electrical, and electronic systems. The Automotive Technology AAS-T program provides a strong combination of classroom theory and hands-on practice, with courses based on competencies established by the ASE Education Foundation (ASE). This program also meets the academic requirements to apply for admittance into Lower Columbia's Bachelor of Applied Science degree in Organizational Leadership and Technical Management which prepares industry professionals for positions in leadership, management and supervision.

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 Associate in Applied Science - Transfer (AAS-T) for LCC BAS-OLTM (lowercolumbia.edu/program-maps/trades/AAST-Automotive-Technology -to-BAS-OLTM)

## **Degree Requirements**

**Total credits required to earn this degree:** 127 with cumulative grade point average (GPA) of at least 2.0 in the program requirements

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

#### **General Education Requirements**

Communications:

5 credits – ENGL& 101 English Composition I

Quantitative Skills:

5 credits - MATH& 107 Math in Society or higher except for MATH& 131

Natural Sciences:

5 credits - Natural Science with lab from the Distribution List

Diversity / Human Relations:

5 credits – BUS 144 Management of Human Relations: DIV

### **Program Requirements**

Course Code	Course Title	Number of Credits
AMTC 100	Essentials of Mechanics	5
AMTC 104	Automotive Electrical Systems	15
AMTC 105	Vehicle Climate Control	5
AMTC 114	Automotive Chassis	15
AMTC 124	Automotive Engines	15
AMTC 206	Fuels and Emissions	15
AMTC 207	Computer Engine Controls	15
AMTC 214	Automotive Drivetrains	15
MFG 105	Industrial Safety	3
HLTH 105	First Aid, CPR and Bloodborne Pathogens	1
COLL 289	Employment Portfolio Seminar	1
AMTC 288	Cooperative Education	2

AMTC 299 (3 credits) may be substituted for COLL 289 and AMTC 288 with program advisor permission.

# **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.

- Analyze and repair automotive systems including electrical, engines, heating, air conditioning, transmissions drivetrain, suspension, wheels, tires and brakes.
- Demonstrate competency in fluid services of automotive systems.
- Analyze automotive vehicles to diagnose cause of concern.
- Service and repair automotive engines including fuel, ignition, and computer systems.
- Locate information using a variety of automotive service information resources.

#### **Notes**

#### Revised May 2023 (effective Summer 2023)

Program planning is based on information available at the time of preparation. It is the student's responsibility to meet with their LCC advisor. Consult the LCC catalog for LCC graduation requirements.