

# Program map for Automotive Technology Associate in Applied Science (AAS)

2024-25



[Return to Manufacturing, Trades and Transportation Program Maps \(lowercolumbia.edu/program-maps/trades\)](https://lowercolumbia.edu/program-maps/trades)

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).

[View this program in the LCC Catalog \(lowercolumbia.edu/publications/catalog/programs/Trades-AAS-Automotive-Technology\)](https://lowercolumbia.edu/publications/catalog/programs/Trades-AAS-Automotive-Technology)

## See also

- [Degree Requirements for Manufacturing, Trades and Transportation programs \(lowercolumbia.edu/programs/trades\)](https://lowercolumbia.edu/programs/trades)
- [Course descriptions in the LCC Catalog \(lowercolumbia.edu/publications/catalog/courses\)](https://lowercolumbia.edu/publications/catalog/courses)
- [Distribution lists in the LCC Catalog \(lowercolumbia.edu/publications/catalog/distribution-lists\)](https://lowercolumbia.edu/publications/catalog/distribution-lists)

**Important:** Many course sequences only begin in fall quarter. Check with your program advisor.

## By Quarter Overview

### First Quarter (Summer)

- COLL 101: College Success 101 (2 credits)
- MFG 105: Industrial Safety (3 credits)
- HLTH 105: First Aid, CPR and Bloodborne Pathogens (1 credit)

- MATH 106: Industrial Mathematics (5 credits)
  - *MATH 079 or TECH 079 with a C or better or instructor permission\**
- Choose one or more electives (1-9 credits)
  - *See advisor for recommendations of elective choices that meet individual needs*

*\*Pre- and/or co-requisite(s)*

## Second Quarter

- AMTC 104: Automotive Electrical Systems (15 credits)
- ENGL 110: Industrial Communication (5 credits)

## Third Quarter

- AMTC 114: Automotive Chassis (15 credits)
- AMTC 100: Essentials of Mechanics (5 credits)

## Fourth Quarter

- AMTC 124: Automotive Engines (15 credits)

## Fifth Quarter

- TECH 100 : Advanced Principles of Technology (5 credits)
  - *One year of high school principles of technology (certificate from instructor required), or TECH 090, or MATH 106 or higher\**
- BUS 144: Management of Human Relations: DIV (5 credits)
- Choose one or more electives (2 credits)
  - *See advisor for recommendations of elective choices that meet individual needs*

*\*Pre- and/or co-requisite(s)*

## Sixth Quarter

- AMTC 214: Automotive Drivetrains (15 credits)
  - *AMTC 104 or Instructor Permission\**

*\*Pre- and/or co-requisite(s)*

## Seventh Quarter

- AMTC 206: Fuels and Emissions (15 credits)
  - *AMTC 104 or Instructor Permission\**

*\*Pre- and/or co-requisite(s)*

## Eighth Quarter

- AMTC 207: Computer Engine Controls (15 credits)
  - *AMTC 104 or Instructor Permission\**
- AMTC 105: Vehicle Climate Control (5 credits)
  - *AMTC 104 or DHET 104 or Instructor Permission\**

*\*Pre- and/or co-requisite(s)*

## **Detailed Class Sequence**

### **1. College Success 101**

COLL 101 (2 credits)

### **2. Industrial Safety**

MFG 105 (3 credits)

### **3. First Aid, CPR and Bloodborne Pathogens**

HLTH 105 (1 credit)

### **4. Industrial Mathematics**

MATH 106 (5 credits)

*Pre- and/or co-requisite(s): MATH 079 or TECH 079 with a C or better or instructor permission*

### **5. Electives**

Choose one or more elective (1-9 credits)

*See advisor for recommendations of elective choices that meet individual needs*

### **6. Automotive Electrical Systems**

AMTC 104 (15 credits)

### **7. Industrial Communication**

ENGL 110 (5 credits)

### **8. Automotive Chassis**

AMTC 114 (15 credits)

### **7. Essentials of Mechanics**

AMTC 100 (5 credits)

## **8. Automotive Engines**

AMTC 124 (15 credits)

## **9. Advanced Principles of Technology**

TECH 100 (5 credits)

*Pre- and/or co-requisite(s): One year of high school principles of technology (certificate from instructor required), or TECH 090, or MATH 106 or higher*

## **10. Management of Human Relations: DIV**

BUS 144 (5 credits)

## **11. Electives**

Choose one or more electives (2 credits)

See adviser for recommendations of elective choices that meet individual needs

## **12. Automotive Drivetrains**

AMTC 214 (15 credits)

*Pre- and/or co-requisite(s): AMTC 104 or Instructor Permission*

## **13. Fuels and Emissions**

AMTC 206 (15 credits)

*Pre- and/or co-requisite(s): AMTC 104 or Instructor Permission*

## **14. Computer Engine Controls**

AMTC 207 (15 credits)

*Pre- and/or co-requisite(s): AMTC 104 or Instructor Permission*

## **15. Vehicle Climate Control**

AMTC 105 (5 credits)

*Pre- and/or co-requisite(s): AMTC 104 or Instructor Permission*