

Automotive Technology - AAS



2023-24

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

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).

See also: (lowercolumbia.edu/programs/trades)

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

Please note that many course sequences only begin in fall quarter. Please check with your program advisor for more information.

Please review both the "By Quarter Overview" and "Detailed Class Sequence" tabs below.

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



Program Maps for Manufacturing, Trades and Transportation (lowercolumbia.edu/program-maps/trades)

- **Advanced Manufacturing Technology - AAS (Engineering Technician and Multicraft Trades Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Engineering-Tech-Multicraft-Trades)**
- **Advanced Manufacturing Technology - AAS (Multicraft Trades and Production Technician Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Multicraft-Trades-Production-Tech)**
- **Advanced Manufacturing Technology - AAS (Production Technician and Engineering Technician Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Production-Tech-Engineering-Tech)**
- **Advanced Manufacturing for BAS-OLTM - AAS-T (Transfer Option) (lowercolumbia.edu/program-maps/trades/AAS-T-Advanced-Manufacturing-for-BAS-OLTM)**
- **Automotive Technology - AAS (lowercolumbia.edu/program-maps/trades/AAS-Automotive-Technology)**
- **Automotive Technology - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAS-T-Automotive-Technology-to-BAS-OLTM)**
- **Automotive Technology - COP (lowercolumbia.edu/program-maps/trades/COP-Automotive-Technology-Maintenance-Light-Repair)**
- **Commercial Truck Driving - COC (lowercolumbia.edu/program-maps/trades/COC-Commercial-Truck-Driving)**
- **Computer Numerical Control - COP (lowercolumbia.edu/program-maps/trades/COP-Computer-Numerical-Control)**
- **Diesel/Heavy Equipment Preventative Maintenance - COP (lowercolumbia.edu/program-maps/trades/COP-Diesel-Heavy-Equipment-Preventative-Maintenance)**
- **Diesel/Heavy Equipment Technology - AAS (lowercolumbia.edu/program-maps/trades/AAS-Diesel-Heavy-Equipment)**
- **Diesel/Heavy Equipment Technology - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAS-T-Diesel-Heavy-Equipment-to-BAS-OLTM)**
- **Engineering Technician - COP (lowercolumbia.edu/program-maps/trades/COP-Engineering-Technician)**
- **Machine Trades - AAS (lowercolumbia.edu/program-maps/trades/AAS-Machine-Trades)**
- **Machine Trades - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAS-T-Machine-Trades-to-BAS-OLTM)**
- **Machinist - COP (lowercolumbia.edu/program-maps/trades/COP-Machinist)**
- **Multicraft Trades - COP (lowercolumbia.edu/program-maps/trades/COP-Multicraft-Trades)**
- **Production Technician - COP (lowercolumbia.edu/program-maps/trades/COP-Production-Technician)**
- **Welding - AAS (lowercolumbia.edu/program-maps/trades/AAS-Welding)**
- **Welding - COP (lowercolumbia.edu/program-maps/trades/COP-Welding)**
- **Welding for BAS-OLTM - AAS-T (Transfer Option) (lowercolumbia.edu/program-maps/trades/AAS-T-Welding-for-BAS-OLTM)**