

# Automotive Technology - AAS-T (BAS-OLTM Option)



**2023-24**

## Program map for Automotive Technology Associate in Applied Science (AAS-T), BAS-OLTM Option

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](https://lowercolumbia.edu/programs/trades) )

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

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- COLL 101: College Success 101 (2 credits)
- MFG 105: Industrial Safety (3 credits)
- HLTH 105: First Aid, CPR and Bloodborne Pathogens (1 credit)
- MATH& 107: Math in Society (5 credits)
  - *MATH 097/098 with a grade of C or better\**

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

## Second Quarter

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- AMTC 104: Automotive Electrical Systems (15 credits)
- ENGL& 101: English Composition I (5 credits)
  - College level reading and writing skills or completion of ENGL 099 (was ENGL 100) or TECH 105 with a grade of C or better\*

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

## Third Quarter

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

## Fourth Quarter

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- AMTC 124: Automotive Engines (15 credits)
- COLL 289: Employment Portfolio Seminar (1 credit)

## Fifth Quarter

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- 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)
- AMTC 288: Cooperative Education (2 credits)

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

## Sixth Quarter

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

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

## Seventh Quarter

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

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

## Eighth Quarter

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- 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

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COLL 101 (2 credits)

### 2. Industrial Safety

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MFG 105 (3 credits)

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

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HLTH 105 (1 credit)

### 4. Math in Society

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MATH& 107 (5 credits)

*Pre- and/or co-requisite(s): MATH 097/098 with a C or better*

### 5. Automotive Electrical Systems

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AMTC 104 (15 credits)

### 6. English Composition I

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ENGL& 101 (5 credits)

*Pre- and/or co-requisite(s): College level reading and writing skills or completion of ENGL 099 (was ENGL 100) or TECH 105 with a grade of C or better*

### 7. Automotive Chassis

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AMTC 114 (15 credits)

### 8. Essentials of Mechanics

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AMTC 100 (5 credits)

### 9. Automotive Engines

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AMTC 124 (15 credits)

## **10. Employment Portfolio Seminar**

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COLL 289 (1 credit)

## **11. Advanced Principles of Technology**

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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*

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

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BUS 144 (5 credits)

## **13. Cooperative Education**

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AMTC 288 (2 credits)

## **14. Automotive Drivetrains**

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AMTC 214 (15 credits)

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

## **15. Fuels and Emissions**

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AMTC 206 (15 credits)

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

## **16. Computer Engine Controls**

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AMTC 207 (15 credits)

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

## **17. Vehicle Climate Control**

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