

# Welding - AAS-T (BAS-OLTM Option)



2024-25

## Program map for Welding - AAS-T (BAS-OLTM Option)

The Welding AAS-T degree prepares students for the state commercial welding examination or welding jobs in manufacturing, maintenance, or fabrication. Students must successfully complete the Washington Association of Building Officials (WABO) Qualification Test before earning a degree in Welding. 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 (BAS-OLTM) which prepares industry professionals for positions in leadership, management, and supervision.

### See also

- [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)

( [lowercolumbia.edu/program-maps/trades/](https://lowercolumbia.edu/program-maps/trades/) ) **Important:** Many course sequences only begin in fall quarter. Check with your program advisor.

## By Quarter Overview

### First Quarter

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- MFG 105: Industrial Safety (3 credits)
- WELD 141: SMAW - Stick Welding with E7018 (10 credits)

### Second Quarter

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- MATH 107: Math in Society (5 credits)
- WELD 142: Advanced SMAW - WABO (10 credits)
  - *WELD 141 or instructor permission\**

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

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### Third Quarter

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- ENGL 110: Industrial Communication (5 credits)
- WELD 143: SMAW - Stick Welding with E6010 (10 credits)
  - *WELD 142 or instructor permission\**

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

### Fourth Quarter

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- BUS 144: Management of Human Relations: DIV (5 credits)
- WELD 241: FCAW-G - Dual Shield Wire Feed Welding with E71T-1 (10 credits)

### Fifth Quarter

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- MASP 107: Machining for Related Occupations (6 credits)
- Natural Science: Distribution List (5 credits)
- WELD 242: Advanced FCAW-G - WABO (6 credits)
  - *WELD 241 or instructor permission\**

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

### Sixth Quarter

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- BLPT 160: Blueprint for Welders (5 credits)
  - *MATH 106 or higher or instructor permission\**
- Soc 101: Introduction to Sociology: DIV (5 credits)
- WELD 243: GMAW – Solid Wire Feed Welding with ER70S-6 and ER5356 (6 credits)
  - *WELD 241 or instructor permission\**

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

### Seventh Quarter

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- COLL 289: Employment Portfolio Seminar (1 credit)
- WELD 158: Welding Theory and Fabrication (5 credits)
  - *WELD 125 and 131\**
- WELD 255: GTAW-Tig Welding with ER70S-6 and ER5356 (6 credits)

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

### Eighth Quarter

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- CS 110: Introduction to Microcomputer Applications (3 credits)
- HLTH 105: First Aid, CPR and Bloodborne Pathogens (1 credit)

- Humanities: Distribution List (5 credits)
- WELD 75/70: Welding Certification-WABO Exam/re-test (0 credits)
  - *WELD 60 or instructor permission\**
- WELD 288: Cooperative Work Experience (2 credits)

*\*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. SMAW - Stick Welding with E7018

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WELD 141 (10 credits)

### 4. Industrial Mathematics

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MATH 106 (5 credits)

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

### 5. Advanced SMAW - WABO

WELD 142 (10 credits)

*Pre- and co-requisite(s): WELD 141 or instructor permission*

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### 6. Introduction to Microcomputer Applications

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CS 110 (3 credits)

*Pre- and/or co-requisite(s): Ability to use keyboard*

### 7. Industrial Communication

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ENGL 110 (5 credits)

### 8. SMAW - Stick Welding with E6010

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WELD 143 (10 credits)

*Pre- and co-requisite(s): WELD 142 or instructor permission*

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**9. Management of Human Relations: DIV**

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BUS 144 (5 credits)

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**10. FCAW-G - Dual Shield Wire Feed Welding with E71T-1**

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WELD 241 (10 credits)

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**11. Machining for Related Occupations**

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MASP 107 (6 credits)

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**12. 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*

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**13. Advanced FCAW-G - WABO**

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WELD 242 (6 credits)

*Pre- and/or co-requisite(s): WELD 241 or instructor permission*

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**14. Blueprint for Welders**

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BLPT 160 (5 credits)

*Pre- and/or co-requisite(s): MATH 106 or higher or instructor permission*

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**15. Employment Portfolio Seminar**

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COLL 289 (1 credit)

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**16. GMAW – Solid Wire Feed Welding with ER70S-6 and ER5356**

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WELD 243 (6 credits)

*Pre- and/or co-requisite(s): WELD 241 or instructor permission*

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**17. First Aid, CPR and Bloodborne Pathogens**

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HLTH 105 (1 credit)

## 18. Welding Theory and Fabrication

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WELD 158 (5 credits)

*Pre- and/or co-requisite(s): WELD 125 and 131*

## 19. GTAW-Tig Welding with ER70S-6 and ER5356

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WELD 255 (6 credits)

## 20. Cooperative Work Experience

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WELD 288 (2 credits)

## 21. Welding Certification-WABO Exam/re-test

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WELD 75/70 (0 credits)

*Pre- and/or co-requisite(s): WELD 60 or instructor permission*



## Program Maps for Manufacturing, Trades and Transportation ( [lowercolumbia.edu/program-maps/trades](http://lowercolumbia.edu/program-maps/trades) )

- **Advanced Manufacturing - AAS-T (BAS-OLTM Option) ( [lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-to-BAS-OLTM](http://lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-to-BAS-OLTM) )**
- **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) )**
- **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-Automotive-Technology-to-BAS-OLTM](http://lowercolumbia.edu/program-maps/trades/AAS-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-Diesel-Heavy-Equipment-to-BAS-OLTM](http://lowercolumbia.edu/program-maps/trades/AAS-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-Machine-Trades-to-BAS-OLTM](http://lowercolumbia.edu/program-maps/trades/AAS-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 - AAS-T (BAS-OLTM Option) ( [lowercolumbia.edu/program-maps/trades/AAS-Welding-to-BAS-OLTM](http://lowercolumbia.edu/program-maps/trades/AAS-Welding-to-BAS-OLTM) )**
- **Welding - COP ( [lowercolumbia.edu/program-maps/trades/COP-Welding](http://lowercolumbia.edu/program-maps/trades/COP-Welding) )**