Welding

2022-23

Program map for Welding Certificate of Proficiency (COP)

The welding certificate program helps prepare the student for employment in manufacturing or maintenance.

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

- COLL 101: College Success 101 (2 credits)
- MATH 106: Industrial Mathematics (5 credits)
  - *MATH 079 or TECH 079 with a C or better or instructor permission**
- WELD 141: SMAW - Stick Welding with E7018 (10 credits)

Pre- and/or co-requisite(s)

Second Quarter

- BLPT 160: Blueprint Reading for Welders (5 credits)
  - *MATH 106 or higher or instructor permission**
- CS 110: Introduction to Microcomputer Applications (3 credits)
  - *Ability to use keyboard**
- WELD 241: FCAW-G- Dual Shield Wire Feed Welding with E71T-1 (10 credits)

Pre- and/or co-requisite(s)

Third Quarter

- ENGL 110: Industrial Communication (5 credits)
- WELD 158: Welding Theory and Fabrication (5 credits)
  - *WELD 125 and 131 or instructor permission**

- WELD 243: GMAW-G - Solid Wire Feed Welding with ER70S-6 and ER5356 (6 credits)
  - *WELD 241 or instructor permission**

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

Fourth Quarter

- BUS 144: Management of Human Relations: DIV (5 credits)
- HLTH 105: First Aid, CPR and Bloodborne Pathogens (1 credit)
- MFG 105: Industrial Safety (3 credits)

Detailed Class Sequence
1. College Success 101

COLL 101 (2 credits)

2. 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

3. SMAW - Stick Welding with E7018

WELD 141 (10 credits)

4. Blueprint Reading for Welders

BLPT 160 (5 credits)
Pre- and/or co-requisite(s): MATH 106 or higher or instructor permission

5. Introduction to Microcomputer Applications

CS 110 (3 credits)
Pre- and/or co-requisite(s): Ability to use keyboard

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

WELD 241 (10 credits)

7. Industrial Communication

ENGL 110 (5 credits)

8. Welding Theory and Fabrication

WELD 158 (5 credits)
Pre- and/or co-requisite(s): WELD 125 AND 131 or instructor permission

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

WELD 243 (6 credits)
Pre- and/or co-requisite(s): WELD 241 or instructor permission*

10. Management of Human Relations: DIV

BUS 144 (5 credits)

11. First Aid, CPR and Bloodborne Pathogens

HLTH 105 (1 credit)

12. Industrial Safety

MFG 105 (3 credits)

(lowercolumbia.edu/program-maps/trades)

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)
- Automotive Technology - AAS (lowercolumbia.edu/program-maps/trades/AAS-Automotive-Technology)
- Automotive Technology - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAST-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 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/AAST-Diesel-Heavy-Equipment-to-BAS-OLTM)
- Diesel/Heavy Equipment Preventative Maintenance - COP (lowercolumbia.edu/program-maps/trades/COP-Diesel-Heavy-Equipment-Preventative-Maintenance)
- 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/AAST-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)