# **WELDING** 2023-2024

Welding students become proficient in performing welding processes, reading blueprints and welding symbols, and developing safe work habits. Upon successful completion of the program, students are eligible to apply for skilled trades apprenticeships, weld and fabricate metal, read and interpret blueprints, and operate CNC fabrication equipment. Welding is part of the Advanced Manufacturing Academy. Senior students have the opportunity to engage in advanced-elective course work in any of the manufacturing areas: Computer-Aided Design, Precision Machining, Robotics & Automation, and Welding. This opportunity provides students with a more diverse skill-set to enter a career in manufacturing.

#### **Program Highlights:**

- Use advanced welding techniques and fabrication equipment to design, engineer and assemble metal components
- Design and fabricate products to solve manufacturing challenges for clients
- Interpret blueprints to meet critical design specifications

#### The Program Focuses on the Following State Approved Courses:

- Welding Technologies
- Gas Metal Arc Welding
- Shielded Metal Arc Welding

#### **COST-FREE COLLEGE CREDIT OPPORTUNITIES**

#### College Credit Plus through Owens Community College

- WLD 190: Welding Blueprint Reading (2 Credit Hours)
- WLD 191: Introduction to Welding Processes (2 Credit Hours)
- WLD 192: SMAW (Flat & Horizontal) (2 Credit Hours)
- WLD 193: SMAW Vertical and Overhead (2 Credit Hours)
- WLD 261: Pipe Welding (2 Credit Hours)
- WLD 262: GMAW Welding (2 Credit Hours)
- WLD 264: Welding Plate Pre-Cert and Test (2 Credit Hours)
- WLD 265: Pipe Welding Pre-Cert and Test ((2 Credit Hours)
- WLD 266: GTAW Welding (2 Credit Hours)
- WLD 267: Welding Fabrication & Layout (2 Credit Hours)

#### Career Technical Assurance Guides (CTAGs)

• CTS001: OSHA 10-Hour Safety (1 Credit Hour)

- Flux Core Arc Welding
- Welding & Fabrication
- Advanced Welding

#### INDUSTRY-RECOGNIZED CREDENTIALS (POINT VALUES)

- Ohio State Apprenticeship Council Recognized Pre-Apprenticeship Program Certificate of Completion
  (12 Points)
- American Welding Society (AWS) Certified Welder (FCAW) (12 Points)
- American Welding Society (AWS) Certified Welder (GMAW) (12 Points)
- American Welding Society (AWS) Certified Welder (GTAW) (12 Points)
- American Welding Society (AWS) Certified Welder (SMAW) (12 Points)
- American Welding Society (AWS) Welding Qualification (FCAW) (9 Points)
- American Welding Society (AWS) Welding Qualification (GMAW) (9 Points)
- American Welding Society (AWS) Welding Qualification (GTAW) (9 Points)
- American Welding Society (AWS) Welding Qualification (SMAW) (9 Points)
- OSHA 10-Hour Training (1 Point)
- CPR First Aid (1 Point)
- Forklift Operation (2 Points)
- Manlift Operation (2 Points)
- Ohio Driver's License (1 Point)

OHIO MEANS JOBS OCCUPATIONS LISTED ACCORDING TO TYPICAL SALARY					
OCCUPATION TITLE	TYPICAL SALARY- BOTTOM 10%	TYPICAL SALARY- MEDIAN	TYPICAL SALARY- TOP 10%	TYPICAL EDUCATION	ANNUAL JOB OPENINGS
Grinding, Lapping, Polishing, & Buffing Machine Tool Setters, Operators, & Tenders, Metal & Plastic*	\$29,360	\$37,220	\$58,650	HS Diploma or Equivalent	620
Welders, Cutters, Solderers & Brazers*	\$35,360	\$46,360	\$60,860	HS Diploma or Equivalent	2,060
Sheet Metal Workers*	\$36,790	\$64,770	\$79,530	HS Diploma or Equivalent	370
Plumbers, Pipe Fitters & Steamfitters*	\$38,230	\$62,930	\$90,740	HS Diploma or Equivalent	1,370
First-Line Supervisors of Production & Operating Workers*	\$39,130	\$61,910	\$95,540	HS Diploma or Equivalent	3,130
Structural Iron & Steel Workers*	\$46,920	\$66,260	\$80,420	HS Diploma or Equivalent	310
Manufacturing Engineers*	\$61,050	\$87,120	\$129,160	Bachelor's Degree	1,150
JOB OUTLOOK COMPILED BY OHIO MEANS JOBS AS OF SEPTEMBER 2022; VISIT OHIOMEANSJOBS.COM FOR MORE INFORMATION.					

\*Denotes an In-Demand Occupation in the State of Ohio

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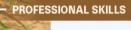




## TECHNICAL CAREERS —

- Welder
- Metal Fabricator
- Non-Destructive Testing
  Technician
- Combo Welder
- Maintenance Welder
- AWS Welder
- Boilermaker
- Pipefitter/Welder
- Journeyman Welder
- Journeyman Iron Worker
- Journeyman Pipe Welder
- Welding Inspector





- PASSION

# PROFESSIONAL CAREERS

- Instructor
- Company Owner
- Safety Manager
- Manufacturer Sales Representative
- Project Manager
- Plant Superintendent
- Certified Pipe Welder
- Site Superintendent
- Mechanical/Welding Engineer
- Estimator
- Metallurgist
- Safety Inspector

### ENTRY-LEVEL CAREERS

- Production Welder
- Fabrication Shop Welder
- Construction Welder
- MIG/TIG Entry-Level Welder
- Iron Worker Apprentice
- Pipe Welder Apprentice
- Fabricator
- Boilermaker Apprentice
- Certified Welder
- Sheet Metal Worker
- Structural Welder
- Repair Welder



ACADEMICS

**EXPERIENCES** 

For **Career Tree\*** tools and materials please visi TFSresults com and call our team at 330,840,2680