

Welding and Sheet Metal Fabrication



In this career pathway, you will learn to interpret blueprints and specifications using math and computer technology while gaining experience in all types of metal welding, brazing, and flame cutting.

Curriculum Highlights:

Develop the strength, work ethic, and knowledge necessary for a career in the welding and fabrication industry.

Areas of study include:

- Shop safety and welding safety
- Metallurgy
- Sheet metal layout and fabrication principles
- Industry math
- Hand tools, power tools
- Blueprint reading
- Shop projects
- CNC plasma table and laser
- Senior projects
- Joint preparation, fit-up, and design
- SMAW - carbon steel
- FCAW - carbon steel
- GMAW - carbon steel and aluminum
- GTAW - carbon steel, stainless steel, and aluminum
- Plasma arc cutting and OxyFuel cutting
- Welding vocabulary and industry standards

Career Focus:

You will be prepared to pursue further certifications and education or to find employment as a:

- Sheet Metal Worker
- Pipe Fitter
- Ironworker
- Welder Operator
- Fabricator
- Welding Engineer
- Shipyard Worker
- Welding Technician

“Mr. DeMent will give you the skills you need to succeed in the real world. He doesn’t just tell you what to do, he gives you ideas and guides you in the right direction. After graduation, I’m getting into a 4-year paid apprenticeship program where I’ll be learning and working at the same time.”

- Austin Palileo

Welding & Sheet Metal Fabrication Student

This course focuses on specialized classroom and shop learning experiences that are concerned with all types of metal welding, brazing and flame cutting.

Students entering this area of career and technical training find background experiences in mathematics and mechanical drawing very helpful.

Additional Opportunities:

- Participate in job shadowing, internships, and paid employment
- Opportunities to compete locally, regionally, and nationally in SkillsUSA
- Be prepared for part-time and summer employment to help offset college costs
- Qualify for scholarship opportunities
- Earn industry credentials through the American Welding Society
- Earn apprenticeship opportunities and job placement assistance
- Take field trips to hear from industry professionals
- Potential to earn college credits through articulation agreements

Location	DACC Campus
Grade Level	Junior and Senior
2020/2021 Fees* <i>Fees are subject to change. See our web site for a breakdown of individual costs.</i>	Welding and Sheet Metal Fabrication I - \$340.00 Welding and Sheet Metal Fabrication II - \$320.00
Organizations, Affiliations or CTSO	SkillsUSA
High School Credits Available	3 elective credits each year
College Credits Available	Articulation agreement with Hocking College and Columbus State Community College CTAGs: Gas Metal Arc Welding, Shielded Metal Arc Welding, Gas Tungsten Arc Welding**
Industry Credentials Available	American Welding Society Certifications*** OSHA 10-Hour Safety Card Forklift License
Technology Integration	Computers for daily use and up-to-date computer software Internet for research CNC Plasma Cutter Laser cutter

**This program participates in the One-to-One Chromebook program. An additional fee will be applied unless the student chooses to bring their own technology. Fees are subject to change. See our web site for a breakdown of individual and additional costs.*

***CTAG, which stands for Career-Technical Assurance Guide. A CTAG works as guaranteed transfer credit to any state of Ohio public college that offers that class. Students must meet WebExam requirements to be awarded the credit.*

****Industry credential recognized by ODE for points toward graduation.*

Instructor:

Brad DeMent

(740) 203.2238

DeMentB@DelawareAreaCC.org

4565 Columbus Pike | Delaware, OH 43015

DACC | DELAWARE AREA CAREER CENTER
Empower. Prepare. Inspire. Connect.
Elevate your life.



Enroll online at DelawareAreaCC.org/DACCApp

This document is provided to you as an overview of the Delaware Area Career Center program. The information is not intended to be a binding contract and is subject to change at any time. For more information or clarification, please see the program instructor.

The Delaware Area Career Center (DACC) affirms that equal opportunities are offered without regard to race, color, religion, sex, military status, national origin, disability, age, and ancestry of person. For additional information visit our website at www.DelawareAreaCC.org