



Welding

Educational member of American Welding Society (AWS)



WELDING develops skills and knowledge in the fusing of different types of metals. Students will work from blueprints to layout, develop, fabricate, and form metals utilizing the Oxyacetylene Flame Cutting, Gas Welding, Shielded Metal Arc Welding (stick), Gas Metal Arc Welding (MIG), Gas Tungsten Arc Welding (TIG), and Plasma Arc Welding Processes.

Work Environment

The welder may work indoors or outdoors depending on the type of job being performed. Extreme heat is used in the welding process and safety glasses, masks, gloves, work boots and appropriate apparel must be worn. Very strict safety rules must be followed.

Career Opportunities

Structural Welder
Business Owner
Certified Welder
Flame Cutter
Pipefitter
Precision Tig Welder
Welding Engineer
Welding Inspector
Welder (Combo) Mechanic
Welding Supervisor

Advanced Standing Available*

Five Towns College
Lincoln Technical Institute
Ohio Technical College
SUNY Canton
SUNY Delhi

*College credits may be earned by meeting the criteria of articulation agreements (see listing in Handbook) Tech has established with SELECT colleges. In addition, check directly with the post-secondary institutions for any additional credits they may offer.

Academic Credits integrated:

Tech Math, Tech Phys Sci, Eng. 12, Art, CFM, Comp App

CTE Endorsement

Students must successfully meet the academic and attendance criteria for a two-year Wilson Tech Certificate of Completion, be High School diploma eligible, and pass the following exam: YouScience: Welding I and Welding II

Student Supplies

Additional supplies will need to be purchased for this program including work boots.

Average Annual Wage

Salaries are subject to market fluctuations.

For the most current updates on local & national wages go to job search engines on the internet and www.careerzone.ny.gov

Course Outline

- Shop and Field Safety Procedures
- Basic Electricity/Fundamentals of Blueprint Reading
- Thermodynamics/Layout and Development
- Properties, Identification, and Use of Metals
- Welding Processes and Techniques including Production and Maintenance Welding
- Inspection and Testing of Weldments
- Basic Metallurgy
- Special Welding Techniques
- Preparation for Welder's Certification Exam in 3G, 4G and 6G Pipe
- OSHA 30