Welding

PROGRAM SUMMARY
• Welding holds much of our world together, from buildings and bridges to airplanes and equipment.
• Take a drawing or blueprint and breathe life into it by fabricating a life size creation.
• Know you have a future with many different job skills that will drive you down the road of success towards manufacturing, field work or owning your own company.
• Skilled Welders Needed! There is a large shortage of welders in the United States with great opportunities for employment.

COLLEGE CREDIT CONNECTIONS
• Alfred State College
• Lincoln Technical Institute
• Niagara County Community College
• Ohio Technical College
• Universal Technical Institute

SPECIAL NOTES
• Students in this program are eligible for post-secondary dual enrollment opportunities.
• Steel toed or composite toed work boots are required.

PROGRAM ELIGIBILITY
• Technical Endorsement
• 3.75 Credits per Year
• Pathways to Graduation (CTE and CDOS)

TECHNICAL CAREERS
- Boilermaker / Ironworker
- Fabricator
- Machinist
- Millwright
- Robotics Technician
- Sheet Metal
- Shipwright
- Underwater Welder

ENTRY LEVEL CAREERS
- Apprentice Steamfitters
- Steel Distribution Center
- Assistant / Helper
- Grinder and Polishing Worker

Career Paths
WELDING

WELDING SAFETY
- PPE
- Electrical Shock
- Ferrous
- Cylinder Safety / Storage
- Equipment Operation
- Power Sources

METAL WORKING SAFETY
- Grinding
- Preparation
- Sheering
- Machine Cutting
- Hand Cutting

OXY-FUEL CUTTING
- Equipment Set Up
- Cylinder Handling
- Regulator Safety
- Torches / Gases
- Hand Cutting
- Track Cutting
- Hand Auto Cutting

GTAW (GAS TUNGSTEN ARC WELDING), TIG
- Equipment Set Up
- Gases / Flowmeter
- Equipment Operator
- Ferrous Metals
- Non-Ferrous Metals
- Torches and Machine Types
- Pulse TIG Welding

ROBOTICS
- Types
- Processes
- Automotive Industry
- Machine
- CAD Drawing
- CNC Plasma Table

PLASMA ARC CUTTING
- Equipment Arc Set Up
- Safety
- Types
- Gases
- Torches

SMAW (SHIELDED METAL ARC WELDING), STICK
- Equipment Set Up
- Basic Operations
- Types of Electrodes
- Multiple Position Welding
- Out of Position
- Operating Equipment

LIGHT MANUFACTURING
- Drill Press
- Sheet Metal Bending
- Machining Lathe
- Bridge Port Drill
- Hydraulic Shear
- Hydraulic Band Saw
- Iron Worker

GMAW (GAS METAL ARC WELDING) / FCAW (FLUX CORED), MIG
- Equipment Set up
- Flowmeters / Gases
- Machine Parts
- Operating Equipment
- Welding Defects
- Puls Mig Welding