



SUCCESS

Get involved with these student organizations

- ▶ American Welding Society (A.W.S.) student Chapter
- ▶ Future Business Leaders of America
- ▶ National FFA Organization
- ▶ National Technical Honor Society
- ▶ Skills USA

NON-DISCRIMINATION POLICY

It is the policy of the Genesee Valley Educational Partnership not to discriminate on the basis of religion, sex, race, color, sexual orientation, national origin or disability in admissions, employment and treatment of students and employees in any educational program or activity.

For More Information...

Batavia Career & Technical Education Center

8250 State Street Rd., Batavia, NY 14020
(585) 344-7711

Mount Morris Career & Technical Education Center

27 Lackawanna Ave., Mount Morris, NY 14510
(585) 658-7811



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2019-20

Metal Trades Career & Technical Education



Genesee Valley Educational Partnership
success stories written here

While training at the Career and Technical Center, students learn how to set-up and operate machining and welding equipment. Hands-on instruction is provided in the use of lathes, milling machines, surface grinders, drill presses, Computer Numerically Controlled (CNC) Haas lathe and milling machines.

Students develop hands-on skills in each of the major welding and cutting processes including oxyacetylene, TIG, MIG, Arc welding, plasma arc and air carbon arc. Students will learn how to program and run the CNC Plasma Burning Table.

Units of study that are interwoven throughout the program include Safety, Trade Math, Layout and Fabrication, Blue Print Reading, Metallurgy and Communication Skills.

UNITS OF STUDY

Year 1

- ▶ Basic Machining
- ▶ Engine Lathe
- ▶ Gas Metal Arc Welding (GMAW)
- ▶ Gas Tungsten Arc Welding (GTAW) structural
- ▶ Horizontal Mill
- ▶ Introduction to Welding
- ▶ Oxy-Acetylene Welding (OAW) / Oxy-Acetylene Cutting (OAC)
- ▶ Plasma Arc Cutting (PAC)
- ▶ Power Tools/Equipment and Safe Use
- ▶ Precision Instrumentation Reading
- ▶ Print Reading
- ▶ Safety/Hand Tools and Safe Use
- ▶ Shielded Metal Arc Welding (SMAW)
- ▶ Surface Grinding
- ▶ Trade Math

Year 2

- ▶ Aluminum, Steel, and Stainless Steel
- ▶ AWS Entry Level Welding Test Plates and Workmanship Samples
- ▶ CNC Mill/CNC Lathe
- ▶ Fabrication
- ▶ Gas Tungsten Arc Welding (GTAW) pipe welding
- ▶ Gas Metal Arc Welding (GMAW)
- ▶ Machining Skill Development
- ▶ Pipe Welding

- ▶ Print Reading
- ▶ Safety
- ▶ Sheet Metal Layout
- ▶ Trade Math
- ▶ Welding Metallurgy
- ▶ Work Experience Opportunity

CAREER CONNECTIONS

- ▶ Artist
- ▶ Ironworker
- ▶ Machinist
- ▶ Machining Technology
- ▶ Maintenance Mechanic
- ▶ Millwright
- ▶ Pipefitter
- ▶ Quality Control Inspector
- ▶ Sheet Metal Fabricator
- ▶ Tool and Die Maker
- ▶ Welder
- ▶ Welding Engineering
- ▶ Welding Technology

CREDIT AVAILABLE

High School Credit

- ▶ 4.0 CTE
- ▶ .5 Career & Financial Management

Embedded

- ▶ 1.0 Math

College Articulation Agreements

- ▶ Mohawk Valley Community College
- ▶ Pennsylvania College of Technology

**Credit by Evaluation*

POST-SECONDARY EDUCATION

Schools most commonly attended after graduation

- ▶ Alfred State College
- ▶ Hobart Institute of Welding Technology
- ▶ Mohawk Valley Community College
- ▶ Monroe Community College
- ▶ Morrisville Community College



- ▶ Ohio Technical College
- ▶ R.I.T.
- ▶ University of Northwestern Ohio

INDUSTRY-BASED EXAMS/ CERTIFICATIONS

- ▶ American Welding Society: Level 1- Entry Level Welder Certification
- ▶ Occupational Safety and Health Administration (OSHA) 10 Hour Card
- ▶ OSHA Forklift Certification
- ▶ Students May Obtain Their CDL Class B License

SUCCESSFUL STUDENTS

- ▶ work with or without close supervision
- ▶ demonstrate attention to detail and the ability to concentrate on detailed work for prolonged periods of time
- ▶ possess good mechanical aptitude and manual dexterity
- ▶ have good eyesight, and are in good physical condition
- ▶ demonstrate ability to stoop, bend, climb, stand and work in awkward positions
- ▶ communicate effectively and follow directions
- ▶ demonstrate attention to detail
- ▶ follow all safety standards

METAL TRADES PROGRAM