

# Industrial Mechanics & Welding

Carl Speer, Instructor  
speerc@hartfordschools.net

The Industrial Mechanics and Welding (IMW) program exposes students to a wide range of topics designed to instill general fabrication skills combined with technical subjects. The course prepares students for a variety of occupations ranging from welding, electrical, and machining to mechanical trades. Students routinely use math and science skills, and interact with STEM, Automotive Technology, Natural Resources, and Collision Repair and Refinishing programs while working on projects. Students are prepared for a career or post-secondary education with technical skills as well as a positive attitude and work ethic. Personal projects students have designed and built include lamps, stools and tables, as well as other miscellaneous projects.

## Industry Certifications:

S/P2 Environmental Safety Training Certification; AED/CPR and First Aid; and Conover® Workplace Readiness.

**Embedded High School Credit:** Science

## Articulation Agreement:

University of Northwestern Ohio; Lincoln Technical Institute; and Keene State College.

## Units of Study:

- Shop Safety
- Employability
- Fabrication Math
- Information Technology
- Measurement
- Fasteners
- Hand and Power Tools
- Print Reading and Technical Drawing Skills
- Welding: Oxy-acetylene; welding and cutting; GTAW Aluminum and Ferrous; GMAW; SMAW
- Plasma Cutting
- Machining: Manual mill; CNC mill manual lathe; CNC lathe; surface grinder; sheet metal fabrication; shear; brake; slip roll; bread roller; English wheel; stretcher
- Electrical: DC, AC

