



WELDING TECHNOLOGY

WHITEWATER CAREER CENTER



OVERVIEW

If you can apply math skills, like to work with your hands, and are interested in an exciting career that can provide you numerous opportunities, then you should consider this program.



YOU WILL LEARN

- 4 major welding processes along with oxy-fuel and plasma cutting
- How to weld in flat, vertical, horizontal, and overhead positions
- How to read welding symbols and understand blueprints



A TYPICAL STUDENT

The typical student is a solid academic student on track with credits for graduation. Students who enroll in Welding Technology like hands-on work and plan to pursue a career in a technical field. Successful students have the patience and attention to detail to solve problems using the skills they have learned. They can work on projects independently or with other students. They take initiative, check their work as needed, and stay on task without constant supervision. Safety is a primary focus, and students must follow the guidelines to keep themselves and others safe.



GET YOURSELF READY

You will use math skills to solve problems and complete welding projects. To be prepared, focus on doing well in algebra and geometry courses. Employment and admission into apprenticeship programs and specialty training programs can be competitive. To increase your chances, do your best in all high school courses. The following courses will help prepare you for the Welding Technology career program, further education and training, and a career in the welding industry:

- Algebra I
- Geometry
- Introduction to Manufacturing
- Introduction to Engineering Design (PLTW-IED)
- Principles of Engineering (PLTW-POE)





POTENTIAL CAREERS

- Welder, Cutter, Solderer, & Brazer \$37,420
- Assembler & Fabricator \$29,280
- Quality Control Inspector \$35,330
- General Maintenance & Repair Worker \$36,170
- Industrial Engineering Technician \$53,370
- Industrial Production Manager \$92,470
- Mechanical Engineer \$83,060
- Industrial Engineer \$81,490

All career and salary information is cited from the Bureau of Labor Statistics.



YEAR ONE

Welding Technology I includes classroom and lab experiences that develop a variety of skills in oxy-fuel cutting and shielded metal arc welding. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used to enforce safety at all times. Instructional activities emphasize properties of metals, safety issues, print reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success.

Ivy Tech Dual College Credits

- INDT 114 Introduction to Welding 3 credits
- WELD 100 Welding Processes 3 credits
- WELD 108 Shielded Metal Arc Welding I 3 credits



YEAR TWO

Welding II students focus on completing the AWS (American Welding Society) Sense Level 1 industry certification. Welding Technology II builds on the skills covered in Welding Technology I, and successful students have opportunities to complete internships at local companies during the spring semester. Instructional activities may include working on school and client projects to expose students to real world situations. OSHA standards and guidelines endorsed by AWS are used to enforce safety at all times.

Industry Certifications

AWS (American Welding Society) SENSE (Level 1):

- Entry Level Welder in SMAW
- Entry Level Welder in GMAW
- Entry Level Welder in FCAW
- Entry Level Welder in GTAW

Ivy Tech Dual College Credits

- WELD 109 Oxy-Fuel Gas Welding & Cutting 3 credits
- WELD 207 Gas Metal Arc Welding 3 credits



WHEN YOU FINISH

Upon completion of this program, you may enter full-time employment, enter apprenticeships, and/or pursue 2 and 4-year postsecondary degrees such as welding technology and welding engineering.



WHITEWATER CAREER CENTER

Where opportunities flow

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1300 Spartan Drive | Connersville, IN 47331
whitewatercareercenter.org | (765) 825-0521