



# WELDING TECHNOLOGY

WHITEWATER CAREER CENTER

## PROGRAM OVERVIEW

EARLY COLLEGE CAREER PROGRAM

If you 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. Participate in the Early College option and earn an Ivy Tech Certificate in Structural Welding while at WCC.

### YOU WILL LEARN

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

To be prepared for success, do well in all high school courses, be on track for graduation, and develop a good work ethic. The following pathway courses will help prepare you for the Welding Technology career program, further education and training, and a career in the welding industry:

- Preparing for College & Careers
- Introduction to Manufacturing
- Introduction to Advanced Manufacturing & Logistics
- Introduction to Engineering Design (PLTW-IED)



WHITEWATER CAREER CENTER

Where opportunities flow

Centerville | Connersville | Franklin County  
Lincoln | Rushville | Union County

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## CERTIFICATIONS & DUAL CREDITS

### 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

Industry certifications are earned in year two. Dual credits are earned during year one and two.

\*Students who earn these dual credits can complete the Ivy Tech Certificate in Structural Welding.

### IVY TECH DUAL COLLEGE CREDITS

- INDT 114 Introduction to Welding
- WELD 100 Welding Processes
- WELD 108 Shielded Metal Arc Welding I
- WELD 206 Shielded Metal Arc Welding II
- WELD 109 Oxy-Fuel Gas Welding & Cutting
- WELD 207 Gas Metal Arc Welding
- WELD 208 Gas Tungsten Arc Welding
- WELD 272 Adv Gas Metal Arc Welding II
- WELD 273 Adv Gas Tungsten Arc Welding II

- 3 credits
- 3 credits\*
- 3 credits\*
- 3 credits\*
- 3 credits
- 3 credits\*
- 3 credits\*
- 3 credits\*
- 3 credits\*

Earn the Ivy Tech Certificate in Structural Welding at WCC. Take dual credit classes at your high school, to work toward the next steps of a Technical Certificate and/or Associate in Applied Science at Ivy Tech:

- Dual Credit Speech
- Dual Credit Math
- Dual Credit English
- Dual Credit Physical Science

## COURSE CONTENT

Welding Technology includes classroom and lab experiences that develop 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. Welding II students focus on completing the AWS (American Welding Society) Sense Level 1 industry certification. Successful students have opportunities to complete internships at local companies during the spring semester.

## MEET GRADUATION PATHWAYS

- PATHWAY 1 HIGH SCHOOL DIPLOMA**  
Students can earn 6 high school elective credits per school year at WCC. WCC courses can also lead to a Technical Honors Diploma.
- PATHWAY 2 EMPLOYABILITY SKILLS**  
All WCC programs have a work-based learning component built into the curriculum.
- PATHWAY 3 POSTSECONDARY READY**  
Students can meet the requirement by completing 2 years of a career program at WCC, completing 3 pathway dual credit courses, or earning industry certification.

## WHEN YOU FINISH

Students who have earned the Ivy Tech Certificate in Structural Welding are eligible to participate in Ivy Tech Richmond's graduation ceremony. Students can also go on to earn a Technical Certificate in Welding Technology or an Associate of Applied Science in Industrial Technology. Other options are to enter full-time employment, enter apprenticeships, join the military, and/or continue education and training on the job and in college.

## POTENTIAL CAREERS

- |                                       |                                   |
|---------------------------------------|-----------------------------------|
|                                       | <small>NATIONAL MEAN WAGE</small> |
| • Welder, Cutter, Solderer, & Brazer  | \$44,360                          |
| • Assembler & Fabricator              | \$35,650                          |
| • General Maintenance & Repair Worker | \$41,020                          |
| • Industrial Engineering Technician   | \$58,860                          |
| • Industrial Production Manager       | \$113,370                         |
| • Industrial Engineer                 | \$91,630                          |

All career and salary information is cited from the U.S. Department of Labor Bureau of Labor Statistics, May 2018 National Occupation Employment & Wage Estimates.



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