

WELDING APPRENTICESHIP

Overview

Welding Apprenticeship

Program Code: 50-442-1

For more information: [edu/welding-appr \(https://www.wctc.edu/academics/programs-courses/programs/welding/\)](https://www.wctc.edu/academics/programs-courses/programs/welding/)

Welders work in a wide variety of industries – from automobile manufacturing, shipbuilding, aerospace and many others. Their duties include joining metal parts by fusing them together and creating a permanent bond using different welding techniques. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C

Program GPA = 2.0

Additional details regarding apprenticeship:

- Obtain further information about apprenticeship programs by visiting the State's Department of Workforce Development website: <https://dwd.wisconsin.gov/apprenticeship> (<https://dwd.wisconsin.gov/apprenticeship/>)
- Secure employment as a State of Wisconsin Indentured Apprentice.
- WCTC will send the schedule to the student; application to WCTC is not necessary by the student.

Learning Outcomes

Program Outcomes

1. Adhere to welding and fabrication health & safety rules, regulations, and training covered by employers.
2. Interpret technical drawings.
3. Weld metals following prescribed techniques and industry standards.
4. Produce precision fabricated parts and assemblies according to specifications.
5. Perform advanced cutting processes.
6. Apply principles of metallurgy to welding and fabrication operations.
7. Perform visual inspection of welds, parts, and assemblies.
8. Perform basic forming processes.
9. Perform job set-up operations in order to control distortion.
10. Apply manufacturing principles to welding and fabrication work processes.

Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multicultural and collaborative**, we provide curricular and co-curricular opportunities to develop critical life skills. WCTC is committed to teaching all students the following skills:

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.

- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

Required Courses

Code	Title	Credits
Core Courses		
442-504		0.5
442-506	Shop Safety Welding Apprentice	0.5
442-508	Welding Apprentice Blpt Rdg	1.5
442-509	Apprentice Welding Processes 1	1
442-510	Fabrication for Apprentices 1	1
442-514	Fabrication for Apprentices 2	1.5
442-516	Welding Apprentice Metallurgy	1
442-517	Apprentice Welding Processes 2	1
442-527	Robotic Welding for Apprentice	1
442-528	Troubleshooting for Fabricator	1
442-529	Automated Cutting Apprentices	2
Total Credits		12

Full-time Plan

First Year

Fall Term 1		Credits
442-506	Shop Safety Welding Apprentice	0.5
442-508	Welding Apprentice Blpt Rdg	1.5
442-509	Apprentice Welding Processes 1	1
442-510	Fabrication for Apprentices 1	1
Credits		4

Spring Term 1

442-504		0.5
442-514	Fabrication for Apprentices 2	1.5
442-516	Welding Apprentice Metallurgy	1
442-517	Apprentice Welding Processes 2	1
Credits		4

Second Year

Fall Term 1		
442-527	Robotic Welding for Apprentice	1
442-528	Troubleshooting for Fabricator	1
442-529	Automated Cutting Apprentices	2
Credits		4
Total Credits		12