

# WELDING TECHNICIAN

## Overview

### Welding Technician Technical Diploma

**Program Code: 30-457-1**

For more information: [wctc.edu/welding-tech](http://www.wctc.edu/welding-tech) (<http://www.wctc.edu/welding-tech/>)

Welders fuse metal parts together to create a permanent bond. In this program, develop knowledge of print reading; learn safe handling techniques for gas cylinders, manual and machine oxy-fuel cutting, plasma cutting and air carbon arc cutting; and become introduced to gas metal arc welding/flux core arc welding techniques.

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

Core Courses = C  
General Studies Courses = C-  
Program GPA = 2.0

**Build your degree along a career pathway.** Start with a couple of courses or an entry-level credential to enter the job market in your area of interest, then continue with higher credentials on your educational path for job advancement and higher wages.

## Career Pathway

1. Welding Technician 19
2. Metal Fabrication/Welding 33
3. Metal Fabrication/Welding - Advanced 60

**Related certificates that can be earned along the way.**

- GMAW/Fabricator Technical Certificate (<https://catalog.wctc.edu/programs/gmaw-fabricator/>)
- Industrial Laser Operator Technical Certificate (<https://catalog.wctc.edu/programs/industrial-laser-operator/>)

## Learning Outcomes

### Program Outcomes

1. Demonstrate industry recognized safety practices.
2. Form materials to detailed drawings.
3. Cut materials to detailed drawings.
4. Join materials to detailed drawings.
5. Layout components/assemblies.
6. Inspect product.

## 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

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

Code	Title	Credits
<b>Core Courses</b>		
442-151	Gas Metal Arc Welding 1	2
Approved Substitute: 442-150		
442-152	Gas Metal Arc Welding 2	2
Approved Substitute: 442-150		
442-171	Flux Core Arc Welding 1	2
Approved Substitutes: 442-170 OR 442-180 OR 442-181		
442-172	Flux Core Arc Welding 2	2
Approved Substitutes: 442-170, 442-180, 442-182		
457-110	Blueprint Reading - Fab	2
457-125	Manual Thermal Cutting Process	1
457-161	Intro to Metal Fabrication	2
Approved Substitute: 457-160		
457-162	Metal Fabrication 1	3
Approved Substitute: 457-160		
<b>General Studies</b>		
804-107	College Mathematics	3
Approved Substitutes: 804-115 OR 804-116 OR 804-118 OR 804-195 OR 804-198 OR (804-304 AND 804-305)		

**Total Credits** **19**

## Full-time Plan

<b>First Year</b>		
<b>Fall Term 1</b>		<b>Credits</b>
442-151	Gas Metal Arc Welding 1	2
457-110	Blueprint Reading - Fab	2
804-107	College Mathematics	3
<b>Credits</b>		<b>7</b>
<b>Fall Term 2</b>		
442-152	Gas Metal Arc Welding 2	2
457-125	Manual Thermal Cutting Process	1
457-161	Intro to Metal Fabrication	2
<b>Credits</b>		<b>5</b>
<b>Spring Term 1</b>		
442-171	Flux Core Arc Welding 1	2
457-162	Metal Fabrication 1	3
<b>Credits</b>		<b>5</b>

**Spring Term 2**

442-172	Flux Core Arc Welding 2	2
	<b>Credits</b>	<b>2</b>
	<b>Total Credits</b>	<b>19</b>