

# WELDING TECHNOLOGY, COA

## Program Code: Welding-CoA

### Program Description

Certificate of Achievement, Welding Technology: Based on the American Welding Society Entry Level Welder Standards, the welding technology certificate of achievement program gives students the welding skills necessary to qualify for an entry-level position in a diversity of occupations that utilize welding from construction to manufacturing along with part of the general education skills that are strongly requested by commercial and industrial employers.

Welding Technology Career Map (<https://sites.tmcc.edu/flipbook/career-maps/>)

### Recommended Course Schedule

1st semester		Units
Communications <sup>1</sup>		3
Elective <sup>1</sup>		6
OSH 222	General Industry Safety	1
WELD 211	Welding I	3
WELD 212	Welding I Practice	2
<b>Semester Total</b>		<b>15</b>
2nd semester		Units
Elective <sup>1</sup>		4
MPT 140	Quality Control	3
MTT 120	Technical Print Reading	3
WELD 221	Welding II	3
WELD 222	Welding II Practice	2
<b>Semester Total</b>		<b>15</b>
<b>Total Units</b>		<b>30</b>

<sup>1</sup> See program recommendations or requirements.

### Program Requirements

Certificates of Achievement can be a stepping stone to an associate degree or allow students to enter the workforce. Certificates of Achievement have a general education component.

To earn a Certificate of Achievement, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 semester credit hours within the college.
3. Satisfy General Education requirements for the Certificate of Achievement (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).
4. Have no financial or library obligation to the college.

Code	Title	Units
<b>General Education Requirements</b>		
	<i>Communications</i>	3

Recommended:

ENG 107	Technical Communications I	
<i>Human Relations</i>		[3]
Requirement is satisfied through embedded curriculum in the following courses: MPT 140, OSH 222, WELD 211, WELD 212 WELD 221, WELD 222.		
<i>Mathematics</i>		[3]
Requirement is satisfied through embedded curriculum in the following courses: MTT 120, MPT 140 WELD 211 WELD 212 WELD 221, WELD 222.		

#### Certificate Requirements

MTT 120	Technical Print Reading	3
MPT 140	Quality Control	3
OSH 222	General Industry Safety	1
WELD 211	Welding I	3
WELD 212	Welding I Practice	2
WELD 221	Welding II	3
WELD 222	Welding II Practice	2

#### Elective Requirements

Select 10 units from the following:		10
MTT 101	Introduction to Machine Shop	
MTT 150	Metallurgy I	
WELD 101	Basic Metals	
WELD 215	Introduction to Welding Fabrication Techniques	
WELD 225	Independent Study	
WELD 231	Welding III	
WELD 232	Welding III Practice	
WELD 241	Welding IV	
WELD 242	Welding IV Practice	
WELD 250	Welding Certification Preparation	

**Total Units** **30**

### Program Outcomes

Students completing the certificate will:

PSLO1: Be proficient in two major welding processes and prepared for industry-standard certification.

PSLO2: Identify and explain technical drawings and apply print reading techniques required in the welding industry.

PSLO3: Consistently demonstrate safe and proper use of welding equipment, power tools, and accessories in the performance of welding and joinery.