

# Metal Fabrication/Welding Technology, AAS

The Metal Fabrication/Welding Technology program offers students the required skills and knowledge to get an entry level position in a variety of welding career options. It builds off of the welding certificate to include additional training in the major processes as well as opportunities to learn machining, FCAW, and common fabrication practices along with the general education courses required to be a well-rounded critical thinker. These skills make a welder more employable and promotable in their field.

(Major Code 2460; CIP Code 48.0508)

Welding (Metal Fabrication) Program web page (<http://www.jccc.edu/academics/credit/welding/>)

## Associate of Applied Science Degree

### First Semester

Code	Title	Hours
COMS 155	Workplace Skills	1
MFAB 124	Introduction to Welding	3
MFAB 126	Cutting Processes for Welding*	3
MFAB 131	Shielded Metal Arc Welding (SMAW) I*	3
MFAB 180	Blueprint and Symbols Reading for Welders	2
MFAB 205	Shielded Metal Arc Welding (SMAW) II*	3
<b>Total Hours</b>		<b>15</b>

### Second Semester

Code	Title	Hours
CMGT 100	Industrial Safety/OSHA-30	3
MFAB 133	Gas Metal Arc Welding (GMAW) I*	3
MFAB 136	Gas Tungsten Arc Welding (GTAW) I*	3
MFAB 210	Gas Metal Arc Welding (GMAW) II*	3
MFAB 240	Metallurgy	2
MFAB 241	Gas Tungsten Arc Welding (GTAW) II*	3
<b>Total Hours</b>		<b>17</b>

### Third Semester

Code	Title	Hours
ENGL 121	Composition I*	3
MATH 130	Technical Mathematics I*	3
MFAB 128	Basic Machine Tool Technology	3
MFAB 215	Fabrication Practices I*	3
Program Elective (see below)		6
<b>Total Hours</b>		<b>18</b>

### Fourth Semester

Code	Title	Hours
ENGL 123	Technical Writing I*	3
HPER 200	First Aid and CPR	2
MFAB 220	Flux Core Arc Welding (FCAW)*	3
Humanities Elective ^		3
Social and Behavioral and Sciences Elective ^		3
Program Elective (see below)		3
<b>Total Hours</b>		<b>17</b>

**Total Program Hours: 67****Program Electives**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
CMGT 150	Construction Safety/OSHA-30	3
MFAB 140	Maintenance Repair Welding*	3
MFAB 250	Fabrication Practices II*	3
MFAB 255	Advanced Machine Tool Technology*	3
MFAB 259	Shielded Metal Arc Welding (SMAW) III*	3
MFAB 271	Metal Fabrication Internship*	3

\* This course has registration requirements.

^ See all AAS general education electives (<https://catalog.jccc.edu/archives/2024-25/degree requirements/associate-applied-science/>)