

# Metal Fabrication/Welding Certificate

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The metal fabrication/welding certificate teaches welding skills in the areas of shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux core arc welding (FCAW), gas and tungsten arc welding (GTAW), oxy-fuel welding (OFW), oxy-fuel cutting (OFC), and plasma arc cutting (PAC). The students also will receive training in safety and basic blueprint reading, and metallurgy. This certificate gives the student the skills needed to successfully enter the field of welding.

## Suggested/Sample Course Sequence

The sequence taken by the student may vary depending on prerequisites, course availability, and personal/ professional responsibilities.

(Major Code 4790; State CIP Code 48.0508)

- Welding (Metal Fabrication) (<http://www.jccc.edu/academics/industrial-technology/welding>)
- Gainful Employment Data (<http://www.jccc.edu/academics/industrial-technology/welding/gainful-employment/Gedt.html>)

### First Semester

INDT 125	Industrial Safety/OSHA 30	3
MFAB 180	Blueprint and Symbols Reading for Welders	2
MFAB 240	Metallurgy	2
MFAB 124	Introduction to Welding	3
INDT 155	Workplace Skills	1
Total Hours		11

### Second Semester

MFAB 131	Shielded Metal Arc Welding (SMAW) I*	3
MFAB 133	Gas Metal Arc Welding (GMAW) I*	3
MFAB 136	Gas Tungsten Arc Welding (GTAW) I*	3
Total Hours		9

### Third Semester

MFAB 205	Shielded Metal Arc Welding (SMAW) II*	3
MFAB 210	Gas Metal Arc Welding (GMAW) II*	3
MFAB 220	Flux Core Arc Welding (FCAW)*	3
Total Hours		9

**Total Program Hours: 29**