

Metal Fabrication/Welding Certificate

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/credit/welding>)

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 |
| SPD 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