

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; State CIP Code 48.0508)

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

Associate of Applied Science Degree

First Semester

| | | |
|--------------------|---|-----------|
| COMS 155 | Workplace Skills | 1 |
| MFAB 124 | Introduction to 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 |
| MFAB 240 | Metallurgy | 2 |
| Total Hours | | 14 |

Second Semester

| | | |
|--------------------|-------------------------------------|-----------|
| 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 241 | Gas Tungsten Arc Welding (GTAW) II* | 3 |
| Total Hours | | 15 |

Third Semester

| | | |
|---------------------|-------------------------------|-----------|
| ENGL 121 | Composition I* | 3 |
| MATH 130 | Technical Mathematics I* | 3 |
| MFAB 128 | Basic Machine Tool Technology | 3 |
| MFAB 215 | Fabrication Practices I* | 3 |
| Technical Electives | | 6 |
| Total Hours | | 18 |

Fourth Semester

| | | |
|---------------------------|-------------------------------|-----------|
| 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 Science Elective ^ | | 3 |
| Technical Electives | | 3 |
| Total Hours | | 17 |

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

Total Program Hours: 64

Technical Electives

| | | |
|----------|-----------------------------|---|
| 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 |