WELDING

This program of study emphasizes the skills needed for employment in the welding industry, including the manufacturing, fabrication, maintenance, and construction sectors.

- **Technical Certificate Option** - The Technical Certificate in Welding Technology is a two semester program that contains technical and advanced technical courses.

- **Associate of Applied Science Degree Option** - The Associate of Applied Science degree, with a major in Welding Technology, is a four semester program that contains technical, advanced technical and general education courses.

**Admission Criteria:** Placement test and pre-admission advising.

### Technical Education Courses

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Title</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>ENV 102 Safety Orientation (OSHA-10)</td>
<td>1</td>
</tr>
<tr>
<td>WEL 101 Welding Math</td>
<td>2</td>
</tr>
<tr>
<td>WEL 105 Welding Theory</td>
<td>3</td>
</tr>
<tr>
<td>WEL 106 Cutting Processes</td>
<td>3</td>
</tr>
<tr>
<td>WEL 111 Shielded Metal Arc Welding</td>
<td>3</td>
</tr>
<tr>
<td>WEL 112 Shielded Metal Arc Welding II</td>
<td>3</td>
</tr>
<tr>
<td>WEL 150 Welding Blueprint Reading</td>
<td>3</td>
</tr>
</tbody>
</table>

**Semester Total**: 18

**Total Technical Certificate Credits**: 36

### General Education Courses

- **COM 102** Interpersonal Communication or **COM 105** Public Speaking .................. 3
- **CSA 105** Introduction to Computer Applications and Concepts .............................. 3
- **ENG 100** Technical Writing or **ENG 101** English Composition I ...................... 3
- **HUM 101** Ethics in the Workplace or **PSY 101** General Psychology .................. 3
- **MAT 101** Technical Math or **MAT 150** College Algebra ................................. 3

**TOTAL GENERAL EDUCATION CREDITS**: 15

**TOTAL RELATED ELECTIVE CREDITS**: 9

**TOTAL AAS PROGRAM CREDITS**: 60

**PROGRAM OUTCOMES**

- Demonstrate an understanding of the methods and problems of production and exchange.
- Identify quality welding design and workmanship.
- Demonstrate competency in the ability to select, care for, and use industrial products wisely.
- Demonstrate competency in basic welding fundamentals.
- Identify materials and processes commonly used in welding.
- Develop work habits and interpersonal skills necessary to be a productive employee.
- Demonstrate ability to use welding tools and machines.
GENERAL EDUCATION PROGRAM OUTCOMES

- Compose coherent written communication.
- Deliver coherent oral communication.
- Show proficiency in locating, analyzing, documenting, and ethically using information sources.
- Perform and interpret calculations.
- Develop logical problem solving skills and/or critical thinking skills.
- Identify appropriate strategies for gathering, analyzing, and displaying data to draw conclusions from scientific data.
- Collaborate effectively, which cultivates a respect for human diversity.
- Demonstrate technology literacy appropriate to area of study.