

MANUFACTURING TECHNOLOGIES, SKILLS CERTIFICATE

Welding: Shielded Metal Arc-Welding (SMAW) & Gas Metal Arc-Welding (GMAW)

This Skills Certificate will prepare students to take the American Welding Society (AWS) certified welding (CW) exams. Students will learn fillet and groove welds using SMAW and GMAW processes, air carbon arc cutting, and develop manual skills using SMAW and GMAW that comply with AWS standards, including critical safety procedures. Students will learn to fabricate simple parts from basic drawings, sketches, and technical plans. Students must pass all coursework with a score of 75% or higher.

Outcomes

Students completing the certificate will:

- Use the SMAW and GMAW processes to produce a variety of welds.
- Fabricate simple parts from basic drawings, sketches, and technical plans.
- Demonstrate appropriate workplace skills and tools, including the application of personal and mechanical safety measures for using welding equipment and techniques.

Skills Certificates provide training for entry level positions or career advancement and are designed to prepare students to take state, national and/or industry-recognized certifications or licensing exams. Skills certificates are awarded upon completion of coursework and marked on a student's transcripts at the end of the semester (Student are unable to declare intent to complete a skills certificate.) Skills Certificates are not eligible for Financial Aid.

To earn a skills certificate, students must:

1. Maintain a minimum cumulative GPA of 2.0
2. Have no financial or library obligation to the college

| Code | Title | Units |
|---------------------------------|---------------------|-------|
| Certificate Requirements | | |
| WELD 211 | Welding I | 3 |
| WELD 212 | Welding I Practice | 2 |
| WELD 221 | Welding II | 3 |
| WELD 222 | Welding II Practice | 2 |
| Total Units | | 10 |
| 1st semester | | |
| WELD 211 | Welding I | 3 |
| WELD 212 | Welding I Practice | 2 |
| WELD 221 | Welding II | 3 |
| WELD 222 | Welding II Practice | 2 |
| Semester Total | | 10 |
| Total Units | | 10 |