

Central Arizona College

8470 N. Overfield Road

Coolidge, AZ 85128

Phone: (520) 494-5444

Welding Certificate

Program Description for the Catalog:	Provides students with entry-level skills to enter the welding profession as welding technicians
Effective Term:	Fall 2009
Campuses:	Signal Peak Campus - SPC
Semester Hours:	35
Prerequisites:	None
Corequisites:	None
Recommended Proficiencies:	None
List of Course Requirements for the Catalog:	<p>WLD121 Shielded Metal Arc Welding I (3) WLD122 Shielded Metal Arc Welding II (3) WLD221 Gas Tungsten Arc Welding (3) WLD222 Gas Metal Arc Welding (3) WLD227 Welding Design and Fabrication (6) (two semesters)</p> <p>Choose one of the following: ENG101 English Composition III (3) ENG121 Applied Technical Writing (3)</p> <p>Choose 14 credits from the following courses: DFT 127 AutoCAD I (3) DFT 128 AutoCAD II (3) DFT 131 AutoCAD III (3) MAT141 College Math, Standard (4) WLD110 Survey of Welding Processes (3) WLD120 Oxy-Acetylene Welding (3) WLD125 Pipe Welding I (3) WLD128 Blueprint Reading for Welding (3) WLD223 Automatic and Semi-Automatic Welding(3) WLD225 Shielded Metal Arc Welding III (3)</p>

**Learning Outcome
Statements for
Program:**

1. Weld and fabricate as guided by current industry practices, including:
 - a. Shielded Arc, Oxy-Acetylene, Tungsten inert gas, and metal inert gas welding;
 - b. Bead running in all positions;
 - c. Position welding;
 - d. Air arc cutting, flame cutting, plasma cutting, and machine cutting;
 - e. Read basic blueprints;
 - f. Gas Tungsten Arc Welding; and
 - g. Use MIG and TIG equipment.

**Standards for
Program:**

1. Demonstrate basic welding processes and procedures in the following methods; Shielded Arc, Oxy-Acetylene, Tungsten inert gas, and metal inert gas welding.
2. Demonstrate proper bead running in all positions.
3. Demonstrate proper out of position welding.
4. Demonstrate proper cutting techniques using air arc cutting, flame cutting, plasma cutting, and machine cutting.
5. Demonstrate knowledge of reading basic blueprints as they pertain to welding.
6. Demonstrate the proper use of Gas Tungsten Arc Welding equipment in accordance to manufacturer's standards.
7. Demonstrate the proper use of MIG and TIG equipment in accordance to manufactures standards.

Revised:

December 2008