

WELDING TECHNOLOGIES 48.0508.00

Program Description, Industry Credential, Coherent Sequence, and Teacher Certification Requirements

PROGRAM DESCRIPTION

The **Welding Technologies** program prepares students to acquire welding techniques and be product verified with weldment testing. They will develop a working knowledge of blueprint reading; and the welding processes for Shielded Metal ARC Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Cored ARC Welding (FCAW), and Gas Tungsten ARC Welding (GTAW) with the use of thermal cutting equipment. Students will learn about the tools and equipment for the welding trade.

The **Welding Technologies** program is delivered as a 2-year coherent sequence of courses designed to offer students knowledge and skills that meet the needs of today's workforce. Students experience pedagogy in technical instruction, academic foundations, experiential learning, work-based learning, leadership, and personal development. The Professional Skills developed by business and industry leaders across Arizona are integrated throughout the **Welding Technologies** program. Students learn how to get along with their team members, to make critical decisions, to solve problems, to develop respect, and to be successful in their chosen occupation. Students also develop leadership, social, civic, and career skills through their participation in the state-recognized Career and Technical Student Organization, SkillsUSA.

The **Welding Technologies** instructional program prepares students for entry-level employment, further training, and/or postsecondary education for these and other occupations: Construction Welder, Shipyard Welder, Metal Cutters, Automated Welder Operators, Structural Iron and Steel Worker, Pipefitter, Boilermakers, Aerospace, Agriculture, Automotive, Chemical Processing, and Manufacturing

INDUSTRY CERTIFICATIONS

Review the [Current CTE Credential List](#) for approved A-F CCR and are CTED eligible for the **Welding Technologies** instructional program.

COHERENT SEQUENCE

48.0508.10 – Welding Technologies I, **and**

48.0508.20 – Welding Technologies II, **and program may elect to add:**

48.0508.25 – Welding Technologies III, **or**

48.0508.40 – Welding Technologies IV, **or**

48.0508.70 – Welding Technologies – DCE (Diversified Cooperative Education) **or**

48.0508.75 – Welding Technologies - Internship **or**

48.0508.80 – Welding Technologies – Cooperative Education

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TEACHER CERTIFICATION REQUIREMENTS

The instructor must be ADE/CTE certified according to the following Certificates:

SCTIET	Standard Career and Technical Education Industrial and Emerging Technologies
SSCTEIET	Standard Specialized Career and Technical Education Industrial and Emerging Technologies

- Note:
- Welding Technologies 48.0508.70 (DCE) requires a CTE Teacher to have the Cooperative Education Endorsement (CEN).
 - Welding Technologies 48.0508.75 (Internship) **does not** require a CTE Teacher to have a Cooperative Education Endorsement (CEN).
 - Welding Technologies 48.0508.80 (Cooperative Ed.) requires CTE Teacher to be appropriately certified for the program and to have a Cooperative Education Endorsement (CEN).