



# Welding

EMPHASIS: Welding Technology

DEGREE: Associate in Technology Arts

## Purpose:

The Welding Technology program prepares students to compete for employment as an entry-level welder in building trades, ship building, structural fabrication, automatic and semiautomatic welding, and in maintenance welding.

The Welding Technology ATA program prepares students for advanced welding skills in FCAW (Flux Cored Arc), GTAW (TIG), GMAW (MIG), and SMAW (stick) welding. Students will have the opportunity to gain WABO Welding Certification.

## Program Outcomes

Students who successfully complete this program should be able to:

- A. Follow industry safety practices and recognize the effects of welding on health.
- B. Set-up and adjust SMAW, GMAW, FCAW, GTAW, and oxy-fuel equipment and accessories.
- C. Apply principles and welding design practices to welding fabrication and inspection.
- D. Identify and make repairs to finished welds.
- E. Interpret information on welding blueprints.
- F. Apply the principles of Metallurgy to welding fabrication and inspection.
- G. Develop basic computer aided drafting skills
- H. Perform 3-G and 4-G AWS - WABO welding code qualification tests.

## Note:

Students thinking of transferring into an applied bachelors program, such as the Bachelor of Applied Science in Applied Management program that Centralia College offers, may need to take additional course work required for entrance:

English Composition (5 credits) \*\* (note that English 102 and Public Speaking CMST& 202 are highly desirable, but not required)

- College-level math course (5 credits) \*\*
- Social Science course (5 credits)
- Natural Science course (5 credits)
- One additional course in English, college-level math, social science, or natural science (5 credits)

\*\* English Composition I and the college-level math class can replace the math and English course required in this degree program.

## Learning Themes:

General education outcomes at Centralia College help students, faculty, and the general public identify what learning is expected when a student has completed a degree or program. The administration, faculty, and staff have agreed upon the following five Learning Ability Themes which students can expect to encounter in most courses and by the completion of any degree or program.

### Reasoning:

The ability to extract information from data, develop ideas and solutions, establish logical progression in thinking, and problem solve using such procedures as literary analysis or the scientific methods.

### Written, Oral and Visual Communication:

The ability to make oneself understood in public, interpersonal, professional, artistic, and technical arenas.

### Exploration-Self and Others:

An awareness of the values, beliefs, customs, and contributions of persons from one's own and other traditions, ethnicities, classes, and genders.

### Resourcefulness:

The ability to adapt to change, such as technological innovations or environmental conditions.

### Responsibility:

The ability to be accountable to self, society, and the natural world.

## Estimated Quarterly Program Costs (subject to change without notice)

Tests: Accuplacer	\$15
Resident Tuition (15 credits) and fixed fees*:	\$1399
US Citizen Nonresident Tuition (15 credits) and fixed fees*:	\$1536
Non US Citizen Nonresident Tuition (15 credits) and fixed fees*:	\$3202
*Tuition is subject to change due to State Legislative actions	
Books and supplies (estimate):	\$334
Lab fees:	\$155

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