

Honolulu Community College's Welding Technology Program (WELD) curriculum has been designed to meet minimum skill standards established by the American Welding Society for entry-level welders.

Program Entry Requirements

English Requirements:

None

Math Requirements:

None

Recommended Preparation

Classes in math, mechanical drawing, physics, chemistry, metals technology, machine shop and blue print reading

Costs (not including tuition)

Books and tools - \$450 for the program

Program Technical Standards

Our program technical standards have been developed to help students understand the minimum essential mental, physical, and behavioral skills necessary for participation in and completion of all core aspects of our curriculum.

As a WELD student, you will be expected to do the following:

General: Apply standard welding principles and practices to perform practical work assignments.

Specific: Read textbooks, handouts, diagrams, charts and tables.
Read welding codes and qualifications.
Recognize welding terminology and symbols.
Interpret blue prints and sketches.
Visualize three-dimensional objects.
Distinguish shapes, forms, and patterns.
Take accurate measurements and do conversions.
Calculate slopes, circumferences, and decimal equivalents.
Estimate materials and costs.
Identify names and uses of tools and machines.
Describe operations of various welding machines.
Explain characteristics and uses of different types of metals
Describe standard welding methods and practices.
Follow safety procedures.
Explain the proper care of equipment.
Formulate fabrication plans.
Perform procedures according to proper specifications.
Conduct tests of welding work.
Distinguish indicators of poor vs. quality construction.



WELD students interpret blueprints and sketches.



WELD students perform procedures according to proper specifications.

Welding Technology



2 WELD student surveys and selects appropriate tools for welding work.

Sensory/ Observation skills **2**

- General: Use sensory cues to maintain standards of quality welding.
- Specific: Take precise measurements to 1/16 of an inch.
Recognize and compare shapes and forms of objects.
Detect fabrication problems.
Survey and select appropriate materials, tools and equipment for welding work.

Motor skills **3**

- General: Possess sufficient physical strength, flexibility, and dexterity to safely perform welding techniques.
- Specific: Operate necessary tools, equipment, and machinery.
Remove and replace metal pieces.
Position and maneuver in confined spaces.
Work at varying heights.
Lift and transport equipment and materials as necessary.



3 WELD students operate necessary equipment and machinery.

Communication skills **4**

- General: Communicate effectively to gather and convey information.
- Specific: Obtain necessary information from oral and written sources.
Express information coherently.

Behavioral skills **5**

- General: Behave appropriately and safely in a cooperative learning environment.
- Specific: Fulfill personal and shared responsibilities.
Work cooperatively with partners and groups.
Exercise good judgement.
Follow safety procedures.

Environmental tolerance **6**

- General: Function safely in a welding shop environment.
- Specific: Work for prolonged periods exposed to:
- | | |
|---------------------------|-----------------------------|
| Extreme noise | Chemicals and toxins |
| Extreme heat | Dust and fumes |
| Sharp tools and materials | Machinery with moving parts |
| Electrical equipment | Slippery or uneven surfaces |
| | Variations in lighting |



5

WELD students work cooperatively with partners and groups.



6

WELD students work for prolonged periods exposed to heat, dust, and fumes.

For More Information

If you are interested in our program, we encourage you to meet with our WELD counselor (phone: 845-9129) and refer to the information at <http://tech.honolulu.hawaii.edu/weld/index.html> to decide whether the WELD program is right for you.

Please keep in mind that you will have to fulfill additional requirements to be eligible for certification exams or licensure in the field. For more information go to <http://www.aws.org/w/s/certification/index.html> or <http://www.contractors-license.org/hi/Hawaii.html>

Disability Accommodations

We have developed our technical standards in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. We will provide reasonable accommodations to qualified students with disabilities. If you are interested in our program, we encourage you to review the program technical standards and course information at <http://tech.honolulu.hawaii.edu/weld/index.html> to decide whether the WELD program is right for you.

If you have questions about the WELD program, please call the HCC Counseling Office at 845-9129. Individuals with hearing impairments may call 845-9270 (v/t) or use the Telecommunication Relay Service at 1-877-447-5990.

If you have questions about disability access and accommodations, please direct them to HCC's Services for Students with Disabilities (SSD) at 845-9282 (v/t), 845-9272 (v/t), or e-mail access@hcc.hawaii.edu

SSD will be happy to meet with you, evaluate your disability documentation, and, as appropriate, recommend reasonable accommodations consistent with your documented limitations and the technical standards of the program. We will keep your disability information confidential within the parameters of the accommodation process.