

WELDING (WELD)

WELD 100 Introduction to Welding 4 Credits

Combines classroom instruction with hands-on practice to give an overview of the most common welding processes as well as the safe use of the tools and equipment used to support welding activities. Hand tools, supplies, and personal protective equipment (PPE) are required. A supply list will be provided at the first class.

Prerequisite: None.

WELD 102 Welding Theory I 5 Credits

Introduces the tools and equipment used in welding, including a technical orientation for select welding and cutting processes.

Prerequisite: Prerequisite: Concurrent enrollment in WELD 102, WELD 103, WELD 104, WELD 106.

WELD 103 Thermal Cutting and Gouging 1 Credit

Develops the skill for Oxyfuel Cutting, Plasma Arc Cutting, and Carbon Arc Cutting and gouging.

Prerequisite: Prerequisite: Concurrent enrollment in WELD 102, WELD 103, WELD 104, WELD 106.

WELD 104 Oxyacetylene Welding 3 Credits

Develops the skill for Oxyacetylene Welding (OAW) steel in various joint designs and positions.

Prerequisite: Prerequisite: Concurrent enrollment in WELD 102, WELD 103, WELD 104, WELD 106.

WELD 106 Shielded Metal Arc Welding I 5 Credits

Introduces Shielded Metal Arc Welding (SMAW) with emphasis on deep penetrating electrodes.

Prerequisite: Prerequisite: Concurrent enrollment in WELD 102, WELD 103, WELD 104, WELD 106.

WELD 125 Welding Theory II 5 Credits

Introduces methods of weld inspection and testing, basic metallurgy, and continuation of the technical orientation to select welding processes.

Prerequisite: Prerequisite: WELD 102

WELD 127 Shielded Metal Arc Welding II 9 Credits

Continues skill development in Shielded Metal Arc Welding (SMAW) with an emphasis on the applications and techniques for low hydrogen electrodes.

Prerequisite: Prerequisite: WELD 102

WELD 134 Print Reading for Welders 5 Credits

Develops the ability to interpret prints used in welding and fabrication, including the use of welding symbols.

Prerequisite: Prerequisite: WELD 102

WELD 135 Gas Metal Arc Welding 9 Credits

Develops the knowledge and skill for Gas Metal Arc Welding (GMAW) carbon steel and aluminum in all positions.

Prerequisite: Prerequisite: WELD 102 and WELD 127

WELD 201 Welding Upgrade 4 Credits

Provides the opportunity for welders to develop their skills or prepare for employment or certification testing. This course will allow students the opportunity to become Washington Association of Building Officials (WABO) certified. Hand tools, supplies, and personal protective equipment (PPE) are required. A supply list will be provided at the first class.

Prerequisite: Instructor's permission.

WELD 210 Flux Cored Arc Welding 12 Credits

Develops the knowledge and skill for using gas and self-shielded Flux Cored Arc Welding (FCAW) to join carbon steel in all positions.

Prerequisite: Prerequisite: WELD 125 and WELD 127

WELD 220 Gas Tungsten Arc Welding 12 Credits

Develops the knowledge and skill for Gas Tungsten Arc Welding (GTAW) carbon steel and aluminum in all positions.

Prerequisite: Prerequisite: WELD 125 and WELD 127

WELD 230 Welding Fabrication and Certification 12 Credits

Provides a capstone experience to develop metal fabrication knowledge while applying welding techniques gained in previous course work. This course will allow students the opportunity to become a Washington Association of Building Officials (WABO) certified welder.

Prerequisite: Prerequisite: WELD 134, WELD 135, WELD 210, and WELD 220.