

Welding (WELD)

WELD 060 **1-6 credits** **WABO EXAM PREPARATION**

Provides focused studies toward advanced welding techniques in preparation for the WABO (Washington Association of Building Officials) welder certification test. This course is a prerequisite for WELD 070 and 075 (WABO test courses). Passing a WABO test is required for AAS degree in Welding. Prerequisites: Instructor permission required to enroll.

WELD 071 **1 credit** **WELDING SUPPORT I**

Introduces shop safety practices and common welding techniques for related curriculums. The common welding techniques addressed will include oxy/fuel cutting and brazing, and basic welding. Concurrent enrollment in WELD 105 required. Prerequisite: None

WELD 072 **1 credit** **WELDING SUPPORT II**

Introduces shop safety practices and common welding techniques for related curriculums. The common welding techniques addressed will include oxy/fuel cutting and brazing, basic arc welding, and wire feed welding. Concurrent enrollment in WELD 105 required. Prerequisite: None

WELD 105 **S,F,W,Sp** **1-6 credits** **RELATED WELDING I** **RE**

Studies shop safety practices and common welding techniques for related curriculums. The common welding techniques will include oxy-acetylene cutting and brazing, electrode arc welding, and wire feed welding. Prerequisite: None.

WELD 154 **S,F,W,Sp** **1-6 credits** **INTRODUCTION TO OXY-ACETYLENE** **RE**

Covers basic principles, procedures, and safety in using oxy-acetylene equipment. Discusses mild steel rod, brazing rod, soldering, temperatures, metal testing, fluxes, expansion, contraction and dry cutting. Projects are assigned to give practice in basic welds. Prerequisites: None

WELD 155 **S,F,W,Sp** **1-10 credits** **INTRODUCTION TO ARC WELDING** **RE**

Covers basic principles, procedures, and safety in the use of welding equipment. Students must complete satisfactory vertical, flat, horizontal, and overhead welds using E6010. Projects are assigned to help develop student skills. Prerequisites: None

WELD 158 **5 credits** **WELDING THEORY AND FABRICATION** **RE**

Covers theoretical and practical applications of welding processes and metal fabrication. Work on project is required outside of class.

Prerequisite: WELD 151, 254 or instructor permission

WELD 221 **S,F,W,Sp** **10 credits** **WIRE MACHINE** **RE**

Presents a general overview of various metallic inert gas (MIG) welding machines, including instructions on stainless steel, mild steel, aluminum, flux core wire welding, and machine troubleshooting and setup problems/safety.

Prerequisite: None

WELD 222 **S,F,W,Sp** **6 credits** **ADVANCED WIRE MACHINE** **RE**

Prepares the student for successful employment in flux core wire welding. Emphasizes safety, care and use of equipment, types of testing (destructive and non-destructive), welding specifications and codes, welding procedures and qualification requirements, visual inspection, weld defects, and workmanship.

Prerequisite: WELD 221 or instructor permission

WELD 254 **S,F,W,Sp** **1-10 credits** **ARC WELDING** **RE**

Continues arc welding procedures, rods, symbols, and metal testing using E7018 and different alloy rods and sizes. Students also work towards AWS/WABO certification.

Prerequisite: None

WELD 255 **S,F,W,Sp** **1-10 credits** **ADVANCED WELDING PROCESSES** **RE**

Provides training opportunity with tungsten inert gas (TIG) and aluminum, mild steel, stainless steel, and pipe.

Prerequisite: WELD 151, 152, 254, 256, or instructor permission

WELD 256 **S,F,W,Sp** **1-10 credits** **ADVANCED WELDING APPLICATION** **RE**

Studies maintenance, repair and production welding and provides a testing program and a service course for those desiring to complete a certification test meeting AWS or WABO specifications.

Prerequisite: WELD 152, 254, or instructor permission