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
Studies shop safety practices and common welding techniques for related curriculums. The common welding techniques will include oxy-acetylene welding, cutting and brazing, SMAW stick welding, and FCAW-G wire feed welding.
Prerequisites: None

WELD 125 S,F,W,Sp 1-6 credits
OFW-A - OXY/ACETYLENE WELDING WITH RG45RE
Covers the fundamentals of oxy/acetylene welding, brazing, and cutting of mild steel, in all welding positions for numerous weld joints. Explores key techniques that are utilized in later welding processes. Introduces selected cutting processes and equipment used in the metal trades. This is the 1st class recommended for any student seeking a degree or certificate.
Prerequisites: None Concurrent requirements: None

WELD 131 S,F,W,Sp 1-10 credits
SMAW - STICK WELDING WITH E7018
Covers the fundamentals of stick welding of mild steel with 7018 electrodes in all welding positions for numerous weld joints. Explores key welding and fitting techniques through project based print reading and become familiar with selected cutting processes and equipment used in the metal trades. This is the 2nd class recommended for any student seeking a degree or certificate.
Prerequisites: None Concurrent requirements: None

WELD 132 S,F,W,Sp 1-10 credits
SMAW - STICK WELDING WITH E6010
Covers the fundamentals of stick welding of mild steel with 6010 electrodes in all welding positions for numerous weld joints. Explores key welding and fitting techniques through project based print reading and discusses selected cutting processes and equipment used in the metal trades. This is the 3rd class recommended for any student seeking a degree but not necessary for a certificate.
Prerequisites: WELD 131 or Instructor Permission
Concurrent requirements: None

WELD 133 S,F,W,Sp 1-10 credits
ADVANCED SMAW AND OTHER STICK WELDING ELECTRODES
Expands on fundamental skills of stick welding of mild steel with 7018 and 6010 electrodes to a more advanced level of full penetration welding. Emphasizes a 2-position WABO plate certification weld test on 1” plate. Explores selected SMAW electrodes such as 308, 309, and 7024, as well as structural welding techniques such as coping and mitering of structural steel members. Covers key welding and fitting techniques through project based print reading and discusses selected cutting processes and equipment used in the metal trades. This is the 4th class recommended for any student seeking a degree but not necessary for a certificate.
Prerequisites: WELD 132 or Instructor Permission
Concurrent requirements: None

WELD 158 5 credits
WELDING THEORY AND FABRICATION
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 241 S,F,W,Sp 1-10 credits
FCAW-G - DUAL SHIELD WIRE FEED WELDING W/ E71T-1
Covers the fundamentals of wire feed welding of mild steel with E71T-1 dual shield 0.045” electrode wire in all welding positions for numerous weld joints. Explores key welding and fitting techniques through project based print reading and covers selected cutting processes and equipment used in the metal trades. This is the 5th class recommended for any student seeking a degree and the 3rd class recommended for a certificate.
Prerequisites: None Concurrent requirements: None
WELD 242  S,F,W,Sp   1-6 credits
ADVANCED FCAW-G & OTHER WIRE FEED WELD PROCESSES
Re
Expands on fundamental skills of wire feed welding of mild steel with E71T-1 dual shield 0.045” electrode wire to a more advanced level of welding. Focuses on a 2-position WABO plate certification weld test on 1” plate. Explores selected wire feed processes such as GMAW solid wire, GMAW aluminum spool gun, and FCAW-S self-shielding wire. Presents key welding and fitting techniques through project based print reading. Discusses selected cutting processes and equipment used in the metal trades. This is the 6th class recommended for any student seeking a degree but not necessary for a certificate.
Prerequisites: WELD 241 or Instructor Permission
Concurrent requirements: None

WELD 255  S,F,W,Sp   1-10 credits
GTAW - TIG WELDING W/ER70S-6 & OTHER ELECTRODE/R
Re
Covers the fundamentals of tig welding of mild steel with ER70S-6 in all welding positions for numerous weld joints. Explores other GTAW electrodes/rods such as 308 stainless steel and 4043 / 5356 aluminum. Covers key welding and fitting techniques through project based print reading. Discusses selected cutting processes and equipment used in the metal trades. This is the 7th and final class recommended for any student seeking a degree but not necessary for a certificate.
Prerequisites: None Concurrent requirements: None