

WELDING (WELD)

WELD 110. OFC Operations

Credits: 2

Typically Offered: FALL

This course provides the training to develop the manual skills necessary to produce high quality Oxyfuel cuts on mild steel.

WELD 118. PAC and CAC Operations

Credits: 2

Typically Offered: FALL

This course provides the training to develop the manual skills necessary to produce high quality Plasma Arc and Carbon Arc cuts on mild steel.

WELD 130. OFW Operations

Credits: 2

Typically Offered: SPRING

This course provides the advanced lab to develop the manual skills necessary to produce high quality welding using the oxyacetylene welding processes on mild steel.

WELD 135. Welding Principles

Credits: 2

Typically Offered: SPRING

This course trains students in manual skills necessary to produce high quality welds on mild steel plate using the gas metal and flux cored arc welding process in all positions.

WELD 140. Methods in GMAW and FCAW

Credits: 2

Typically Offered: FALLSPR

This course provides the lab to develop the manual skills necessary to produce high quality welds on mild steel plate using the gas metal arc welding and flux cored arc welding process in all positions.

WELD 145. Advanced Methods in GMAW and FCAW

Credits: 3

Typically Offered: SPRING

This course provides the advanced lab to develop the manual skills necessary to produce high quality welds on mild steel plate using the gas metal arc welding and flux cored arc welding process in all positions.

WELD 150. Methods in GTAW

Credits: 3

Typically Offered: SPRING

This course trains students in manual skills necessary to produce high quality welds using the gas tungsten arc welding process on mild steel plate in all positions.

WELD 155. Blueprint Reading for Welders

Credits: 3

Typically Offered: FALLSPR

This program concentrates on the understanding and use of technical blueprints. This includes basic lines, geometric construction, orthographic projection, isometric projection, oblique projection, pictorial drawings, and structural sizes.

WELD 160. Advanced Methods in GTAW

Credits: 3

Typically Offered: SPRING

This lab provides the advanced technical training to develop manual skills necessary to produce high quality welds on mild steel plate using the gas tungsten process in all positions according to the American Welding Society Standards.

WELD 165. Blueprint Symbols for Welding

Credits: 3

Prerequisite: WELD155.

Typically Offered: FALLSPR

This course is a continuation of WELD 155, and introduces the American Welding Society standardized welding symbols used on blueprints. Actual prints from industry are used during this course.

WELD 170. SMAW Operations

Credits: 2

Typically Offered: FALL

This course develops the manual skills necessary to produce high quality welds using the shielded metal arc welding process in all positions, on thin and medium thickness mild steel, using single- and multi-pass welds with the E60 series electrodes.

WELD 173. Methods in SMAW Operations

Credits: 4

Typically Offered: FALL

This course develops the testing skills necessary to produce high quality welds on mild steel plate in all positions using the shielded metal arc welding process according to the American Welding Society Standards.

WELD 180. Advanced Methods in SMAW Operations

Credits: 2

Typically Offered: FALLSPR

This course develops the manual skills necessary to produce high quality welds using the shielded metal arc welding process on thin and medium thickness mild steel plates in all positions using the E70 series electrodes.

WELD 183. Testing in SMAW Operations

Credits: 3

Typically Offered: FALL

This course develops the testing skills necessary to produce high quality welds using the shielded metal arc welding process on mild steel plate in all positions with E70 series electrodes according to the American Welding Society Standards.

WELD 187. Types of Non-Destructive Testing

Credits: 1

Typically Offered: FALL

This course studies non-destructive tests such as: magnetic particle, eddy current, visual, ultrasonic, dye penetrant, and radiographic.

WELD 210. Gas Tungsten Arc Pipe Welding

Credits: 3

Prerequisite: Departmental approval.

This course develops the manual skills necessary to produce high quality groove welds on four-inch diameter schedule 40 steel pipe in the 2G, 5G, and 6G positions.

WELD 215. Testing in Gas Tungsten Arc Pipe Welding

Credits: 3

Prerequisite: Departmental approval.

Typically Offered: FALL

This course develops the manual skills necessary to produce high quality groove welds on pipe in the 2G, 5G, and 6G positions using the gas tungsten arc welding process. All testing is in accordance with the American Society of Mechanical Engineer Standards.

WELD 220. Shielded Metal Arc Pipe Welding

Credits: 3

Prerequisite: Departmental approval.

Typically Offered: FALL

This course trains students to make high quality groove welds on open root mild steel pipe in the 2G, 5G, and 6G positions using the shielded metal arc open root process.

WELD 225. Testing in Shielded Metal Arc Pipe Welding

Credits: 3

Prerequisite: Departmental approval.

Typically Offered: FALL

This course develops the testing skills necessary to produce high quality groove welds on pipe in the 2G, 5G, and 6G positions using the American Society Mechanical Engineer Standards.

WELD 230. Gas Metal Arc Pipe Wldng

Credits: 3

Prerequisite: Departmental approval.

Typically Offered: FALL

This course develops the manual skills necessary to produce high quality groove welds on 6-inch diameter schedule 40 steel pipe in the 2G, 5G, and 6G positions using the gas metal arc process.

WELD 235. Testing in Gas Metal Arc Pipe Welding

Credits: 3

Prerequisite: Departmental approval.

Typically Offered: FALL

This course develops the testing skills necessary to produce high quality groove welds on pipe in the 2G, 5G, and 6G positions using the gas metal arc welding process. All testing is in accordance with the American Society of Mechanical Engineer Standards.

WELD 240. Special Projects

Credits: 3

Prerequisite: Departmental approval.

Typically Offered: FALL

To design and/or build a special project concentrating on the students major area of interest in the field of welding. This project will allow the student to integrate all the theoretical and hands-on skills acquired in the program.

WELD 245. Special Projects

Credits: 3

Prerequisite: Departmental approval.

Typically Offered: FALL

A continuation of WELD 240 for advanced design and development of projects concentrating on the student's major area of interest in the field of welding, allowing the student to integrate all the theoretical and hands-on skills acquired in the program.