WELDING (WLDG)

WLDG 1312
Introduction to Flux Cored Arc Welding (FCAW)
CRT HRS:3 LEC HRS:1 LAB HRS:6 OTH HRS:0
This course is an overview of terminology, safety procedures, and equipment set-up. Practice in performing various joints using Flux Cored Arc Welding (FCAW) equipment.
Prerequisite: None.

WLDG 1317
Introduction to Layout and Fabrication
CRT HRS:3 LEC HRS:3 LAB HRS:0 OTH HRS:0
This course is a fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in constructions.
Prerequisite: None.

WLDG 1327
Welding Codes and Standards
CRT HRS:3 LEC HRS:3 LAB HRS:1 OTH HRS:0
This course is an in-depth study of the welding codes and their development in accordance with structural standards, welding processes, destructive and nondestructive test methods.
Prerequisite: None.

WLDG 1428
Introduction to Shielded Metal Arc Welding (SMAW)
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
This course is an introduction to shielded metal arc welding process. Emphasis placed on power sources, electrode selection, and various joint designs.
Prerequisite: None.

WLDG 1430
Introduction to Gas Metal Arc Welding (GMAW)
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
This course is a study of the principles of gas metal arc welding, setup and use of Gas Metal Arc Welding (GMAW) equipment, and safe use of tools/equipment. Instruction covers various joint designs.
Prerequisite: None.

WLDG 1434
Introduction to Gas Tungsten Arc Welding (GTAW)
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
This course is an introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. The course covers welding instruction in various positions on joint designs.
Prerequisite: WLDG 1327.

WLDG 1453
Intermediate Layout and Fabrication
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
This course is an intermediate course in layout and fabrication. Includes design, layout, and fabrication. Emphasis placed on symbols, blueprints, and written specifications.
Prerequisite: WLDG 1317.

WLDG 1457
Intermediate Shielded Metal Arc Welding (SMAW)
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
This course is a study of the production of various fillet and groove welds. Preparation of specimens for testing in various positions.
Prerequisite: WLDG 1428.

WLDG 2406
Intermediate Pipe Welding
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
A comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds will be 1G, 2G, 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices.
Prerequisite: WLDG 1457.

WLDG 2413
Capstone: Intermediate Welding Using Multiple Processes
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
This course covers instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process.
Prerequisite: WLDG 1457, WLDG 1434, WLDG 1312, WLDG 1453, and WLDG 1430.

WLDG 2435
Advanced Layout and Fabrication
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
This is an advanced course in layout and fabrication which includes production and fabrication of layout, tools, and processes. Emphasis is on application of fabrication and layout skills.
Prerequisites: WLDG 1453.

WLDG 2451
Advanced Gas Tungsten Arc Welding (GTAW)
CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0
This course covers advanced topics in GTAW welding, including welding in various positions and directions.
Prerequisite: WLDG 1434.