

# COURSES

## WELDING

### WLDG 1191 SPECIAL TOPICS - WELDING

1 lec/0 lab (1 Cr.) Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

Credits

1

Distribution

WLDG

Course Fee

Lab fee: \$24

### WLDG 1313 INTRO TO BLUEPRINT READING FOR WELDERS

2 lec/2 lab (3 Cr.) A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production.

Credits

3

Distribution

WLDG

Course Fee

Lab fee: \$24

### WLDG 1327 WELDING CODES

2 lec/2 lab (3 Cr.) An in-depth study of welding codes and their development in accordance with structural standards welding processes destructive and nondestructive test methods.

Credits

3

Distribution

WLDG

Course Fee

Lab fee: \$24

### WLDG 1417 INTRO TO LAYOUT & FABRICATION

3 lec / 2 lab (4 Cr.) A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction.

Credits

4

Distribution

WLDG

### WLDG 1423 WELDING SAFETY, TOOLS, & EQUIPMENT

4 lec (4 Cr.) An introduction to welding equipment and safety practices, including OSHA standards for industry.

Credits

4

Distribution

WLDG

### WLDG 1428 INTRO TO SHIELDED METAL ARC WELDING

2 lec/ 4 lab (4 Cr.) An introduction to shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxyfuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions.

Credits

4

Distribution

WLDG

### WLDG 1430 INTRO TO GAS METAL ARC WELDING (GMAW)

2 lec /4 lab (4 Cr.) Principles of gas metal arc welding, setup and use of Gas Metal Arc Welding (GMAW) equipment, and safe use of tools/equipment. Instruction in various joint designs.

Credits

4

Distribution  
**WLDG**  
 Course Fee  
 Lab fee: \$24

### **WLDG 1434 INTRO. TO GAS TUNGSTEN ARC WELD**

2 lec/6 lab (4 Cr.) Principles of Gas Tungsten Arc Welding (GTAW) set up GTAW equipment. Instruction in various positions and joint designs.

Credits  
 4

Distribution  
**WLDG**  
 Course Fee  
 Lab fee: \$24

### **WLDG 1435 INTRO TO PIPE WELDING**

2 lec/4 lab (4 Cr.) An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes.

Credits  
 4

Distribution  
**WLDG**  
 Course Fee  
 Lab fee: \$24

### **WLDG 1457 INTERMEDIATE SHIELDED METAL ARC WELDING (SMAW)**

2 lec/4 lab (4 Cr.) A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions.

Credits  
 4

Distribution  
**WLDG**  
 Course Fee  
 Lab fee: \$24

### **WLDG 2288 INTERNSHIP-WELDING TECH WELDER**

8 External Hrs./128 Contact Hrs. (2 Cr.) A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

Credits  
 2

Distribution  
**WLDG**

### **WLDG 2406 INTER PIPE WELDING**

2 lec/4 lab (4 Cr.) 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.

Credits  
 4

Distribution  
**WLDG**  
 Course Fee  
 Lab fee: \$24

### **WLDG 2413 INTER WELDING USING MULTIPLE PROCESSES**

2 lec/4 lab (4 Cr.) 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.

Credits  
 4

Distribution  
**WLDG**  
 Course Fee  
 Lab fee: \$24

## **WLDG 2447 ADVANCED GAS METAL ARC WELDING**

2 lec/4 lab (4 Cr.) Advanced topics in Gas Metal Arc Welding (GMAW). Includes welding in various positions and directions.

Credits

4

Distribution

WLDG

Course Fee

Lab fee: \$24

## **WLDG 2451 ADVANCED GAS TUNGSTEN ARC WELDING (GTAW)**

3 lec/3 lab (4 Cr.) Advanced topics in GTAW welding, including welding in various positions and directions.

Credits

4

Distribution

WLDG