

WELDING (WLDG)

WLDG-1202. Fundamentals of Gas Metal Arc Welding (gmaw). (2 Credits)

(2-1-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Fundamentals of Gas Metal Arc Welding (GMAW). Includes setup and safe use of GMAW equipment as well as instruction in various basic weld joints. Lab fee.

WLDG-1206. Fundamentals of Gas Tungsten Arc Welding (gtaw). (2 Credits)

(2-1-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Fundamentals of Gas Metal Arc Welding (GMAW). Includes setup and safe use of GTAW equipment as well as instruction in flat positions on joint designs. Lab fee.

WLDG-1317. Introduction to Layout and Fabrication. (3 Credits)

(3-3-0) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction.

WLDG-1323. Welding, Safety, Tools, and Equipment. (3 Credits)

(3-3-0) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introduction to welding equipment and safety practices, including OSHA standards for industry. Lab Fees.

WLDG-1353. Intermediate Layout and Fabrication. (3 Credits)

(3-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An intermediate course in layout and fabrication. Includes design and production of shop layout and fabrication. Emphasis placed on symbols, blueprints, and written specifications. Lab Fees.

WLDG-1407. Introduction to Welding Using Multiple Processes. (4 Credits)

(4-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Basic welding techniques using some of the following processes: Oxy-fuel welding(OFW) and cutting, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux cored arc welding (FCAW), and gas tungsten arc welding (GTAW). Lab Fee.

WLDG-1417. Introduction to Layout and Fabrication. (4 Credits)

This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction.

WLDG-1421. Welding Fundamentals. (4 Credits)

This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introduction to the fundamentals of equipment used in oxy-fuel and arc welding, including welding and cutting safety, basic oxy-fuel welding and cutting, basic arc welding processes and basic metallurgy.

WLDG-1423. Welding Safety, Tools, & Equipment. (4 Credits)

This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introduction to welding equipment and safety practices, including OSHA standards for industry.

WLDG-1425. Introduction to Oxy-Fuel Welding & Cutting. (4 Credits)

This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introduction to oxy-fuel welding and cutting, including history and future in welding, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies.

WLDG-1428. Introduction to Shielded Metal Arc Welding. (smaw). (4 Credits)

(4-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introduction to the shielded metal arc welding process. Emphasis placed on power sources, electrode selection, and various joint designs. Lab Fee.

WLDG-1430. Introduction to Gas Metal Arc Welding (gma). (4 Credits)

(4-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. 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. Lab fee.

WLDG-1435. Introduction to Pipe Welding. (4 Credits)

(4-2-8) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. 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. Lab fee.

WLDG-1457. Intermediate Shielded Metal Arc Welding (smaw). (4 Credits)

(4-3-3) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. A study of the production of various fillets and groove welds. Preparation of specimens for testing in various positions. Lab fee.

WLDG-1491. Special Topics. (4 Credits)

This course is taken for academic credit. Students will earn an A, B, C, D, F, or W.

WLDG-1521. Welding Fundamentals. (5 Credits)

(5-3-6) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introduction to the fundamentals of equipment used in oxyacetylene and arc welding, including welding and cutting safety, basic oxy acetylene welding and cutting, basic arc welding processes and basic metallurgy. Lab fee.

WLDG-1530. Introduction to Gas Metal Arc Welding (gma). (5 Credits)

(5-3-6) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. A study of the principles of gas metal arc welding, setup and use of GMAW equipment and safe use of tools/equipment. Instruction in various joint designs. Lab fee.

WLDG-1534. Introduction to Gas Tungsten Arc Welding. (gtaw). (5 Credits)

(5-3-6) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Principles of gas tungsten arc welding (GTAW), including setup, GTAW equipment. Instruction in various positions and joint designs. Lab Fee.

WLDG-1557. Intermediate Shielded Metal Arc Welding (smaw). (5 Credits)

(5-3-6) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Lab fee.

WLDG-2413. Intermediate Welding Using Multiple Processes. (4 Credits)

This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Introduction 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).

WLDG-2443. Advanced Shielded Metal Arc Welding (smaw). (4 Credits)

(4-3-3) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions. Lab fee.

WLDG-2506. Intermediate Pipe Welding. (5 Credits)

(5-3-5) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. A comprehensive course on the welding of pipe using the shielded metal arc welding the shielded metal arc welding (SMAW) process. Welding will be done using various positions. Topics covered include electrode selection, equipment setup and safe shop practices. Lab fee.

WLDG-2543. Advanced Shielded Metal Arc Welding. (5 Credits)

(5-3-6) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joint in various positions. Lab Fee.

WLDG-2551. Advanced Gas Tungsten Arc Welding (gtaw). (5 Credits)

(5-3-6) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Advanced topics in GTAW welding, including welding in various positions and directions. Lab Fee.

WLDG-2553. Advanced Pipe Welding. (5 Credits)

(5-3-5) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Advanced topics involving welding of pipe using the shielded metal arc welding (SMAW) process. Topics include electrode selection, equipment setup and safe shop practices. Emphasis on weld positions 5G and 6G using various electrodes. Lab fee.