



Pipe Welding

Certificate (42 SCH*)

*Semester Credit Hour

7/2023

First Semester - 18 SCH

WLDG 1323 - Welding Safety, Tools, and Equipment
WLDG 1425 - Introduction to Oxy-Fuel Welding and Cutting
WLDG 1407 - Introduction to Welding Using Multiple Processes
WLDG 1313 - Introduction to Blueprint Reading for Welders
WLDG 1457 - Intermediate Shielded Metal Arc Welding

Second Semester 16 SCH

WLDG 1427 - Welding Codes and Standards
WLDG 1434 - Intro to Gas Tungsten Arc Welding
WLDG 1435 - Introduction to Pipe Welding
WLDG 2413 - Intermediate Welding Using Multiple Processes

Third Semester - 8 SCH

WLDG 2451 - Advanced Gas Tungsten Arc Welding (GTAW)
WLDG 2453 - Advanced Pipe Welding

Marketable Skills

Teamwork; cultural diversity; apply technology to work; creative thinking; decision-making; problem-solving; construction and industrial safety; oxy-fuel welding and cutting; power sources; electrode selection; shielded metal arc welding; gas metal arc welding and cutting; gas tungsten arc welding; flux-cored arc welding; blueprint reading; measurement; welding codes and standards; layout and fabrication; fillet welds; V-groove welds; plate welding; pipe welding; and 1G, 2G, 5G, 6G positions.

Program Outcomes

- Students earning the Pipe welding certificate will demonstrate proficiency by taking the American Society of Mechanical Engineers section IX test (6G) on 5" pipe using SMAW welding process.

High School Endorsements

Business and Industry

Additional Education Opportunities

Associate of Arts in Applied Science; Bachelor of Arts in Applied Science

Expected Salary

Texas wage data: workers on average earn \$36,210; 10% of workers earn \$27,030 or less; 10% of workers earn \$53,290 or more.

Career Opportunities

Blueprint reading; layout, cutting and fitting parts; tack and production welding; finishing and material handling; welding fabricators; shop supervisors; estimators and shop owners; pipe welder; and structural steel welder.