



Advanced Welding Shop Technology

Certificate (20 SCH*)

*Semester Credit Hour

8/2020

First Semester - 20 SCH

WLDG 2413 - Intermediate Welding Using Multi-processes

WLDG 2435 - Advanced Layout and Fabrication

WLDG 2443 - Advanced Shielded Metal Arc Welding

WLDG 2451 - Advanced Gas Tungsten Arc Welding

WLDG 2453 - Advanced Pipe Welding

Marketable Skills

Math Skills; manage time and materials; acquire and evaluate information; interpret and communicate information; oral and written communications skills; computer skills; teamwork; cultural diversity; apply technology to work; creative thinking; decision making; problem solving; self-management; 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; 1G, 2G, 5G, 6G positions.

Program Outcomes

- Students earning the Advanced Welding Shop Technology certificate will demonstrate proficiency by taking the American Society of Mechanical Engineers section IX test (6G) on 2" pipe using the GTAW welding process.

High School Endorsements

Business and Industry

Additional Educational Opportunities

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

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.