



# Structural Steel Welding

Certificate (18 SCH\*)

\*Semester Credit Hour 8/2020

## First Semester - 18 SCH

WLDG 1307 - Intro to Welding Using Multi-processes  
WLDG 1313 - Intro to Blueprint Reading for Welders  
WLDG 1417 - Intro to Layout and Fabrication  
WLDG 1428 - Intro to Shielded Metal Arc Welding  
WLDG 1457 - Intermediate Shielded Metal Arc 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 Structural Steel Welding certificate will demonstrate proficiency by taking the American Welding Society Certification Test (3G) on plate using SMAW 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.