



Welding Technology

AAS (60 SCH*)

*Semester Credit Hour

8/2020

First Semester - 16 SCH

PSYC 1300 - Learning Framework
MATH 1332 - Contemporary Mathematics
WLDG 1307 - Intro to Welding Using Multi-processes
WLDG 1313 - Intro to Blueprint Reading for Welders
WLDG 1428 - Intro to Shielded Metal Arc Welding

Second Semester - 15 SCH

COSC 1301 - Introduction to Computing
WLDG 1417 - Intro to Layout and Fabrication
WLDG 1457 - Intermediate Shielded Metal Arc Welding
WLDG 1435 - Intro to Pipe Welding

Third Semester - 15 SCH

ENGL 1301 - Composition I
WLDG 1434 - Introduction to Gas Tungsten Arc Welding
WLDG 1453 - Intermediate Layout and Fabrication
WLDG 2406 - Intermediate Pipe Welding

Fourth Semester - 14 SCH

DRAM 1310 - Introduction to Theater
WLDG 1327 - Welding Codes and Standards
WLDG 2443 - Advanced Shielded Metal Arc Welding
WLDG 2451 - Advanced Gas Tungsten Arc Welding

Marketable Skills

Math skills; time and materials management; ability to 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; and 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.
- 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.
- 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

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.