Industrial Technology/Manufacturing

Gas Metal Arc Welding Short Circuit Transfer CIMA-1135

This short-term, hands-on training program teaches proper welding safety protocol, machine setup and repair, and basic welding techniques for gas metal arc welding using short arc, spray metal transfer methods. Students will learn to perform American Welding Society compliant welds on mild steels in the flat, horizontal, vertical, and overhead positions.

Ready to learn more? Complete our information form at www.kirkwood.edu/ce_certificatesform or contact a student advisor today at ceadvising@kirkwood.edu or 319-398-5529.

Course List:
NA

Delivery Method:
Classroom

Length of Program and CEU Credits:
114 hours, 13.68 CEUs

Entrance Requirements/Prerequisites:
None

Other Items to Know About this Course:
The following textbooks will need to be purchased separately: “GMAW Tech Guide EW-473” (Hobart, ISBN 9781936058174) and “GMAWB EW-369” (Hobart, ISBN 9781936058068). Handouts, if required, will be provided in class. Students must also bring a 4.5” angle grinder with metal grinding wheel, welding helmet and gloves, safety glasses, steel-toe boots/shoes, leather welding jacket, wire brush, vice grip-locking “C” 11R and vice grip 10” 10WR curved jaws, MIG pliers 8WMP, and a back hand pad on the first day of the program.

Program Completion Requirements:
This is a pass/fail certificate. Mandatory safety training and 70 percent attendance is required to complete the program.

Industry Credentials Earned:
None. This program does not award any nationally recognized certification upon completion.

Pathway to Credit Program:
None

Tuition Assistance:
Yes
**Course Objectives:**
- Perform safety inspections on equipment and projects.
- Set up GMAW-S equipment and complete minor external repairs.
- Complete a fillet weld in the flat, horizontal, vertical, and overhead positions.
- Complete a groove weld in the flat, horizontal, vertical, and overhead positions.
- Analyze completed welds and adjust welding technique as needed.

**Learning Outcomes:**
The skills and knowledge in this program will prepare students to produce and evaluate fillet and groove welds to ensure AWS standards are met.

**Careers:**
Source: Career Coach 2018, Kirkwood Community College region.

**Welders, Cutters, Solderers, and Brazers**
Average hourly earnings: $18.20
Starting hourly earnings: $12.73
Projected job openings (2018 – 2023): 520

**Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders**
Average hourly earnings: $17.65
Starting hourly earnings: $12.28
Projected job openings (2018 – 2023): 51

**Related Information:**
NA

**LEARN MORE**
Complete our information form at www.kirkwood.edu/ce_certificatesform or contact a student advisor today at ceadvising@kirkwood.edu or 319-398-5529.