

BASIC WELDING, CERTIFICATE (628)

About Our Program

The Basic Welding program provides the academic and technical skills as well as the occupational basics for the person wishing to enter the field as an entry-level worker.

Nature of Work and Employment

Graduates of this program have the entry-level job skills required in welding and metal fabrication. These skills are developed in the areas of Print Reading, Materials, Layout, Shielded Metal Arc Welding (SMAW), and Metal Inert Gas Welding (GMAW).

Special Considerations

This work requires laying out jobs according to drawings or blueprints and determining the welding method best suited for the metals being fused.

Requirements

Code	Title	Hours
Required Courses		
DRAF 110	Print Reading and Inspection	2
Technical Elective from DRAF or MTEC		2
Select one of the following:		3
BUSN 125	Math of Business ¹	
MATH 111	Technical Math ¹	
Select one of the following:		3
BUSN 141	Business Communications ¹	
COMM 101	Technical Communications ¹	
ENGL 121	Rhetoric and Composition I ¹	

Select one of the following Sequences:		6
Sequence A:		
WELD 130	Introduction to Welding	
WELD 232	Interm Welding/Fabrication ¹	
Sequence B:		
WELD 135	Shield Arc/Oxyacetylene Weldng	
WELD 233	Advanced Welding Processes ¹	
Total Hours		16

¹ Course has a prerequisite. See course description.

Program Outcomes

Students who complete this program of study will:

- Interpret Welding Symbols and Blueprint drawings. Read and accurately interpret welding symbols, blueprints and technical drawings to plan welding tasks according to specifications.
- Demonstrate safety practices for all the types of welding. Including the proper use of personal protective equipment (PPE), safe handling of tools and materials and appropriate shop procedures.
- Demonstrate proper welding techniques in these types of welding: Shielded Metal Arc Welding (SMAW) Gas Metal Arc Welding (GMAW) Gas Tungsten Arc Welding (GTAW) on a variety of metal types in the following positions: Flat, Overhead, Vertical, Horizontal.
- Inspect and Evaluate Welds. Perform basic and mechanical inspections of welds to assess weld quality.

Program Contacts

Call Highland at 815-235-6121 for the following program contacts:

- Dr. Matt Magee, Dean of Agriculture, Business & Technology
- Todd Vacek, Welding Faculty
- Vicki Schulz, Student Advisor/Transfer Coordinator