

INDUSTRIAL TRAINING, ASSOCIATE OF APPLIED SCIENCE (634)

About Our Program

The Highland Community College Industrial Training degree was created in partnership with the Area 23 Plumbers and Pipefitters Union. Its main purpose is to create pathways for those pursuing a career having an emphasis in Welding. Students will gain the core Welding and General Education skills at the community college. The remainder of their skill development will be obtained through the existing structure of the Plumbers/Pipefitters and Heating Air Conditioning and Ventilation (HVAC) 5-year Apprentice program. Upon completion of this degree each student will have the necessary skills to work in a group or independently.

Nature of Work and Employment

Industrial Technicians will find a wide variety of employment options mainly in the area of metal fabrication. Possible careers would be Welder, Brazer, Plumber, Pipefitter and Steamer. These careers are generally for full time positions with plenty of opportunity for overtime and possible travel. Completers of this program would be able to be hired in several entry level positions, but with their completion of the apprentice program they would be able to work at a Journeyman's level and pay rate.

Special Considerations

A workplace experience is encouraged and may be made available.

Requirements

Code	Title	Hours
Required General Education Courses		
NSCI 232	Fund of Meteorology with Lab ¹	4
INFT 180	Intro to Information Systems ¹	3
General education course with a Diversity designation (see advisor)		3
Select one of the following:		3
ENGL 121	Rhetoric and Composition I ¹	
BUSN 141	Business Communications ¹	
Select one of the following:		3-4

MATH 166	College Algebra ¹	
MATH 111	Technical Math ¹	
MATH 167	Plane Trigonometry ¹	
Career and Technical Education Courses		
WELD 130	Introduction to Welding	3
or WELD 135	Shield Arc/Oxyacetylene Weldng	
WELD 232	Interm Welding/Fabrication ¹	3
WELD 233	Advanced Welding Processes ¹	3
DRAF 110	Print Reading and Inspection	2
DRAF 105	Computer Aided Drafting I	3
Technical Elective from DRAF or MTEC		3
Work-based Learning Courses		
Plumbers and Pipefitters Union 23 Apprenticeship Program		32
Total Hours		65-66

¹ Course has a prerequisite. See course description.

Program Outcomes

Students who complete this program of study will be able to:

- Demonstrate the use, interpretation, and application of an appropriate engineering print.
- Identify the processes required to manufacture a component.
- Identify sources of hazards and assess/identify appropriate health and safety measures.
- Effectively communicate solutions to problems orally, visually, or in writing.
- Apply industry related mathematics.
- Through the completion of their 5-year apprenticeship program become a certified Journeyman Plumber/Pipefitter or HVAC technician.

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