

# Industrial Training (634)

## ASSOCIATE OF APPLIED SCIENCE

### 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.

### 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.

### 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.

### Program Contacts

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

- Scott Anderson, Vice President of Business, Technology, and Community Programs
- Todd Vacek, Welding Faculty
- Vicki Schulz, Student Advisor/Transfer Coordinator

### Required General Education Courses 16/17 Credit Hours

*	NSCI	232	Fundamentals of Meteorology	4
*	INFT	180	Introduction to Information Systems	3
*	ENGL	121	Rhetoric and Composition	
		-or-		3
*	BUSN	141	Business Communications	
*	MATH	166	College Algebra	
		-or-		
*	MATH	111	Technical Math	4/3
		-or-		
*	MATH	167	Plane Trigonometry	
			General education course with a Diversity designation (see advisor)	3

### Career and Technical Education Courses 17 Credit Hours

	WELD	130	Introduction to Welding	
		-or-		3
	WELD	135	Shielded Arc and Oxyacetylene Welding	
*	WELD	232	Intermediate Welding and Fabrication	3
*	WELD	233	Advanced Welding Processes	3
	DRAF	110	Print Reading and Inspection	2
	DRAF	105	Computer Aided Drafting	3
			Technical Elective from DRAF or MTEC	3

### Work-based Learning Courses 32 Hours

Plumbers and Pipefitters Union 23 Apprenticeship Program	32
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**Total Credit Hours = 65/66**

\* Course has a prerequisite. See course description.