

# WORKFORCE AND ECONOMIC DEVELOPMENT

## SPRING 2018 INDUSTRIAL MAINTENANCE COURSES

### ISO Audit Training

This course is directed at anyone with a desire to understand the requirements and basic skills needed to audit, manage and/or implement an ISO 9001:2015 or similar quality management system.

Instructor: Jim Linkie, RABQSA, MSSC  
Wednesday  
February 21 and February 28  
12:30 - 4:30 p.m.

Fee: \$529

Location: 755 White Pond Dr., Akron

### Basic Electricity (for Maintenance)

This is a noncredit course designed for current maintenance employees to update and refresh their skills. No previous knowledge of electrical systems is required. You'll learn electrical fundamentals, meters, measurements, and basic electrical circuits and how to troubleshoot those circuits in the work place. *Fee includes required classroom materials.*

Instructor: Bill DeCoste  
Mondays and Wednesdays  
January 17 - February 19  
4:30 - 7:30 p.m.

Fee: \$759

— OR —

Tuesdays and Thursdays  
January 16 - February 22  
4:30 - 7:30 p.m.

Fee: \$759

### Machine Controls I

This noncredit course is for current maintenance employees to update and refresh their skills. Previous knowledge of electrical systems or Basic Electricity for Maintenance is required. You'll learn how to troubleshoot and properly wire motor control circuits, pilot devices, limit switches and other industrial devices. *Fee includes required text/classroom materials.*

Instructor: Bill DeCoste  
Mondays and Wednesdays  
February 26 - April 4  
4:30 - 7:30 p.m.

Fee: \$759

— OR —

Tuesdays and Thursdays  
February 27 - April 3  
4:30 - 7:30 p.m.

Fee: \$759

### Machine Controls II

This noncredit course is designed for current maintenance employees to update and refresh their skills. Previous knowledge of electrical motor control systems or Machine Controls I is required. The participant will learn how to troubleshoot and properly wire complex electric motor controls including timers, reversing starters, PLC interfacing and reduced voltage starting. *Fee includes required classroom materials.*

Instructor: Bill DeCoste  
Mondays and Wednesdays  
April 16 - May 16  
4:30 - 7:30 p.m.

Fee: \$759

— OR —

Tuesdays and Thursdays  
April 17 - May 17  
4:30 - 7:30 p.m.

Fee: \$759

### PLCs – the Basics

This noncredit course is designed for current maintenance employees to update and refresh their skills. Previous knowledge of electrical systems and Machine Controls I is required. Participants will learn how to troubleshoot and properly wire PLCs, identify and properly locate defective inputs and outputs and be introduced to RSLogix500 software, all using Allen-Bradley Micrologix1000 PLCs. *Fee includes required text/classroom materials.*

Instructor: Butch Powell  
Tuesdays and Thursdays  
January 17 - February 19  
5:30 - 8:30 p.m.

Fee: \$759

Location: Fuel Cell Center, D118

### PLCs – Systems

This noncredit course is designed for current maintenance employees to update and refresh their skills. Participants must be familiar with RSLogix500 and Micrologix1000 PLCs or have taken PLCs – The Basics. We'll look at troubleshooting small conveyor systems controlled by Micrologix1000 PLCs using RSLogix500 software. *Fee includes required text/classroom materials.*

Instructor: Butch Powell  
Tuesdays and Thursdays  
February 27 - April 3  
5:30 - 8:30 p.m.

Fee: \$719

Location: Fuel Cell Center, D118

### PLCs – Analog Controls

In this advanced PLC training, you will learn how to troubleshoot to configure and program an Allen Bradley SLC500 series PLC with 5/04 processor, how to program the PLC for analog and BCD control and how to use sequencer, masking and other data handling instructions. Introduction to Control Net and Device Net will also be included. Prior experience in PLCs required. *Fee includes required classroom materials.*

Instructor: Butch Powell  
Tuesdays and Thursdays  
April 17 - May 17  
5:30 - 8:30 p.m.

Fee: \$719

Location: Fuel Cell Center, D118

## Workforce Development Certificate Program

**Earn a certificate in industrial maintenance. Select the track that most meets your needs and those of your company, or work towards earning a certificate in each track.**

Electrical	Mechanical	Automation
Basic Electricity for Maintenance	Basic Electricity for Maintenance	Electrical PLUS Mechanical tracks
Machine Controls I	Machine Controls I	PLCs -Systems
Machine Controls II	Hydraulics/Pneumatics Troubleshooting II	CNC Programming
Hydraulics/Pneumatics Troubleshooting I	Mechanical Drives (credit class)	CNC Maintenance or CNC Operations or Servo Systems
PLCs - The Basics	Variable Frequency Drives	Blueprint Reading for the Machine Trades

### Hydraulic/Pneumatic Troubleshooting I

This noncredit course is custom-designed for maintenance personnel. You'll learn the operation and troubleshooting techniques of hydraulic and pneumatic systems. This includes component and circuit principals, safety, symbols, fluids, compressors, pumps, accumulators, control valves, cylinders, and motors using hands-on troubleshooting techniques. *Fee includes required text/classroom materials.*

Instructor: Jim Hardin  
Mondays and Wednesdays,  
January 22 - February 21  
6 - 9 p.m.  
Fee: \$719

### Hydraulics/Pneumatic Troubleshooting II

This is a noncredit course designed for maintenance personnel. The participant will learn basic safety, symbols, electro-hydraulics, plus an introduction to proportional control using hands-on lab techniques. *Fee includes required classroom materials.*

Instructor: Jim Hardin  
Mondays and Wednesdays,  
March 5 - April 11  
6 - 9 p.m.  
Fee: \$719

### Powered Industrial Truck Safety

Drivers of powered industrial trucks (forklifts) are required to be trained or evaluated every three years. Those who complete this three-hour Train-the-Trainer course will receive a certificate of completion and may then conduct safety training in their organization. It should be understood that hands-on driving skills are not learned in the classroom. The client will develop these at their own pace, in their environment.

Instructor: Jim Linkie, RABQSA, MSSC  
Wednesday  
March 21  
2 - 5 p.m.  
Fee: \$83  
Location: 644 Norton Ave., Barberton

### Panelview Programming/Troubleshooting

You will learn to program and touch screen panelview to display process information, create alarm and fault messages, and set up communications with a PLC for process control.

Instructor: Butch Powell  
CRN:  
Mondays and Wednesdays  
March 19 - April 18  
5:30 - 8:30 p.m.  
Fee: \$759  
Location: Fuel Cell Center, D118

## GAS AND OIL EXPLORATION

### IADC Rig Pass with SafeLAND USA and SafeGULF Training

This fully accredited, nationally recognized safety training course provided by the International Association of Drilling Contractors will address the health, safety and environmental training and requirements for oil and gas service contractors and exploration and production employees both on shore and off shore. This course covering an industry-standardized curriculum will give you basic knowledge of

- work site safety
- overview of government agencies and applicable regulations
- employee responsibilities
- environmental protections
- incident reporting procedures

After completing the course, you'll be issued a completion card with an identification number that will be entered into the national databases for IADC Rig Pass, SafeLAND USA and SafeGULF.

Instructor: Carl Moore  
Friday, March 9  
7:30 a.m. - 5 p.m.  
Fee: \$200

### 3-Day Initial Plastic Joining Qualification - Dominion

Initial training for contractors who have not previously performed Plastic Joining Tasks for Dominion. The course covers:

- manual butt fusion
- hydraulic butt fusion
- electrofusion

Instructor: Jay McClouth,  
Charles Schmid, Fred Albrecht  
CRN:  
Tuesday, Wednesday, Thursday  
January 9 - January 11  
8 a.m. - 4 p.m.  
Fee: \$950