

WORKFORCE AND ECONOMIC DEVELOPMENT

SPRING 2017 INDUSTRIAL MAINTENANCE COURSES

Intro to 3D Printing

This course will consist of the basics of 3D printing, developing 3D models and .STL files and printing out a simple, finished part for the participant to take with them.

Instructor: Elizabeth Kittinger
Saturdays
March 4 and March 11
1 – 3 p.m.

Fee: \$99

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
March 21 – April 5
1:30 - 4:30 p.m.

Fee: \$475

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 9 - February 13
4:30 - 7:30 p.m.

Fee: \$689

— OR —

Tuesdays and Thursdays
January 10 - February 9
4:30 - 7:30 p.m.

Fee: \$689

Variable Frequency Drives

This is a noncredit course specifically designed for current maintenance employees to update and refresh their skills. Previous knowledge of electrical systems or Troubleshooting Motor Controls I is required. The participant will learn how to troubleshoot and properly wire variable speed drives, including Allen Bradley PowerFlex drives. *Class materials/text included in fee.*

Instructor: Greg McInnis
Mondays and Wednesdays
March 21 – April 20
5 – 8 p.m.

Fee: \$589

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 20 – March 29
4:30 - 7:30 p.m.

Fee: \$689

— OR —

Tuesdays and Thursdays
February 23 – April 4
4:30 - 7:30 p.m.

Fee: \$689

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 Troubleshooting Motor 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
Monday and Wednesday
April 10 – May 10
4:30 - 7:30 p.m.

Fee: \$689

— OR —

Tuesdays and Thursday
April 11 – May 11
4:30 - 7:30 p.m.

Fee: \$689

PLCs – the Basics

This noncredit course is designed for current maintenance employees to update and refresh their skills. Previous knowledge of electrical systems and Troubleshooting Motor 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 10 – February 9
5:30 - 8:30 p.m.

Fee: \$689

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 23 – April 4
5:30 - 8:30 p.m.

Fee: \$589

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
Troubleshooting Machine Controls I	Troubleshooting Machine Controls I	Troubleshooting PLCs -Systems
Troubleshooting 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
Troubleshooting PLCs - The Basics	Programming Variable Frequency Drives	Blueprint Reading for the Machine Trades

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 18 – May 18
5:30 - 8:30 p.m.
Fee: \$589

Strategic Industrial Maintenance

Start pulling it all together with this course covering predictive, preventive and reactive maintenance. We'll cross all crafts to enhance the skills of maintenance professionals, helping solve modern day-to-day problems efficiently. We'll cover pumps, fasteners, valves, couplings, bearings, prints and drive components. *Fee includes required text/classroom materials.*

Instructor: Greg McInnes
Tuesdays and Thursdays,
January 31 - March 7
5 - 8 p.m.
Fee: \$589

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,
February 6 - March 8
6 - 9 p.m.
Fee: \$649

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 20 – April 19
6 - 9 p.m.
Fee: \$649

Blueprint Reading for Welding

This course covers basic welding-specific symbols and print reading. This course is a co-requisite of 2G AWS Certification Preparation

Instructor: Fred Albrecht
Mondays and Wednesdays
January 18 – March 8
5 - 6 p.m.
Fee: Call for info

2G AWS Certification Preparation

This course is designed to teach welding basics to prepare a student to take an AWS D1.1 2G test. Includes core welding kit and two GMAW, GTAW or SMAW (horizontal/2G) tests.

Student is required to provide: Leather work boots, jeans and cotton long-sleeved shirt

Instructor: Fred Albrecht
Mondays and Wednesdays
January 18 – March 8
1 - 5 p.m.
Fee: \$2,948

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
April 12
2 - 5 p.m.
Fee: \$75

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 10
7:30 a.m. to 5 p.m.
Fee: \$195