****

**On-Line Industrial Maintenance Technician Mechanical Training Program Summary**

**INTRODUCTION -** $60, 5 HRS

* REA5 – Study Skills
* MPR1 - Maintenance Principles
* TRB1 – Maintenance Troubleshooting Procedures

**BASIC MATH** - $80, 8 HRS

* MAT1 – Whole Numbers
* MAT2 – Fractions
* MAT3 – Decimals
* MAT4 – Algebra

**PRINT READING** - $80, 8 HRS

* PRT1 – Print Reading: Orthographic Projection
* PRT2 – Print Reading: Format & Dimension
* PRT3 – Print Reading: Types & Symbols
* PRT4 – Thread Specifications

**READING SCHEMATICS & SYMBOLS TPC102** - $150, 20 HRS

**SAFETY & HEALTH** *-* $140, 14 HRS

* PPE7 - Personal Protective Equipment: Don’t Start Work Without It
* LOT9 - Lockout/Tagout: Lightening in A Bottle
* ELE5 - Electrical Safety: Beware the Bite
* MAC0 - Machine Guarding: Safeguarding Your Future
* HAZ2 - HazCom: In Sync with GHS
* CHE5 - Chemical Handling: Basic Principles
* ELEO – ArcFlash: Live to Tell

**INDUSTRIAL SAFETY & HEALTH** - $150, 24 HRS

* TPC109 – Industrial Safety & Health

**OSHA 10 HOUR GENERAL INDUSTRY** - $150, 10 HRS

* OSHA 10 HR General Industry

**RIGGING**- $40, 4 HRS

* RIG1 - Rigging: Equipment Basics
* RIG2 - Rigging: Operations

**LUBRICATION** - $80, 8 HRS

* MLU1 – Lube Oil: Types, Properties & Handling
* MLU2 – Lube Oil: Equipment & Procedures
* MLU3 – Lube Grease: Types, Application & Equip.
* INS9 – Lubrication System Inspection

**DRIVE COMPONENTS** - $200, 20 HRS

* MDR1-Industrial Drives: Belt Drives
* MDR2-Industrial Drives: Chain Drives
* CDP1-Industrial Drives: Complete Drive Package
* INS7- Operator Inspection: Belt Drive, Chain Drive & Gear Box Inspection
* EDS1 – Industrial Drives: Enclosed Drive System
* CBR1 – Clutches & Brakes: Types, Principles & Functions
* CBR2 – Clutches &Brakes Troubleshooting
* INS8 – Operator Inspection: Clutch & Brake Inspection
* GGS1 – Industrial Drives: Gears and Gear Systems
* SJC1 – Industrial Drives: Shaft and Coupling Devices

**SEALS** - $60, 6 HRS

* MPS1 – Industrial Seals: Types, Materials & Properties
* MPS2 – Gaskets & Packing: Inspection & Installation
* MPS3 – Mechanical Face Seals: Troubleshooting

**PUMPS** - $120, 12 HRS

* PUM1 – Centrifugal: Pumps: Design & Function
* PUM2 – Centrifugal: System Characteristics / Selection
* PUM3 – Centrifugal: Operation & Maintenance
* PUM4 – Centrifugal: Troubleshooting & Disassembly
* PUM5 – Centrifugal: Reassembly & Installation
* TRB4 – Maintenance Troubleshooting: Pumps & Compressors

**BEARINGS** - $60, 6 HRS

* BRG1 – Industrial Bearings: Application & Technology
* BRG2 –Bearings: Maintenance & Installation
* BRG3 – Industrial Bearings: Troubleshooting

**PIPING SYSTEMS** - $150, 20 HRS

* TPC306 Piping Systems

**VALVES** - $80, 8 HRS

* CVA1 - Control Valves & Actuators: Basics & Functions
* CVA2 - Control Valves: Types and Designs
* CVA3 - Control Valves: Fundamentals & Selection
* CVA4 - Control Valves: Sizing & Installation

**PNEUMATICS** - $180, 18 HRS

* PNM1 – The Power of Compressed Air
* PNM2 – The Pneumatic Circuit
* PNM3 – Processing Air
* PNM4 – Using Compressed Air
* PNM5 – Pneumatic Control Valves
* PNM6 – Working Safely w/ Pneumatic Systems
* PNM7 – Pneumatic System Maintenance
* PNM8 – System Troubleshooting
* INS1 – Pneumatic System Inspection

**HYDRAULICS** - $260, 26 HRS

* IDH1 – Ind. Hydraulics: Principles & Application
* IDH2 – Ind. Hydraulics: Types & Concepts
* IDH3 – Hydraulics: Functions & Operating Principles
* IDH4 – Hydraulics: Maintenance & Troubleshooting
* HDL1 - Harnessing Hydraulic Power
* HDL2 – The Hydraulic Circuit
* HDL3 – Hydraulic Pumps & Actuators
* HDL4 – Hydraulic Control Valves
* HDL5 – Hydraulic Fluid
* HDL6 – Hydraulic System Safety and Maintenance
* HDL7 – Hydraulic Systems Troubleshooting
* HPS1 – Hydraulic Power Systems: Identification & Operation
* HPS2 – Hydraulic Power Systems Troubleshooting

**WELDING** - $150, 12 HRS

* TPC417 Welding Principles

**BASIC ELECTRICITY** - $160, 16 HRS

* ELS1 – Industrial Electricity Basic Principles
* ACDC1 – Current
* ACDC2 – Voltage
* ACDC3 – Resistance
* ACDC4 – Ohm’s Law
* ACDC5 – Magnetism
* ACDC6 – Electrical Measurements
* ACDC7 – DC Circuits

**MEASUREMENT/INSTRUMENTATION** - $80, 8 HRS

* PME1 – Temperature Measurement: Thermometers and Thermocouples
* PME3 – Pressure Measurement: Manometers and Gages
* PME5 – Level Measurement: Measurement & Gages
* PME7 – Flow Measurement

**Total Hours: 253**

**Total Cost: $2,430**   
Prices are subject to change with 30-day notice

**Kent State University Regional Workforce Development**

For more information call: Terry Theis at 330.308.7448 or [ttheis1@kent.edu](mailto:ttheis1@kent.edu)

Rev. 2.16.2022