

TECH ONLINE

SPRING 2021

These modules are a blend of online learning and hands-on validation. Each module is comprised of approximately ten (10) hours of online instruction, which the student is able to receive at their own pace and convenience. When the online portion is completed, students proceed to a scheduled hands-on evaluation in a lab setting from an experienced instructor, to validate and reinforce the online learning experience. **Due to concerns related to COVID-19, students may choose to complete ONLY the online portion of the module. However, for the most complete learning experience, the hand-on labs are strongly recommended. Registration is open at any time. Modules may also be customized to meet your specific training needs.**

SHOP PRACTICES & MEASUREMENTS

Online classes include: Math Fundamentals, Fractions & Decimals, and Units of Measurement; Basics of Tolerance; Basic Measurement; Blueprint Reading; Geometry Lines & Angles and Triangles; Intro to Geometric Dimension & Tolerancing and Calibration Fundamentals.

Online | 4-Hour Lab @ Piqua, Eaton OR Greenville Location

FEE \$449–Online Courses ONLY

\$695–Online Courses AND Hands-On Lab

MAINTENANCE BASICS

Online classes include: Intro to OSHA; Personal Protective Equipment; Lockout/Tagout Procedures; Safety for Lifting Devices; Safety for Mechanical Work; Safety for Hydraulics & Pneumatics; Troubleshooting: Hand and Power Tool Safety; Environmental Safety Hazards; Total Productive Maintenance.

Online | 4-Hour Lab @ Piqua Campus

FEE \$449–Online Courses ONLY

\$695–Online Courses AND Hands-On Lab

MECHANICAL SYSTEMS

Online classes include: Intro to Mechanical Systems; Forces of Machines; Power Transmission Components; Intro to Fastener Threads; Overview of Threaded Fasteners; Overview of Non-Threaded Fasteners; Lubricant Fundamentals; Mechanical Power Variables; Belt Drive Applications; Gear Applications.

Online | 4-Hour Lab @ Piqua Campus

FEE \$449–Online Courses ONLY

\$695–Online Courses AND Hands-On Lab

HYDRAULICS & PNEUMATICS

Nineteen hours (19) of online instruction. Online classes include: Intro to Fluid Systems; Forces of Fluid Power; Intro to Hydraulic Components; Intro to Pneumatic Components; Intro to Fluid Conductors; Fittings for Fluid Systems; Preventive Maintenance for Fluid Systems; Hydraulic Power Variables; Pneumatic Power Variables; Hydraulic Power Sources; Pneumatic Power Sources; Fluid System Print Reading; Hydraulic Control Valves; Pneumatic Control Valves; Actuator Applications; Basic Hydraulic Circuit Design; Basic Pneumatic Circuit Design; Hydraulic Fluid Selection; Contamination and Filter Selections.

Online | 6-Hour Lab @ Piqua, Eaton OR Greenville Location

FEE \$549–Online Courses ONLY

\$795–Online Courses AND Hands-On Lab

BASIC ELECTRICITY

Online courses include: Safety for Electrical Work; Electrical Units; Introduction to Circuits; Electrical Instruments; DC Power Sources; DC Circuit Components; Series Circuit Calculations; Parallel Circuit Calculations; AC Power Sources; AC Fundamentals. (Two 4-hour labs)

Online | 8-Hour Lab @ Piqua, Eaton OR Greenville Location

FEE \$449–Online Courses ONLY

\$895–Online Courses AND Hands-On Lab

INDUSTRIAL CONTROLS

Online classes include: Control Devices; Relays, Contactors and Motor Starters; Reversing Motor Circuits; Logic & Line Diagrams; Limit Switches and Proximity Sensors; Photoelectric & Ultrasonic Devices; Times & Counters; Solenoids; Symbols & Diagrams for Motors; Distribution Systems.

Online | 4-Hour Lab @ Piqua, Eaton OR Greenville Location

FEE \$449–Online Courses ONLY

\$695–Online Courses AND Hands-On Lab

ADVANCED INDUSTRIAL CONTROLS

Online classes include: Intro to Electric Motors; DC Motor Applications; AC Motor Applications; Reduced Voltage Starting; Solid State Relays & Starters; Specs for Servo Motors; Deceleration Methods; Acceleration Methods; Electronic Semiconductor Devices; Photonic Semiconductor Devices.

Online | 4-Hour Lab @ Piqua Campus

FEE \$449–Online Courses ONLY

\$695–Online Courses AND Hands-On Lab

PROGRAMMABLE LOGIC CONTROLLERS (PLCS)

Online classes include: Intro to PLCs; Hardware for PLCs; Basics of Ladder Logic; Numbering Systems & Codes; PLC Inputs & Outputs; Basic Programming; PLC Timers & Counters; Networking for PLCs; Hand-Held Programmable PLCs; PLC Diagrams & Programs.

Online | 4-Hour Lab @ Piqua, Eaton OR Greenville Location

FEE \$449–Online Courses ONLY

\$695–Online Courses AND Hands-On Lab

ADVANCED PROGRAMMABLE LOGIC CONTROLLERS (PLCS)

Prerequisite: Programmable Logic Controllers. Online courses include: Overview of PLC Registers, PLC Program Control Instructions; Math for PLCs, Sequencer Instructions for PLCs; PLC Installation Practices; PID for PLCs; Data Manipulation; Shift Registers; Vision Systems; Industrial Network Integration.

Online | 4-Hour Lab @ Piqua Campus

FEE \$449–Online Courses ONLY

\$695–Online Courses AND Hands-On Lab

ROBOTICS

Online classes include: Intro to Robotics; Robot Safety; Robot Components; Robot Axes; Applications for Robots; Robot Installations; Robotic Control Systems; Concepts of Robot Programming; Robot Maintenance; Robot Troubleshooting.

Online | 4-Hour Lab @ Piqua Campus

FEE \$449–Online Courses ONLY

\$695–Online Courses AND Hands-On Lab

For more information or to register, contact Trisha Elliott at 937.778.7811 or telliott2@edisonohio.edu.