Industrial Technician Course Schedule
Fall 2019

Basic Industrial Electricity
Students will gain a basic understanding of the principles of electricity, electronic components, standards and schematics. Class and lab sessions will focus on the following: Personal and Equipment Safety, Definitions and Terminology; Basic Principles, Laws and Calculations, AC Principles, Wiring, Schematics and Codes; AC Motors, Lighting and other Equipment; Testing Instruments, Basic Troubleshooting and Repair (AC Equipment and DC/Electronic Equipment); DC Principles and Components; DC Circuits, Diagrams and Schematics; Electronics and Semiconductors.

Course Details:
➢ Day/Time: Tuesdays 2:00 – 5:00 PM
➢ Date: September 3 – November 5, 2019
➢ Room: Skou Hall 134
➢ Tuition: $695 + textbook

Industrial Motors & Motor Controls
This course is intended for the participant with some working knowledge and/or experience in industrial electricity. Designed to help prepare participants for employment in the field of industrial electrical maintenance, this course consists of lecture, lab demonstration, and hands-on and software-based lab assignments. Areas covered include: Safety, Understanding electrical drawings, Motor transformer and distribution systems, Motor control devices; Motor principles, DC motors, Three phase AC motors, Single phase AC motors, Motor selection, Motor installation, Motor maintenance and troubleshooting, Motor starters, Relays and logic, Motor control devices and AC and DC drives. (Prerequisite: Basic Industrial Electricity)

Course Details:
➢ Day/Time: Wednesdays 1:00 – 4:00 PM
➢ Date: September 4 – November 6, 2019
➢ Room: Skou Hall 134
➢ Tuition: $695 + textbook

Pneumatic Automation
Provides an understanding of the operation and maintenance of pneumatic components and automation systems. Topics such as compressed air and vacuum systems, pneumatic logic systems, component operation, selection, maintenance and troubleshooting are emphasized in the class and lab environment.

Course Details:
➢ Day/Time: Thursdays, 5:00 – 8:00 PM
➢ Date: September 12 – November 14, 2019
➢ Room: Lecture 5:00 – 6:00 PM Skou Hall 212 & Lab 6:00 – 8:00 PM Skou Hall 136
➢ Tuition: $695 + textbook

Programmable Logic Controllers (PLC) I
Introducing the PLC: What it is and how it functions, number systems, introduction to PLC operations, input modules, output modules; putting together a modular PLC, introduction to Logic, programming a PLC, PLC processors, program and data organization, basic relay instructions, understanding relay instructions and the PLC input module, documenting your system, timer and counter instructions, introduction to comparison, data handling, and sequencer instructions, including hands-on exercises.

Course Details:
➢ Day/Time: Mondays and Wednesdays 4:30 – 7:30 PM
➢ Date: September 2 – October 3, 2019 (two evenings a week)
➢ Room: Skou Room 134
➢ Tuition: $695 + textbook

Basic Welding
This course will introduce the basic welding concepts of Shielded Metal Arc Welding (Stick) and Gas Metal Arc Welding (Mig) processes. Students will also have the opportunity to use Oxy-fuel cutting equipment. Basic safety will be included for all processes as well as basic joint setup, machine setup and proper usage of the equipment. Students will need to provide their own personal protective equipment including: Leather work boots, Flame Resistant Jacket, Long Pants (No nylon/polyester), Leather Welding Gloves, Welding Helmet, Clear Safety Glasses, Tinted Safety Glasses, Chipping Hammer, Wire Brush, Mig Welding Plyers, and Welding beanie (optional).

➢ Day/Time: Mondays and Wednesdays 4:30 – 7:30 PM
➢ Date: October 7 – November 7, 2019 (two evenings a week)
➢ Room: Skou Room 150
➢ Tuition: $1095 includes materials (please note cost difference)

To register please visit: go.osu.edu/ITC