



Industrial Technician Course Schedule

Winter-Spring 2023

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.

Details:

- Day/Time: Wednesdays, 9:00AM - 12:00PM
- Date: January 25 – March 29, 2023 (10 weeks)
- Room: Skou Room 134
- Tuition: \$925.00 (materials included)

Industrial Motors & Motor Controls

This course is intended for the individual who has completed Basic Industrial Electricity course or with some working knowledge and 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)

Details:

- Day/Time: Wednesdays, 9:00AM - 12:00PM
- Date: April 5 – June 7, 2023 (10 weeks)
- Room: Skou Room 134
- Tuition: \$925.00 (materials included)

Basic Hydraulics

Provides a basic understanding of the operation and maintenance of hydraulic components and systems. Topics to be covered in the classroom and in the lab setting: Principles of Hydraulics; Definitions and Terminology; Hydraulic Symbols and Schematics; Types of Circuits; Pumps (designs and applications); Motors (designs and applications); Cylinders (designs and application); Pressure, Direction and Flow Control Valves; Oil Filtration, Sampling and Fabrication; Fittings (use and identification).

Details:

- Day/Time: Thursdays, 5:30PM – 8:30PM
- Date: January 26 – March 30, 2023 (10 weeks)
- Room: Skou Room 134 (5:30-6:30) and Skou Room 140 (6:30-8:30)
- Tuition: \$925.00 (Books & Materials Included)

Advanced Hydraulics

A more in-depth look at hydraulic components and systems. Items to be covered will include complex systems of cartridge valves, proportional and servo controls, electrical feedback, closed and open loop control, and hydrostatic drives. Emphasis in the class and lab will be on understanding, troubleshooting and maintenance of these systems. (Prerequisite: Basic Hydraulics)

Details:

- Day/Time: Thursdays, 5:30PM – 8:30PM
- Date: April 13 – June 1, 2023 (8 weeks)
- Room: Skou Room 134 (5:30-6:30) and Skou Room 140 (6:30-8:30)
- Tuition: \$925.00 (Books & Materials Included)