

INDUSTRIAL CONTROLS AND PLCS



Fundamentals of Industrial Controls and PLCs

This continuing education course is for the industry professional desiring to learn more about the fundamentals of industrial control circuits and programmable logic controllers (PLCs). The course introduces fundamental concepts of hardwired control including relay logic and ladder diagrams. The fundamentals of inputs and outputs (I/O), wiring, and introductory PLC programming concepts are introduced. Reinforces concepts learned with a "hands-on" approach for wiring, programming, and troubleshooting. Live class is limited in size. Other fundamental related topics or more advanced topics can be incorporated upon request.

Summary of Fundamental Topics:

- Fundamentals of three-phase motors
- Ladder logic and ladder diagrams (2-wire, 3-wire control)
- Inputs and output devices
- Timers
- PLC I/O (wiring)
 - o Digital I/O
 - o Analog I/O
- PLC Programming basics
- Troubleshooting Control Circuits