

I-100

Introduction to Ladder Logic & Programmable Controllers

<i>Course Description</i>	This two day course is designed to present an introduction to electrical control devices, ladder logic diagramming, and wiring. Application exercises are used throughout the course to create a hands-on learning environment.
<i>Topical Outline</i>	<ul style="list-style-type: none">▪ Fundamentals of Control▪ Control Components and Pilot Devices▪ Symbology▪ Ladder Logic Diagramming and wiring▪ Development and Analysis of Control Circuits▪ Control of Motor Starting▪ Maintaining and Troubleshooting Control Equipment and Circuits▪ Safety Procedures▪ Documentation▪ Introduction to Programmable Controllers<ul style="list-style-type: none">▪ Basic Characteristics▪ Advantages Over Relays▪ Differences and Similarities between Relay Ladder Logic and PLC Logic
<i>Audience</i>	This course is designed for plant maintenance personnel and other technicians who need to broaden their understanding of industrial control fundamentals. I-100 answers the prerequisite requirements for our PLC Level One courses.
<i>Course Length</i>	16 hours
<i>CEU's</i>	1.4
<i>Objectives</i>	Persons completing this course will be able to: <ul style="list-style-type: none">▪ Identify electrical control components▪ Interpret ladder logic diagrams▪ Understand electrical terms and symbols▪ Troubleshoot control circuits▪ Design simple electrical control circuits▪ Identify the components of a programmable controller (system block diagram)

NOTE **I-100 is also ideal for anyone who has a need to familiarize himself/herself with basic control fundamentals.**