

Call 1-877-978-7246

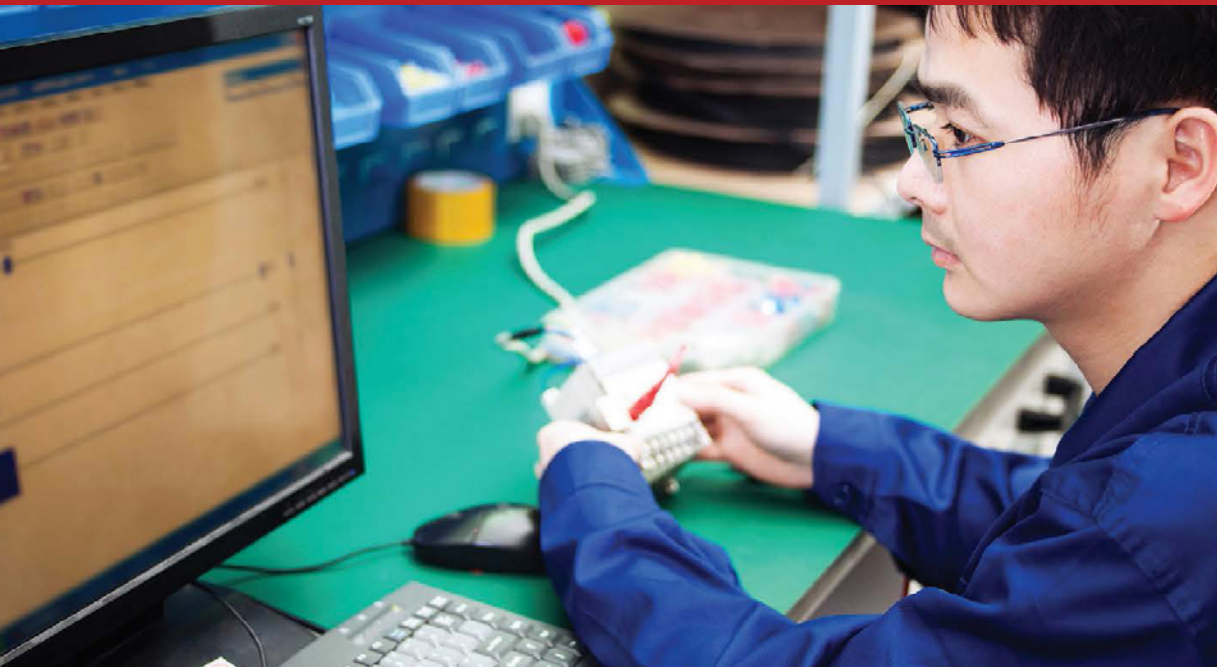


PLC PROGRAMMING & APPLICATIONS TRAINING SEMINAR

Day 1 - Five Parts of a PLC, Relay Type, Addressing, Logic Gates, Troubleshooting Logic

Day 2 - Timer Controls, Compare Instruction, Programmer & Processor Memory, Program Instructions

Gain the confidence you need to modify and create your own PLC programs



Learning Objectives:

- Five Parts of a PLC
- PLC System Sequence of Operation
- Relay Type Instructions
- Addressing
- Logic Gates
- Application of Bit Type I/O Instructions
- Troubleshooting Logic
- Converting Hardwired Systems to PLC Control
- Timer Parameters and Control Bits
- Application of Timer Control Bits
- Compare Instruction
- Binary Decimal System
- Programmer and Processor Memory
- Program Control Instructions

- Reserve your space now either **online** or by calling us at **1-877-978-7246!**
- Check us out online at **live.tpctraining.com** for a complete list of all virtual and in-person seminars.
- This seminar is also available for **Virtual** or **In-Person Private Group Training**



SEMINAR OVERVIEW

Available in both virtual and in-person, instructor-led formats, this two-day "Hands-On" PLC Programming & Applications course provides a greater depth of PLC knowledge for those who have already taken TPC Training's introductory course, "PLCs for Non-Programmers," or have some background and experience working with PLCs. It is designed to help maintenance technicians, electricians and others modify and write common PLC programs on their own. It will provide students the comfort and confidence they need to edit or create new PLC solutions for their specific work applications. It will make vendor-specific PLC programming manuals understandable. Students' specific needs and concerns are also addressed during the class, so that they can go back to their workplace and immediately apply what they've learned.

WHAT YOU WILL TAKE HOME

- A laminated, full-color TPC Training Reference Guide detailing all the "mustknow" information covered in the class. Keep this with you while on the job for immediate knowledge recall.
- Comprehensive classroom materials
- A Personalized Training Certificate with 0.8 TPC Training Continuing Education Units for each day attended, 1.6 for both days.
- All the information you need from asking our instructors specific questions about your own unique equipment or facility.

CONTINUING EDUCATION

Upon completion of this seminar, the student will receive a Certification of Completion and .8 TPC Training CEUs per day attended. Most employers and many government agencies accept TPC Training CEUs to fulfill their continuing education requirements. If the student needs CEUs to renew a state license, please contact us at 303-867-5039 to ensure the state licensing board has approved the seminar. If we are currently not approved by your state licensing board, we are happy to begin the process as long as we receive your request at least one month before the training date.

DISCUSSION TOPICS

Five Parts of a PLC

PLC System Sequence of Operation

- Input Data Table
- Output Date Table

Relay Type Instructions

- Input
- Output

Addressing

- Hardware (Rack/Slot/Screw)
- Software (File/Word/Bit)
- Addressing Examples
 - Allen Bradley SLC 500
 - Allen Bradley PLC5
 - Allen Bradley RSLogix 5000 / Studio
 - Siemens Simatic Step 7 (S7)
 - Modicon

Logic Gates

- And
- Or
- Not

Application of Bit Type I/O Instructions

- arage Door Simulation
- Motor Control Circuit
- Exclusive
- Latching Outputs

Troubleshooting Logic

- Copy & Paste Errors
- Incorrect Addressing
- Duplicate Destructive Bits

Converting Hardwired Systems to PLC Control

- Series Circuit vs. AND Statement
- Parallel Circuit vs. OR Statement
- Schematic Exercises

Timer Parameters & Control Bits

- Timer On Delay / Off Delay
- Retentive
- Self Resetting
- Cascading Timers

Application of Timer Control Bits

- LogixPro Traffic Light Simulation

Compare Instruction

- EQU
- NEQ
- LES
- GRT
- LEQ
- GEQ
- LIM

Binary Decimal System

Programmer & Processor Memory

Program Control Instructions

- Jump
- Master Control Reset
- Jump to Subroutine
- Forces
- One Shot

Compute Instructions

- Introduction to Source & Destination
- Add, Subtract, Multiply, Divide, SQR, Clear & Trig
- Convert to BCD (TOD) & Compute (CPT)

Transfer Instructions

Counters

- Count Up
- Count Down
- Reset

Application of Counter Control Bits

- LogixPro Batch Simulation

JOIN OUR CLASSROOM SEMINARS FROM VIRTUALLY ANYWHERE

Our virtual instructor-led training option allows students to connect to a live classroom seminar via a web link, with the ability to participate full in the classroom dialogue, exercises, and Q&A. Online participants get all the benefits of the full classroom experience, plus the convenience of remote access.

Features include

- Two full days of live, interactive instruction from a TPC Training instructor
- All classroom materials in PDF format
- Certificate of completion for 16 hours of live training
- Full technical support to ensure your online experience is a rewarding one

SEMINAR FEE & AGENDA

This 2-day course is just \$1195 (Earn 1.6 CEUs)

7:30 am	Registration
8:00 am	Class Begins
12:00 -1:00 pm	Lunch (on your own)
4:30 pm	Class Ends

NO RISK REGISTRATION & MONEY-BACK GUARANTEE

You can reserve your space in the class at any time and cancel without penalty. Cancellations made more than 14 days prior to the seminar may be refunded or rescheduled. Cancellations made within 14 days may be rescheduled for any future topic and/or date. If you're not satisfied with the course, we'll promptly refund your payment.

BRING THE TRAINING TO YOUR FACILITY VIRTUALLY OR IN-PERSON

Every public seminar class in our Course Catalog can be conducted virtually or on-site at your facility, with the same expert instructors. To arrange an in-person private group training, call or email us at virtual@tpctraining.com.

Some Advantages of In-Person Private Group Training

- Cost Savings — Save time and travel costs by keeping workers on-site
- Customized Content — Tailor the seminar to your facility and equipment
- Flexibility — Accommodate multiple shifts and different start and end times