Learn About:

- 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

PLC Programming & Applications

Designed to help maintenance technicians, electricians and others edit or create new PLC solutions for their specific work applications

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

- Reserve your space now! **CALL 1-877-978-7246**

- Check us out online at live.tpctraining.com for a complete listing of all seminars coming to your area

- This seminar is also available as an **Online Simulcast** or can be brought **On-Site** to your facility

NO RISK REGISTRATION — MONEY BACK GUARANTEE

SEMINAR OVERVIEW

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.e most common PLC problems on their own.

WHAT YOU WILL TAKE HOME

- 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.

TRAINING PHILOSOPHY

TPC Training's curriculum is designed to provide complete coverage of essential industrial maintenance skills, across a full range of electrical training, HVAC, plant management, and mechanical & industrial topics. Our "see, touch, do" instructional approach allows us to impart practical skills in an intensive format.

The most vital part of our seminar format is the coverage that goes beyond the course outline. Our small class sizes allow each instructor to tailor the course to address students' individual needs, concerns, and experience levels. Our instructors deliver content with hands-on exercises, demonstrations role-playing, visuals, and case study discussions.

DISCUSSION TOPICS

Five Parts of a PLC

PLC System Sequence of Operation
- Input and Output Date Table
- Program Scan

Relay Type Instructions
- Input and Output

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

Logic Gates

Application of Bit Type I/O Instructions
- LogixPro Garage Door Simulation
- Motor Control Circuit
- Latching Outputs

Troubleshooting Logic
- Copy and 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 and Timer Off Delay
- Retentive, Cascading, and Self Resetting 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

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

Transfer Instructions

Counters
- Count Up, Down, and Reset

Application of Counter Control Bits
- LogixPro Batch Simulation

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.

JOIN OUR CLASSROOM SEMINARS FROM VIRTUALLY ANYWHERE

live.tpctraining.com/simulcast

Our simulcast option allows students to connect to a live classroom seminar via a web link, with the ability to participate fully 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

BRING THE TRAINING ON-SITE TO YOUR FACILITY

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

Some Advantages of On-Site 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

TPC TRAINING