

LIVE, REMOTE INSTRUCTOR-LED, HANDS-ON EXPERIENCE IN THE COMFORT OF YOUR LOCATION

- On-site training – no need to travel, this is conducted at your facility.
- Flexible training – schedule training when it fits your schedule.
- Hands-on experience – we deliver the lab equipment and training computer to you.
- Live instructor – conducts the class remotely for an in-person interaction, not just a self-guided experience.
- Keeps you readily available – hosting at your facility allows you to react to unforeseen circumstances in your plant.
- Maintain social distancing – maximum of four workstations per company location.
- Scalable offering – you pick the amount and type of training to fit your needs.
- Custom training available on request to prepare you for your next project or plant needs.



Remote I/O Workstation



CompactLogix Workstation

CUSTOMER REQUIREMENTS:

1. Network - Reliable wireless network to connect training computer and iPad (guest-provided network).
2. Setup time - Time required to work with instructor the day prior to class to setup equipment and verify it and the network is operational.

KENDALL WILL PROVIDE:

Remote I/O workstation, CompactLogix workstation, laptop with software, iPad for instructor communications and digital training materials.

COST AND ORDERING INFORMATION

PART NUMBER: KCT_Logix_OS

PRICING INFORMATION *

- 1 Person – Per day price = \$1,495/person/day (\$1,495/day)*
- 2 People – Per day price = \$1,395/person/day (\$2,790/day)*
- 3 People – Per day price = \$1,295/person/day (\$3,885/day)*
- 4 People – Per day price = \$1,195/person/day (\$4,780/day)*
- Custom – Inquire about special pricing*

**Minimum of 2 days of training are required. Lunch and snacks are not provided.*

To inquire about training, visit: kendallelectric.com/training/kct/logix-r

ABOUT THE INSTRUCTOR:

Roy Radziszewski is an automation and networks instructor. He teaches courses covering various types of Allen Bradley™ AC variable frequency drives, small and medium range PLCs, PanelView graphic terminals, and Networks (including Stratix switches). During Roy's career he has started-up, serviced and designed control systems, and has deployed thousands of drives for all types of industrial manufacturing applications. Roy holds an electrical engineering degree from The Milwaukee School of Engineering and an MBA from the University of Houston. In addition, he holds programming certificates (C, C#, Android, and real-time embedded systems) from the University of Washington and University of California, Irvine. Roy is presently working on his CCNA Certification through Cisco.

LOGIX ON-SITE Topics Covered	Choice of 2 or more classes:				
	Basic "Getting Started" (1-Day)	Intermediate +(1-Day)	Advanced +(1-Day)	PID +(1-Day)	Trouble-Shooting +(1-Day Each)
• Overview of the Logix family	✓				
• Overview of Studio 5000 Logix Designer software	✓				
• Overview of Rockwell product compatibility website	✓				
• How to upgrade (flash) logix controller firmware	✓				
• Launching software and establishing connectivity	✓				
• Navigating Studio 5000 software features	✓				
• Basic logic programming	✓				
• Adding local and controller tags	✓				
• Adding rungs to the main routine	✓				
• Adding instructions to rungs	✓				
• Editing rungs in program and run modes	✓				
• Online/off-line editing	✓				
• Uploading/downloading and running a ladder logic program	✓				
• Forcing inputs and outputs	✓				
Ethernet static and dynamic IP address setup		✓			
Ethernet remote I/O adapter setup and operation		✓			
Digital point I/O setup and operation		✓			
Analog point I/O setup and operation		✓			
AOI (add on instruction) identification and evaluation		✓			
Very high speed counter setup and operation		✓			
Creating and operating periodic and event tasks		✓			
Understanding the difference between global and local tags		✓			
User-defined data types creation and functionality			✓		
Creating custom AOI (add on instructions)			✓		
Writing function block diagram routines			✓		
Writing structured text routines			✓		
Calling routines via the JSR instruction			✓		
ASCII module setup and operations			✓		
Messaging (produced and consumed)			✓		
Ethernet DLR (device level ring) setup and operation			✓		
Trending			✓		
Discuss PID theoretical operation				✓	
In-depth discussion on the PIDE instruction functionality				✓	
Writing function block diagrams using PIDE instruction				✓	
Writing complete functioning PID applications using personal PLC workstation				✓	
Discuss over damped, critically damped, and under damped performance				✓	
Testing PIDE applications using PLC demo workstation				✓	
Manual tuning proportional, integral, and differential parameters				✓	
Auto tuning proportional, integral, and differential parameters				✓	
Testing PID performance when adding external disturbances to the system				✓	
Basic troubleshooting (requires 1-day basic or equivalent knowledge)					✓
Intermediate troubleshooting (requires 1-day intermediate or equivalent knowledge)					✓
Advanced troubleshooting (requires 1-day advanced or equivalent knowledge)					✓
PID troubleshooting (requires 1-day PID or equivalent knowledge)					✓

TROUBLESHOOTING OPTIONS:

The class uses preprogrammed PLC code from the Basic, Intermediate, Advanced, and PID Logix classes. You pick the level of troubleshooting you want, from Basic to PID. Pick one, pick several, or pick them all. Each troubleshooting class requires the 1-Day training class as prerequisite or equivalent experience. Programming bugs will be strategically added in the code. The students will then take the programs one by one and apply them to the PLC workstation demo. Afterward, the students will be required to analyze, debug, and fix each program. This is a 100% troubleshooting class so no new material will be presented which allows students to spend all of their time troubleshooting and fixing PLC programs. The instructor will be available for technical questions. He will also provide hints on how to approach a complex application, analyze the problem, make strategic tests, isolate and fix the bug, and finally, test the application for proper operation. This is a free flowing class, students will be allowed to work together as a team on each faulty program or work independently on programs/applications that are of most interest to them.