

ControlLogix Communications

September 2025

Course Overview

After completing this course, students will develop advanced skills in communications drivers, network configurations, Keeper Files, Message Instructions, the PLS Module, PID Control, and set up a network from scratch. **The course is done on equipment made available by the client.**



Course Objective

To provide the necessary information, resources, and hands-on activities needed to become proficient in advanced features and programming of a ControlLogix System. The course focuses on hardware & Network configurations, and Advanced Instruction Programming. There are ample hands-on exercises and troubleshooting that familiarize the student with the hardware and software.

Who Should Attend

This course is recommended for maintenance and engineering personnel and those responsible for programming and maintaining this equipment. It is highly recommended that students have a thorough understanding of the concepts and practices included in the **ControlLogix Fundamentals course (POAC101)**.

Course Length and Cost

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|-------------------|------------|
| Per Student Cost: | \$1350 USD |
| Course Length: | 3 Days |

Client Expectations

This training is provided at a discount by using equipment provided by the client. Students are expected to attend the entire training session to receive their certificate. It includes a separate

workstation, DH/DH+ Communications Module, ControlNet Module, Ethernet Module, 1756-L75 Controller, and software for each student. An additional station for the instructor. In addition, make the following available:

- Computer and necessary software, including: RSLogix 5000, RSLogix 5, RSLogix 500, RSLinx, ControlFlash
- Internet Access
- Dry-erase board for examples, assignments, etc.

Provider Expectations

The contractor will provide the following:

- Student Workbook with exercises
- RSLogix 5000 Instruction Set Reference (Digital)
- Select Procedure Guides
- Lab results can be provided if desired
- Certificate of Completion or Achievement
 - A completion certificate is provided to students who complete the entire class, but with no assessment
 - An achievement certificate is provided for those who complete the entire class and pass a written and programming assessment

Course Agenda

Day 1:

- Safety
- Communications Modules
- Updating Firmware
- ControlNet Communications
- Ethernet Communications
- Ethernet IP Communications
- RS Linx Software
- Ethernet Cable Fabrication
- ControlNet Cable Fabrication

Day 2

- Messaging across Networks
- Comprehensive Labs
- Producer/Consumer Model
- Comprehensive Labs
- Legacy Communications
- PLS Module

Day 3

- PLS Module
- Comprehensive Labs
- PID Controls
- Comprehensive Programming Exercises
- Assessment

Adjustments

It may be necessary to adjust the course curriculum depending on the students' understanding of the material. Every effort will be made to include as much information as possible.

Time permitting, troubleshooting will be incorporated into the program. Troubleshooting will be limited to software, edits, and hardware configurations unless the client provides faulty equipment to be used.

If you have questions about any part of the course or would like to modify the course curriculum, please reach out to [PO Controls](#) to discuss. Price may vary depending on the extent of changes.