

In our seven-week live online course you will learn how to setup, configure, and program the **Allen-Bradley ControlLogix** family of Large Programmable Automation Controllers (PACs)

## Logix Live™ Online Course:

This seven-week course is made up of the following seven one-hour live online sessions:

### Session 1: Introduction to ControlLogix

#### Part 1: Hardware

- System Design and Components
- Controller Anatomy and Operating System
- Important Manuals and Documentation

#### Part 2: Software

- RSLogix 5000 vs Studio 5000
- Packages and Versions
- Overview and Project Components
  - Controller Properties
  - Tasks, Programs, Routines
  - Controller and Program Tags

### Session 2: Communications & Setup

#### Part 1:

- Ethernet Basics and Addressing Devices
- RSLinx Classic Driver Setup and Use
- Flashing Controller and Module Firmware

#### Part 2:

- Add, Test, Force Local (1756) I/O
- Add, Test, Force Distributed I/O
  - 1756 I/O, Flex I/O, Point I/O

### Session 3: Ladder Diagram

#### Part 1: Ladder Logic

- Create and Configure New Application
- Boolean Logic: And, Or, XAnd, XOR (LD)
- Motor Control (LD)
- Photo Eyes, Part Sensing (LD)

### Session 4: Function Blocks & UDTs

#### Part 1: Function Blocks

- Function Block (FBD) Basics
- Machine Runtime Routine (FBD)

#### Part 2: User Defined Data Types

- How User Defined Data Types (UDT) work
- Create and use UDTs

### Session 5: Structured Text & SFCs

#### Part 1: Structured Text (ST)

- How Structured Text Routines work
- Calculate Scrap Ratios using ST Routine

#### Part 2: Sequential Function Charts (SFCs)

- Sequential Function Chart Routines
- Part Count, Copy, Reset Routine using SFC

### Session 6: Code Reuse and AOIs

#### Part 1: Code Reuse

- Changing a Project's Version
- Duplicating and Re-using Code

#### Part 2: AOIs

- How Add-on Instructions (AOI) work
- Create, Download, and Use AOIs
- Using PlantPax Objects AOIs

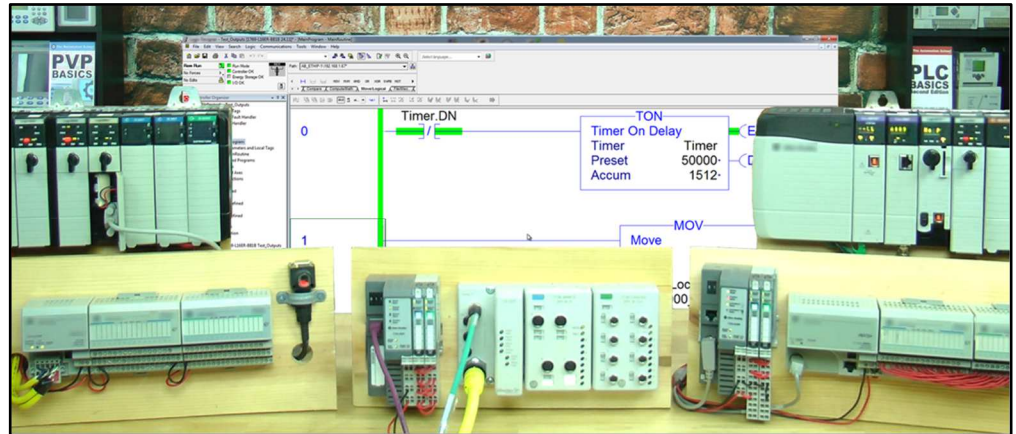
### Session 7: Produced/Consumed & MSG

#### Part 1: Produced & Consumed Tags

- Using Produced and Consumed Tags

#### Part 2: Messaging Controllers

- Messaging Controllers over Ethernet
- Messaging Controllers over DH+, DF1



Our Logix Live™ training course consists of Seven One-Hour Live Training Sessions designed to teach those with some basic PLC knowledge how to setup, program, and troubleshoot the ControlLogix family of Large Programmable Automation Controllers (PACs) using RSLogix 5000 and/or Studio 5000.

### What students will learn:

- Understanding the overall design of ControlLogix system and components
- How to configure a system's Controllers, I/O, and Communications Modules
- How to setup Ethernet, Serial DF1, and USB drivers in RSLinx Classic
- The difference between RSLogix 5000 and Studio 5000
- How to setup, configure, and edit RSLogix and Studio 5000 projects
- How to add, edit, and test Local, Ethernet, and ControlNet I/O
- Understanding Controller and Program tags
- How to create and edit Tags and Aliases
- How to setup, configure and edit Tasks, Programs, and Routines
- How to create, test, run, and troubleshoot Ladder Diagram Routines
- Understanding Function Block Diagram Routines, and how they Execute
- How to create, test, run, and troubleshoot Function Block Diagram Routines
- How to create and use User Defined Data Types
- And many additional advanced topics (complete list on left)

### What students need:

- To join online lessons: (1) Internet connection, (2) Access to TheAutomationSchool.com, (3) Zoom compatibility
- To complete **optional** hands-on exercises: (1) CompactLogix or ControlLogix PAC, (2) compatible communications port and cable, (3) a compatible and installed copy of RSLogix 5000 or Studio 5000

**Training Course Pricing:** (Note: Below pricing is for individual students. Contact us directly for discounted group pricing)

- **Logix Live™ Online Training** featuring the Allen-Bradley ControlLogix & Studio 5000, single student ~~\$699~~ \$349

### Additional Student Benefits:

When you take a Live Training course at The Automation School™, you get access to the course lessons and materials **for life**, including replay archive of videos, downloads (sample programs, presentations,) access to quizzes and completion certificate, as well as online course support.

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# The Automation School LIVE™

Open Enrollment Online Training Schedule as of February 17<sup>th</sup>, 2021

Date	Time	Session	Course	Topic(s)
03-16-21	7-8:15pm ET	1	(Control)Logix Live	Intro to Hardware & Software
03-23-21	7-8:15pm ET	2	(Control)Logix Live	Communications and I/O
03-30-21	7-8:15pm ET	3	(Control)Logix Live	Relay Ladder Diagram
04-06-21	7-8:15pm ET	4	(Control)Logix Live	Function Blocks and UDTs
04-13-21	7-8:15pm ET	5	(Control)Logix Live	Structured Text and SFCs
04-20-21	7-8:15pm ET	6	(Control)Logix Live	Code Re-use and AOIs
04-27-21	7-8:15pm ET	7	(Control)Logix Live	Produced/Consumed & MSGs