PLC Basics

Learn how to setup, configure, and program the **Allen-Bradley MicroLogix** Programmable Logic Controllers using RSLogix 500 or RSLogix Micro in PLC Basics

Level 1 Lesson Topics:

(Included with 1st and 2nd Edition courses)

Hardware
- What a PLC is
- Where PLCs are used
- Anatomy of a PLC
- Styles and Types
- Common Inputs and Outputs
- PLCs used in this course
- MicroLogix Hardware Tour
- Programming Cables
- Manuals and Documentation

Numbers and Data
- Numeral Systems & Types of Numbers
- Digital Information & Data Types

Ladder Logic and RSLogix Software
- What Ladder Logic is & How it works
- PLC Scan Detailed
- Download and Install Software
- Using RSLogix Micro
- Browsing Data and Program Memory

Communications
- RSLinx Emulate Setup
- RSLinx Serial Setup
- RSLinx Ethernet Setup

Basic Programming
- Basic Bit Instructions
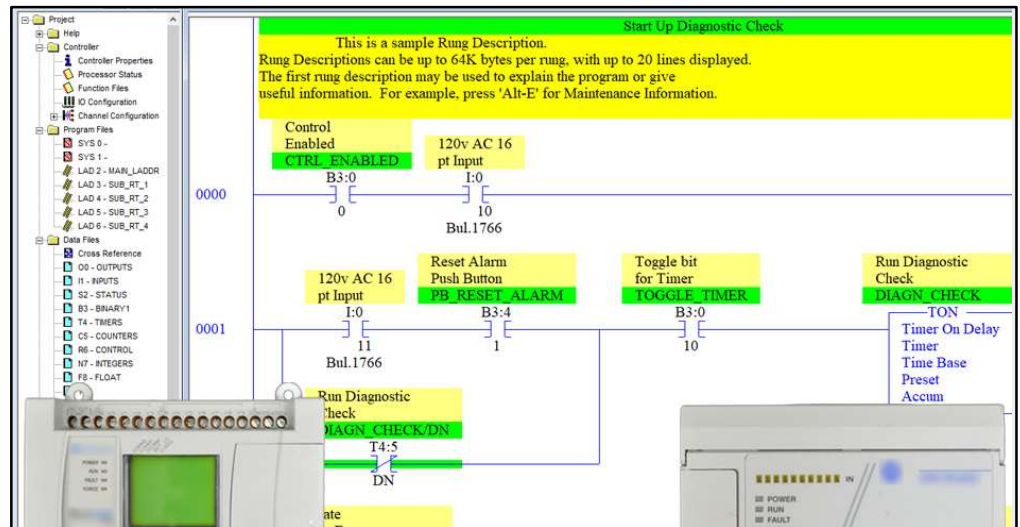- Motor Control

Additional Instructions
- Using TON and CTU instructions
- Using ADD and SUB instructions
- Using MUL and DIV instructions
- Using GRT and LES instructions

Level 2 Lesson Topics:

(Included with Extended 2nd Ed. course only)

Photo Eyes, Timers, and Counters
- Bin Full Detection
- Sense Jam, No parts
- Elapsed Run Time
- Delay Time
- Part Counting
- Copy Part Counts
- Conditional Resets
- Includes New 2024 Course Update*
- Includes Remastered 1st Ed. Course*

PLC Basics is designed for those students who have basic electrical knowledge, and want to learn how to setup, program, and troubleshoot PLCs - perfect for new PLC users! The specific PLCs covered in this course (pictured above) include the Allen-Bradley MicroLogix 1100 and 1000, both of which can be programmed using the free RSLogix Micro Starter Lite software.

What students will learn:
- What a PLC is
- Styles and Types of PLCs
- Numbering Systems and Data Types
- What Ladder Logic is and how it works
- How to setup Serial and Ethernet Communications
- Creating, Testing, and Troubleshooting MicroLogix Programs in RSLogix
- How to integrate Push Buttons and Pilots Lights with PLC Logic
- How to use PLCs in a Motor Control circuit
- And much more in the Extended Edition

Who should take this course:
- Anyone with basic electrical knowledge who would like to learn how to use, program, and troubleshoot Programmable Logic Controllers (PLCs.)

What students need to complete hands-on exercises:
- Windows 7, 8, or 10 PC with Ethernet or USB port and an internet connection
- Free RSLogix Micro Starter Lite programming software (how to get is covered in course)
- A MicroLogix 1000 or MicroLogix 1100, and compatible PC and Cables on students PC, or
- Free RSEmulate 500 Emulation software to simulate the PLC (how to get is covered in course)

Course Editions (Note: Online courses include instructor support, completion certificate, and lifetime access)
- **TAS-PLC22-O*** PLC Basics Second Ed. Extended Online Course (Level 1 and Level 2 Topics) **$99.99**
- **TAS-PLC91-O** PLC Basics First Ed. Remastered Online Course (Level 1 Topics, upgradeable to Extended/1&2) **$34.99**

* For a Limited Time: Includes PLC Basics 1st Ed Remastered