

Introduction to Logix Troubleshooting

< Programming Track >

Course Description and Topics Covered



Course Description:

Learn how to troubleshoot and debug CompactLogix Programmable Logic Controllers (PLCs) during this one-day course that covers a combination of instructor-led discussions, demonstrations, and hands-on labs. This troubleshooting class is design to reinforce topics and material concepts covered during the **Introduction to Logix** one-day class.

Using a PLC Workstation, Remote IO Workstation, & hand-held PLC test module, students will utilize RSLinx and Studio 5000 software to troubleshoot and debug malfunctioning PLCs

The class flows as follows:

- A. The instructor creates functioning PLC projects that cover the material from the **Introduction to Logix** class and then strategically introduces configuration and/or programming bugs.
- B. The students are handed a “support ticket” document that describes the problem that the operator is experiencing and the malfunctioning project file name.
- C. The students will download the malfunctioning project into the PLC Workstation.
- D. Finally, students are required to analyzing, troubleshoot, debug, and fix each malfunctioning PLC.

This is a 100% troubleshooting class so no new material will be presented which allows students to spend all of their time troubleshooting, debugging, and fixing malfunctioning PLC projects. During entire class, the instructor will be available for technical questions. He will also, if requested, provide hints on how to approach a complex industrial application, analyze the problem, make strategic tests, and finally isolate & fix the bug(s). This is a free-flowing class, so students are allowed to work independently or work together as a team on each malfunctioning PLC project.

Optional class segment added by popular demand:

Students will also have the opportunity to try to add/create a specific feature to an existing fully functioning project. This part of the class is totally optional, as the class does not require student to perform any programming. Students are welcome to just troubleshoot and debug malfunctioning PLC projects the entire day.

The optional segment of the class flows as follows:

- A. The instructor creates functioning PLC projects that cover the material from the **Introduction to Logix** class.
- B. The students are handed a “support ticket” document that describes a new feature that needs to be added and the fully functioning base project file name.
- C. The students will download the fully functioning base PLC project into the PLC Workstation.
- D. The students then will imagine, create, program, and test the new feature.