

AB to S7 Programming with TIA Portal - Virtual (SCT-PTOILABSP1A)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

5 Days 2 sessions per day
2.7 CEUs

Target Group

- Programmer

Short Description

This virtual course acknowledges the automation experience of the students and delivers must-know, advanced topics to experienced engineers interested in Siemens SIMATIC STEP 7 TIA Portal software. This course moves engineers/programmers quickly into the power of the STEP 7 TIA Portal engineering tool. Multiple STEP 7 program editors are presented, demonstrating the flexibility and fully integrated features of STEP 7. The course teaches Siemens STEP7 Software, recognizing the previous experience students have with Allen-Bradley platforms. The instructor has familiarity with AB platforms and software, from which they directly relate to the questions and experiences of students in the class.

Objectives

- Utilize STEP 7 TIA Portal engineering tools
- Insert an HMI device into a project
- Locate Tags using Cross-Reference tool
- Utilize System Diagnostic Functions to test and troubleshoot an application program
- Create custom code blocks
- Create reusable program code (FB, DB, FC, etc.) and insert in Library
- Assign tags in STEP 7 TIA Portal
- Create, Store, and Retrieve Library Objects

Content

- System Overview
- AB-STEP 7 TIA Portal Navigation
- AB-STEP 7 TIA Portal Communication
- Hardware
- Memory Allocation and Usage
- Tag Handling
- Program Instructions in STEP 7 TIA Portal
- Programming Blocks
- HMI
- Reference Data
- System Diagnostics
- Simulation
- Library Options

Recommended Prerequisites

[Introduction to TIA Portal - Virtual: SCT-PTOILPLCI1A](#)

Note

This course concentrates on STEP 7 software, program structures, System Functions, advanced block libraries, and custom block design. STEP 7 engineering tools and programming instructions are demonstrated to guide the student through the development of a realistic application. The course format consists of instruction, demonstration, and hands-on exercises. Students utilize test, debug, and diagnostic tools to complete extensive programming exercises. Access to fully functional software, virtual tools, and exercises are provided to each participant through a cloud-based application.

Language

English

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