

AB to S7 Programming with TIA Portal (US-PTABSP1A)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

4 Days
2.6 CEUs

Target Group

- Programmer

Short Description

This 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

Recommended Prerequisites

[Introduction to TIA Portal and Diagnostics: US-PTBADIA](#)

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.

Language

English

Course descriptions are Siemens Intellectual Property and copyright protected. Do not modify without written permission from SITRAIN US. ©2023 Siemens Industry, Inc.