SIEMENS

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

## Type

Instructor-led Learning

## Duration and Continuing Education Units (CEU)

1.5 Days
1.2 CEUs

## Target Group

- Engineer
- Maintenance

## Short Description

This course is an introduction to the TIA Portal Development Environment and is an ideal preparation for the TIA Portal Programming 1 or TIA Portal Service 1 courses. This course helps students unlock the potential for increased productivity by building foundational concepts and diagnostic skills. Students will learn how to apply those skills to create or open existing projects, navigate work screens and informational cross-referencing, identify CPU and I/O hardware specifications, and conduct initial hardware diagnostics in TIA Portal. This is a face-to-face, instructor-led course consisting of in-class instruction and exercises.

## Objectives

- Use TIA Portal to create a new development project
- Navigate through an existing project using both the Portal View and the Project View
- Configure an S7-1500 PLC with local I/O modules
- Assign PLC tags
- Identify key characteristics of program blocks
- Identify important features of the automation languages LAD and FBD
- Diagnose hardware errors

## Content

- Number Systems & IEC61131 Standard
- Introduction to the TIA Portal Development Environment
- PLC Program Blocks and Variables in the Program Editor
- Introduction to I/O and Addressing
- TIA Portal Automation Languages
- CPU Diagnostics

## Note

Recommendation: Students familiar with programming in Allen Bradley software should attend the AB to TIA Portal course (SCT-PTABSP1A in person or virtual instructor-led SCT-PTOILABSP1A).

## Language

English

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