Online training - Totally Integrated Automation in the Digital Enterprise - Implementing Standardization with the Help of TIA Portal (DI-STAND)

Objectives

The basis for digitalization is the standardization. This is reflected in standardized sequences, interfaces and software components. It also includes the software and hardware in the automation environment. Standardization is an ongoing process so that you already have standardized sequences, interfaces and software components today. Nevertheless, development continues and there are new trends, such as, virtual commissioning, data analysis in the cloud and automatic execution of automation processes that require adjustments or realignment to the current standard. Learn from Siemens as manufacturer how you can optimally design your interfaces and program structures through standardization in terms of effectiveness and efficiency.

In this training course, we will explain all aspects of standardization, especially the modularization of your automation system and show you how you can implement it.

In particular, this means you will learn how you can create your own Styleguide, how you efficiently manage your blocks, templates and interfaces in a TIA Portal library and how these blocks can be automatically tested. As well, we will discuss how you can set up and implement your own company library. Finally, you will become familiar with the aspects that are important for line standardization.

The training course is characterized by a high practical portion; all contents are consolidated and reinforced through exercises in TIA Portal. Create the basis for your digitalization today.

In order to provide you with the best possible support and training in your personal learning environment (own office/home office), we have implemented selected courses as digital online trainings for you.

We provide you with live theory lectures from our experts, which convey the course content described in the learning objectives in a practical and comprehensive manner, utilizing our virtual exercise environment for practical exercises.

In our virtual classroom, our expert is also available to you at any time during your individual practical exercises for in-depth questions and technical discussions.

Target Group

- Decision makers
- Project planners
- Programming persons
- Project designers
- System integrators

Content

- Standardization – on the way to digitalization
- Advantages of standardization of PLC software
- Possibilities for implementing a standard
- Structuring the machine/system in individual functions/subfunctions as a basis
- Re-usability of program parts (according to IEC 61131 and Programming Guidelines)
- Creating a Styleguide and automatically testing it
- Block modularization and automatically testing it
- Working correctly with libraries
- Creating a company library
- Standards in the visualization – HMI
- Standardized interfaces – OPC UA, TCP/UDP, …
- Principles of line standardization

Prerequisites

Basic knowledge in SIMATIC TIA Portal Step 7 equal to TIA-PRO2 or TIA-SYSUP

Technical requirements

For this training you will need a computer with Windows 7 or better Windows 10 and a stable internet connection. We recommend a data transfer rate of 50 Mbit/s. You will require Google Chrome as Internet browser to access a virtual whiteboard and to use our Virtual Exercise Lap (VE Lap) solution. The platform for this training is Microsoft Teams. We recommend installing the Microsoft Teams app for the best possible use of all functions.

Type

Online-Training

Duration