SIEMENS

TIA-S7-1500 Service 2 (TIA-SERV2)

Short Description

Service2 is the second part of the TIA-Service learning path SERV1-SERV2-SERV3. You will deepen your theoretical knowledge of TIA-portal and S7-1500 with numerous practical exercises. You will be more familiar with TIA-portal program, SIMATIC S7 automation system, ET200 distributed I/O, Touchpanel and drive.You will expand your troubleshooting and error correction knowledge using the TIA Portal diagnostic tool in the commissioning and productive phase.

Objectives

You will thus be able to adapt your plant to new demands and to reduce downtime.
After attending the course, you can do the following:
- Understand the interaction of TIA components
- Understand, adapt, and expand given STEP 7 programs, including with step sequences and analog value processing
- Systematically diagnose and correct hardware and software errors in the SIMATIC S7 automation system with the diagnostic tools of the TIA Portal engineering portal
- Use the test functions in Structured Control Language (SCL)
- Perform specific commissioning of TIA components
- Adapt your WinCC configuration to new requirements through small modifications or extensions

Target Group

Maintenance personnel
Service personnel

Content

- Hardware diagnostic functions of the TIA Portal in the SIMATIC S7 automation system
- Software diagnostic functions of the TIA Portal in the SIMATIC S7 automation system
- Possible applications of various block types (function (FC), function block (FB), organization block (OB), data block (DB))
- Principles of analog value processing
- Sequence control with S7-Graph
- Commissioning of distributed I/O on PROFINET IO
- Alarm configuration in WinCC
- Parameterization of the drive
- Test functions in Structured Control Language (SCL)
- Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 system model

Prerequisites

SIMATIC S7 knowledge corresponding to TIA-SERV1 and practical experience in using the knowledge.

Note

The course teaching and material language is English. The material is provided for students in electrical form as pdf document.
Training Devices:
• SIMATIC S7-1500
• Profinet I/O ET200 SP
• Comfort-panel
• Sinamics G120
• Belt model
1 training set / 2 students

Type

Face-to-face training

Duration

4 days

Language

en

Fee

1,900 EUR