SIEMENS

SIMATIC Service 2 in the TIA Portal (TIA-SERV2) (TIA-SERV2)

Short Description

• The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with SIMATIC STEP 7 and SIMATIC WinCC. The second part of the SIMATIC TIA Portal service training is based on the knowledge of the TIA Portal gained in the SIMATIC TIA Portal service 1 course, including SIMATIC STEP 7, HMI, connection of drives, and PROFINET IO. You will expand your troubleshooting and error correction knowledge using the TIA Portal diagnostic tool in the commissioning and productive phase. Alarms are displayed on an operator control and monitoring system. You will thus be able to adapt your plant to new demands and to reduce downtime.

Objectives

• 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
• You can deepen your theoretical knowledge with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7 automation system, ET 200 distributed I/O, Touchpanel, drive, and a conveyor belt model.

Target Group

• Maintenance personnel
• Service personnel
• Operators

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

• In this course you will work with SIMATIC S7-1500 and software SIMATIC STEP 7 based on TIA portal – for SIMATIC S71-1200 we offer the trainings TIA-MICRO1/2.
• This is the first of three courses to prepare you for certification as a "Siemens Certified Service Technician Level 2, based on the TIA Portal". The test will cover content of all 3 courses and will form part of the "SITRAIN Certification Program".

Type

Face-to-face training

Duration

5 days

Language

en

Fee

22,513 ZAR