SIEMENS

SIMATIC TDC Engineering with D7 and CFC (US-PCTDCP2A)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

4 Days
2.6 CEUs

Target Group

- Maintenance
- Programmer
- Commissioning
- Engineer

Short Description

This course is designed for service technicians and commissioning/configuration engineers who are responsible for project maintenance, design, development, and commissioning a TDC system using CFCs. This course provides you with the knowledge for programming and commissioning the control system SIMATIC TDC. After the training, you will be able to configure technological functions with CFC and establish the communication via PROFIBUS, Industrial Ethernet, and GDM-connection.

Objectives

- Obtain help using the online documentation
- Configure rack hardware
- Copy, archive and restore a project
- Configure the PG/PC interface
- Create and edit a program using CFC blocks
- Configure the processing sequence of CFC blocks
- Configure scan times and interrupts
- Create run-time groups
- Save, compile, and load the program to the memory module
- Monitor program and hardware operation using Test Mode
- Create and use reference data for a program
- Convert a task to a program (Chart in chart, chart as block)
- Configure and track global signals and multi-processor signal exchange
- Configure communications to and from peripheral components (ET200, Drives, etc.) using PROFIBUS DP
- Test communications to and from peripheral components
- Trace signals to and from Field interface modules
- Monitor the CPU operating status
- Import and update block libraries
- Configure rack to rack and S7 to rack communications using Netpro
- Configure rack to rack communications using virtual signals and GDM (global data memory)
- Configure pointer-based connections
- Configure communications with WinCC

Content

- Working with the SIMATIC-Manager
- Hardware configuration for the system SIMATIC TDC
- Preparation of CFC charts for this system
- Working with own blocks and chart in chart
- Communication-Hardware and its ranges of application
- Introduction to the communication
- Processor communication
- Getting to know the testing and error indication
- Programming, loading and proof testing of examples for practical training
- Introduction to the communication SIMATIC TDC - WinCC

Mandatory Prerequisites

S7 Programming 1: US-S7TIAP1C

OR

S7 Automation Maintenance 1: US-S7300S1C

OR

SIMATIC S7, Programming with SCL: ST-7SCL

OR

S7 Programming with CFC & SCL: US-S7CFCP1A

Note

Theoretical knowledge will be reinforced with numerous practical exercises using a TIA plant model. This consists of a SIMATIC Technology TDC System, PROFIBUS DP bus and a mix of peripheral devices such as ET200M, MICROMASTER, SINAMICS S120 compact and other test equipment.

Language

English