

SIMATIC S7-1500 with TIA Portal (MFC-S71500)

Objectives

To make participants aware and familiar with:

- SIMATIC S7-1500 automation system
- STEP7 in TIA portal framework
- Troubleshooting of S7-1500 system and related signal modules

Target Group

- Service engineers
- Maintenance engineers

Content

Basic hardware topics:

- System Overview S71500, ET200SP controller, Compact CPU
- Demonstration of Hardware Configuration, Addressing & Wiring of PLC signal modules
- Selecting successor of an obsolete module

Diagnostics from hardware:

- Diagnostics with LEDs on CPU and SM
- Diagnostics with the display in S7-1500

Diagnostics from software:

- Diagnostics in TIA Portal from
- Project navigation
- Inspection window
- Diagnostic buffer
- Task card "online tools"
- Diagnostics using Cross-references, call structure, assignment list, dependency structure
- Memory resource allotment
- Diagnosis of Memory overlap identification
- Diagnostics with Trace analyser function
- Diagnostics with the Web Server
- Diagnosis using Forcing, renaming, and rewiring
- Project comparison
- Project archiving and retrieval
- PLC program upload

General maintenance topics:

- Downloading DB without re-initialization of variables
- Factory reset of PLC
- Firmware update procedure
- Understanding of SIMATIC Automation tool
- Understanding of SIMATIC Notifier tool
- Understanding earthing rules for PLC & modules
- Diagnostics with ESD characteristics in Maintenance

Hands on:

- Task based exercises after each topic

Prerequisites

- Basic know how about automation technology is must
- Basic knowledge of electrical technology and digital electronics
- SIMATIC S7-1500 Basic course is highly recommended

Note

Technical Requirement:

- A Desktop or laptop with Windows 7/10 OS and a stable internet connection. (We recommend a data transfer rate of 5 Mbit/s.)
- Microsoft Team platform for technical presentations.
- TeamViewer platform for Hands-ons

Type

Face-to-face training

Duration

3 days

Language

en

Fee

28,000 INR