SIEMENS

Online Training - SIMATIC S7-300 with SIMATIC Manager (Basic Course) (AS-OL-300B)

Objectives

To make participants aware and familiar with:
- SIMATIC S7-300 automation system
- STEP7 Classic software (i.e. SIMATIC Manager)
- Basic programming concepts in STEP7
- Troubleshooting of S7-300 system

Target Group

- Service engineers
- Commissioning engineers
- Maintenance engineers

Content

Hardware topics
- System overview of SIMATIC controller families
- SIMATIC S7-300 family in detail
- Hardware configuration of S7-300 controller in STEP7
- Module installation and wiring

SIMATIC Manager topics
- SIMATIC Manager i.e. STEP7 Classic software overview
- Licensing concept for STEP7

Software and Programming concepts
- Working with symbol table
- Bit logic instructions
- Concept of RLO
- Logic gates in various programming languages
- Programming rules
- Elementary data types
- Arithmetic and logic operations
- Working with VAT tables
- Analog value processing
- Linear v/s structured programming approach
- Effective programming using function and function blocks
- Use and need of data blocks
- Types of data blocks
- Concept of Organization blocks

Communication - Explanation and demo only
- S7-300 controller with remote station on Profinet(PN)/Profibus DP protocol

Troubleshooting and diagnostic topics
- Significance of LED indication on different modules
- Diagnosis using diagnostic buffer
- Cross-references, call structure, assignment list, dependency structure
- Memory overlap identification
- Project backup
- Forcing, renaming, and rewiring concepts
- Project comparison

HANDS ON
- Application example-based exercises after each topic

Prerequisites

- Basic know how about automation technology is must
- Basic knowledge of electrical technology and digital electronics is essential

Type

Online-Training

Duration

5 days

Language

en