

## SIMATIC S7-400 with SIMATIC Manager (MFC-S7400)

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### Objectives

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#### To make participants aware and familiar with:

- SIMATIC S7-400 automation system
- STEP7 Classic software (SIMATIC Manager)
- Troubleshooting of S7-400 system and related signal modules

### Target Group

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- Service engineers
- Maintenance engineers

### Content

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#### Hardware troubleshooting:

- SIMATIC S7-400 family in detail
- Addressing & wiring of signal modules
- Selecting successor of an obsolete module
- Hardware configuration of SIMATIC controller in STEP7
- Diagnostics with LEDs of CPU & different modules
- Configuration of diagnostic settings in DI, DQ, AI, AQ

#### Software troubleshooting:

- Diagnostics with symbol table
- Diagnostics with VAT tables
- Diagnostics with force table
- Renaming, and rewiring concepts
- Diagnostics with Cross referencing & Program Call structure
- Diagnosis in Memory overlap identification
- Project comparison
- Program Archiving & Retrieving procedure
- Maintain program documentation using PLC Upload method
- Understand the Memory concept of PLC & Checking memory of in-production PLC
- Error interpretation using diagnostic buffer
- Demonstration of general faults related to programming
- Hardware Components & Communication between devices
- Diagnosis of device address identification & their modification using Edit Ethernet Nodes & Accessible Nodes

#### General maintenance topics:

- CPU & modules Firmware upgradation procedure explanation
- Understanding earthing rules for PLC & components
- Diagnostics with ESD characteristics in Maintenance etc.

#### HANDS ON:

- Example-based exercises after each topic.

### Prerequisites

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- Basic know how about automation technology is must
- Basic knowledge of electrical technology and digital electronics is essential
- Should have worked on SIMATIC S7-400 hardware and SIMATIC Manager

### Note

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#### 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-on

### Type

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Face-to-face training

### Duration

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3 days

### Language

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en

### Fee

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25,500 INR  
18% GST additional on course fees

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