# SIEMENS

## SIMATIC S7-300 and WinCC v7.x (CO-300WIN)

### Objectives

OBJECTIVE: To make participants aware and familiar with:
- SIMATIC S7-300 automation system
- STEP7 Classic software (SIMATIC Manager)
- WINCC V7.x as a visualization framework
- Understanding different elements of visual engineering

### Target Group

- Service engineers
- Programmers
- Commissioning engineers
- Maintenance engineers

### Content

**Hardware topics:**
- SIMATIC S7-300 hardware detailed information, protocols, DI/DO module wiring, LED's explanation, front indicators
- Hardware configuration of SIMATIC controller in STEP7

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

**Programming concepts:**
- Working with symbol table
- Bit logic instructions
- 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
- Cross-references

**WinCC V7.x**
- Scope of WinCC V7.x
- License management for WinCC V7.x
- Overview of the software

**Communication**
- Communication with SIMATIC S7-300 on simulator with WinCC V7.x.

**Software and Programming concepts**
- Tag Management
- Program creation
- Testing functions with variable simulation
- Graphic designer
- Alarm Logging
- Tag Logging
- Introduction of User Administration

**Troubleshooting and diagnostic topics**
- Project Backup
- Communication diagnostics
- Cross-references

**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

### Note

**TECHNICAL REQUIREMENT:**
- A computer or laptop with Windows 7/10 OS and a stable internet connection. (We recommend a data transfer rate of 16 Mbit/s.)
- Microsoft Teams platform for technical presentations and demo.
(We recommend using desktop app for best possible use of all functions).
- Goggle Chrome internet browser for assessing virtual lab solution for hands-on

### Type

Online-Training

**Duration**

6 days

**Language**

en