SIEMENS

Corso SIMATIC S7 Service 1. Transizione 5.0 con attestazione finale superamento esame. (IT5P-ST-SERV1)

Short Description

This first component of the SIMATIC S7-300/400 Service course teaches the basic knowledge of the design of automation systems, the configuration and parameterization of the hardware, handling with the SIMATIC STEP 7 V5.x software and the fundamentals of programming. You also get an overview ofSIMATIC HMI systems, PROFIBUS DP and the integration of drives SINAMICS. What you learn about the integrated factory automation will teach you to take a holistic view of your plant and to understand the relationships between components. On completion of the course, you will thus be able to diagnose simple hardware faults or replace modules, to coordinate components optimally, carry our safe fault diagnostics and thus reduce downtimes. The course requires a final examination, which is deemed passed if a minimum of 8 out of 10 points is achieved. Only in this case will a pass certificate be issued with the final result.

Objectives

After attending the course, you can:
- Commission a SIMATIC S7-300/400 PLC system
- Replace SIMATIC S7-300/400 hardware modules
- Diagnose and locate multiple hardware faults using module LEDs and SIMATIC STEP 7 V5.x diagnostic tools
- Troubleshoot and resolve typical software failures using SIMATIC STEP 7 V5.x diagnostic tools
- Understand, change, and expand small programs
- Monitor, modify and force I/O
- Backup and restore an S7 project

Target Group

Maintenance personnel
Service personnel
Operators

Content

- System overview and essential performance features of the SIMATIC S7 system family
- Components of the SIMATIC Manager
- Program execution in the automation system
- Binary and digital operations
- Configuring and assembling an automation system
- Addressing and wiring of the signal modules
- Introduction to LAD, FBD and STL programming languages
- Hardware and software startup of the automation system
- Hardware configuration and parameterization in the case of SIMATIC S7-300
- Introducing the SIMATIC HMI system
- Introducing the SINAMICS drive
- Backing up and documenting executed program changes

Theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-300 automation system, a SIMATIC HMI operator control and a conveyor model.

Prerequisites

SEP course or equivalent basic knowledge of automation systems.

Note

This course is also available in Virtual Classroom mode: E-SERV1.
This course is also avaiable as an evening course: SERV1/S.
In this course, the SIMATIC S7-300 automation system and the SIMATIC STEP 7 V5.x software are used. Redundant systems SIMATIC S7-400H are not covered here.
IMPLEMENTING DECREE AUGUST 2024 :
Transition 5.0: Trailed Expenditure
Energy transition A .5

Type

Face-to-face training

Duration

5 days

Language

it