

# S7 Service & Maintenance Part 3 (ST-7SERV3)

#### **Short Description**

ST-7SERV3 S7 Service & Maintenance Part 3 (Siemens Certified Service Technician)

#### **Objectives**

The third part of the SIMATIC S7 service training is based on the knowledge of the SIMATIC Manager gained in the SIMATIC S7 service courses 1 and 2, including SIMATIC STEP 7, HMI, connection of drives, and PROFINET IO. You will expand your knowledge in terms of program troubleshooting and error handling and learn how to display these errors in an operator control and monitoring system. The basis for this is to also interpret and expand existing programs in the programming languages Structured Control Language (SCL) and S7-Graph. You will set up communication between SIMATIC CPUs based on Industrial Ethernet.

Thanks to this comprehensive understanding, you gain new impetus and ideas to optimize your plant and can thus reduce or eliminate downtime in your entire plant.

#### **Target Group**

Maintenance personnel Service personnel

#### Content

PLC (programmable logic controller) technology

"Start-up of hardware for a PLC and the components of Totally Integrated

Automation

"SIMATIC S7-300 CPU

"Central I/O modules (digital and analog) and their addressing

"Configuration of the distributed I/Os, a drive and an HMI

"Installation guidelines for programmable controllers

"Start-up and enhancement of a PLC program

"Understanding, adapting, and enhancing given STEP 7 programs with sequencers and analog value processing

"Systematically diagnosing and eliminating hardware and software errors in the SIMATIC S7 automation system with the SIMATIC STEP 7 diagnostic tools

"Using logic operations with inputs/outputs and bit memories

"Using memory, timer and counter functions

"Being familiar with data blocks, organization blocks, function blocks and functions

"Using test functions in Structured Control Language (SCL)

Industrial communication

"Configuring and parameterizing the distributed I/Os

Human Machine Interface

"Adapting a WinCC flexible configuration to new conditions by making small modifications and enhancements

Motion control

"Configuring and parameterizing a drive

Hands-on environment

"SIMATIC S7-300, SIMATIC STEP 7 V5.x

"Touch Panel, SIMATIC WinCC flexible

"Micromaster drive

# **Prerequisites**

SIMATIC S7 knowledge corresponding to ST7-SERV2 and practical experience in using the knowledge.

# Туре

Face-to-face training

#### Duration

5 days

### Language

en

## Fee

27,350 ZAR