

## SIMOTION and SINAMICS S120 - Diagnostics and Service (MC-SMO-DG)

### Short Description

In this course, you learn to handle the motion control system SIMOTION and SINAMICS S120 when a fault occurs. You can also adapt the control program when changes are made to the machine.

### Objectives

You are responsible for the reliable operation of the SIMOTION automation system and the SINAMICS S120 drive system. In this course, you learn the proper way to handle systems when a fault occurs. Based on prepared projects, you analyze signal interconnection and programming. Using projects with deliberate faults and errors, you identify and resolve faults. After the course, you can more quickly resolve faults and in a focused fashion. You can adapt the control program when changes are made to the machine.

### Target Group

Service engineers  
Maintenance personnel

### Content

Overview of the modules and components:

- SIMOTION automation system
- SINAMICS S120 drive system

Working with PC programs:

- SIMOTION SCOUT engineering software
- SINAMICS STARTER commissioning tool

Structure and configuration of a SIMOTION project:

- Axes, components and topology
- Drive objects and technology objects

Establishing an online connection via PROFIBUS, PROFINET and Ethernet

Diagnostics with SIMOTION SCOUT and SIMOTION IT web browser

Analysis of enabling signals and signal interconnections

Recording signals with measuring functions and trace

Handling Safety Integrated when service is required

Procedure when replacing modules, motors and encoders

Introduction into programming when making adaptations in the case of service

Integration of SIMOTION SCOUT into the TIA Portal

Practical exercises on training equipment with SIMOTION D, SINAMICS S120, SIMATIC ET200S and SIMATIC TP177B

### Prerequisites

- Basic knowledge of automation with SIMATIC S7
- Basic knowledge of drive technology with SINAMICS

### Type

Face-to-face training

### Duration

5 days

### Language

en