

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

---

### Short Description

---

You are responsible for the reliable operation of the SIMOTION automation system and the SINAMCS S120 drive system. In this course, you learn the proper way to handle systems when a fault occurs. Based on prepared projects, you analyse signal interconnection and programming. Using projects with deliberate faults and errors, you identify and resolve faults.

### Objectives

---

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 Comfort Panels

### Prerequisites

---

A good understanding of basic electrical principles such as voltage, current, resistance, inductance and power.  
A basic ability to use an MS Windows PC, keyboard and mouse to open and close programs, locate files, drag, drop, copy and paste objects/text.  
Basic knowledge of SIMATIC S7 in accordance with the TIA-SERV1 or ST-SERV1 courses.

### Type

---

Face-to-face training

### Duration

---

5 days

### Language

---

en

### Fee

---

3,050 GBP