SIEMENS

TIA-S7-1500-Safety eng (TIA-SAFETY)

Short Description

You will put your theoretical knowledge to use the training system SIMATIC S7-1500F with the STEP 7 Safety Advanced software in practical exercises. Note: course is about MACHINE SAFETY not PROCESS SAFETY

Objectives

The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with SIMATIC STEP 7 and SIMATIC WinCC. In this course, you will learn about configuring, programming, starting up, diagnosing and troubleshooting of the failsafe CPUs of the SIMATIC S7 Safety PLC (no H systems) and the failsafe, distributed ET200 systems.
After attending the course, you can do the following:starting up failsafe CPUs of the SIMATIC PLC
programming of safety-related programs in the languages F-FBD and F-LAD
diagnosing and troubleshooting of safety-related programs.

Content

- Overview and guidelines
- AS S7 Safety (principle, system configuration and I/O)
- Configuring of the failsafe I/O with STEP 7 Safety Advanced
- Programming of a safety-related user program
- Failsafe communication PROFIsafe (CPU-CPU communication, master-slave communication)
- Diagnostics facilities (CPU diagnostics, I/O diagnostics, advanced diagnostics)
- Exercises for I/O configuration, communication, troubleshooting
- Programming examples
- Deeper understanding of contents through practical exercises on the system SIMATIC S7-1500F

Prerequisites

Basic knowledge of SIMATIC S7 according to the courses TIA-SERV2 or TIA-PRO2

Note

The course teaching and material language is English. The material is provided for students in electrical form as pdf document.
Training Devices:
- SIMATIC S7-1500F
- Profinet I/O ET200SP
- Comfort-panel
1 training set / 3 students
PG M6 / TIA Portal Step7 V18
1 PG for every student

Type

Face-to-face training

Duration

3 days

Language

en

Fee

1,320 EUR