

DIGSI 5 - Basics incl. IEC 61850 GOOSE (DIGSI5-BI)

Objectives

Participants will learn the special features of SIPROTEC 5 devices and learn how to use the DIGSI 5 operating program. The participant is thus qualified to do the following:

- Planning & operation of SIPROTEC 5 devices
- Making protection settings in SIPROTEC 5 devices
- Parameterize control functions in SIPROTEC 5 devices
- Testing of SIPROTEC 5 devices

Target Group

Employees from the utility and industrial sectors who deal with the planning, parameterization, commissioning and operation of SIPROTEC 5 devices.

Content

- Introduction to the hardware and function group concept
- Basic functions of SIPROTEC 5
- Hardware overview
- Software components
- Communication concept
- Function groups and application templates
- Modularity of the hardware and the protection and control functions
- Determination of the order numbers with the SIPROTEC 5 online configurator
- DIGSI 5: One tool for all business processes
- Creating a single-pole diagram of a typical high voltage switchgear
- Parameterization of the analog measuring points for SIPROTEC 5
- Parameterization of the measuring transformer data
- Assignment of binary inputs and outputs to logical messages / functions
- Creation of display pages and user message lists
- Create and check logic functions with CFC
- Parameterization and testing of protection and control functions
- Control of switchgear, interlocked/non interlock control, local/remote
- Evaluation of information via log files and fault records
- Addition of function points
- Basics of communication networks and systems in substations with Ethernet and IEC 61850 (TCP/IP; IEC 61850 Model)
- Structure of Ethernet communication networks (topology, architecture, components, addressing)
- IEC 61850 redundancy concepts with RSTP, PRP and HSR protocol
- Structure of the substation communication bus IEC 61850 profile
- Implementation of IEC 61850 communication with the Digsi 5 and the system configurator
- Overview of IEC 61850 Edition 1 and Edition 2
- GOOSE communication between SIPROTEC 4 and SIPROTEC 5
- Online test for commissioning the SIPROTEC 5 devices: Check inputs/outputs
- Monitoring of the GOOSE messages
- GOOSE communication between Siprotec 5 devices and third party devices
- Practical exercises on all topics with a helpful DIGSI 5 exercise guide
- Commissioning, testing and diagnostic of IEC 61850 communication networks
- Practical exercises with DIGSI 5 and SIPROTEC Digital Twin

Prerequisites

- Basic knowledge of electrical engineering.

Note

- Theory/Praxis: 20/80 %

This training can be booked as [VIRTUAL CLASSROOM Training](#) too.

CONTACT

If you have any questions, please directly contact the **Power Academy Vienna**
power-academy.at@siemens.com
Mrs. Monika Schuecker
monika.schuecker@siemens.com
+43 51707 31143

Type

Face-to-face training

Duration

5 days

Language

en