

## IEC 61850 Basics, Application and Testing

**Summary:** Get a thorough introduction to the IEC 61850 standard in a combination of theoretical and hands-on sessions. Get familiar with the IEC 61850 implementation in IEDs from different manufacturers. Learn how to efficiently test IEC 61850 substations with the CMC test system, IEDScout and SVScout.

**Products:** CMC-Family

**Prerequisites:** Basic knowledge of electrical engineering

**Duration:** 3 days

**Language:** English

**Code:** C.0055.AAX



### Objectives

- > Designing and analyzing IEC 61850 based communication systems
- > Using the client/server, GOOSE and sampled values services for power utility automation
- > Configuring the communication according to the IEC 61850-6 standard
- > Performing commissioning and functional testing of IEC 61850 based IEDs and systems



### Content

- > Basics of IEC 61850
- > Data models and services
- > Specific communication mappings
- > Configuration and engineering
- > Basic aspects for designing communication networks
- > Client/server communication for SCADA applications
- > GOOSE analyses and applications
- > Sampled Values basics
- > Engineering of an IEC 61850 application
- > Hands-on testing of IEC 61850 IEDs and systems



### Products

- > IEDScout, SVScout, GOOSE Configuration module, Sampled Values Configuration module
- > ISIO 200
- > CMC test sets with Ethernet adapter



### Audience

Technical staff from electric utilities or companies involved in project planning, commissioning or maintenance of IEC 61850 systems