

# IEC 61850 In Substation Communication

The aim of this course is to teach participants how to connect REF 543 to MicroSCADA and REF 542plus to COM600. The participants will complete example projects with IEC 61850 and become familiar with software and hardware required for vertical and horizontal communication.

## Objectives

After this course the participant will be able to:

- understand the basics of IEC 61850 standard in regard with the products provided by ABB Distribution Automation
- use communication configuration tools, e.g. IEC 61850 OPC Server, Communication Engineering Tool, REF 542plus SCL Tool, etc
- build vertical and horizontal communication
- get an overall picture of substation configuration using IEC 61850

## Participant profile

Engineers who want to learn the basics of substation communication and who want to build a system, where MicroSCADA, COM600 and ABB relays communicate with each other using IEC 61850.

## Prerequisites

Basic knowledge of MicroSCADA, COM600, REF 542plus and REF 543 or knowledge corresponding to courses P281, P284, P240, P236 and P233.

## Topics

- IEC 61850 standard description
- Products and software used in ABB Distribution Automation
- Engineering SPA-ZC 400
- Configuration Tools
- Vertical communication using REF 543 and MicroSCADA
- Horizontal communication using GOOSE
- REF 542plus configuring with IEC 61850
- Connecting REF 542plus to COM615

Course Code	P246
Duration	2 days
Course Fee	1 000 EUR
Language	English
Registration	For registration please contact Vaasa.ABBuniversity@fi.abb.com