The aim of this course is to familiarize the participants with the operation and setting of RED 500 terminals (e.g. REF 541/543/545, REM 543/545 and RET 543/545) by using REF 543 and CAP 501.

## **Objectives**

After this course the participant will be able to:

- perform all the basic operations from the front panel of the terminal
- handle events and alarms locally and from the setting tool
- manage relay settings with CAP 501 tool
- import, export and modify relay settings
- upload disturbance recordings and see the curves

## Participant profile

System engineers, maintenance engineers, substation operators and persons who would like to learn how to operate the terminal and set relay parameters

Course Code	P232
Duration	1 day
Course Fee	500 EUR
Language	English
Registration	For registration please contact
	Vaasa.ABBuniversity@fi.abb.com

## **Prerequisites**

Basic knowledge of protection relays and the electrical network to be controlled.

## **Topics**

- Introduction to RED 500 terminals (REF, REM, RET)
- Functionality and principles of the terminals
- HMI (Human Machine Interface)
- Setting the terminals (via HMI and CAP 501 tool)
- Setting and uploading Disturbance Recorder
- Communication basics