



Online-Course: Cybersecurity in Digital Substations



1 days



English



oCcys01en

A well-balanced mix of presentation and live demonstration by our trainer will familiarize you with the basic terminology of Cybersecurity and their relevancy in digital substations. Get an overview on cyber threats in substations and the countermeasures. You will learn how the networks of the substations can be invaded and how protection and control units can be affected. How this can be countered with the Intrusion Detection System (IDS) StationGuard will be the main topic of the course. Learn how to detect threats, understand alarms and monitor your network with StationGuard.

Objectives

- Understand the basics of Cybersecurity
- Learn how cyberattacks in digital substation are operating
- Get to know the most important preventive measures and choose adequate countermeasures
- Learn what to consider when dealing with OT Cybersecurity
- Understand the contribution of IDS in substations
- Get to know the operating principle of StationGuard
- Become familiar with parameterization and usage of StationGuard

Content

- Introduction to Cybersecurity
- Cybersecurity in my own working environment
- Lessons learned from latest cyber-attacks
- Frame Conditions (e.g. ISO 27000, NIST Framework...)
- Differences and requirements in OT Security
- Attack vectors of a typical substation
- Countermeasures for common attack vectors
- Application of Intrusion Detection Systems (IDS) in substations
- Characteristics of applying IDS in substation
- Usage of StationGuard: integration, functional monitoring, detection of cyber threats
- Hands-on for StationGuard: configuration, understanding alarms, assigning roles, asset management and SIEM integration, live hack

Solutions

StationGuard, RBX1

Audience

OT and IT Substation
Cybersecurity Engineers,
Management and Architects

Prerequisites

Basic knowledge of digital
substation architecture and
network technology

Implementation

This course takes place entirely online. From your desk, you participate in sessions with our trainer. Innovative tools and methods allow you to actively participate and interact with both the trainer and the course participants. Subsequently, comprehensive practical parts on our digital substation will enable you to apply the knowledge you have learned during the theoretical sessions. For this, you will connect in small groups directly to our training room via remote access.

Structure

- > Introduction round
- > Theory session
- > Practical session
- > Lunch break
- > Theory session
- > Practical session
- > Question and Answer session and discussion

A detailed agenda will be provided shortly before the training starts.

Your Tools

- > Computer/Laptop with Internet access
- > Headset
- > Webcam
- > Cisco Webex access (provided by OMICRON)

