

OT Security with TIA Portal: Protection for Industrial Automation (TIA-OTSEC)

Short Description

The training provides an overview of protection concepts against current cyber threats in industry and how industrial plants and machines can be effectively protected using a comprehensive approach. The participants should learn how and which security measures can be implemented using concrete examples using the security portfolio of Siemens Digital Industries (DI). Practical exercises in TIA Portal allow participants to better understand the concepts and apply them directly.

Objectives

In the course, participants will gain an understanding of the countermeasures and portfolio elements that can be used to protect industrial plants and machinery against cyber threats.

Target Group

- Machine builders, system integrators, plant operators
- Cybersecurity officers, those responsible for cybersecurity
- Project manager, project staff
- Technologists
- Project planners, programmers
- Commissioning engineer

Content

- Awareness and understanding of cyber security threats & risks for industrial production facilities
- Demonstration of security concepts, standards and best practices adapted and optimized for the industry based on use cases and by using the automation portfolio of Siemens Digital Industries.
- How the integrated security functions in the DI Security Portfolio can be configured and used in combination with a holistic security concept.
- What does the Defense in Depth security concept include?
- Getting started with user administration with TIA Portal
- Controller security – System integrity for SIMATIC Controllers
- An introduction to authentication and encryption mechanisms
- Secure communication mechanisms of the SIMATIC CPU S7-1500
- Network security – the cell protection concept and the implementation of remote maintenance access
- Plant security – physical and organizational security measures
- Drives – Hardening

Included in the course price: Free access to the digital learning platform [SITRAIN access](#) – starting one week before the start of the course until two weeks after the end of the course. Here you will find web-based trainings on [Protecting Industrial Networks](#) as well as other topics such as [Industrial Security](#), [Industrial Automation Systems SIMATIC](#) and many more. With the Learning Membership, you can deepen or repeat the content of this learning event as well as continue your education on other interesting topics.

Prerequisites

- Basic knowledge about industrial automation
- Basic knowledge about industrial communication
- Basic knowledge in SIMATIC TIA Portal Step 7

Note

The Learning Membership starts 7 days before the start of the course and ends 14 days after the end of the course. During this period, you have access to all available web-based trainings.

Type

Face-to-face training

Duration

3 days

Language

en