

## Monitoring and Configuration of Industrial Networks (IK-MONCON)

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### Short Description

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The complexity and number of participants in Ethernet-based production networks are constantly increasing due to growing requirements. Given that production losses can result from the failure of individual device in such networks, it is critical to maintain transparency through continuous network monitoring.

In this course, participants will learn how to use the network monitoring and configuration system SINEMA Server to monitor, diagnose and document their network from a central location, as well as to plan, implement and maintain their network monitoring solution.

Through in-depth practical exercises you will put the theoretical knowledge into practice.

### Objectives

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At the end of the course, participants will be familiar with the requirements and solutions for monitoring industrial networks with SINEMA Server, and will be able to monitor, diagnose and document industrial networks with SINEMA Server.

### Target Group

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- technical Sales Personnel
- Plant Engineers
- Control Engineers
- System Engineers
- Commission Engineers
- Application Engineers
- Service and Maintenance Personnel
- Operations or IT Network Engineers
- Facility Managers

### Content

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- Fundamentals of network monitoring
- Documentation and inventory of networks to create transparency
- Detection and diagnostics of network events
- Customized and clear depiction of the monitored network
- Evaluation and optimization of the network performance
- Integration of the network monitoring data into a higher-level HMI system
- Monitoring of third-party devices (manufacturer-independent network monitoring)
- Implementation of simple network configurations with SINEMA Server
- Mutual monitoring of multiple SINEMA Server instances
- Practical exercises

### Prerequisites

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Knowledge in accordance with the course "Ethernet Fundamentals in Industrial Networks (IK-ETHBAS)":

Participants should be familiar with topologies, transmission methods, addressing and transport of data, and understand the associated technical vocabulary. It is also helpful to be familiar with the functionality of routers and switches, as well as the OSI reference model.

### Note

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Certification (Siemens CEIN-LEVEL):

Following the training, there is an option of taking a certification test. This test is part of the certification to become a "Siemens Certified Expert for Industrial Networks", which consists of several individual tests.

Please note that before the examination you have to identify yourself by showing a valid photo identification.

### Type

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Face-to-face training

### Duration

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3 days

### Language

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