

## Industrial Networks Education

# Network Monitoring and Configuration SINEC NMS with SCALANCE

### General Information

Course Code: IEN-IKMONCS  
Length: 3.5 Days

### Audience

This course is for users who are involved with developing or sustaining automation networks in an industrial environment. This includes, but is not limited to the following:

- Plant Engineers
- Control Engineers
- System Engineers
- Commission Engineers
- Application Engineers
- Operations or IT Network Engineers
- Facility Managers
- Project Engineers

### Prerequisites

- Knowledge in accordance with the course "Fundamentals of Industrial Networking" (IEN-NETFUND1A).
- Participants must be very familiar with topologies, transmission methods, addressing and transport of data in industrial networks and understand the associated technical vocabulary.
- Ideally, participants should have practical experience in the field of industrial networks.

### Profile

This course is one of Siemens Industrial Networks Education Courses, available for engineers looking to obtain this Certified Professional for Industrial Networks (CPIN) designation.

Throughout the course, students will have ample time for practical exercises, diagnostics, and troubleshooting. The course uses a hands-on model for realistic demonstrations.

### Objectives

*Upon completion of this course, the student will learn:*

- How to use the network monitoring and management system SINEC NMS to monitor, document and configure their network from a central location.
- How to plan, implement and maintain their network management solution.
- What the requirement and solutions are for monitoring and managing industrial networks with SINEC NMS.

### Topics

1. Fundamentals of network monitoring
2. Documentation and inventory of networks to create transparency
3. Detection and diagnostics of network events
4. Customized and clear depiction of the monitored network
5. Evaluation and optimization of the network performance
6. Monitoring of third-party devices (manufacturer-independent network monitoring)
7. Central user management with UMC (User Management Component)
8. Integration of the network monitoring data into a higher-level HMI system
9. Implementation of policy-based network configurations with SINEC NMS
10. Central Firewall- and NAT-Management
11. Network monitoring with multiple SINEC NMS Operations