

## Diagnose und Optimierung von Industrial Wireless LAN (IK-IWLANA)

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### Short Description

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The functionality and reliability of WLAN networks are always dependent on the structural environment as well as other sources of interference such as neighboring wireless applications. Due to these locally individualized and ever-changing environmental parameters, WLAN solutions - unlike wired networks - are not 100% predictable. There is always the possibility that adaptations must be made during the commissioning and operation of wireless networks.

Especially in mission-critical and industrial applications, where availability and reliability of a network play central roles, it is crucial to understand that industrial WLANs can only be diagnosed and optimized through a holistic approach.

In this course, participants will learn about the techniques and methods for diagnosing industrial wireless networks, as well as eliminating interference and error sources.

Practical exercises as well as corresponding checklists complete the course.

### Objectives

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After the training, participants will be able to properly assess wireless signals. Furthermore, participants will be familiar with the tools and parameters that can be adapted to ensure the required performance of the network.

### 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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- Introduction to holistic diagnostics
- Clarification or repetition of technical terms
- Preparation and survey of the physical structure
- Introduction to wireless field diagnostics
- Procedure for device diagnostics
- Introduction to network diagnostics
- Comprehensive exercises
- Practical exercises

### Prerequisites

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Knowledge in accordance with the course "Wireless LAN in Industrial Networks":

Participants must be very familiar with topologies, transmission methods, addressing and transport of data, and ideally possess practical experience in the field of industrial WLANs.

Knowledge of the ISO / OSI model as well as the functionality of common network devices.

### [IK-ETHBAS](#)

To prepare for the training, please work through the WBT [Data communication with Industrial Ethernet](#).

### 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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2 days

**Language**

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