

## Online: OPC UA - Grunnleggende kunnskap og konfigurering (IK-OPCUA1)

### Short Description

This training offers you a detailed introduction into the basic concepts of the OPC UA system and its interfaces. You will learn the terminology behind the abstract model and test and deepen your understanding of it with several OPC UA capable components. You will learn about the most important OPC UA servers and clients in the SIMATIC product portfolio and will configure and program them in practical exercises. A continuous exercise concept will lead you gradually to a communication model that is solely based on OPC UA communication.

As a part of this training, you will receive free trial to the digital learning platform SITRAIN access. This gives you access to many web-based training courses 7 days before the start of the course and the test period ends automatically 14 days after the end of the course. [Mer information om SITRAIN access](#)

In SITRAIN access you will find web-based trainings on SIMATIC OPC UA as well as other topics such as Industrial Communication, SIMATIC Automation Systems and many more. As an introduction to the digital learning platform, we recommend the following learning paths:

[SIMATIC OPC UA](#)

[Industrial Communication](#)

[SIMATIC Automation Systems](#)

### Objectives

At the end of this training you will be familiar with the basics, the terminology and the data models of OPC UA in the automation environment. You will understand the interaction of its components and be able to configure the most important OPC UA servers and clients of the SIMATIC product portfolio and program an S7-1500 OPC UA client.

### Target Group

- Automation engineers
- Programmers
- Commissioning engineers

### Content

- Introduction to OPC
- Infrastructure of OPC UA
- Security of OPC UA
- Information model, data access types and profiles of OPC UA
- SIMATIC S7-1500 controller as OPC UA server and client:
  - Configuring the OPC UA server
  - Programming OPC UA methods
  - Programming an OPC UA client
- OPC UA Companion Specifications and modeling the server interface with SiOME
- SIMATIC HMI products as OPC UA servers and clients:
  - SIMATIC HMI Comfort/Mobile Panel
  - SIMATIC WinCC Runtime Advanced
  - SIMATIC WinCC Runtime Professional
- SIMATIC NET OPC Server
- SIMATIC Ident RF600 Reader as OPC UA server
- Integration of 3rd Party OPC UA servers using a 2D code reader
- Standard OPC UA clients (UaExpert, OPC Scout)
- Performance of OPC UA connections
- Diagnostics and debugging of OPC UA components
- Migration from OPC Classic to OPC UA

### Prerequisites

- Basic knowledge of network engineering
- Knowledge according to TIA-PRO1 or TIA-SERV1

### Note

Documentation in English.  
Register in the calendar at the latest one week before the training starts.

**Type**

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Face-to-face training

**Duration**

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4 days

**Language**

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no

**Fee**

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24,600 NOK