

## OPC UA System (IK-OPCSYS)

### 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.

### 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.

Combine your course with web-based trainings on our digital learning platform for industry and thus increase your personal learning success in the face-to-face course. On SITRAIN access you will find further topics, for example, TIA Portal, PROFINET or data communication with Industrial Ethernet, digitization, ...

As part of your course booking, you will receive free test access for the digital learning platform:

[Click here for information about SITRAIN access](#)

You have access to over 270 web-based training 7 days before the start of the course. The test period automatically ends 14 days after the end of the course.

As an introduction to the digital learning platform, we recommend the following learning path:

[SIMATIC OPC UA Curriculum](#)

### 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 controllers as OPC UA servers and clients: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 clientsSIMATIC HMI Comfort/Mobile Panel  
SIMATIC WinCC Runtime Advanced  
SIMATIC WinCC Runtime Professional  
SIMATIC NET OPC Server  
SIMATIC Ident RF600 Reader as OPC UA server  
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

The Learning Membership starts 7 days before the start of the course and ends 16 days after the end of the course. During this period, you have access to all of the more than 270 web-based trainings available.

### Type

Face-to-face training

### Duration

4 days

**Language**

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en

**Fee**

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2,250 GBP

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