

## Online-Training - OPC UA with SIMATIC Controllers (IK-OPCCTRL)

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### Short Description

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OPC UA is an open standard for horizontal machine-to-machine communication (M2M) and vertical communication from machine to cloud. It is manufacturer- and platform-independent, supports extensive security mechanisms and can be optimally combined with PROFINET in a common Industrial Ethernet network. This training teaches you the basics of OPC UA and enables you to use OPC UA with SIMATIC Controllers.

### Objectives

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You can configure SIMATIC S7-1200 and S7-1500 Controllers as OPC UA servers and program OPC UA clients in SIMATIC S7-1500 Controllers. You can secure OPC UA communication with encryption and authentication and create simple server interfaces with TIA Portal. You will deepen your theoretical knowledge through numerous practice-oriented exercises in our virtual exercise environment Virtual Lab.

### Target Group

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- Automation engineers
- Programmers

### Content

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- Basics of OPC UA
- Configuring OPC UA servers
- Programming methods
- Securing OPC UA communication
- Modelling server interfaces with TIA Portal
- Programming OPC UA clients

This course includes a 4-week Learning Membership for our digital learning platform [SITRAIN access](#). Here you will find web-based trainings on [SIMATIC OPC UA](#) as well as other topics such as [Link to curriculum or catalog](#), [SIMATIC Automation Systems](#) and many more. With the Learning Membership, you can deepen or repeat the content of this learning event as well as continue your education on other interesting topics.

### Prerequisites

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- Basic knowledge of networks
- Knowledge according to [TIA-PRO2](#)
- Basic knowledge of SCL
- [Technical requirements](#)

### Note

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Are you looking for a course that dives deep into the OPC UA specification and is not limited to controllers? Then take a look at our [OPC UA System Course](#).

The Learning Membership starts 7 days before the start of the course and ends 14 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

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Online-Training

### Duration

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2 days

### Language

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