

Price List



Price List OPC Unified Architecture Workshops, valid from January 01, 2021

The prices for classroom course include training, course hand-outs and refreshments during breaks and lunch. All workshops are held in English unless all participants prefer German.

Schedule: <https://www.unified-automation.com/services/training/schedulelocations.html>.

Due to the Covid-19 pandemic we offer our courses ONLINE. This is also possible for individual and company specific training including programming workshops where we use sophisticated e-learning platform, providing preinstalled Visual Studio build environment. The classroom course requires you to bring your laptop with pre installed build environment. Please contact us for details.

Regular Training	Participation Fee ⁽¹⁾
OPC UA Quick Overview (half day)	€ 395,-
OPC UA Basic Introduction (one day) ⁽²⁾	€ 650,-
OPC UA Introduction Seminar (two days)	€ 995,-
Development of Applications for OPC UA (two days) ⁽³⁾	€ 995,-
Compact Jumpstart OPC UA (three days) consists of	€ 1.645,-
<ul style="list-style-type: none">• Compact Introduction (one day)• Development of Applications for OPC UA (two days) ⁽³⁾	

(1) Per person, all prices exclude tax.

(2) online course split in 2x half days

(3) using C++ SDK or .NET SDK

Unified Automation must have received your written registration at least ten business days before the course begins. Every registration will be confirmed by us in writing and becomes binding for both parties upon confirmation. Unified Automation reserves the right to cancel or reschedule the course at least ten business days before the intended start. Registered participants may cancel no later than ten business days before the beginning of the course without incurring any costs. Online course maybe cancelled/rescheduled 5 business days before.

Individual Training (company related, in-house, tailored content)

The price includes the training and general training material. The infrastructure for the execution of the training is provided by the customer.

Individual Training	Price ⁽¹⁾
Base price per day The base price includes 4 participants	€ 2000,-
Price per day and participant starting with 5th participant	€ 300,-
Travel costs based on time and material ⁽²⁾ travel time is calculated with 50,00 €/hour, ticket cost for train, flight and hotel are calculated plus 20% booking service charge, kilometres are calculated with 50ct per driven kilometre	according to effort

(1) All prices exclude tax.

(2) not required for online training

General Conditions

Incidentally the "General Conditions for the Supply of Products and Services" (AGB) are applied in the version of May 2003.

Unified Automations training program is conducted by our partner ascolab. Ascolab's main activities are manufacturer and industry independent consulting, design and development services regarding OPC based solutions. From the very first beginning, ascolab was and still is part of the core development group of OPC Unified Architecture. The team is involved in the specification work of various OPC Foundation core working groups, including many Companion Specifications and harmonization efforts, furthermore ascolab was leading development group of the official OPC Foundation ANSI C Communication Stack. We offer seminars and workshops to allow you to profit from the experience of over fifteen years of OPC UA definition, evaluation and product development.

OPC Unified Architecture Quick Overview (half day)

This ½-day **online** seminar gives a general overview on the OPC UA technology. It starts with the motivation for OPC UA and gives an overview of the different aspects of OPC UA from the different communication mechanisms to the information modelling capabilities, without going into the technical details. It includes an online demo of OPC UA applications.

The following topics are targeted in the Seminar:

- OPC UA general overview
- Different communication mechanisms
- Information modeling capabilities
- General applications and use cases
- Demonstration of selected functionalities

The target group are decision makers like product managers, program managers or CTOs as well as end users, system integrators, testers, technical writer, data analysts, etc. who want to get a first impression of OPC UA.

OPC Unified Architecture Basic Introduction (one day)

This one-day (2x ½-day) **online** seminar gives a basic introduction in the OPC UA technologies. It starts with a half day Quick Overview as describes above. On the second half day we look into the use cases of different domains and their standardized information models and we consider the OPC UA features needed for the task including test and certification.

The following topics are targeted in the Seminar:

- OPC UA Quick Overview
- Overview on use case and domain specific standardized information models
- How to define and determine needed OPC UA features
- Verification and certification of OPC UA features
- Short demonstration on Information Model based application generation
- Practical view on commissioning OPC UA applications, security and discovery mechanism

The target group are decision makers like product managers, program managers or CTOs as well as end users, system integrators, testers, technical writer, data analysts, etc. who want to get a first impression and practical view on OPC UA.

OPC Unified Architecture Introduction Seminar (two days)

This two-day seminar gives a detailed introduction to the base concepts of OPC Unified Architecture and provides a comprehensive, detailed overview on the relevant aspects of OPC UA. In addition to the pure theory we include technology demonstrations and small information modelling exercise. We focus on the two main features: generic modelling of data and platform independent transport of data and how to migrate existing applications to OPC Unified Architecture.

The following topics are targeted in the Seminar:

- OPC UA Basic Introduction
- Architecture of OPC UA
- Communication Protocols
- Client/Server and Publish/Subscribe
- Information Modeling
- UA Services for accessing information
- Data Access, Alarms & Conditions, Historical Access
- Commissioning: Security & Discovery
- Companion Specifications of various domains

The target group are development managers, software architects, technical managers, developers, testers and product managers. Available as **online** and **classroom** course.

Development of Applications for OPC UA (two days) using C++SDK or .NET SDK

In this two-day workshop, students learn to create their own OPC UA Server and Client applications by implementing the main features in sample OPC UA client and server applications. Sample applications are developed using Unified Automation C++ or .NET based OPC UA SDK, adding the most important OPC UA features step-by-step. Students can use this knowledge to create their own application or system using OPC UA.

Students will learn to:

- Create a UA Server address space
- Connect a UA Client and navigate through the Server address space to find information
- Reading and writing of data
- Creation of subscriptions to monitor data changes and events
- Using UA methods

The target group are developers and software architects who already use or are going to use the Unified Automation .NET based or the C++ based OPC UA SDK/Toolkit. The workshop requires base knowledge in object oriented software development and C++ or C#. Not for beginners, participants not familiar with OPC UA technology and terminology should attend the two-day OPC UA Introduction Seminar before. Available as **online** and **classroom** course.

Compact Jumpstart Hands-On Classes for OPC UA (three days)

This three-day compact training is especially suitable for jumpstart on OPC UA. It addresses developers who want to quickly develop OPC UA Server and Client products. After short intensive introduction participants will start creating their own UA Server and Client you will get a deep insight in the UA technology. During the course students will use the C++ based or the .NET based OPC UA SDK and will learn everything that is required to build UA products based on Unified Automation Toolkit.

Students will learn to:

- Compact OPC UA introduction
- Create OPC UA Client application
- Create OPC UA Server application including full featured address space
- Using subscriptions to monitor data changes and events, and UA methods
- Using UaModeler for code generation and information modelling
- Considerations on finalizing the application

The target group are developers and software architects. The workshop requires base knowledge in object oriented software development and the programming language to be used. Not for beginners. Available as **online** and **classroom** course.

Individual Training (company related, in-house, tailored content)

Based on the content of Unified Automation's OPC training courses, we can tailor the in-house training to your company's requirements. The training will take the participants' background knowledge into account and will focus on company and product related use cases. After an introduction to OPC UA technology, you will have the opportunity to discuss project specific requirements, you can design specific OPC UA information models for your system and you can start to develop a sample project together with our seminar leader.

In the individual training course, we offer customized company training. If you want to ramp up your team, or look deeply into OPC UA Information Modelling and Companion Specifications we can provide the best in class expert knowledge. This training is mostly a mixture of building up knowledge and individual consulting.

Students will learn to:

- Based on the OPC Unified Architecture training courses offered
- tailored special training packages
- Considering your requirements and prior knowledge
- Discuss project-specific requirements
- Design information models specifically for your system
- Develop a sample project together with the seminar instructor

The individual training is available **online**, but also **on-site**. Our experts can do the training in English or in German language. Reduce your travel costs and benefit from our extensive OPC UA know-how by focusing individually on your requirements.

Please contact us for individual offer and content of your individual training.

Mail to: sales@unified-automation.com

Registration



Fax: +49 911 495 25009
Email: sales@unifiedautomation.com

Unified Automation GmbH
An der Kaufleite 34
90562 Kalchreuth
Germany

I am registering for the following Seminar / Workshop / Training:

Title: _____

Date: _____

Location: _____

Language: _____

Programming Language: C++ C#.NET

Important: All workshops are held in English unless all participants prefer German.

Name Attendee: _____

Email Attendee: _____

Phone: _____

Fax: _____

Company Name _____

Company Address: _____

Invoice Address (if different): _____

Purchaser (if different): _____

Date / Signature _____

Additional Attendees: _____

(Name, Email) _____

The prices include training, course hand-outs and refreshments during breaks and lunch. Unified Automation must have received your written registration at least ten business days before the course begins. Every registration will be confirmed by us in writing and becomes binding for both parties upon confirmation. Unified Automation reserves the right to cancel or reschedule the course at least ten business days before the intended start. Registered participants may cancel no later than ten business days before the beginning of the course without incurring any costs.

Incidentally the "General Conditions for the Supply of Products and Services" (AGB) are applied in the version of May 2003.