

## PT 205 | SILworX<sup>®</sup> - HIMax<sup>®</sup> Engineer Part 1 plus communication basic

### Course Content

#### The HIMax system family

- Redundancy concepts
- Power supply
- Structure of base plate
- System bus
- I/O redundancy
- First start-up
- Communication module
- Safety concepts of I/O module
- Module replacement
- Diagnosis during operations
- Procedures in the event of a fault

#### SILworX programming tool

- Essentials of IEC 61131-3 basic standard
  - Data types
  - Variable types
  - Functions and function blocks
- Structure of projects
- Definition of resource types
- Program structure
- Programming exercises
- Copying objects
- Testing in offline simulation
- Configuring communication to PES
- Code generation
- Loading and starting PES
- Online functions
- Forcing of signals
- Diagnostic display and fault notifications
- Configuring safety parameters
- Designing and adapting documentation
- Revision compare
- Basics of communication with **safeethernet** and Modbus



### Engineering HIMax systems with SILworX

The HIMax system is programmed and configured using the SILworX programming tool. The course starts with an introduction of system family HIMax and options for implementation and operation. Then the handling of SILworX will be discussed extensive in all major parts. Here the participants will get a deep understanding starting with programming techniques via generation of project up to test and diagnosis possibilities. Also the implementation of safety requirements will be discussed in detail. Training will be supported by practical exercises using projects in HIMax systems. Upon successful completion, every participant will be able to generate projects in SILworX and implement HIMax systems on-site and are able to independently engineer and operate the communication between HIMax systems and between HIMax systems and third-party systems.

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## Dates in 2017

Date	Location	Country	Language
26.06. - 30.06.2017	Brühl*	Germany	English
16.10. - 20.10.2017	Brühl*	Germany	English

\* 68782 Brühl near Mannheim

## Participant profile

- Operating staff
- Planning staff
- Commissioning staff

## Participant requirements

- Knowledge of how to work in Windows-based programs
- Knowledge of logic elements (truth table)
- Basic experience in programming with a programmable logic controller is advantageous

## Theory and practice

The course contains both theoretical and practical components. During practice sessions, a test system (programming system and hardware) is available for every two participants.

## Tailored training

- Implementation of participant-group projects as programming examples
- Course also possible on-site when space and appropriate technical equipment are available
- Individual course focus possible for closed groups
- Price upon request

## Further courses on this subject

- SILworX – HIMax Engineer Part 2 ( PT 255) – 2 days
- SILworX – HIMax Communication safeethernet/OPC ( PT 261) – 1 day
- SILworX – HIMax Communication Modbus ( PT 262) – 1 day

## Duration

- 5 days,
- Monday, 1:00 pm until
- Friday, 3:00 pm

## Number of participants

- Min. number of participants: 4
- Max. number of participants: 8

## Prices 2017

- 2.180,- € per person

## Services

- Paper copies of training documentation
- Electronic storage of training exercise projects
- Refreshments and lunch
- Arrival day: Sandwiches

## Registration and contact

General terms and conditions as well as registration at

[www.hima.com/Lifecycle\\_Services](http://www.hima.com/Lifecycle_Services)

or using our registration form.

For any other questions please contact

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