



## SimTalk training

This course is designed for plant simulation users who have little or no programming experience. It will communicate the fundamentals of programming, offer practice working with different data sources, and develop basic skills for creating user interface elements. All the exercises relate to use cases from simulations, which are required on a daily basis in a variety of forms.

## Course Content

### SimTalk Syntax

- Comments, variables, data types
- Operators, branches, cases
- Loops, methods and functions
- Methods for text processing, mathematic methods

### Introduction into Object Oriented Programming (OOP)

- Classes and objects, instantiation
- Constructor/ destructor
- Extension of classes
- Visibility and inheritance
- Creation of user defined libraries

### Connection between simulation and method calls

- Sensors, observer, standard-controls
- Drag and Drop-controls
- The method methCall, recursion
- Wait, waituntil, stopuntil

### Test procedures and debugging

- Breakpoints, debugger
- Profiler, optimization of the runtime behavior

### Working with lists and tables

- Arrays, list- und table- data types, list-objects
- Write, read, change, delete data
- Working with nested tables
- Data import and export

### User interface elements and dialogs

- Button, list and checkbox
- Create custom dialog boxes
- Programming of Call-Back-Methods
- Message- and input boxes

Participants should have gained some initial experience with Plant Simulation.

The training course is based on the following book:

Tecnomatix Plant Simulation (Springer, 2015, ISBN: 978-3-319-19502-5)

### Duration:

4 days

### Costs:

3.400 € \*

### Location:

On-site in your company

\* The price does not depend on the number of course participants and includes all travel expenses.

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