## 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)