

1. Schedule: Plant Simulation basic seminar

Day 1: Plant Simulation, the introduction

We take the first steps in Plant Simulation, create new models and create our own libraries.

At the end of the day...

- ... you know which questions can be answered with a simulation in Plant Simulation.
- ... you know the best model structure to react as flexible as possible to changes.
- ... you can create your own building blocks and use them repeatedly.
- ... you have conducted experiments and can interpret the results.

Day 2: Data, disturbances, personnel

We complete our example model and get to know all elementary building blocks for it. In order to depict reality, we deal with disturbances and involvement of personnel.

At the end of the day...

- ... dealing with personnel is no problem for you.
- ... you can manage data clearly in tables.
- ... you have learned how to represent disturbances in the simulation and what influence these random processes have.
- ... you have your own simulation model that you can use again and again later.

Day 3: What to do if the standard objects are not sufficient?

We have reached a point where standard objects in Plant Simulation are not sufficient. Therefore we create building blocks with their own logic and individual behavior. The programming language Simtalk is learned and applied.

At the end of the day...

- ... you know how to implement new functions in the simulation model with the help of a few lines of program.
- ... you will be able to judge how much effort it takes to reproduce reality in your simulation model.

Day 4: Logistics and data evaluation

On the last day we map simple logistics tasks with the help of vehicles. In order to present the results of our work we deal with the data evaluation.

At the end of the day...

- ... you can simulate goods transports with vehicles.
- ... you know how to define routes within a plant and let vehicles drive optimally.
- ... you can present the results of your simulation in diagrams and pictures.
- ... you know the interfaces to exchange data with other programs.