Interactive Training Course

dynamita
PROCESS MODELING

from 26th April to 12th May 2022

This six online session course can be taken in three different ways:

- Introductory – First four sessions (700 EUR)
- Advanced – Last four sessions (800 EUR)
- Complete – All six sessions (1000 EUR)

Each session will be 4 hours.

Includes

- A one-month Sumo21 license
- A one-month Digital Twin license

Register by mail:

- ferenc@dynamita.com

Program details

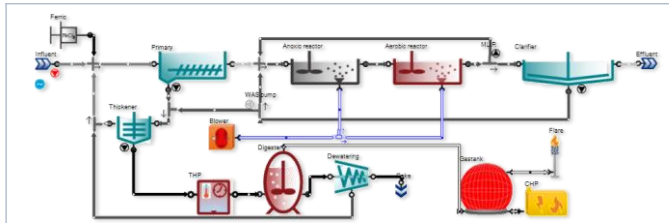
- next page

Contact

- web: www.dynamita.com
- for more information: info@dynamita.com

Modeling in Practice

in fundamentals and design applications



Name	Energy Center	Unit
Plant electric power demand	234	kW
CHP unit power generation	37	kW
Power demand purchase	197	kW
Electric energy purchase	102661	kWh
Self suffciency	16	%

Who will benefit?

New users/modelers should take the introductory part (first four sessions). Existing or experienced model users can start from session 3. All six can be taken for a complete overview of Sumo if desired.

Software familiarization

- What's new in Sumo21
- Learn how to use basic and advanced features and build process configurations
- Dynamic simulation set-up, Data plotting, Scenario analysis

Full plant model calibration

- Wastewater characterization - Municipal and industrial, sludge feed, food waste
- Activated sludge and biofilm (including aerobic granular and MABR) systems
- BOD-removal/Nit-denit/Enhanced Biological Phosphorus removal/GHG model
- Predicting alpha factor for improved aeration design and modeling
- Modeling aerobic facultative lagoon (predict sludge buildup and dredging)
- Thermal hydrolysis, anaerobic digestion, and sidestream treatment
- Controllers: standard and ABAC, SRT control, AvN control, and NRCY control
- Energy/Cost module (Plant power demand, power generation, and self-sufficiency)

Digital Twin for Process Improvement

- Taking your model real time using our state-of-the-art OPC UI and other options

Sumo21 complete training

26th April to 12th May 2022	Session 1 26th April	Session 2 28th April	Session 3 3rd May	Session 4 5th May	Session 5 10th May	Session 6 12th May
9-10 am	Introductions, modelling basics	Nitrification denitrification	Bio-P	Digestion	Sulfur, odours	Energy, Carbon footprint
10-11 am	Sumo familiarization	Aeration	Chem-P	Side-stream treatment	Biofilms Granular sludge	SumoSlang basics
11-12 am	Simple plant configuration	Model components, Fractions	Phase separation	pH in Sumo	Simple control	Digital Twin
12-1 pm	Steady-state, dynamic runs	Influent fractionation	Lagoons	Nutrient recovery	Advanced control	Project examples, summary