

SUMO Training Course

dynamita
PROCESS MODELING

Dates – November 13st, 15th, 18th and 20th

Time – 10 AM to 2 PM EST

Venue – Online

Registration fee – 800 USD per person

Includes

- A one-month SUMO license
- A one-month Digital Twin license

To register email

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Program details

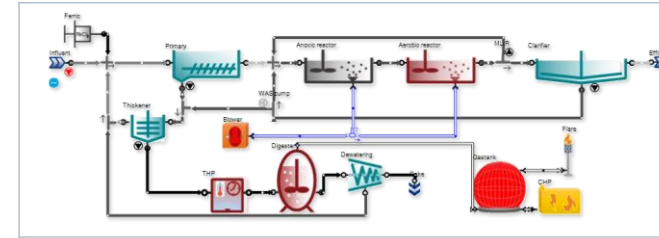
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Contact

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- for more information: info@dynamita.com

Modeling in Practice

in fundamentals and design applications



Name	Energy center	Unit
Plantwide electric power demand	257	kW
CHP unit power generation	142	kW
Plant electric energy consumption	6177	kWh
Self sufficiency	55	%

Who will benefit?

Academics, Utilities and Consultants

→ Software familiarization

- 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
- Activated sludge and biofilm systems
- Nitrification-denitrification/Enhanced Biological Phosphorus removal
- Predicting alpha factor for improved aeration design and modeling
- Thermal hydrolysis, anaerobic digestion, and sidestream treatment
- Controllers: standard and ABAC, SRT control
- Energy/Cost module (Plant power demand and self-sufficiency)
- Greenhouse gases and Carbon footprint
- Digital Twin for Process Improvement

Time (EST)	November 13 st	November 15 th	November 18 th	November 20 th
10:00 - 10:30	Introduction to SUMO and process modeling	Nitrification, denitrification	Clarifier modeling	Controllers introduction, setup, and application
10:30 - 11:00				
11:00 - 11:30	Setting up activated sludge plant for steady-state and dynamic simulation	Conventional versus Advanced digestion (Thermal hydrolysis),	Biological Phosphorus removal - model, application, and constraints	Chemical P - Iron and Alum
11:30 - 12:00				
12:00 - 12:30				
12:30 - 1:00	Wastewater characterization - data collection, reconciliation, and fractionation	Sidestream treatment post aerobic digestion, deammonification	Aeration modeling - Diffuser versus mechanical, using aeration tool, alpha modeling	Biofilm modeling - fundamentals and advanced setup
1:00 - 1:30				
1:30 - 2:00				