



MIKE URBAN WATER QUALITY

Introduction to the modelling of water quality in collection systems

This two-day, hands-on course gives you an introduction to model water quality in urban collection system networks using MIKE URBAN. The aim is to enable you to set up and run basic water quality models and to assess and present the simulation results. MIKE URBAN covers modelling of surface runoff, flows, water quality and sediment transport.

The water quality in the collection system and in the discharges/overflow has an impact on both the infrastructure and the recipients. The formation hydrogen sulphide in sanitary and combined sewer systems causes odour and corrosion nuisances as well as unsafe working environment. This is a serious problem, which affects large areas of a typical sanitary sewer system. The mitigation of the odour and corrosion damages is costly. Other examples are the combined sewer overflow to recipients, which impacts both the aquatic life and causes a health risk to human activities. The management and treatment of storm water quality is yet another topic, which also has impact on the receiving waters.

MIKE URBAN models the water quality components on the surface by attaching them to the surface runoff. The water quality components are thereafter transported by advection-dispersion by the flow in the network. The on-going biological processes are modelled using ECO Lab coupled to the MIKE 1D hydraulic engine.

COURSE TOPICS

- Advection-Dispersion
- Long Term Simulation and Advection-Dispersion
- Introduction to ECO Lab
- Use existing ECO Lab templates
- Modify existing ECO Lab templates and create your own template
- Local treatment options using ECO Lab
- Running surface runoff and water quality simulations
- Presenting and analysing simulation results
- Hands-on exercises

TARGET GROUP AND PREREQUISITES

Professionals in the fields of design, planning and optimisation of urban water infrastructure interested in obtaining understanding of how to model water quality using MIKE URBAN MIKE 1D and ECO Lab. Participants must be acquainted with the functionalities of MIKE URBAN CS either through experience or through participation in the course 'MIKE URBAN COLLECTION SYSTEMS - Introduction to the modelling of collection systems'.

THE ACADEMY BY DHI

THE ACADEMY offers a palette of courses and capacity building packages designed to fit your needs and challenges. We offer standard and/or tailored training - face-2-face as well as tailored.

MIKE Powered by DHI courses focus on practical skills, hands-on exercises and teaching you how to get the most out of your software. These courses also enable you to understand the power of the MIKE tools for building decision support systems.

Thematic courses allow you to apply concepts, applications and decision support principles to the entire business process within current areas: aquaculture and agriculture, energy, climate change, flooding, coast and marine, surface and groundwater, urban water, industry, environment and ecosystems, product safety and environmental risk, etc.

Our trainers are experienced professionals, many of whom are recognised international experts in their fields. The use of highly skilled trainers guarantees the quality of THE ACADEMY courses.

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courses@dhigroup.com
www.theacademybydhi.com