MIKE FLOOD

Integrated 1D and 2D urban flood modelling

This two-day, hands-on course aims to teach you urban flood modelling by integrating the 1D urban drainage model (MU CS) and 2D overland flow model (MIKE 21). The emphasis is on establishing a 2D overland flow model followed by coupling the 1D and 2D model components to simulate the fully integrated flow dynamics between sewage/storm water systems and surface areas.

Urban flooding often occurs as a result of insufficient storm drainage capacity, river overflows, storm surge or as a combination of these phenomena. The risks of flooding are amplified by the expected effects of climate change.

MIKE FLOOD is a comprehensive modelling package covering all the major aspects of flood modelling and a tool for understanding urban flooding, analysing scenarios and testing mitigation measures. MIKE FLOOD integrates flood plains, streets, rivers, coastal areas and sewer/storm water systems into one package.

COURSE TOPICS

- Introduction to 2D overland flow modelling with MIKE 21
- Building urban bathymetries
- Preparing MIKE URBAN models for coupling with MIKE 21
- MIKE FLOOD graphical editor
- Coupling of 1D and 2D models with MIKE Zero
- Coupling 1D and 2D models with MIKE URBAN 2D Overland Flow
- 1D-2D linkage options; stability issues
- Tips and troubleshooting with model coupling
- Results viewing and presentation
- Hands-on exercises

TARGET GROUP AND PREREQUISITES

Professionals involved in urban drainage, flood management, flood risk assessment or other flood related studies. Participants must be acquainted with the basic functionalities of MIKE URBAN COLLECTION SYSTEMS (MU CS) prior to the course either through experience or through participation in the MU CS course 'Introduction to 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.

LEARN MORE AND CONTACT US

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The expert in **WATER ENVIRONMENTS**

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