COURSE SCHEDULE 2013 UNITED KINGDOM

FLOODING, URBAN WATER, COAST & MARINE, SURFACE & GROUNDWATER, ENVIRONMENT & ECOSYSTEMS

BUILDING EXPERTISE





COURSE SCHEDULE 2013

	FOCUS AREA	TITLE	DATES	LOCATION
COAST & MARINE	METOCEAN MODELLING FOR MARINE RENEWABLES	New trends in off-shore metocean modelling and analysis	21-22 March	Shropshire
	SHORELINE MANAGEMENT	How to protect and develop your coasts!	21-23 October	Birmingham
	LITPACK Processes 1D	Modelling long sediment transport and coastline evolution	24-25 October	Birmingham
	MIKE 21 SW	Spectral wave modelling	28-29 October	Birmingham
ENV. & ECOSYSTEMS	MIKE 21 & MIKE 3 ECO Lab	2D & 3D water quality and ecological modelling	18-19 June	Birmingham
	ABM Lab	Agent based modelling	20 June	Birmingham
SURFACE & GR.WATER	INTEGRATED CATCHMENT MANAGEMENT	Hydrology, management and decision making in a catchment with competing uses	Upon request	Upon request
	MIKE 11	Introduction to river and channel modelling	09-10 September	Birmingham
	FEFLOW	Introduction to groundwater modelling	11-13 September	Birmingham

15th User Group Meeting, Shropshire, England, 19-20 March 2013

The 15th UK User Group Meeting will be held on 19 March 2013 at the Lion Quays Waterside Resort, Oswestry, Shropshire. The User Group Meeting includes a mixture of presentations of new software features and technologies, as well as practical case studies presented by UK users and DHI experts. On the following day, 20 March, specialised seminars will be held at the same venue.

The training courses 'Metocean Modelling for Marine Renewables' is placed in continuation of the User Group Meeting (21-22 March 2013) at the same venue. Course participants are welcome to join the User Group Meeting!



COURSE FLASHES This two-day, thematic course is directed towards project

MARINE RENEWABLES engineers who need an introduction to offshore metocean New trends in off-shore metocean modelling and analysis, or project managers with a need to modelling and analysis understand the advantages and limitations of basic Special price: £495.00 excl. VAT! SHORELINE MANAGEMENT How to protect and develop your coasts! Standard price: Please contact **Course Coordinator** COAST & MARINE environment in the coastal zone. **LITPACK Processes 1D** This two-day, MIKE by DHI hands-on course provides a Modelling long sediment transport practical introduction to the use of 1D modelling of and coastline evolution longshore sediment transport and coastline evolution along quasi-uniform coastlines. The course aims at Standard price: £890 enabling the you to set up and run simulations using LITDRIFT and LITLINE as well as Littoral Processes FM. MIKE 21 SW Spectral wave modelling Standard price: £890 predict and analyse wave climates in offshore and coastal MIKE 21 & MIKE 3 ECO Lab 2D & 3D water quality and ecological modelling Standard price: £890 ENV. & ECOSYSTEMS **ABM Lab** Agent/individual based models describe the autonomic Agent based modelling behaviour and states of agents, objects or individuals. The methodology allows addressing questions that are out of Standard price: £ 460 the scope of traditional water quality models. This oneday, MIKE by DHI hands-on course gives a short introduction to the general theory and how ECO Lab supports the formulation of agent/individual based models. INTEGRATED CATCHMENT **MANAGEMENT** Hydrology, management and decision making in a catchment with competing Standard price: Please contact **Course Coordinator MIKE 11** SURFACE & GR.WATER Introduction to river and channel modelling

METOCEAN MODELLING FOR

reconciling competing uses and environmental impacts. Catchment hydrology and its implications on water management is discussed. Modelling and decision support tools are introduced as examples and project cases.

This two-day, MIKE by DHI hands-on course gives an introduction to 1D river modelling with MIKE 11. The aim you to set up and run simple river models and to evaluate

- On-line and planning tools
- MIKE 11 modular structure MIKE 11 graphical user interface
- · Schematisation and application of
- simple river models
- Modelling basic hydraulic structures

Introduction to groundwater modelling

This three-day, MIKE by DHI hands-on course provides you with an introduction to groundwater modelling using FEFLOW. On the basis of a case study you build a 3D flow and transport model applying the most important programme functions, including preprocessing, simulation and result evaluation.

- FEFLOW and its graphical user

- Steady-state and transient models

methods. Focus is on DHI's methods for coastal and off shore projects for wind turbines, tidal or wave power conversion and marine infrastructure projects.

The purpose of this three-day, thematic course is to give professionals involved in shoreline management an overview of coastal and estuarine dynamics. It is the aim to provide the participants with an understanding of the available tools and procedures that can help creating a sustainable and holistic management of the physical

• Introduction to coastal problems

Model calibration and skill

Introduction to wave and flow

Metocean modelling - data sources

Hindcast and forecast simulations Analysis and presentation of

modelling

assessment

metocean data

and requirements

- Coastal processes and coastal classification
- Climate changes and the coastal zone
- Causes of coastal erosion and beach degradation
- Shore and coast protection measures
- Handling sedimentation at harbours
- Introduction to numerical modelling and data management.
- Basic assumptions in the 1D modelling setup
- Concept of morphological baseline
- Setting up LITDRIFT, LITLINE and Littoral Processes FM models
- Interpretation of results and calibration
- Result viewing and presentation

This two-day, MIKE by DHI hands-on course provides a practical introduction to wave modelling using the MIKE 21 Spectral Wave model. The course will help you to

- Application of MIKE 21 SW
- How to set up models based on flexible mesh (unstructured grid)
- Decision of spectral formulation
- Calibration techniques and model validation
- Interpretation of results
- This two-day, MIKE by DHI hands-on course provides a practical introduction to the fundamentals of ecological modelling. You will learn how to develop your own
- ecosystem models using the ECO Lab editor and integrate this into a MIKE 21/3 ECO Lab model to obtain accurate spatial predictions of aquatic ecosystem response.
- · Fundamentals of ecological modelling • Introduction to existing ECO Lab
- templates How to set up the MIKE 21/3 ECO Lab
- FM model Model calibration and validation
- Interpretation of results
- Introduction to general features/ techniques for agent/individual based models
- Agent/Individual based modelling with ECO Lab
- Available functionality
- Setting up simple agent based models in ECO Lab and MIKE 21 FM

This three-day, thematic course covers the challenges of surface water and groundwater resources management at catchment scale

- Conceptual model approach
- Integrated hydrological models
- Customized water management services
- Scenario and indicator definitions
- Formulation of water management objectives

Standard price: £890

is to go through the basic features of MIKE 11 to enable their results.

FEFLOW

Standard price: £ 1,130

- interface
- Creating 2D and 3D mesh geometries
- Setting up flow models with confined and unconfined aquifers
- Setting up transport models
- Usage of GIS/CAD data interfaces



Every year thousands of water professionals all over the world attend the courses of the Academy by DHI. The Academy courses are available both as standard as well as tailored courses designed according to your specific requests and based upon your own data.

The Academy by DHI offers an umbrella of standard and tailored training courses of various duration and targeting different levels of water professionals, including managers/decision makers, mid-level professionals and technicians.

MIKE by DHI courses focus on practical skills, hands-on exercises and on teaching you how to get the most out of your software. Our short courses are modular and allow you to build your expertise so as to match the requirements of your job.

Ideal for new and potential users of our MIKE products!

Thematic courses embrace a range of current topics such as climate change adaptation, integrated water resources management, water quality and environmental management, water safety plans, urban flooding, urban master planning, flood management and forecasting, shoreline management. These courses allow you to apply concepts, applications and decision support principles to the entire business process - right from source to solution.

MIKE Customised courses enable you to understand the power of the MIKE Customised tools for building decision support systems.

Our trainers are experienced professionals, many of whom are recognised international experts in their areas . The consistent use of certified trainers guarantees the quality of the Academy by DHI courses.

Detailed course descriptions, fees and registration DHI United Kingdom, Customer Care Unit: mikebydhi.uk@dhigroup.com

The Academy by DHI offers a palette of training courses and capacity building packages in the field of water as well as in chemicals regulation and toxicology. Please consult our website for complete listing as well as latest updates of our Global Course Calendar: **www.dhigroup.com/training**

Dates, venue and location

Our scheduled courses are held either at the DHI Office or at easily accessible training locations.

Should the public enrolment course of your interest not be on the list in our Course Schedule for 2013, please feel free to contact us so that we can arrange for future courses or do a one-to-one course at your office!

Computers are requested for the some courses in which case all participants are asked to bring their own lap tops. Prior to the course trainees will receive the relevant software to install. license.

Language

The course language is English. All training material is provided in English.

Our MIKE by DHI standard course prices

1 day £ 460
2 days: £ 890
3 days: £ 1,130
(consecutive days only)

Please contact the DHI Customer Care Unit for course fees for thematic and MIKE Customised courses.

Course fees include training material, training certificates, lunch and refreshments.

Discounts

- 10 % if valid Service Maintenance Agreement (SMA)
- 33% for the 3rd and subsequent participants from same organisation.

Deadline for registration

Three weeks before commencement of course. A minimum of three participants is required for courses to proceed. DHI reserves the right to reschedule courses up to two weeks prior to the commencement of a course.



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