A practical introduction to

- Hydrodynamic Modelling
- Spectral Wave Modelling
- Sand Transport Modelling

using

MIKE 21

DHI

16-18 April 2012
Dubai, United Arab Emirates

MIKE Courses

Introduction to MIKE 21

Introduction

MIKE 21 is the ultimate Swiss army knife of coastal modelling. If you need to simulate physical, chemical or biological processes in coastal or marine areas, MIKE 21 certainly has the tool you need.

The following list is a small subset of the almost endless list of possible applications of MIKE 21:

- Design data assessment for coastal and offshore structures
- Optimisation of port layout and coastal protection measures
- Cooling water, desalination and recirculation analysis
- Optimisation of coastal outfalls
- Environmental impact assessment of marine infrastructures
- Ecological modelling including optimisation of aquaculture systems
- Optimisation of renewable energy systems

Course contents

MIKE 21 Hydrodynamic Modelling

- Selection of geographical coordinate system and bathymetry digitisation (mesh)
- Data import, editing and quality control
- Setting up 2D hydrodynamic models
- Managing boundary conditions
- Calibration and validation
- Hands-on exercises

MIKE 21 Spectral wave modelling

- 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
- Hands-on exercises

MIKE 21 Sand transport using flexible mesh

- Fundamentals of sand transport modelling
- Application of MIKE 21 ST FM
- Setting up wave and flow conditions
- Specifying sand properties
- Calculating sand transport
- Hands-on exercises

On the first day a brief introduction to MIKE 3 HD will be introduced.

The course will also include a brief overview of the application of MIKE 21 Boussinesq wave modeling.

Who should attend?

Participants are expected to have a professional background in applied hydraulics.

Course structure

The course combines lectures and hands-on exercises. Exercises are to a wide extent based on actual applications.

The training encourages dialogue and interaction amongst the participants.

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What is included?

1. Latest MIKE 21 Software Demo Version
2. Training materials and exercises
3. Lunch and refreshments during the three training days

Upon completion of participation in the course the participant will receive a 'Training Certificate'.

N.B. Participants should bring their own computer with the following hardware requirements:

Microsoft Windows XP Professional Edition (32 and 64 bit), Microsoft Windows Vista Business (32 AND 64 bit) and Microsoft Windows 7 Enterprise (32 and 64 bit). The recommended hardware requirements are: 3.0 GHz processor, 4 GB memory (RAM) and 160 GB available disk space.

Course dates

16-18 April 2012

Course days start at 09:00 and finish at 17:00

Location

Qamardeen Hotel, Dubai, U.A.E.

Number of participants

8 (min) – 12 (max)

Course fee

Standard Price: AED 5,300.00

Discounts:

- 10 % for participants with valid SMA (current M21 license)
- 30% to be applied on the 2nd and 3rd participant

Course language

English

Deadline for Registration

One month before course date (16th March 2012). A minimum of eight participants is required for the course to proceed.
DHI reserves the right to reschedule training courses up to one month prior to the scheduled course date.

Course instructor

Niels Hvam

Niels Hvam is senior engineer at DHI. He has broad experience in environmental hydraulics in marine and rivers modelling projects and training. Mr Hvam is specialized in coastal rivers, environmental and coastal zone impact analyses of projects, such as power plants, harbours, and reclamation. He has been in charge of a large number of modelling studies worldwide.

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REGISTRATION FORM

MIKE 21 course, 16-18 April 2012, Dubai, United Arab Emirates

Please confirm your participation by providing your details and fax back to:
DHI Middle East, Fax: +9714 5015611

Name: _____ Organisation: _____

Email: _____ Position: _____

Address: _____

_____

Tel.: _____ Fax: _____

Accomodation:
You may contact us if you want to reserve a room at the training venue or alternatively, you may contact Qamardeen Hotel at +9714 4286888.

Terms & Conditions:

1. Fees are inclusive of program materials (excluding PC) and refreshments
2. Payment terms: An invoice (with bank details) will be issued upon receipt of registration form and full payment is required within 15 days on receipt of invoice. Due to limited space, we advise an early registration. A 50% cancellation fee will be charged if cancellation has been made 7 days before the course date. However, a substitute is encouraged instead of cancellation.

☐ Yes, I agree to be invoiced for the course above

☐ Yes, I understand and agree to the Terms of Conditions

Signature _____ Date _____