

# Course Schedule 2012

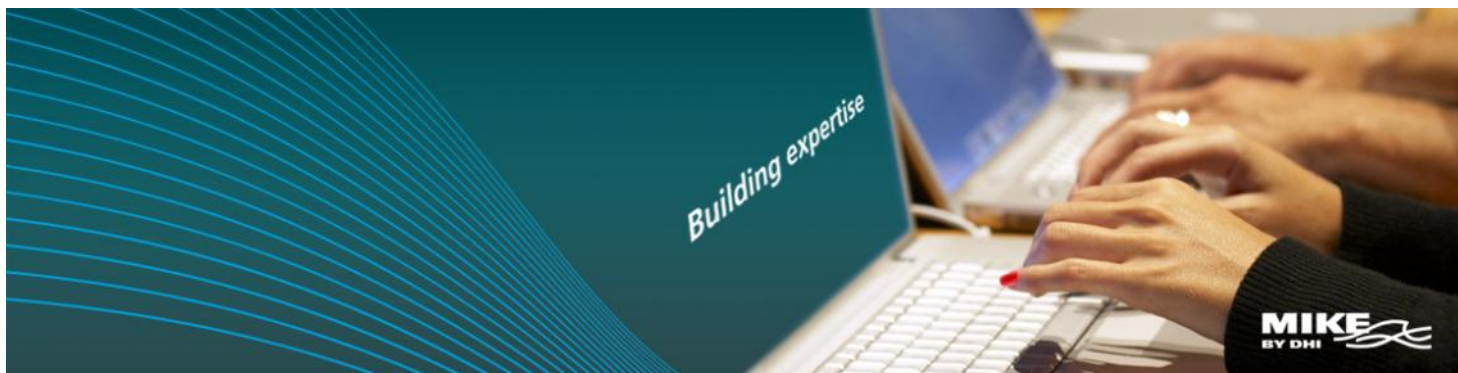
## Australia



We help build your expertise

Cities  
Flooding  
Coast & sea  
Water resources

**MIKE**  
BY DHI 



	Product	Title	Dates	Location
CITIES	MIKE URBAN CS	Introduction to modelling of collection systems	April 16-17	Brisbane (Cliftons)
	MIKE URBAN WD	Introduction to modelling of water distribution systems	April 18-19	Brisbane (Cliftons)
	WEST ( <i>Water Treatment</i> )	Introduction to modelling of wastewater treatment plants	April 18-20	Brisbane (Cliftons)
FLOODING	MIKE FLOOD ( <i>River</i> )	Integrated 1D and 2D river flood modelling	April 18-19	Brisbane (Cliftons)
	MIKE FLOOD ( <i>Urban</i> )	Integrated 1D and 2D urban flood modelling	April 20	Brisbane (Cliftons)
WATER RESOURCES	MIKE 11	Introduction to river and channel modelling	April 16-17	Brisbane (Cliftons)
	MIKE SHE	Introduction to integrated catchment modelling	April 18-20	Brisbane (Cliftons)
	FEFLOW	Introduction to groundwater modelling	April 18-20	Brisbane (Cliftons)
COAST & SEA	MIKE21/3 HD Flow Model FM	Introduction to hydrodynamic modelling using Flexible Mesh	April 16-17	Brisbane (Cliftons)
	MIKE21 SW/BW ( <i>Waves</i> )	Introduction to spectral wave and boussinesq wave modelling	April 18-19	Brisbane (Cliftons)
	MIKE21 ST/MT ( <i>Sediment</i> )	Introduction to sand and mud transport modelling	April 18-19	Brisbane (Cliftons)
	MIKE21/3 ECO Lab	2D and 3D water quality and ecological modelling	April 19-20	Brisbane (Cliftons)

## MIKEbyDHI Software Events in Australia in 2012

MIKEbyDHI Training Week (Brisbane, April 16-20)

Release 2012 Seminars and Mini User Group Meetings

- Brisbane (August, dates TBA)
- Sydney (August, dates TBA)
- Melbourne (September, dates TBA)
- Perth (September, dates TBA)

In-House Training Courses can be arranged on demand, subject to trainer availability



# COURSE DESCRIPTIONS

CITIES	<b>MIKE URBAN CS &amp; WD</b> Introduction to modelling of collection systems / water distribution systems	These 2-day , hands-on courses provide a practical introduction to hydraulic modelling of wastewater and urban drainage networks/water distribution systems. You will learn how to set up and run MIKE URBAN and turn model outputs into professional presentation material. The courses aim at enabling you to perform the basic functions of MIKE URBAN.	<ul style="list-style-type: none"> <li>• Project setup, including units, coordinate system, etc.</li> <li>• Data organisation, import/export of external data</li> <li>• Numerical and graphical editing and quality control</li> <li>• Simulation of network hydraulics</li> <li>• Result analysis and visualisation</li> <li>• Hands-on exercises</li> </ul>
	<b>WEST</b> Introduction to modelling of wastewater treatment plants	This 3-day course provides basic training in WEST introducing the Activated Sludge Modeling (ASM) concepts upon which WEST is based. The training course is suitable for WWTP managers who want to optimise processes or minimise costs of operation and for operators who want to use WWTP modelling for scenario testing, trouble shooting and/or design optimisation.	<ul style="list-style-type: none"> <li>• The WEST GUI</li> <li>• Project set-up (plant layout)</li> <li>• Dynamic simulation</li> <li>• Result analysis and visualisation</li> <li>• Objective evaluation</li> <li>• Advanced experiment types</li> <li>• Hand-on exercises</li> </ul>
FLOODING	<b>MIKE FLOOD (River)</b> Integrated 1D and 2D river flood modelling	In this 2-day course you will learn how to model integrated river and flood plain dynamics using MIKE FLOOD. Focus will be on defining efficient coupled 1D (MIKE 11) and 2D (MIKE 21) models with emphasis on data requirements, optimal model schematisation and model stability.	<ul style="list-style-type: none"> <li>• Building a bathymetry</li> <li>• Coupling MIKE 11 and MIKE 21</li> <li>• Topographic data handling</li> <li>• Fine scale structures in coarse grids</li> <li>• Floodplain modelling and mapping</li> <li>• Results viewing and presentation</li> <li>• Hands-on exercises</li> </ul>
	<b>MIKE FLOOD (Urban)</b> Integrated 1D and 2D urban flood modelling	In this 1-day hands-on course you will learn how to develop a 2D overland flow model by coupling of the 1D urban drainage model (MIKE URBAN) and 2D overland flow model (MIKE 21) to simulate the fully integrated flow dynamics between sewage/storm water systems and surface water flow.	<ul style="list-style-type: none"> <li>• Building urban bathymetries</li> <li>• Coupling MIKE URBAN CS and MIKE 21</li> <li>• Coupling 1D and 2D models with MIKE URBAN 2D Overland Flow feature</li> <li>• Using GIS for model preparation and results</li> <li>• Hands-on exercises</li> </ul>
WATER RESOURCES	<b>MIKE 11</b> Introduction to river and channel modelling	This 2-day course gives an introduction to 1D river modelling with MIKE 11. The aim is to go through the basic features of MIKE 11 to enable you to set up and run simple river models and to evaluate their results.	<ul style="list-style-type: none"> <li>• MIKE 11 modular structure</li> <li>• MIKE 11 graphical user interface (GUI)</li> <li>• Schematisation and application of simple river models</li> <li>• Modelling basic hydraulic structures</li> <li>• Hands-on exercises</li> </ul>
	<b>MIKE SHE</b> Introduction to integrated catchment modelling	This 3-day course is aimed at professional modellers and managers who want to enhance their groundwater or surface water modelling experience to include all processes in the hydrologic cycle. The course is also aimed at new users of MIKE SHE. You are expected to have a basic background in hydrology or hydrogeology.	<ul style="list-style-type: none"> <li>• Channel flow</li> <li>• Overland flow and infiltration</li> <li>• Unsaturated/saturated groundwater flow</li> <li>• Hydrological coupling</li> <li>• Calibration of integrated models</li> <li>• Integrated water budgets</li> <li>• Integrated water quality modelling</li> <li>• Hands-on exercises</li> </ul>
	<b>FEFLOW</b> Introduction to groundwater modelling	This 3-day hands-on course provides you with an introduction to groundwater modelling using FEFLOW. On the basis of a case study you build a three-dimensional flow and transport model applying the most important programme functions, including pre-processing, simulation and result evaluation.	<ul style="list-style-type: none"> <li>• FEFLOW and its graphical user interface</li> <li>• Creating 2D and 3D mesh geometries</li> <li>• Setting up flow models with confined and unconfined aquifers</li> <li>• Setting up transport models</li> <li>• Steady-state and transient models</li> <li>• Usage of GIS-/CAD- data interfaces</li> <li>• Hands-on exercises</li> </ul>
COAST & SEA	<b>MIKE21/3 HD Flow Model FM</b> Introduction to hydrodynamic modelling using Flexible Mesh	This 2-day course provides a practical introduction to the basics of flow modelling and how to get started with 2D models in the Flexible Mesh environment. The course aims at enabling you to set up and run flow simulations with MIKE 21 Flow Model FM using the advanced data preparation and editing facilities and presentation tools.	<ul style="list-style-type: none"> <li>• Selection of geographical coordinate system and bathymetry digitisation (mesh)</li> <li>• Data import, editing and quality control</li> <li>• Setting up 2D hydrodynamic models</li> <li>• Managing boundary conditions</li> <li>• Calibration and validation</li> <li>• Hands-on exercises</li> </ul>
	<b>MIKE21 SW/BW</b> Introduction to spectral wave and Boussinesq wave modelling	This 2-day course gives a practical introduction to wave modelling using the MIKE Spectral Wave model and wave disturbance modelling in ports and by structures using the MIKE 21 Boussinesq Wave model. The course helps you predict and analyse wave climates in offshore and coastal areas and wave conditions in ports and behind structures where accurate assessment of wave impact is of utmost importance. The course is intended for professionals in offshore and coastal engineering.	<ul style="list-style-type: none"> <li>• Application of MIKE 21 SW and BW</li> <li>• How to set up models based on flexible mesh (unstructured grid) and on rectilinear grid</li> <li>• Decision of spectral formulation</li> <li>• Calibration techniques and model validation</li> <li>• Interpretation of results</li> <li>• Creating porosity and sponge layer maps</li> <li>• Hands-on exercises</li> </ul>
	<b>MIKE21 ST/MT</b> Introduction to sand and mud transport modelling	This 2-day course provides a practical introduction to the fundamentals of fine sediment modelling using 2D and 3D models, sand transport modelling and the modelling of morphological changes. The course aims at enabling you to set up and run sand transport modelling simulations using the MIKE 21 Sand Transport FM model in a coupled setup with flow and wave models and using MIKE 21 MT FM .	<ul style="list-style-type: none"> <li>• Fundamentals of fine sediment and sand transport modelling</li> <li>• Application of MIKE 21 ST FM and MT FM</li> <li>• Setting up wave and flow conditions</li> <li>• Specifying sand properties, particles and sediments</li> <li>• Interpretation of results</li> <li>• Hands-on exercises</li> </ul>
	<b>MIKE21/3 ECO Lab</b> 2D and 3D water quality and ecological modelling	This 3-day 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.	<ul style="list-style-type: none"> <li>• Fundamentals of ecological modelling</li> <li>• Introduction to existing ECO Lab templates</li> <li>• How to set up the MIKE 21/3 ECO Lab FM model</li> <li>• Model calibration and validation</li> <li>• Interpretation of results</li> <li>• Hands-on exercises</li> </ul>



***DHI believes that the best way to ensure the success of our products is to ensure the success of our clients! One of the ways we do this is through our training courses.***

Our courses are held by our offices and technical support services worldwide. In your language and in your region! All our trainers are certified by DHI.

**Our participants** represent governmental agencies, regional and local water bodies, research institutions and universities, professional bodies and engineering companies, urban water utilities, coastal and harbour authorities.

**Our courses cover** the areas of water resources, coasts and seas, cities, flooding and groundwater. Should the training course of your interest not be on the list, please feel free to contact us so that we can arrange for future courses or do a one-to-one course at your office.

**Our short standard courses** are designed to introduce you to the application of our various products and modules. Relevant participants for these courses include both new and potential users as well as current users who need an update to our products in a guided way. Our short courses are modular and allow you to build your expertise so as to match the requirements of your job.

**Our tailored courses** within client organisations range from short, dedicated courses in selected topics to longer courses, in which you - with support from relevant DHI experts - are guided through practical applications using your own data.

In-House Courses can take place at your premises!



#### **Venue and Location**

In 2012, all public training opportunities will be focused on our MIKEbyDHI Training Week, to be held in Brisbane, April 16-20. Our courses are hosted by the Cliftons Training Room facility in the Brisbane CBD.

#### **Course Instructors**

All DHI certified trainers are sourced from local Australian based staff, or from the DHI Global network of modelling experts.

#### **Our standard course prices**

1 day: AUD 1200	2 days: AUD 2100
3 days: AUD 2700	4 days: AUD 3000
5 days: AUD 3300	

All prices are exclusive of GST.

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

#### **Discounts**

- 10 % if valid Service Maintenance Agreement (SMA)
- 10% for Early Bird Registrations
- 15 % for third and subsequent participants from the same organisation
- Maximum discount of 25% applies

#### **Registration**

A minimum of 5 attendees is required for courses to proceed. Notification of any course cancellations due to insufficient numbers is provided 2 weeks prior to the Course dates.

#### **Deadline for Early Bird Registration**

Friday, March 16th, 2012

## **Further information**

Consult our global Course Calendar - it always tells you when, where and which MIKE courses are offered worldwide: [www.mikebydhi.com/training/globalcoursecalendar](http://www.mikebydhi.com/training/globalcoursecalendar)

Detailed course descriptions, course fees and registration forms please contact:

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