



THEMATIC COURSE DESCRIPTION

WATER RESOURCES AND CLIMATE CHANGE

Impact and adaptation studies

In this three-day, thematic course you will as a water resources professional be introduced to climate change, climate change estimations and assessment of the uncertainties. You will learn how to assess the impacts of climate change on the water resources through the use of hydrological modelling tools. The courses will also focus on the identification of adaptation measures with particular emphasis on flood and droughts.

The relationship between climate change and water resources is one of the most crucial for our society and for a wide variety of ecosystems. The understanding of climate change impacts for water resources is crucial for economic and social development.

The challenge for decision makers and stakeholders in the water sector is to understand these climate changes, to determine where and how regions and sectors are vulnerable and to establish the best possible adaptation measures.

COURSE TOPICS

- Brief introduction to climate change
- General Circulation models vs. Regional Climate Models
- Downscaling methods (statistical and dynamical downscaling)
- CC projections including uncertainty estimation
- Estimation of Delta-change factors
- Estimation of future hydro-meteorological time series
- Impact assessment using rainfall-runoff modelling
- Identification of adaptation measures
- Environmental, social, and economic indicators
- Hands-on exercises

TARGET GROUP AND PREREQUISITES

Water resources professionals interested in climate change and its impact on the water resources and who would want to use this knowledge in relation to water resources assessment, management and planning.

Participants should have a background in water resources and knowledge of the use of MIKE by DHI modelling tools NAM and MIKE BASIN. Basic knowledge about climate change would be an advantage but not a condition.

DATE AND TIME

Monday 13 May - Wednesday 15 May; or
Wednesday 28 August - Friday 30 August
2013.

Courses start at 09:00 and finish at 16:30

FEES AND DISCOUNTS

Standard price: € 1,330

Discounts:

- 10% with valid Service Maintenance Agreement on MIKE by DHI product
- 33% for 3rd and subsequent participants

THIS IS INCLUDED

- Training material and exercises
- Access to PC with all software required
- Latest MIKE by DHI demo version
- Lunch and refreshments
- Training Certificate
- 'Climate Change Water Resources Guidelines', DHI Publication.

LANGUAGE

Lectures and training material are in English

LOCATION AND VENUE

DHI, Agern Allé 5, DK-2970 Hørsholm,
Denmark

REGISTRATION AND FURTHER INFORMATION

Monday 22 April or Wednesday 7 August
2013 (ie 3 weeks before course start). A
minimum of trainees is required for the course
to proceed. DHI reserves the right to
reschedule the training course up to 3 weeks
prior to the course date scheduled.

Contact: Hanne Bertelsen: +45 4516 9200/
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RELATED COURSES

MIKE BY DHI

- 'MIKE 11 - River and channel modelling'
- 'MIKE 11 - Advanced hydrodynamic modelling'
- 'MIKE FLOOD (River) - Integrated 1D and 2D river flood modelling'
- 'MIKE 11 RR - Rainfall - Runoff modelling'
- 'MIKE BASIN - Introduction to river basin modelling'
- 'MIKE BASIN - Macro programming and optimization'
- 'MIKE BASIN WQ - Water quality modelling'
- 'MIKE SHE - Integrated catchment modelling'

THEMATIC

- 'INTEGRATED CATCHMENT MANAGEMENT - Hydrology, management and decision making in a catchment with competing uses'
- 'INTEGRATED WATER RESOURCES MANAGEMENT (IWRM) - A policy framework for the application of planning and management tools'

MIKE CUSTOMISED

- 'WATER RESOURCES ASSESSMENTS & DECISION MAKING - Management & use of data and information'
- 'ADVANCED WATER RESOURCES ANALYSES & OBJECTIVE DECISION MAKING - Management & use of data and modelling tools.'
- 'EARLY FORECASTING AND WARNING DISSEMINATION - Data, forecast modelling and decision support systems in a live data environment'

INSTRUCTOR

Jens Kristian Lørup

Dr Lørup has worked for DHI for almost 20 years. He has profound experience in the fields of hydrology, water resources assessment, and hydrological modelling. The impact of climate change has been a key focus area in Dr Lørup's work. Dr. Lørup has extensive working and training experience from more than 15 countries.

PhD in Hydrology from the Technical University of Denmark.



THE ACADEMY BY DHI

The Academy offers a palette of courses and capacity building packages designed to fit your needs and challenges. Our training courses are offered as standard and/or as tailored training.

MIKE by DHI courses focus on practical skills, hands-on exercises and on teaching you how to get the most out of your software.

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

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 fields. The consistent use of highly skilled trainers guarantees the quality of the Academy by DHI courses.

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