

GROUNDWATER RESOURCES MANAGEMENT

FEFLOW as a daily assessment tool for quality and quantity of water resources

This three-day, hands-on course provides you with the skills you need for applying FEFLOW for any kind of project related to groundwater resources management. It will cover typical modelling tasks such as delineation of groundwater capture zones based on state-of-the-art methods, estimation of water origin, budget optimization, influence of human-made activities on water resources (e.g. mines), groundwater quality and remediation, etc. Moreover, the course goes beyond standard analysis and bring into the discussion the uncertainty quantification associated to the water resources.

The course uses specially developed hands-on exercises supported by lectures on theory and relevant practical aspects.

FEFLOW is widely recognised as a comprehensive software package for subsurface flow and transport simulation. It provides unique meshing capabilities that offer exceptional geometric flexibility. The software is used by leading research institutes, universities, consulting firms and government organisations all over the world.

The scope of FEFLOW ranges from simple local-scale to complex large-scale modelling. Application areas include water management, mine water, saltwater intrusion, geothermal energy, and variably saturated media.

COURSE TOPICS

- Introduction to FEFLOW and its graphical user interface (flow and mass)
- · Introduction to groundwater age-based methods in FEFLOW
- · Delineation of well capture zones with different methods (2D/3D)
- · Uncertainty associated to well capture zones (e.g. Monte Carlo methods)
- · Estimation of water origin, water balances and content analysis
- · Discussion on groundwater vulnerability
- Interaction of surface water and groundwater (1D/2D)
- Regional drawdown estimations (e.g. due to different water consumption)
- · Modelling of remediation techniques (e.g. flow barriers)
- · Hands-on exercises

TARGET GROUP AND PREREQUISITES

Professionals working on ground water simulation in consulting companies, public authorities, university and research institutions. Participants are expected to have both a basic knowledge about groundwater systems as well as computer application. Prior experience with groundwater modelling is helpful, but not required.

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 online.

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



courses@dhigroup.com www.theacademybydhi.com