

IN-PERSON FEFLOW TRAINING COURSE

Introduction and advanced topics

This instructor-lead, hands-on course provides you with comprehensive training in groundwater modelling using FEFLOW. The course consists of an introductory and an advanced part. The introductory part covers the necessary information and examples to work with flow and mass transport models directly after the course participation. The advanced part aims at providing you with the skills for dedicated modelling topics. A FEFLOW trainer will guide you through the exercises step-by-step.

FEFLOW is widely recognised as a comprehensive software package for subsurface flow and transport simulation. FEFLOW unique meshing capabilities (structured and unstructured) allows for the highest degree of flexibility to account in detail for the most simple to complex geometrical configurations. The software is used by leading research institutes, universities, consulting firms and government organisations all over the world.

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

COURSE TOPICS

Introductory Part (Monday—Wednesday)

- · Introduction to FEFLOW and its graphical user interface
- Creating 2D and 3D mesh geometries (structured and unstructured meshes)
- · FEFLOW's interface with geological software
- · Setting up flow models with confined and unconfined aquifers
- · Setting up mass-transport models and groundwater-age models
- · Setting up steady-state and transient models
- · Usage of GIS/CAD data maps and other formats
- · Results evaluation, visualisation and animation

Advanced Part (Thursday—Friday)

- · Unsaturated flow modelling
- · Density-dependent flow modelling
- Heat transport, including geothermal energy systems (closed/open-loop)
- · Fractures and discrete features
- Multicomponent transport and chemical reactions
- · Introduction to automatic model calibration with FePEST
- Create unstructured meshes

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LOGISTICS

The course offered two times a year:

- Course 1: 15 19 April 2024
- Course 2: 10 14 June 2024

COURSE VENUE

The training is an in-person course. Training venue: Am Studio 26, 12489 Berlin, Germany

INVESTMENT

Standard price: 2200 € (excl. VAT)

WHAT'S INCLUDED

- Full access to FEFLOW software during course
- Training material
- Training Certificate upon completion of course

LANGUAGE

• Lectures and training material are in English.

CONTACT AND INFORMATION

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THE ACADEMY

WHAT IS FEFLOW?

Cover a broad variety of processes on the surface and in the subsurface

FEFLOW is the only tool you need for integrated modelling of all relevant flow, mass transport and heat transport processes. FEFLOW is the standard industry tool for solving hydrogeological challenges associated to mining application, geotechnical engineering, water resources management, nuclear waste decommissioning, brine-water management, seawater intrusion, shallow/deep geothermal among others.

USEFUL LINKS

- Highlights of FEFLOW <u>here</u>
- · Learn from DHI's Zoom video tutorials
- "Getting started with groundwater modelling using <u>FEFLOW</u> - Self-paced course
- <u>"Getting started with groundwater quality modelling"</u> Selfpaced course
- <u>"Getting started with geothermal modelling: Open-Loop</u> <u>systems"</u> - Self-paced course.

REGISTRATION

Registration is on a first-come-first-served basis. Registration is final and your seat is guaranteed upon receipt that payment has been made. Deadline for registration is 2 weeks before course start. A minimum number of participants is required for the course to proceed.

DHI reserves the right to reschedule the course up to one week prior to commencement.

COURSE TESTIMONIAL

'Just come back from a FEFLOW course held at DHI Germany. Many interesting groundwater flow and mass transport modelling topics were presented (unsaturated flow, density-dependent flow, fracture flow, etc.) and discussed extensively. Many thanks to Dr Carlos A. Rivera Villarreyes and DHI, Carlos delivered a highquality course and welcome participants warmly'.

Matteo Francesconi, Hydrogeologist | Groundwater modeller, AECOM, Italy

EXAMPLE OF INSTRUCTORS

SOPHIE GRUSCHKA

Ms. Sophie Gruschka is a water resources engineer and part of the team Sales Service and Support at DHI Germany. She specializes in the modelling of groundwater flow and quality. She supports customers with the development of groundwater modelling tools via Python. Beside her modelling portfolio, Sophie has experience in water sampling and chemical analyses.



MSc., Water Resources Engineering, Lund University

DR.-ING FRANCESCA DE GASPARI

Dr.-Ing. Francesca De Gaspari , DHI Germany, works as FEFLOW Consultant and is member of the support team.

Dr.-Ing. De Gaspari has in-depth knowledge of groundwater and reactive transport modelling as well as calibration and programming in Python and C++. Geochemical and transport modelling is her speciality. She has trained professionals in groundwater and transport modelling in several countries.



PhD, Hydrogeology, Polytechnical University of Barcelona, Spain

Dipl.-Ing. and MSc Civil Engineering, Polytechnical University of Milan, Italy

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 about THE ACADEMY on www.theacademybydhi.com

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