Practical Groundwater Flow & Contaminant Transport Modelling

This comprehensive training for aspiring groundwater modellers provides delegates with the practical skills required to develop numerical models for problem solving and decision support. The course promotes awareness of the role and limitations of modelling for groundwater problems.

Presented by leading practitioners in groundwater science, the training helps delegates to understand how to specify and build groundwater models.

The course is based on the hands on application of Groundwater Vistas, the internationally recognised standard in 3D modelling, incorporating MODFLOW, MODPATH, MT3DMS and RT3D, plus 2D models such as WinFlow and WinTran.

Training will provide the opportunity to learn how to solve practical groundwater problems using the preferred software of hydrogeologists and engineers worldwide, including the UK Environment Agency, groundwater research organisations and leading consultancies.

The course is designed for consultants, regulators and industry personnel who need to use, review, or specify groundwater models to solve practical problems. Previous delegates include the UK Environment Agency, European regulatory bodies, water companies, petrochemical manufacturing and extractive industries, universities and research organisations, consultants and government bodies.

Time is split evenly between lectures and related hands-on use of the software with application to case studies, including group exercises.

Featured topics:

- Developing conceptual models
- Understanding the theory of the Finite Difference method and boundary conditions used in MODFLOW
- Constructing 3D flow and transport models
- Understanding a systematic methodology for model calibration
- Maximising efficiency by utilising GIS to build model datasets
- Understanding the theory of contaminant transport and parameterising transport models
- Analysis of borehole capture zones and protection zones
- Design and evaluation of groundwater dewatering and control

Duration: 2 days
Price (per delegate): £815 excl. VAT
10% discount for second and any subsequent delegates booked from a single organisation.
ESI are one of the UK’s leading providers of applied training for professionals working in soil and groundwater sciences. Our courses are designed to equip delegates with the technical knowledge to enhance problem solving skills, improve decision making and establish best practice methodologies.

Our ‘hands-on’ courses consist of lectures and practical sessions, using examples derived from ‘real-life’ scenarios. Course delegates are actively encouraged to share problems and experiences through an open forum of discussion.

Booking

Contact us for training course dates, to book your place and to find out more about our training services. Prices include course admission (standard courses are held at our Shrewsbury office), electronic course manual containing all course presentations and notes, as well as lunch and refreshments.

A 10% discount is available for the second and any subsequent delegates attending from a single organisation.

Other training courses available

- National Water Hygiene Card Training
- Human Health Contaminated Land Risk Assessment
- Controlled Waters Risk Assessment and the Remedial Targets Methodology
- Practical Introduction to Borehole Testing and Interpretation
- Geostatistics for Contaminated Land

Bespoke Training

In addition to the courses listed we offer bespoke courses in these and related areas tailored to meet your specific needs.

Our training programme can also be taken to the workplace, with many companies commissioning ESI to run ‘in-house’ bespoke or web based courses. For further information, please contact us.

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