



Vadose Zone Hydrology in Geotechnical Engineering and Environmental Science

COURSE NUMBER: P002601

BRIEF DESCRIPTION:

Vadose or unsaturated zone hydrology is extremely relevant in terms of aquifer vulnerability and contamination, wetland delineation, differential movement under loading, flow through excavations and in terms of plant water availability. This course will provide the delegates with a concise theoretical refresher (soil mechanics, soil physics and groundwater flow) followed by empirical, laboratory, field and modelling assessment techniques relating to the unsaturated zone.

LEARNING OUTCOMES:

The two- day course will be most beneficial to professional scientists and engineers working with data and reports from a range of cross-cutting disciplines, including environmental impact assessments, engineering design, aquifer vulnerability assessments, environmental monitoring and land use planning.

CONTACT DAYS: 2

ENTRY REQUIREMENTS:

Soil mechanics, hydrogeology, soil physics (undergraduate level) and/or any of the above mentioned at honours level.

CATALOGUE CATEGORY: Environmental and Natural Sciences

DELIVERY MODE: Contact

WHO SHOULD ATTEND:

The course is aimed at environmental practitioners, geotechnical engineers, engineering geologists, hydrogeologists, soil scientists and hydrologists involved in the trans- disciplinary field of vadose zone hydrology and unsaturated seepage. The course will present the attendees with insight into other perspectives, techniques and applications of vadose zone hydrology.

COURSE CONTENT:

The first day will focus on the theory, principles, legislative aspects and empirical methods. The second day will involve a field trip to address the field methods, followed by case studies and applications applied to underground storage tanks (USTs), cemeteries and ground- based sanitation, karst vulnerability and subsidence, engineering applications (consolidation theory and differential movement) and environmental sciences (wetlands and plant water availability).

AVAILABLE COURSES:

12 November 2012 @ R 3500.00



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