

REGISTRATION

In order to register, please send the following information before February 17, 2012 to the course organiser.

Name: _____

Course fee: US\$ 1600

Titles and initials: _____

Organisation: _____

I will pay by:

Address: _____

- Check in US\$ (to be included with this registration form)
- MasterCard
- VISA
- AMEX
- Bank Transfer

Country: _____

E-Mail: _____

Telephone: _____

Card No.: _____

Date: _____

Fax: _____

Expiration Date: _____

Signature: _____

Plaxis by
P.O. Box 572
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The Netherlands
www.plaxis.nl

Mr. Dennis Waterman
Tel: + 31 (0)15 2517720
Fax: + 31 (0)15 2573107
E-mail: courses@plaxis.nl

Registration by e-mail is preferred

GENERAL INFORMATION

Directly after registration participants will receive a letter of confirmation, travel suggestions and additional information. Please include e-mail information for fast correspondence and check our website www.plaxis.nl for the latest information on the course.

CANCELLATION

Cancellation of course registration with refund of fee, less US\$ 150 service charge, will be accepted by the organizers in writing, if it is received no later than 3 weeks before the course. Only 50% registration fee will be refunded between 1 and 3 weeks before the course and in the last week before the course or in case of no-show no refund will be given. In case of cancellation by the organisers a full refund will be given. The organizers reserve the right to make any necessary amendments to the program.

REGISTRATION

The total number of participants is limited to thirty (30). Registrations will be accepted in the order in which they are received. To register for the course, please complete the registration form and return it to the course administrator before Feb. 17, 2012.

VENUE

The course will be held in the American University in Dubai, www.aud.edu

More detailed information will be sent after registration.

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PLAXIS

essential for geotechnical professionals



SHORT COURSE ON COMPUTATIONAL GEOTECHNICS
11 - 13 March 2012, Dubai, U.A.E.

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INTRODUCTION

This standard course is held around the world and has a long tradition in advanced geotechnical engineering. Each year it is well attended by participants from consulting and contracting companies, public work bodies and universities.

As usual, the forthcoming course consists of a balanced mixture of lectures and hands-on computer analyses. As in previous years the lectures focus mainly on soil behaviour and advanced methods in geotechnical engineering and less on the use of the Plaxis programs.

Subjects as undrained behaviour and 3D modelling, previously treated only in advanced courses, have been included in this course. They are illustrated

by practical case studies of embankments and tunnels. This way, the course offers an introduction to the modelling of geotechnical problems that are encountered in day-to-day engineering practice.

SUBJECT MATTER

The main subject of the course is the practical application of the finite element method (FEM) for stress, deformation, stability and tunnelling in geotechnical engineering and design.

The course concentrates on the following issues: Modelling complex soil conditions, analysing deformations due to phased construction and excavation, obtaining input data and model parameters from soil investigation, interpreting computational results. The course provides the

necessary background information for a proper use of the finite element method in geotechnical engineering applications.

LECTURES

Experts with a thorough theoretical background and an extensive experience in practical finite element modeling have been invited to give lectures and to prepare exercises and case studies on the topics mentioned earlier. Lecturers are:

- Prof. Alaa K. Ashmawy - American University in Dubai
- Dr. Ronald B.J. Brinkgreve - Plaxis bv / Delft University of Technology
- Prof. Rolf Katzenbach - Technische Universität Darmstadt

SOFTWARE

Exercises and case studies are based on the PLAXIS computer programs. PLAXIS 2D is a user-friendly computer program that is used by geotechnical engineers worldwide for deformation calculations, stability assessment, and consolidation analysis. It contains special options for soil-structure interaction. It has a fully automatic mesh generator based on graphical input of soil-layer geometries, and several features to facilitate input and analysis of complex situations. In addition, PLAXIS 3D is used for the analysis of tunnels, foundations and complex problems.

FORMAT

Each day consists of a morning and an afternoon session. Each session deals with a specific topic and starts with a general presentation, followed by an introduction to the practical application and a hands-on computer exercise. At the end of each

day, extra time is reserved to complete exercises and to discuss the computational results.

The specific topics of the presentations are:

- The Mohr-Coulomb model
- The Hardening Soil model
- Parameter selection
- Non-linear computations
- Excavations
- Undrained behaviour, consolidation & flow.
- Tunnels
- Foundations
- Excavations

COST

The cost of the computational geotechnics course is US\$ 1600. The registration includes a full set of instruction manuals and the use of a computer. The fees also cover all lunches and two tea breaks per day.

BENEFITS

After the course, participants will receive an official letter / certificate about the number of Professional Development Hours (PDH) they have earned from this course.

LODGING

Please note that lodging is not included in the course fee and registration. Several hotels are located near the course venue. Participants must make reservations by themselves.

Dates:	11 - 13 March 2012
Location:	Dubai, U.A.E.
Course leader:	Dr. Ronald Brinkgreve
Organisers:	Plaxis bv

SUNDAY, MARCH 11, 2012 – CONCEPTS & SOIL MODELS

- Finite element modelling in geotechnical engineering
- Mohr-Coulomb model and soil stiffness
- Introduction into PLAXIS 2D
- Footing on Elastoplastic Soil (ex.)
- Non-linear calculations
- The Hardening Soil model & parameter selection
- Simulation of soil lab tests (ex.)
- Warehouse Foundation (optional ex.)

MONDAY, MARCH 12, 2012 – DAMS & EMBANKMENTS

- Dams & Embankments
- Initial Stresses & Safety Factors
- Stability of a reinforced embankment (ex.)
- Undrained Behaviour
- Consolidation & Groundwater Flow
- Undrained construction of an embankment (ex.)
- Rapid draw down (extra ex.)

TUESDAY, MARCH 13, 2011 – EXCAVATIONS & FOUNDATIONS

- Excavations
- Modelling Excavations & Structures
- Geometry & Mesh Selection
- Tied-back excavation with Mohr-Coulomb and Hardening Soil model (ex.)
- Foundations
- Introduction into PLAXIS 3D
- Plate foundation using PLAXIS 3D

SCHEDULE