



Surname: _____ (m/f)

Title and name: _____

Company / Institute: _____

Address: _____

Tel: _____ Fax: _____

Email: _____

I will pay by:

Check in US\$

(to be included with the Registration Form)

Mastercard

VISA

AMEX

Card no.: _____

Expiration date: _____

- I will attend the full course
- I will NOT attend the Dynamics session
- I will ONLY attend the Dynamics session

Date: _____ 2003

Signature _____

Return before July 10, 2003,
to the course administrator by fax, post or email:

Computational Geotechnics course
Attn. Dr. Conrad Felice
C. Felice & Company, LLC
11411 NE 124th Street, Suite 275
Kirkland, Washington 98034

Registration:

The total number of participants is limited to thirty (30). Registration 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 July 10, 2003.

General Information

Directly after registration participants will receive a letter of confirmation, travel suggestions and additional information. Please include e-mail information for fast information and check webpage at <http://www.civil.colorado.edu/Faculty/Sture.html> for the latest information on the course. In July, participants will receive a final notice.

Cancellation of course registration with refund of fee, less US\$ 50.00 service charge, will be accepted by the organizers in writing, if it is received no later than August 1, 2003. Only one half of the registration fee will be refunded after that date. The organizers reserve the right to make any necessary amendments to the program.

If you require further information, please contact:

Course organisation:

Professor Stein Sture
Department of Civil, Environmental
and Architectural Engineering
University of Colorado
Boulder, Colorado 80309-0428
E-mail: stein.sture@colorado.edu

For Plaxis software:

Plaxis BV
P.O. Box 572, 2600 AN Delft
The Netherlands
Mr. Erwin Beernink
Tel: + 31 (0)15 2517720
Fax: + 31 (0)15 2573107
Email: info@plaxis.nl

Course on

Computational Geotechnics & Dynamics

4 - 7 August 2003
Boulder, Colorado

PLAXIS FINITE ELEMENT CODE FOR SOIL AND ROCK ANALYSES





INTRODUCTION: This course focuses on the practical aspects of the finite element method (FEM). Similar courses have been given in Boulder, CO, in 1996, '99 and 2001, Cambridge, MA, in 1998 and 2000, Berkeley, CA, in 2001 and 2003 and at several other locations around the world. In addition to regular subjects, a special session is devoted to dynamic aspects (optional). The course is meant for professionals from consulting / contracting companies, public work bodies and universities, who are interested in applying advanced tools to practical geotechnical engineering. Experts will give presentations on finite element modeling aspects as well as engineering topics, such as foundations, slope stability analysis, staged construction of embankments and excavations.

The specific topics of the presentations are:

- Elasticity (Hooke's law)
- Plasticity (Mohr-Coulomb) and parameter determination
- Non-linear computations
- Dams and embankments
- Excavations and deep foundations
- FE slope stability analysis, Phi-c
- reduction, and probabilistic issues

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:

- Prof. Stein Sture - *University of Colorado at Boulder*
- Dr. Ronald B.J. Brinkgreve - *Plaxis / Delft University of Technology*
- Dr. Conrad W. Felice - *C. Felice & Company, LLC*
- Prof. D. Vaughan Griffiths - *Colorado School of Mines*
- Prof. Youssef Hashash - *University of Illinois, U-C.*
- Prof. Andrew J. Whittle - *MIT*

The course consists of a balanced mixture of presentations and hands-on computer analyses using the new PLAXIS Version 8.

SUBJECT MATTER: The main subject of the course is the practical application of the finite element method (FEM) for stress, deformation and stability analysis in geotechnical engineering and design. The course concentrates on the following issues: Modeling complex soil conditions, determining bearing capacity of realistic foundations, analyzing deformations due to phased construction and excavation, obtaining input data from soil investigation, interpreting computational results.

SOFTWARE: Exercises and case studies are based on the PLAXIS computer program V8, which is used by geotechnical engineers worldwide. This user-friendly code has been developed for deformation analyses, stability assessment, groundwater flow and consolidation. It contains special options for soil-structures involving retaining walls, ground anchors, geosynthetics, etc. The staged construction/excavation simulation is handled in an analytically correct, yet straightforward and intuitive manner. The latest V8 has a fully automatic mesh generator based on graphical input of soil-layer geometries, and several new features to facilitate input and analysis of complex situations. Amongst other things, PLAXIS V8 allows for fully coupled deformation-consolidation during staged construction.

COST: The cost of the full course is \$1200 per participant from industry, consulting firms and government agencies, and \$1000 for university students and faculty.

For those who do not attend the Dynamics session, a \$200 discount applies. The registration includes a full set of

Dates : 4 – 7 August, 2003
Location : University of Colorado at Boulder
Course leader : Prof. Stein Sture,
University of Colorado at Boulder
Course administration : C. Felice & Company, LLC

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. The last session is devoted to case studies.

instruction manuals and the use of a computer. The fees also covers 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 and motels are located within 15 minutes walking distance (see suggestions below). If necessary, participants must make reservations by themselves.

Best Western Boulder Inn

(Contact person: Ari)

770 28th Street, Boulder, Colorado 80302

Phone : (800) 233-8469, (303) 449-3800

Fax : (303) 402-9118

Room rates : \$86 for single, \$96 for double

(Booked under "Plaxis", registrants must mention this name. Offer expires July 5, 2003)

Ramada Inn

(Contact person: Katrina Barnes, Ext. 153)

800 28th Street, Boulder, Colorado 80302

Room rates : \$ 119.95

Super 8 of Boulder

(Contact person: Kevin Ripley)

970 28th Street, Boulder, Colorado 80302

Phone : (800) 525-2149, (303) 443-7800

Fax : (303) 443-7801

Room rates : \$75 for single or double

(Book under "Plaxis", registrants must mention this booking name. Offer expires July 5, 2003)

