INTRODUCTION

A course on Soil Dynamics and Earthquake Engineering is planned to be conducted at IIT Madras during 13th - 17th June 2005 under the aegis of National Programme on Earthquake Engineering (NPEEE).

In the aftermath of the Bhuj earthquake in 2001, the NPEEE was initiated with the support of the Ministry of Human Resource Development (MHRD) to develop better teaching capability in the area of Earthquake Engineering. As a part of this strategy, several short term courses are planned to be conducted, at all the resource institutes consisting of the IITs and IISc. Details of NPEEE may be found at http://www.nicee.org/npeee.

As a resource institute for the project, a series of four short-term courses will be conducted at the Department of Civil Engineering, IIT Madras during June - July 2005. The first course is (1) Seismic Retrofit of Multistoried Buildings (SRMB 2005). The second course is on Soil Dynamics and Earthquake Engineering (SDEE 2005). The other two are (3) Finite Elements in Earthquake Engineering (FEEE 2005), 4th – 8th July 2005; (4) Probability Methods in Earthquake Engineering (PMEE 2005), 11th – 15th July 2005.

The course on **Soil Dynamics and Earthquake Engineering** (SDEE 2005) is specially designed for Teachers of Engineering Colleges who are involved or likely to be involved in teaching of the subject at the Undergraduate and Postgraduate levels. Recognising that SDEE is a broad, multi-disciplinary field, the course attempts to introduce Fundamentals of Soil Dynamics, Wave Propagation and Earthquake Geotechnical Engineering. A test will be conducted at the end of the course to evaluate the value addition of the training.

OBJECTIVES

1. To give a broad perspective of the concepts and theories of Soil Dynamics.
2. To highlight the issues involved in the design of Geotechnical structures in the seismic environment.

COURSE CONTENTS

1. Fundamentals of Soil Dynamics
2. Seismology and Wave Propagation
3. Strong Ground Motion
4. Dynamic Soil Properties
5. Seismic Site Response Analysis
6. Seismic Stability of Earth Structures
7. Soil-Foundation-Structure Interaction (SFSI) Analysis
8. Liquefaction and Mitigation Measures
9. GIS and Microzonation
10. Soft Computing Techniques

REGISTRATION FORM (SDEE 2005)

1. Name:

2. Designation:

3. Mailing Address:

   Telephone:
   Fax:
   E-mail:

4. Educational qualifications

5. Experience

6. Motivation for attending the course and future plans

7. Name of the Sponsoring Organisation/College/University

8. Boarding and Lodging required Y/N

9. Signature and date

Note:

- In addition to this form, candidates should fill the NPEEE application form for teachers to participate in the training programme and get the recommendation of the Head of their Institution on the same.

MAIL TO

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The course is planned to be conducted at the Geotechnical Engineering Division, IIT Madras, which has considerable expertise in the area of Soil Dynamics and Geotechnical Earthquake Engineering. The Faculty of Geotechnical Engineering Division who has teaching, consultancy and research experience in the subject will deliver the lectures. Both theory and tutorial sessions will be conducted. In addition, demonstration of laboratory and field dynamic tests is also proposed.

IMPORTANT DETAILS

- Only permanent full-time faculty of AICTE recognized engineering colleges are eligible to apply. Only 30 seats are available.
- Cancellation after registration is highly discouraged and application will be given low preference during selection for future courses.
- Candidates are eligible for III AC train fare from the nearest station on production of a copy of the ticket. Non-AC double room accommodation will be provided on a shared basis during the workshop period.
- Last date for Registration **30 May 2005**

CORRESPONDENCE

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National Programme on Earthquake Engineering Education (NPEEE)

Short Term Course on

Soil Dynamics and Earthquake Engineering

June 13 – 17, 2005

Coordinators
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Dr G R Dodagoudar

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