

Introduction

Product development/improvement requires knowledge in diverse subjects such as solid/fluid mechanics, heat transfer and theory of machines. The availability of powerful computers allows these to be done today with the aid of softwares for Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD) and Mechanism Analysis. The current trend in the engineering simulation software industry is for these to be integrated into a single Computer Aided Engineering (CAE) software suit which serves as a one point solution for a product developer. This allows the product development cycle time to be greatly reduced compared to the conventional design-build prototype-test routine.

Course Outline

The basic aim of the course is two-fold. Firstly we aim to enable you gain an appreciation of the theory behind the computer screen, so that you can develop your own programs and use the software intelligently. Our second aim is to enable you to appreciate the nuances of the concepts through solving on software carefully designed exercise problems. With this two pronged approach of theory and hands-on practice, we believe you will be firmly set on your path to become CAE expert. Thus, we will begin with a refresher on some of the basic concepts in Stress Analysis, Heat Transfer, Fluid Mechanics, Mechanisms etc. Building on these concepts, we will then discuss how these problems are

formulated in such a manner that the computer software can solve them easily. The lectures will be complemented by practice sessions on software, which are given significant emphasis in this course.

Who may benefit

The course is intended for faculty of engineering colleges and participants from industry.

Facility / Faculty

Computational Lab of Mech. Engg. is expected to be used for practice sessions. Prof. A. Guha, Prof. A. Sharma and Prof. P. Seshu will give the lectures.

Programme Venue

The course is scheduled during November 17 – 21, 2008 at Institute Auditorium, IRCC Bldg., IIT Bombay.

Course Fee

Rs. 12,500 per participant for college teachers and Rs. 15,000 per participants from industry. The fees are inclusive of one set of course notes, working lunch and lodging in IIT Guest House.

Course Coordinators

Prof. Anirban Guha and Prof. Atul Sharma, Dept. of Mechanical Engg.

REGISTRATION FORM

Five-day CEP Course on
Computer Aided Engineering (CAE)

November 17 – 21, 2008

NAME (PRINT) :

_____ Gender: M / F

DESIGNATION :

INSTITUTION / ORGANIZATION:

MAILING ADDRESS :

TELEPHONE : _____(O) _____(R)

FAX: _____ MOBILE: _____

EMAIL : _____

QUALIFICATIONS : _____ EXPERIENCE : ____ Yrs.

IIT Guest House accommodation required?* YES / NO

PAYMENT: D.D. No.: _____ Dt. _____ Rs. _____

[Demand draft should be drawn in favour of "Registrar, IIT Bombay (CEP A/c)".]

Date:

Signature of Applicant

(PHOTOCOPY ADDITIONAL COPIES OF THIS FORM, IF NEEDED)

Address all correspondence to:

Prof. Anirban Guha,
Course Coordinator,
Dept. of Mechanical Engineering,
Indian Institute of Technology Bombay,
Powai, Mumbai - 400 076.
Tel : (022) 2576 7590 (O), 2576 8590 (R)
Fax : (022) 2572 6875, 2572 3480
Email : anirbanguha@iitb.ac.in, atuls@me.iitb.ac.in

**For information on other Continuing Education
Programmes at IIT B, contact:**

PROFESSOR-IN-CHARGE, (CE & QIP),
OFFICE OF
CONTINUING EDUCATION & QUALITY IMPROVEMENT
PROGRAMMES,
INDIAN INSTITUTE OF TECHNOLOGY BOMBAY,
POWAI, MUMBAI – 400 076.
TEL. NO. : 022-2576 7060, 2572 6199
FAX : 2572 3480
Email : cep@admin.iitb.ac.in

For latest information on CEP, please visit our home page at :
<http://www.iitb.ac.in/~cep>

Accommodation

Accommodation in IIT Guest House will be provided on first come first serve basis in twin-sharing rooms. A maximum of 30 participants will be allowed.

Registration Procedure

1. Fill up registration form.
2. Draw a Demand Draft for the course fee in favour of “**Registrar, IIT Bombay – CEP Account**” payable at Mumbai.
3. Send registration form and demand draft to the Course Coordinator.

Kindly note that no income tax is to be deducted at source from the course fee, as IIT Bombay is exempt from the same.

**APPLICATIONS MAY BE SENT SO AS TO REACH US NOT
LATER THAN NOVEMBER 10, 2008.**

Address all correspondence to:

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Powai, Mumbai - 400 076.
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Powai, Mumbai - 400076