

ABOUT THE COURSE

Already in its fiftieth edition, this course needs no introduction to the industry and the working professionals in the process industry.

About 4000 engineers and 250 organizations in India and abroad have so far benefited from this unique course in the last 15 years. It would not be out of place here to highlight those features of the course, which have got it such massive support from industry circles. The last year saw three editions of the course conducted in Sharjah and Dubai for the benefit of the engineering community in the Middle East countries.

Piping Engineering is a truly multidisciplinary subject. It draws its knowledge base from chemical, mechanical, civil, electrical, metallurgical, instrumentation, control engineering, to name a few. Traditionally, chemical or mechanical engineers have taken to this profession and it is believed that about 10 years on-job experience and exposure can make a few gifted ones 'piping engineers' in real sense. Design/engineering sector as well as operating companies have always yearned for a formal training programme in piping engineering so that this slow self-training approach could be replaced by a fast track. Against this background the present course emerged.

Few design organizations as well as eminent piping engineers joined hands with IIT Bombay and methodically designed a formal Certificate Course on Piping Engineering for chemical and mechanical engineering graduates. Once it was offered in 1991, the course has had a fairy tale like journey and is the most sought after course in the engineering circles.

The course has undergone continuous revisions, helped to a large extent by the feedback given by the participants and the industry. It is now an optimal mixture of theory and practice. The instruction hours are shared by IIT faculty and speakers from industry, the latter playing a significant role.

The activity was institutionalized through the formation of a Piping Engineering Cell in CAD Centre, which now conducts this course. The acceptance of the course by the industry has virtually forced the hands of various software houses and the Piping Engineering Cell has now a collection of most state-of-the-art piping engineering software. These are extensively used during the course.

The open course is conducted twice every year, the winter edition beginning on the first or second Wednesday of December and the Summer edition on the first or second Wednesday of May. These are calendar events. Enrollment for the Winter 2008 course is now open. Please note that the medium of instruction in the course is English.

THE COURSE COVERAGE

Fresh or working, chemical or mechanical engineering graduates are normally preferred. Few seats are also given to the instrumentation, production and refinery-engineering graduates on proven aptitude basis. Diploma holders are normally not admitted. In exceptional cases, diploma holders with considerable relevant experience (at least 7 Years) are admitted. It is an exposure level course and the participant profile is young. Experienced working engineers from operating companies and design organizations also attend in significant numbers and have found the course a horizon - widening experience.

The vastness of the subject and limited duration of the course do not allow in-depth coverage of each and every topic. The topics which are covered in adequate details are as follows:

- Scope of Piping Engineering
- Codes and Standards
- Piping Elements & Specialties
- Mechanical Design Fundamentals
- Pipe Hydraulics & Sizing
- Piping Drawing Basics
- Development of Plot Plan
- Equipment Layout
- Process Piping Layout
- Utility Piping Layout
- Flexibility Analysis
- Selection of Supports & Expansion Joints

Exposure Level Lectures are delivered on some of the following topics.

- Steam Engineering
- Transient Fluid Flow Analysis
- Cryogenic Storage
- Dynamic Analysis
- Process Insulation
- Instrumentation and Control

Practicals are an important part of the course. The participants are encouraged to develop rational thinking skills through a case study approach. Exposure to important CAD tools available in Piping Engineering arena is offered.

Multimedia teaching aids are incorporated. This allows display of three dimensional plant models, carrying out computer aided design and engineering in the classroom itself, showing video clippings to support a point etc. At the same time, all care is taken to emphasize on teaching rather than on presentation.

A comprehensive test is given at the end of the course.

COURSE FEES

Rs.40,000/- (self-financed candidates / company sponsored candidates)

US \$3000/- (Foreign Nationals / Non-Resident Indians, Persons working abroad)

The course fees are inclusive of one set of course material and working lunch. All other expenses are chargeable extra.

Companies please note that the courses conducted in IIT are exempt from Income Tax and hence no TDS should be deducted.

ACCOMMODATION

Subject to availability, only bachelor accommodation is offered in the **IIT Students Hostels (Rs.150/- per day)**. **IIT Guest House is not available**. Accommodation is not included in the course fees and is on first-come-first-served basis.

LAST DATE

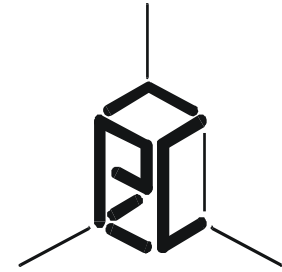
The admissions are strictly on **first-come-first-served** basis and would close latest by **October 15, 2008 for foreign nationals** – to enable us to get necessary clearance for their visit & stay in India and **November 25, 2008 for Indian nationals & NRIs**.

Please note that these are the last closing dates and admissions are normally closed as soon as the seats are full.

As per past experience, seats would be full well before the last date.

REGISTRATION

To register, the accompanying registration form or its Xeroxes may be used. Completed registration form along with Demand Draft for requisite amount drawn in favor of **Registrar, IIT Bombay, CEP Account** must reach the course coordinator on or before the appropriate last dates mentioned above. The seat is confirmed only after receipt of payment. Fees once paid are not refundable under any circumstances. In special cases, transfer of registration to the next course or replacement of the registered candidate by another eligible candidate may be permitted.



**Continuing Education and Quality Improvement Programmes
&
Piping Engineering Cell, IIT Bombay**

Certificate Course on PIPING ENGINEERING

December 10 – 23, 2008

Course Coordinator:

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REGISTRATION FORM
CERTIFICATE COURSE ON PIPING ENGINEERING

December 10 – 23, 2008

at CAD Centre, IIT Bombay

[**Last Date of registration** : Indian Nationals - November 25, 2008

Foreign Nationals - October 15, 2008

Please Tick Self Financed
 Company Financed
 Persons working abroad

Name: Mr./Ms. _____

Date of Birth: _____ Gender: M / F Nationality: _____

Academic Qualification: _____ Branch: _____

Address for correspondence: _____

Phone No. : _____ e-mail : _____

Organization Name and Address: _____

Designation: _____ Years of Experience: _____

Boarding and Lodging requested? Student Hostel / Not Required

If Yes, Please give details of expected arrival at I.I.T.

Date: _____ Time: _____ Place: _____ Signature of the Applicant _____

For Office Use

Cheque /DD No.: _____ Date: _____ Bank: _____

Place: _____ Amount Rs.: _____

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