

# 6000

## PIPING ENGINEERING

### Industry Recognized Piping Engineer Program

The College of Engineering at AUS and in collaboration with Pinnacle Knowledge Group and Indian Institute of Technology at Bombay, introduces to the region, the first online-contact Piping Engineering course.

The online course was launched on July 16, 2009. Engineers from all around the world have enrolled in this course. Due to its success, a vast number of organizations have ticked this course as a part of their annual training calendar. This course is more comprehensive than the contact course. The USP is the knowledge of Piping Engineering assimilated over the last 20 years of teaching. A unique methodology was developed for transmitting engineering knowledge online. Sound content and a unique content manager make it possible for engineers everywhere to learn the subject as if an instructor is teaching personally. The enhanced and web enabled course content enriched with extensive examples, tutorials, assignments and applications is now available globally.

The duration of the AUS version of the course is 6 months at which the registrant would have access to the online material, applications and remote tutoring. A grace period of one month is accommodated for those who wish to take a break during the 6 months period.

The primary advantage of the AUS version of the course is that it includes three eight hours contact mode sessions. Each course will initiate at AUS with a head start of one day induction session. After 60 days a study session is conducted dedicated to the covered material, Q&A and exercises. The last contact session, which is the revision session, will be conducted at the end of the course and before the exam.



### Course Outline

Codes and Standards  
Piping Elements and Valves  
Pipe Hydraulics and Sizing  
Mechanical Design Fundamentals

Piping Drawing Basics  
Development of Plot Plan  
Equipment and Piping Layout  
Stress Analysis - Static and Dynamic

Selection and Design of Supports and Expansion Joints  
Transient Fluid Flow Analysis  
A Unifying Case Study

### Course Chapters

01 About the course  
02 Scope of Piping Engineering  
03 Pipe Sizing Techniques  
04 Mechanical Design of Pipes  
05 Codes and Standards  
06 Piping Elements  
07 Valves

08 Transient Flow in Piping Systems  
09 Piping Network Design  
10 Insulation Design for Pipes  
11 Nozzle Reinforcement  
12 Various Stresses in Pipes  
13 Supports  
14 Thermal Stresses in Pipes

15 Stress Analysis  
16 Expansion Joints  
17 Basics of Piping Drawing  
18 Plot Plan Fundamentals  
19 Equipment and Piping Layout  
20 Dynamic Analysis of Pipe  
21 Case Study

### Features of the Online Course

Your choice of time, place and pace at your convenience

In-depth course content - over 5 times the contact course with up to 500 hours of reading

Possibility of blended learning - unique combination of online and contact course

Access to a wide range of applications including PAnORaMA, the renowned pipeline leak detection software

Accessibility to course faculty and counseling services

Special portal access for corporate entities on bulk purchases to manage licenses and monitor performance

Online examination at a center and time of your choice; multiple attempts possible

Unique platform for the Piping Engineering community for knowledge sharing

Welcome kit including notes, case study videos, plot plans, PAnORaMA tutorials and help files.

## Who Should Attend

Engineers and graduating college students in the disciplines of Mechanical Engineering, Chemical engineering, Production / Industrial engineering, Instrumentation engineering, Petroleum engineering and Civil / Construction engineering.

## Course Prerequisite

To qualify, the registrants need to be engineering degree holders, senior engineering students or should hold a diploma in engineering with 3 years work experience.

## In What Fields

Process plants, power plants, ship-building, marine industry, cross-country piping (buried, above ground, sub-sea), city gas distribution, Municipal corporations in distribution of utilities (gas, water, chilled water etc.) and offshore platforms.

## Participants From

Alba (Bahrain)	ALSTOM POWER	BELLELI ENERGY (Italy)	Petrofac
Galfar (Oman)	Megarme	Qatar Design Consortium	ADGAS
J. Ray Mcdermott	Mott Macdonald	Velosi	Dubai Petroleum
Kuwait Oil Corporation	National Petroleum Construction Company (NPCC)	Worley Parsons (Oman, Kazakhstan, Indonesia)	Perma Pipes

## News

In Malaysia Ministry of Human Resources approved this course under Perous program where companies will have to pay to government 1% of their profit every year and the government will contribute 20% of the fees for each participants to get high end engineering knowledge and skills.

ALSTOM POWER a world leader in power generation and transmission with presence in 100 countries and turnover of Euro 20.9 billion and 92,700 employees, is continuously enrolling engineers from France, Germany, Switzerland, etc. for this course.

## Certificates

**Certificate of completion** will be issued by American University of Sharjah to those who attend and complete the course provided that the participants cover a minimum of 300 online hours.

**Piping Engineering certificate** will be issued by IIT Bombay upon the completion of the course and passing the exam.

## About the Exam

The prerequisite for taking the official piping engineering exam is the completion of 300 hours of online coursework. The piping engineering exam will be held at the American University of Sharjah testing centers. The exam will be open-book and online. The duration of the exam is 120 minutes. The exam is constituted of 120 multiple choice questions and a curve grading system will be used to set the average passing score. Two attempts to pass the exam are free of charge and any extra attempt will cost \$300.

The Engineering Outreach Program (EOP) is pleased to announce that it will coordinate interviews between interested organizations and the participants who successfully attend the course and pass the exam. The dates and venue will be decided and advised as seen suitable by EOP.

“EACH CHAPTER STARTS WITH A VERY BASIC LAYMAN’S LANGUAGE AND ENDS IN A VERY DETAILED MANNER AND THIS BOOSTED THE SUCCESS OF THIS COURSE.”  
Sadakkathulla / Dubai, UAE

“ALL IN ALL, IT IS A GREAT CHANCE FOR ANY WORKING/ASPIRANT PIPING ENGINEER TO ATTEND THIS FABULOUS COURSE.”  
Dolly Sebastian / Galfar, Oman



**To register:**

<https://www.regonline.com/PipingEng600>

**Engineering Outreach Program**

**For more information:**  
cen-outreach@aus.edu  
+971 6 515 2852

Mr. G Ramakrishnan  
+971 55 511 1647