


# Welding and Fabrication

Conducted by Indian Institute of Technology (IIT), Bombay



Fusion welding is a process involving a number of multi-disciplinary areas. Selection of a suitable welding process and corresponding parameters greatly influence the final joint quality. In recent times, the area of fusion welding has observed significant advancements towards the development of new processes and of methodologies for the selection of requisite process parameters based on mathematical models. This course will aim at dissemination of knowledge in the area of recent advances in fusion welding processes and use of computational tools to optimize process parameters to achieve a certain weld attribute. The course aims at a pragmatic and practical industry oriented outlook for which IIT, Bombay is well recognized.

▶ Interactive contact mode course with interpersonal attention		▶ Certification by IIT Bombay after clearance of mandatory examination held post-course	
<p align="center"><b>Faculty</b></p> <p align="center"><b>Prof. Amitava De, Ph.D</b></p> <p>Course Coordinator, Mechanical Engineering, IIT Bombay B.E, M. Tech &amp; Ph. d, IIT, Kaharagpur, India</p>		<p align="center"><b>Topics</b></p> <ul style="list-style-type: none"> <li>◆ Advanced technologies in GMAW and SAW processes.</li> <li>◆ How mathematical tools help in better understanding of welding technology?</li> <li>◆ Advanced technologies in sheet metal joining.</li> <li>◆ How to predict weld joint attributes through mathematical tools?</li> <li>◆ Development of process models as an aid to design for welding.</li> </ul>	
<p><b>Prof. Amitava De</b> is the course coordinator at IIT Bombay. His research interests include fundamental modeling of welding processes, design for welding by linking process model and GA, fundamental modeling of LENS process and optimization of manufacturing processes.</p>		<p align="center"><b>Program features</b></p> <ul style="list-style-type: none"> <li>◆ Exposure to some of the latest technologies in fusion welding processes.</li> <li>◆ Understanding use of mathematical tools for welding process design.</li> <li>◆ Exposure to the use of computer based tools for the prediction of weld joint dimensions, distortion and residual stress in welding.</li> </ul>	
<p align="center"><b>Eligibility</b></p> <ul style="list-style-type: none"> <li>◆ Practicing welding engineers</li> <li>◆ Junior academicians working in similar area</li> </ul>		<p align="center"><b>Benefits</b></p> <p>The participants will get an exposure to advanced welding technologies and modern tools that can aid the decision towards the selection of optimum process parameters alleviating the need of huge volume of trial-and-error experiments.</p>	
<p align="center"><b>Target Industries</b></p> <ul style="list-style-type: none"> <li>◆ Shipping</li> <li>◆ Petroleum</li> <li>◆ Fabrication</li> <li>◆ Oil and Gas</li> <li>◆ Construction</li> </ul>		<p><b>Proposed course dates</b></p> <p>May 27 to June 1, 2009</p>	<p><b>Course duration</b></p> <p>6 days / 30 hours</p>
		<p><b>Timings</b></p> <p>Evenings to suit working professionals</p>	<p><b>Course fee</b></p> <p>Course fee USD 1750 Registration fee USD 100 (not refundable) 20% discount for first 10 registrations 10% discount for next 10 registrations</p>
<p><b>PINNACLE KNOWLEDGE GROUP</b></p> <p>Block 2B, G08 Dubai Knowledge Village, Dubai Phone: +971 4 375 5526 Fax : +971 4 429 3664 www.pinnacleknowledge.com</p>		<p><b>Partner</b></p> 	<p align="center"><b>Registrations</b></p> <p align="center">Write to <a href="mailto:cep@pinnacleknowledge.com">cep@pinnacleknowledge.com</a> ♦ Call 04 375 5526</p> <p align="center">♦ Satish(M.Tech-IITB) 050 919 8049 ♦ Sushma(B.Tech-IITB) 050 919 8914</p>

# Continuing Education Programs (CEP)

Conducted by Indian Institute of Technology (IIT), Bombay



The Continuing Education Program (CEP) at IIT Bombay has been set up to meet the manpower training and knowledge up gradation needs of the industry. They are conducted for working professionals and teachers to enhance their skills and meet industry requirements.

**OVER 100 CANDIDATES FROM 35 COMPANIES HAVE BENEFITED IN UAE IN LAST ONE YEAR BY PARTICIPATING IN OUR CEP COURSES**

## Feedback from past participants of the various courses

- ◆ The course provides us with guidelines and ideas about how to effectively plan, schedule, monitor our projects and tackle our daily activities efficiently. This course has made me more confident in managing my projects—**Richard Bautista, Zebian Aluminium** on Project Management
- ◆ Very well put together course with excellent content. Was really impressed with how much I learned in such a short time. **Saju Parameswaran, Grayloc** on Piping Engineering
- ◆ Course covered is very useful in our field since it covers the major planning and management. It gives a clear idea of major tools and points to stress on. It's our honor to attend a class conducted by such a senior professor. The knowledge and examples given to us are invaluable —**Sachin Sharma, Kaefer LLC** on Project Management
- ◆ The piping engineering course was very useful from the practical point of view. I would say upon completion of the course the level of confident to work as a piping engineer is very high. **Ananthakrishnan, Dubai Petroleum** on Piping Engineering

## Some of the key CEP courses

- ◆ Piping Engineering
- ◆ Project Management
- ◆ Industrial Corrosion
- ◆ Welding
- ◆ Automation and Control
- ◆ Six Sigma
- ◆ Logistics & Supply Chain Management
- ◆ Offshore Structures
- ◆ Sheet Metal Engineering
- ◆ Maintenance Management
- ◆ Paint, Coating, Inspection & Quality Control
- ◆ Energy Auditing

## Key programs conducted in UAE

- ◆ Piping Engineering — November 2007
- ◆ Piping Engineering — April 2008
- ◆ Piping Engineering — June 2008
- ◆ Project Management — October 2008
- ◆ Piping Engineering — February 2009



Course in session

## Our CEP course participants come from



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