Overview

Prestressed concrete is used extensively in bridges, multistory buildings and in many other important parts of today's modern infrastructure.The inherent weakness of concrete in tension is offset by introducing a pre-compression in a prestressed member, which improves its service load behavior, leading to reduced deflections and cracking.

This course will provide a detailed coverage on behavior of prestressed concrete, analysis and design for strength and serviceability of beams,slabs, continuous members, anchorage design and losses in prestressing.It will also cover the recent advances in prestressed technology including external post-tensioning,use of fiber reinforced polymer in pre-stressing and improvement in the durability of prestressed concrete structures.

This course will also address the recent innovations and improvements in design issues of precast technology for modern buildings and bridges. It also aims to train the practitioners on the practical design of prestressed structures in an interactive manner. This course will be taught by internationally acclaimed academics, researchers and prestressed concrete industry specialists.

Course participants will learn these topics through lectures,hands-on experiments. case studies and assignments will be shared to stimulate research motivation of participants..

You Should Attend If You Are

-structural engineer
-research scientist
-contractor/builder
-student or faculty

Participation Fees

Abroad Partcipants: **US $500**
Industry Rs.20000
Research Organizations: **Rs.16000**
Academic Institutions: **Rs.12000**
Students : **Rs.2000**

Fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges. The participants will be provided with accommodation on payment basis. Additional fee of **Rs. 2500** shall be paid for lunch and refreshments during the course.

Registration Form

Name:.....
Designation:.....
Organisation:.....
Ph no.:.....
Email:.....
Registration fee:.....
Enclosed is a closed draft no.....
dated.....for Rs.....
In favour of "IIT Hyderabad" payable at State Bank of India, Hyderabad.
IIT Kandi: (Branch code: 14182)
Hyderabad, India
SWIFT Code: SBIN0014182 (Within India),
SWIFT code SBININBB762,(Abroad)
IMCR CODE:502002528
Account No.: 30859878032 (Current A/c)

Online registration and online payment is recommended
http://www.iith.ac.in/~prestressed

Module 1
Introduction to Modern Prestressed Concrete

Module 2
Losses in Prestressing

Module 3
Analysis and Design for Flexure

Module 4
Analysis and Design for Shear and Torsion

Module 5
Analysis and Design of statically Indeterminate Structural Elements

Module 6
Real Life Case Studies in prestressed and precast construction

Course Coordinator
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GIAN course on

Advanced Prestressed Concrete Design for Modern Buildings and Bridges

Dec 12th- 22nd,2016

Dept of Civil Engineering, IIT-Hyderabad

For more information
http://www.iith.ac.in/~prestressed

Speakers

Dr. Sri Sritharan
Wilson Engineering Professor,
Iowa State University,
USA.

Prof. Sritharan joined the Department of Civil, Construction and Environmental Engineer-ing (CCEE) at Iowa State University as an Assistant Professor in December 1999. He became an Associate Professor in 2005 and Full Professor in 2010. He served as the Director of Graduate Education (DOGE) and Associate Chair for Research and Graduate Affairs for the CCEE department from 2007 to 2012, and the faculty lead for the Wind Energy Initiative of the College of Engineering from 2011 to 2014. He became the Grace Miller Wilson and T. A. Wilson Endowed Engineering Professor in 2008.

Dr. Amlan Sengupta
Professor,
Indian Institute of Technology,
Madras.

Dr. Amlan Sengupta earned his B-Tech in Civil Engineering from IIT Kharagpur. Thereafter, he pursued his MS from Rice University, USA and PhD from University of Missouri Rolla, USA. His research expertise includes prestressed concrete behaviour and design, experimental investigation of reinforced concrete members and analysis, design and seismic retrofit of buildings. Be-fore joining IIT Madras, he worked with Ove Arup Partners, a renowned design firm. He has authored number of journal papers on the behaviour of reinforced concrete/ prestressed concrete and strengthening of concrete members.

Dr. Subramaniam
Professor & Dean (Planning)
Indian Institute of Technology,
Hyderabad.

Dr. Subramaniam is Professor & Dean (Planning) Department of Civil Engineering, IITH, research expertise is in the areas of material characterization using destructive and non-destructive methods, health monitoring and strengthening of structures. He has published several papers on condition assessment and repair of concrete structures. He has also served as a consultant on various projects related to condition assessment and strengthening. He is a fellow of ASCE and ACI, USA and serves on several international committees on concrete structures.

Dr. Suriya Prakash
Associate professor,
Indian Institute of Technology,
Hyderabad.

His research expertise is on prestressed concrete behaviour and design. He worked with Structural Group Inc., a renowned firm in strengthening design and construction using advanced construction materials. He has authored more than thirty journal papers on the behaviour of reinforced concrete/ prestressed concrete. He has also extensively worked on strengthening of prestressed/ precast elements with FRP composites. He is a member of ASCE and ACI, USA. He is a recepient of prestigious Ramanujan fellowship sponsored by DST India.