

ONLINE REFRESHER COURSE ON

PRE-STRESSED CONCRETE FOR BRIDGES & BUILDINGS

20th March 2021 till 01 May 2021

Every Saturday from 14:30 Hours to 18:30 Hours (IST)



ABOUT THE COURSE

The main objective of this course is to provide young engineers with an insight in the design of prestressed concrete members and structures through advanced understanding of material and structural behavior. This course is offered to Young Engineers (Graduate / Post Graduates) having 0-5 years of experience in the design and who are not well conversant with the subject. The topic covered include fundamentals of prestressing, Prestressing systems and hard wares, Pre-tensioned and post tensioned members, provision of IRC/IRS/BIS code on prestressing, Analysis, Losses in prestressed concrete, Analysis and design of statically determinate prestressed concrete buildings and bridge structures, post tensioned flat slab designs, case studies of few bridge designs.

The Faculty for this course are all eminent practicing engineers from the industry.

REGISTRATION FEE

IAStructE Members	: Rs 5,000/- + 18% GST
Non Members	: Rs 7,500/- + 18% GST
Students	: Rs 2,500/- + 18% GST
Foreign Nationals	: USD 130 or INR 10000/- (GST Included)
<i>(Foreign nationals - 20% discount for members of MoU Associations)</i>	
<i>(E-certificate of participation will be provided)</i>	

SPONSORSHIP OPTION (GST payable on reverse charge)

ENTITLEMENTS	DIAMOND SPONSOR (INR 3,00,000)	SUPPORTER (INR 1,00,000)
Presentation Slot	15 mins.	N.A..
Advertisement in SED (an official publication of IAStructE published as soft copy)	One Colour Page	One Colour Page
Logo in Poster & all related correspondence		
Company Profile to all delegates		

HOW TO REGISTER

STEP 1 : Registration fee shall be paid through NEFT/RTGS/UPI as per bank details given below :

Beneficiary: Indian Association of Structural Engineers;
 C. Account No.: 10151200388, IFSC:SBIN0007196
 MICR: 110002034 ; Bank: State Bank of India(07196)
 Branch Address: Flyover Market, Defence Colony, ND 110024

STEP 2: The details of the participant (Name, Designation, Organization, Email id, Mobile) along with the proof of the payment shall be sent to iastructe@gmail.com for registration. Students must send their valid ID card (scanned) along with proof of payment. *The registration link for webinar shall be sent prior to the every lecture to the confirmed participants.*

For any clarification on the above steps, please contact the IAStructE Secretariat on
 Email iastructe@gmail.com, Tel 011-45794829

PROGRAMME FOR COURSE ON PRE-STRESSED CONCRETE DESIGN

COURSE CO-ORDINATOR : Mr. V N HEGGADE, CEO, STUP Consultants Pvt Ltd

(TIMINGS FOR THE COURSE : 14:30 HRS TO 18:30 HRS)

S.No.	Title*	DAY	Duration	Proposed Faculty*
1	INTRODUCTION – History and application of Prestressing in all fields (Buildings, Bridges, Aqueducts, Nuclear Plants, Hangars...etc.), Concepts of Pre-stressed and Post Tensioned Concrete - Materials, Methods & Systems.	20.03.21	1.5 Hrs.	Dr Harshavardhan Subbarao <i>CMD, Construma Consultancy Pvt Ltd</i> Mr. Vipul Ahuja <i>VP (N) IAStructE & Director & CEO, Ahuja Consultants Pvt Ltd</i>
2	BASICS OF PRESTRESSING - A broad Overview of Prestressing System including PSC anchors.	20.03.21	1.5 Hrs.	Mr Vinay Gupta <i>Director & CEO, Tandon Consultants Pvt Ltd</i>
3	Presentation by Prestressing System Supplier with Video - On-Site Application with Focus on Cable Placement, Stressing, Grouting Operation	20.03.21	2 X 30 Minutes	<i>To be identified</i>
4	Basic Concept of Flexure Strength, Shear, Torsion, Creep, Prestress Losses (short term & long term) and Deflections	27.03.21	1.5 Hrs.	Mr Umesh Rajeshirke <i>VP(W), IAStructE & MD – Spectrum Techno Consultants Pvt Ltd</i>
5	Full span & Segmental precast technologies for Bridge Superstructure	27.03.21	1.5 Hrs.	Mr V. N. Heggade <i>CEO, STUP Consultants Pvt Ltd</i>
6	Load Case Prestressing – primary effect 'e x P': type of tendons, profiling, force diagram, verification of force diagram during stressing including causes for non-compliances and possible remedies.	27.03.21	1 Hour.	Mr Max Meyer <i>Independent Consultant, Singapore</i>
7	Mass Use of Precast-Prestressed elements in Metro construction in station buildings, viaducts and double decker.	03.04.21	1.5 Hr.	Prof Mahesh Tandon <i>MD-Tandon Consultants Pvt Ltd</i>
9	Durability of Prestressed Structures	03.04.21	1.5 Hr	Mr Max Meyer <i>Independent Consultant, Singapore</i>
10	Presentation by Contracting Firm with Video - Highlighting The Technologies for Precast Full Span & Segmental Construction	03.04.21	2 X 30 Minutes	<i>To be identified</i>
11	Design & Construction of precast prestressed sleepers & pretensioned aqueduct- Case studies	10.04.21	1 Hour	Mr Alok Bhowmick <i>MD, B&S Engineering Consultants Pvt Ltd</i>
12	A case study of design of PSC airport hangers & Industrial structure (Samtel factory building).	10.04.21	1 Hour	Prof Mahesh Tandon <i>MD-Tandon Consultants Pvt Ltd</i>

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13	Design of Post Tensioned Flat Slab for Buildings - BUILDINGS CASE STUDY	10.04.21	1 Hour	Dr. Satish Jain <i>MD, Satish Jain Consulting Engineers Pvt. Ltd.</i>
14	Presentation by Software Developers - Highlighting The Software Capability in Dealing with Prestressed Structures	10.04.21	2 X 30 Minutes.	<i>To be identified</i>
15	CASE STUDY - BRIDGES-1 : Design of Simply Supported Precast PSC Girder System for Bridges (Post Tensioned as well as Pre-Tensioned)	17.04.21	1 Hour.	Mr Anirban Sengupta <i>CTO, STUP Consultants Pvt Ltd</i>
16	CASE STUDY - BRIDGES-2 : Design of Continuous Precast PSC Girder System for Bridges	17.04.21	1 Hour	
17	Analysis & Design for prestressing using software and manual checklists for verification of the same	17.04.21	1 Hour	Mr Jatinder Pahuja <i>MD, Paragon Consultants Pvt Ltd</i>
18	Presentation by Contracting Firm with Video - Highlighting Use of Precast Units in Metro Structures	17.04.21	2 X 30 Minutes	<i>To be identified</i>
19	Advanced concepts of Creep shrinkage and hyper-static effects and creep redistribution effects	24.04.21	1.5 Hrs.	Mr Umesh Rajeshirke <i>VP(W), IAStructE & MD – Spectrum Techno Consultants Pvt Ltd</i>
20	Provisions in IRC, IRS and BIS codes on Prestressing. Discussion on Codes and Standards.	24.04.21	1.5 Hrs.	Mr ALOK BHOWMICK <i>President IAStructE</i> <i>MD, B&S Engineering Consultants Pvt Ltd</i>
21	CASE STUDY – CHANDIGARH-KHARAR PROJECT : Design of Integral Elevated viaduct with precast pretensioned girders integrated with precast prestressed post tensioned pier cap	24.04.21	1.0 Hrs.	Mr Sanjay Kumar Jain <i>CEO, B&S Engineering Consultants Pvt Ltd</i>
22	Design & Construction of Spine and Wing segmental construction, Struttred box segmental construction	01.05.21	1.5 Hrs.	Mr Harpreet Singh <i>Sr. Project Manager, B&S Engineering Consultants Pvt Ltd</i>
23	Repair & Rehabilitation of prestressed concrete Structures	01.05.21	1.5 Hrs.	Shri P Y Manjure <i>Director, The Freyssinet Prestressed Concrete Co. Ltd</i>
24	CONCLUDING SESSION - WITH QUESTION & ANSWER	01.05.21	1 Hour.	ALL FACULTY AS PANELISTS

* The faculty / subject shown above is tentative subject to the confirmation