CEAI ACADEMY

Online Training Course on DESIGN OF CABLE STAYED BRIDGES AND EXTRADOSED BRIDGES

6th - 28th September, 2024

About the COURSE

There has been a significant development in the field of cable supported bridges in India in last 10-15 years. Large number of Cable Stayed Bridges and Extradosed Bridges have been either constructed or are under construction in India. Indian Roads Congress (IRC) has recently finalised two independent guidelines for design, construction and maintenance of Cable Stayed and Extradosed Bridges respectively. These guidelines are under print in IRC and will be made available very soon. Being new and not in public domain, majority of the practicing bridge engineers are not familiar with the provision of these two important guidelines. This training course on "Design of Cable Stayed Bridges & Extradosed Bridges" is initiated by CEAI with the objective to disseminate knowledge about these new guidelines and to guide and assist various stakeholders (i.e. Practicing Bridge Engineers, Clients, Contractors, Prestressing System suppliers, Academicians and Research Scholars) in the understanding of principles of structural engineering for various types of long span cable stayed and extradosed bridges.

This course is suitable to Engineers (Graduate / Post Graduates) having some years of experience in the field of bridge design and construction or those who are involved in study, teaching, research in Bridge engineering. The course philosophy is to provide the participants with the information they need in order to plan, design, review or teach the subject.

After completing this course, participants should be able to decide the best structural option for the feasibility and conceptual study, optimise the structural scheme with cable supported bridges for Detailed project Reports (DPR), and carry out analysis and detailed design for different situations. Participants should be able to carry out design of such structures independently.

This intensive course begins with a broad overview of the two guidelines which are going to be published soon. The lectures will be delivered by convenors of the IRC code committees, responsible for leading a team of experts in framing the code.

This will be followed by detailed explanation on all aspects of planning and design, including the stay cables and pylons. Special lectures will be delivered on Seismic and Wind design considerations by eminent professors and specialists on the subject.

Specialists dealing with Stay Cable technology will deliver few lectures to guide participants on the cable technology, testing and acceptance of stay cables, vibration control mechanism for the stay cables, durability aspects in design and considerations of ease of inspection and maintenance. Construction aspects of cable supported bridges will be covered by industry experts having hands on experience in the subject.

This will be followed by lectures on inspection, maintenance and monitoring of cable supported bridges to be delivered by experts in the relevant field.

The Faculty for this course are all eminent members from academic institutions as well as from the industry, who are seasoned professionals who brings years of experience and professional understanding into the class room. Few case studies will be presented during the training course for various Indian projects. There will be sufficient time given on each day of the lectures for interaction with the participants. Sufficient time will be kept for interactive session.

Last day of the training course will be devoted in conducting a panel discussion where all the faculty will be present online and the participants will be free to get clarification on any of their doubts. Handouts of the presentations will be given to the participants for their records. Participation certificates will be issued to all participants who attends at least 75% of the lectures. Proficiency certificates will be issued in addition to all those who participate and get 75% marks in the online assessment tests, to be taken on the last day.

Registration Fee

a.	General, Non-members	Rs. 8000/-	**Plus GST @ 18%**
b.	CEAI Members	Rs. 6000/-	
c.	Full time Students	Rs. 2000/-	
d.	Foreign Nationals	USD 120 or INR 8000/-	

Every 5 registration from one organisation will entail one free registration from the same organisation

Sponsorship Option :

a.	Diamond Sponsor	Rs. 3 Lacs	**Plus GST @ 18%**
b.	Gold Sponsor	Rs. 2 Lacs	
c.	Silver Sponsorship	Rs. 1 Lac	

Type of Sponsorship/Benefits	Silver	Gold	Platinum
Free Delegates	2	4	6
Free Advertisement in CEAI quarterly journal ViewPoint	only in 1 issue	only in 2 issues	only in 3 issues
Presentation slot in Course	5 Minutes	10 Minutes	15 Minutes

CEAI BANK DETAILS

Account Name : Consulting Engineers Association of India
Account No : 028394600000592
Bank Name : YES BANK LTD
Account type : Saving
IFSC CODE : YESB0000283
Branch Address : Ground Floor, Plot No 2, OCF, Sector B, Pocket 11, Vasant Kunj, New Delhi 110070

REGISTRATION LINK

https://docs.google.com/forms/d/e/1FAIpQLSecD77pUUyGhEGdjCQ7KFiW58XiukOzILIXiT58HvDizXxfBQ/viewform?usp=pp_url

PROGRAMME

Course Coordinator : Er. Alok Bhowmick, **Moderator :** Er. V. N. Heggade

S. No.	Title of Presentation	Faculty	Duration of Lecture
Day 1 : (6 Sept. 2024), Inaugural Session and Introduction to IRC Guidelines for Cable Stayed Bridges & Extradosed Bridges (Time : 15.30 Hrs to 18:15 Hrs)			
1	**Inaugural Session**	- President, CEAI - Course Co-ordinator - Course Moderator - **Mr G Sharan,** DG (Retd.), MoRT & H and Convenor of B-9 Committee	30 Minutes
2	**Lecture 1 :** IRC Guideline on Cable Stayed Bridges (CSB) [IRC:SP:136] – A broad Overview	**Prof. Mahesh Tandon*** Chairman – Tandon, Consultants Pvt. Ltd. New Delhi	45 minutes
3	Sponsor's Presentation-1		15 Minutes
4	**Lecture 2 :** IRC Guideline on Extradosed Bridges (EDB) [IRC:SP:137] – A broad Overview	**Er. Alok Bhowmick** Managing Director, B&S, Engineering Consultants Pvt. Ltd., Noida, U.P	45 minutes
5	Q&A		30 minutes
Day 2 : (7 Sept. 2024), Planning & Design Aspects of Cable Supported Bridges (Time : 16.00 Hrs to 18:15 Hrs)			
6	**Lecture 3 :** Planning and Design of EDB – Important considerations	**Er. P G Venkataram*** Advisor – ASSYSTEM India Pvt. Ltd.	45 minutes
7	Sponsor's Presentation-2		15 Minutes
8	**Lecture 4 :** Planning and Design of CSB – Important considerations	**Er. Borris Wessler*** President – Wiecon Co. Ltd., Taiwan	45 minutes
9	Q&A		30 minutes
Day 3 : (13 Sept. 2024),Treatment of Wind and Earthquake Induced Forces in CSBs and EDBs (Time : 16.00 Hrs to 18:15 Hrs)			
10	**Lecture 5 :** Considerations of Wind loads for Cable supported structures (EDBs and CSBs)	**Prof. Prem Krishna*** Former Professor, IIT Roorkee	45 minutes
11	Sponsor's Presentation-3		15 Minutes
12	**Lecture 6 :** Considerations of Seismic loads for Cable supported structures (EDBs and CSBs)	**Prof. Yogendra Singh*** Railway Bridge Chair, IIT, Roorkee	45 minutes
13	Q&A		30 minutes

Day 4 : (14 Sept. 2024), Stay Cable Technology (Time : 16.00 Hrs to 18:15 Hrs)			
14	**Lecture 7 :** Stay Cable Technology for Cable Stayed Bridges & Extradosed Bridges	**Er. Jatinder Singh Pahuja*** Managing Director - Paragon Consultants, New Delhi	45 minutes
15	Sponsor's Presentation-4		15 Minutes
16	**Lecture 8 :** Corrosion Protection System in Stay Cables, Saddle & Link System Performance Concept	**Er. Max Meyer*** RUIFENG International Pte Ltd., Singapore	30 minutes
17	Sponsor's Presentation-5		15 Minutes
18	Q&A		30 minutes
Day 5 : (20 Sept. 2024), Construction Aspects (Time : 16.00 Hrs to 18:15 Hrs)			
19	**Lecture 9 :** Construction Aspects of CSB – Indian Experience	**Er. Deepak Singla*** Director - SP Singla Construction Pvt. Ltd. Panchkula	45 minutes
20	Sponsor's Presentation-6		15 Minutes
21	**Lecture 10 :** Construction Aspect of EDB – Indian Experience	**Er. C Sankaralingam*** Technical Advisor, Divisional, Corporate - L&T Construction	45 minutes
22	Q&A		30 minutes
Day 6 : (21 Sept. 2024), Inspection, Maintenance & Monitoring			
23	**Lecture 11 :** Issues and Concerns on Inspection, Maintenance and Health Monitoring of Cable Supported Bridges	**Er. Amitabha Ghoshal** Advisory Consultant and Past President - CEAI	45 minutes
24	Sponsor's Presentation-7		15 Minutes
25	**Lecture 12 :** Provisions on Inspection, Maintenance and Monitoring for EDB and CSB in IRC Codes / Guidelines	**Dr Lakshmy Parameswaran*** Former Chief Scientist, CSIR-CRRI	45 minutes
26	Q&A		30 minutes
Day 7 : (27 Sept. 2024), Case Studies of CSBs, EDBs and Health Monitoring			
27	**Lecture 13 :** Case Study of Signature Bridge, Delhi	**Er. V N Heggade** Founder & CEO – DECon, Complete Solutions, Mumbai	30 minutes
28	**Lecture 14 :** Byet Dwarka Bridge – Case Study	**Er. Rajiv Ahuja*** Independent Structural Consultant - Gurugram	30 minutes
29	**Lecture 15 :** Case Study - Durgam Chevuru EDB	**Er. Inki Choi*** Head - Design, Special Bridges L&T Construction, Chennai	30 minutes
30	Q&A		30 minutes
Day 8 : (28 Sept. 2024), Panel Discussion & Assessment			
31	**Panel Discussion** on Future of long span bridges in India	All Faculty (4 mins for each faculty)	90 minutes
32	Assessment of Participants and Q&A	Admin, CEAI Academy	30 minutes
33	Vote of thanks	Moderator : **Er. V. N. Heggade**	15 minutes

Note: Faculty names with * are subject to confirmation.

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