



Certificate Course  
Training Programme on



# Steel Design, Fabrication and Erection

Jointly organized by

Indian Institute of Engineering Science & Technology (IEST), Shibpur  
&  
Institute for Steel Development and Growth (INS DAG)

## Course



01-March 24 to 21-March-24



18:00 PM to 20:00 PM IST  
(From Monday to Friday)

Steel Design

Moment  
Frame

Plate  
Girders

Composite  
Structures

Fabrication  
& Erection

Case  
Studies

## WHO SHOULD ATTEND

- ✦ Young Junior Structural Engineers and other interested working professionals.
- ✦ Teaching personnel in structural engineering.
- ✦ Civil/structural practicing engineers who do not have prior exposure to steel structural design and wish to learn its major components.
- ✦ Post Graduate students in Structural Engineering
- ✦ Undergraduate civil engineering students who are interested in Structural Engineering.

## REGISTRATION FEE

- Students : Rs. 3500 + 18% GST
- Participants from industry/ teaching personnel : Rs. 6500 + 18% GST

E- Certificate shall be issued, jointly by IEST, Shibpur & INS DAG, to those who attend the course to its completion.

## Please contact for any clarification

IEST, SHIBPUR  
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## ABOUT THE COURSE

The usage of steel in a wide variety of structures, such as, contemporary buildings, bridges, airport terminals and different industrial structures, has reached a point where it has started to capture the common user's imagination and perception. Thus, to the structural engineering community, an understanding of steel design, fabrication and construction is crucial. However, very often, budding engineers and working professionals do not have a thorough combined knowledge of the same. This 3-week long online certificate course aims to fulfil this gap. The lectures of the course have been designed to cover, firstly, the modelling, analysis and design of essential steel structural components, namely, the truss, moment frame and plate girder. The design of connections, which is very important in steel design, will be given due weightage. An introduction to the design of composite structures, which is daily gaining significance, is to be provided. The essential aspects of fabrication and erection of steel structures, with focus on offshore structures, bridges, and Metro infrastructure, will also be given a good amount of coverage in this programme. Lastly, some vital case studies on distresses in steel structures and the adopted remedial measures will be discussed.

The lectures will be delivered by personnel from IEST and INSDAG, as well as some eminent practitioners from the field of steel construction. It is expected that the training programme will provide a holistic knowledge of steel design and construction to the structural engineers.

## ABOUT IEST, SHIBPUR

Established in 1856, this is one of the oldest and one of the most renowned engineering institutions in the country, earlier known as Bengal Engineering College (B. E. College) and Bengal Engineering and Science University (BESU), Shibpur. It has now been bestowed the tag of an Institute of National Importance by the Government of India since 2014. It has 16 departments and 8 schools. It has over 250 faculty members and a student strength of over 4000. The Department of Civil Engineering, which is as old as the Engineering College itself, at present provides facilities for research and development in the broad areas of Structural Engineering, Geotechnical Engineering, Water Resources Engineering, Environmental Engineering and Transportation Engineering. The department is well-recognized for its meticulous teaching and has an impressive world-wide alumni base. It is one of the Government of India recognized Quality Improved Programme Centres and is associated with topical research and developmental activities. It handles numerous sponsored research and consultancy projects in various fields. The Department is also involved in several outreach activities and in the dissemination of knowledge through the organization of training programmes, conferences, workshops, etc.

## ABOUT INSDAG

Institute for Steel Development and Growth (INSDAG), a not-for-profit member-based organization established by the Govt. of India (Ministry of Steel) and the major steel producers of the country. Established in line with Steel Construction Institute (SCI), UK, the Institute primarily works towards the development of advanced design methodologies & technical marketing by expanding applications of steel in different segments of industry, upgrading skills & know-how, creating awareness amongst potential users and communicating the benefits of steel vis-à-vis other competitive materials, etc.

## REGISTRATION & PAYMENT DETAILS: (ONLINE)

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

Account name: CONTINUING EDUCATION CENTRE BESUS  
BANK: PUNJAB NATIONAL BANK  
SB a/c No:1532010011963  
IFSC: PUNB0153220 (**Fifth Place is zero**)

**Link for Registration (Last Date of application 26/02/24)**

<https://docs.google.com/forms/d/1NM4u-nmwdno1RqVcgk67BMRPJyNAbXcjC0RCHM0vysc>

**STEP 2:** The details of the participant along with the proof of payment shall be sent vide the Google Form in the given link. Students must send their valid student ID card (scanned) along with proof of payment.

**The access link for each day's session shall be sent to the confirmed participants a day prior to the session.**

**The number of seats is 70 on first-come first-serve basis.**

## LECTURE SCHEDULE (Total 30 Hours)

Sl. No	Topic	Date	Time	Lecturer
1	Introduction to Steel Design	01.03.24 (Friday)	<b>Everyday 2 Hours session 6:00 PM – 8: 00PM</b>	<b>Mr. Manas Mohon Ghosh (INSDAG)</b>
2	(a) Analysis and Design of Truss - Theory	04.03.24 (Monday)		<b>Dr. Soumya Bhattacharjya ((IEST)</b>
	(b) Analysis and Design of Truss- Sessional	05.03.24 (Tuesday)		<b>Dr. S. Paul and Dr. S.K. Barman (IEST)</b>
3	(a) Analysis and Design of Moment Frame - Theory	06.03.24 (Wednesday)		<b>Ms. Nibedita Dey (INSDAG)</b>
	(b) Analysis and Design of Moment Frame - Sessional	07.03.24 (Thursday)		<b>Ms. Nibedita Dey (INSDAG)</b>
4	Design of Connections	08.03.24 (Friday)		<b>Dr. Soumya Bhattacharjya (IEST)</b>
5	(a) Design of Plate Girders - Theory	11.03.24 (Monday)		<b>Prof. Aparna (Dey) Ghosh (IEST)</b>
	(b) Design of Plate Girders - Sessional	12.03.24 (Tuesday)		<b>Prof. Aparna (Dey) Ghosh (IEST)</b>
6	Introduction to Design of Composite Structures	13.03.24 (Wednesday)		<b>Mr. Arijit Guha (INSDAG)</b>
7	(a) Overview on Fabrication & Erection – 1 (Offshore Structures)	14.03.24 (Thursday)		<b>Mr. Sandipan Pal Chakravarty Principal Structural Engineer, Global Process System, Dubai</b>
	(b) Overview on Fabrication & Erection – 2 (Bridge)	15.03.24 (Friday)	<b>Mr. Anirban Sengupta Technical Advisor (Structural Projects) Ex Sr. Vice President &amp; Chief Technical Officer of Stup Consultants Pvt Ltd (Assystem Stup) Vice President (East) IAStrucE</b>	
	(c) Overview on Fabrication & Erection – 3 (Metro Infrastructure)	18.03.24 (Monday)	<b>Mr. Kishore Chandra Mishra Dy. Chief Engineer, Metro Railway, Kolkata</b>	
8	Case Studies on Distresses in Steel Structure	19.03.24 (Tuesday)	<b>Mr. Amitabha Ghosal Advisory Consultant Ex. Director of Stup Consultants Pvt Ltd Ex-President of CEAI</b>	
9	Quiz	20.03.24 (Wednesday)		
10	Feedback and Valedictory session	21.03.24 (Thursday)		