

Five-Days Online Short-Term Course

on

Advances in Structural Engineering

11th to 15th January 2021



Coordinators

Dr. Joy Pal
Dr. Vimal Kumar

Organized by



Department of Civil Engineering
National Institute of Technology Hamirpur
Hamirpur-177005 (H.P.)

About the Institute

National Institute of Technology Hamirpur is one of the thirty-one NITs of the country, which came into existence on 7th August 1986 as Regional Engineering College, a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. On 26th June 2002, REC Hamirpur was awarded the status of Deemed University and upgraded to National Institute of Technology. The Institute offers Bachelor, Master and Doctoral programs in Engineering, Sciences, Architecture, Management and Humanities. Various programs serve the purpose of building a comprehensive foundation of knowledge and of enhancing confidence, creativity and innovation in its students.

About the Department

National Institute of Technology, Hamirpur was established in the year 1986 and the Civil Engineering Department is part of the institute since its inception. Civil Engineering is the branch with a lot of diversity right from structural to transportation engineering, environmental to hydrology to hydraulics engineering, geology to geo-technology to earthquake engineering. Being one of the primary Engineering Departments of the Institute, the Department of Civil Engineering offers B. Tech., M. Tech. and Ph.D. degree programs. The Department has been imparting quality education at undergraduate and post-graduate level. The faculty members have been active in teaching, research as well as academic activities.

Guest of Honour

Dr. Shailesh Kr. Agrawal
Executive Director, BMTPC, Govt. of India

Patron

Prof. (Dr.) Lalit Kumar Awasthi
Director, NIT Hamirpur (H.P.)

Chairperson

Dr. R. S. Banshtu
Head, DoCE, NIT Hamirpur (H.P.)

Convener

Dr. Pardeep Kumar
Associate Professor, DoCE, NIT Hamirpur (H.P.)

Treasurer

Dr. Vimal Kumar
Assistant Professor, DoCE, NIT Hamirpur (H.P.)

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Prof. Raman Parti	Dr. Manendra Singh
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Dr. Joy Pal	Sh. Hem Raj Sharma
Dr. Joseph Tripura	

About the e-STC

Structural engineering is a sub-discipline of civil engineering in which structural engineers are trained to design the 'bones and muscles' that create the form and shape of man-made structures. Structural engineers need to understand and calculate the stability, strength and rigidity and earthquake of built structures for buildings and nonbuilding structures. The structural designs are integrated with those of other designers such as architects and building services engineer and often supervise the construction of projects by contractors on site. They can also be involved in the design of machinery, medical equipment, and vehicles where structural integrity affects functioning and safety. A few areas related to the fresh research in structural engineering includes the exploration of the characterization of new innovative materials, implementation of latest methodologies in the design and construction, structural behaviour against complex loadings and structural analysis and design employing the mathematical codes vis-a-vis the revision of codes of practice from time to time.

The primary aim of this e-STC is to enhance technical and professional competency as well as organizing skills of the faculty members in the field of structural engineering. The course will promote interaction with professionals working in specific areas of research in Academic Institutions, Research Labs, and Industries. Also, exposure will be provided to the audience from renowned speakers on the latest developments in Academia, Research and Industry. This program will bring a positive transformation among the faculty members, research scholars and participants from industries towards research work, and enable the participants to develop competence in understanding recent advances in the proposed topic of the course.

Topics to be covered

Composite structures; performance of prestressed concrete against high-velocity impact; the ballistic response of concrete targets; corrosion in metallic structures; seismic behaviour of structures; structural reliability; advanced concrete technology; stochastic mechanics; retrofitting of structural members; advanced structural health monitoring; structural engineering; fatigue behaviour, durability and performance of special concretes etc.

Resource Persons

- Prof. M A Iqbal, IIT Roorkee
- Prof. Sandeep Chowdhury, IIT Indore
- Dr. Achal Kumar Mittal, CBRI Roorkee
- Prof. S P Singh, NIT Jalandhar
- Prof. Naveen Kwatra, TIET Patiala
- Prof. Vijay Pal Singh, NIT Kurukshetra
- Dr. Nikhil Pujari, Willis Towers Watson
- Dr. Shrisendu Sikdar, Ghent University, Belgium
- Dr. Saurabh Shirodhonkar, IIT Roorkee
- Dr. Abhishek Rajput, IIT Indore
- Dr. Souvik Chakraborty, IIT Delhi
- Dr. Aditya Singh Rajput, IIT Ropar
- Dr. Amit Rathi, IIT Jodhpur
- Dr. Subhrajit Dutta, NIT Silchar
- Dr. Pardeep Kumar, NIT Hamirpur

Important Dates

Last date (Online Registration): 06-01-2021

Confirmation by E-mail: 08-01-2021

e-STC Duration: 11-01-2021 to 15-01-2021

Eligibility

This program is open to faculty members, scientists, research scholars, PG & UG Students and industrial personnel.

e-Registration

Registration Fee: Through SBI Collect

- (a) **Rs. 200 for students**
- (b) **Rs. 500 for participants from Academia/R&D Labs**
- (c) **Rs. 1000 for participants from Industry**

How to Apply

The interested candidates must deposit the non-refundable registration fee through SBI collect with the following procedure:

- a. Go to SBI collect and choose Himachal Pradesh as the state of Institution and type of Institution as an educational institute.
- b. Choose NIT Hamirpur from Name of the Institutions and Select payment category as WORKSHOP FDP STC CONFERENCE.
- c. Generate the payment slip and attach it with the registration form available at the following link.

<https://forms.gle/9MHpiYau8y455bUt9>

Notes: *Applications will be accepted on first-cum-first serve basis.

*Ensure the link is open before you pay the fee.

*Venue: Through Google Meet. The link for the online course will be shared through email later.

e-Certification

E-certificates will be provided to the participants, with at least 80% attendance, upon successful completion of the program.

Contact Details

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