



## SHORT TERM COURSE ON



# Seismic Evaluation and Retrofitting of Buildings

05-08 August 2025

Organized by

Department of Civil Engineering, IIT Guwahati

(Supported by SPARC)

### Objective

The course aims to enhance the knowledge of academicians, scientists and practitioners on evaluation of seismic performance of buildings. Along with the state-of-the-art practice, latest codal provisions will also be deliberated upon to expose the participants to the current practice. Subsequently, starting from the basics of seismic retrofitting, different retrofitting techniques for reinforced concrete and masonry buildings will be discussed in detail. As the course also intends to highlight the practical implementation of seismic evaluation technique, demonstration of seismic performance evaluation using state-of-the-art computer programme will be arranged. The participants will also be visiting the Structural Engineering laboratory to supplement the theoretical and analytical background developed through the lectures and software sessions.

### Course Outline

The short-term course will broadly cover the following topics:

- Earthquake-Resistant Design
  - :: Philosophy and implementation
- Seismic Performance Evaluation of Buildings
  - :: Basic methodology
  - :: Familiarity with Eurocode 8 (Part 3), ASCE 41-23 and Indian Standards
  - :: Case studies
- Seismic Retrofitting of Buildings
  - :: Overview
  - :: Familiarity with Eurocode 8 (Part 3), ASCE 41 and Indian Standards
  - :: Masonry buildings
  - :: RC buildings
  - :: Case studies
- Numerical modelling and nonlinear analysis
  - :: Demonstration using SAP2000 program

## Course Instructors

(a) Dr. Luigi Di Sarno

Department of Structures for Engineering and Architecture, University of Naples, Federico II, Italy (<https://www.iris.unina.it/cris/rp/rp19150>) and

Department of Civil and Environmental Engineering, University of Liverpool, UK

(<https://www.liverpool.ac.uk/people/luigi-di-sarno>)

(b) Dr. Sajal K. Deb, Dept. of Civil Engineering, IIT Guwahati

(<https://www.iitg.ac.in/civil/SKDeb/>)

(c) Dr. Hemant B. Kaushik, Dept. of Civil Engineering, IIT Guwahati

(<https://www.iitg.ac.in/hemantbk/homepage/index.html>)

(d) Dr. Sandip Das, Dept. of Civil Engineering, IIT Guwahati

(<https://www.iitg.ac.in/sandip.das/homepage/index.html>)

(e) Dr. Romanbabu Oinam, Dept. of Civil Engineering, IIT Guwahati

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## Course Coordinators

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## Participants

The course is open to final year undergraduate students of Civil Engineering and postgraduate students of Structural Engineering specialization. Faculty members of Engineering Colleges are also eligible to participate in the course. Limited number of seats are also available for researchers and practitioners from R&D laboratories and industry.

## Course Fees

- Students from engineering colleges : Rs. 1,000 + GST (18%)
- Faculty members from engineering colleges : Rs. 3,000 + GST (18%)
- Scientists from R&D labs and practising engineers : Rs. 10,000 + GST (18%)

The course fee includes expenses towards course material, refreshments and lunch during the course, and does not include expenses towards travel, accommodation, breakfast, and dinner.

## Lodging and Fooding

Limited boarding and lodging facilities are available for the participants in the institute hostels and the institute guesthouse by paying room rent during the course period. During the course, lunch and refreshments will be provided to the participants. Breakfast and dinner will be available in the institute hostels (messes and canteens) on pay-and-eat basis.

## Sponsorship

The following categories of sponsorship are available

Sponsorship Category	Amount (INR)	Benefits					
		Free Delegates	Corporate Presentation	Exhibition Stall	Sponsor's Banner		Logo in Course Banner
					No.	Size	
Platinum	2,50,000	Three	10 minutes	3m × 3m	One	10' × 6'	Yes
Diamond	1,50,000	Two	10 minutes	2m × 2m	One	6' × 4'	Yes
Gold	1,00,000	One	10 minutes	2m × 2m	-	-	Yes
Silver	50,000	One	-	-	-	-	-

- :: Free delegates shall have all the benefits of the regular delegates.
- :: The banner shall be brought by the sponsor.
- :: Platinum, Diamond and Gold sponsors may place one promotional material (not weighing more than 100 gm) in the course registration kit.
- :: Sponsors can distribute additional promotional material through their exhibition stalls.
- :: The sponsors are requested to contact the organizers for confirming the sponsorship, booking of the exhibition stall(s) and get the payment options.

## Registration

Interested participants for the Short Term Course are requested to fill up the registration form on the following link:

<https://forms.gle/mBGVSoJtdXsvNY74A>

The payment details will be available shortly.

**Last date for registration: 01 Aug 2025**