

Registration Form

Name:
Mr./Ms./Dr.....

Designation:

Organization:

Phone:.....

Address for Communication:
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.....

E-mail:.....

Fax:.....

D.D. Details:
I enclose herewith the Demand

D.D. no.....

dated..... for

Rs.payable to IIT

Indore.

Note: D.D/Cheque must be returned to the coordinator

Date: Signature:

Or register online at
<https://forms.gle/UigMZd5MG4bFsUEKA>

Registration Fee

The course fee is Rs. 2500/- (Two thousand five hundred only) per participant for professionals and Rs. 2000 (Two thousand rupees only) for students.

The fee is payable in advance by a crossed draft in favour of IIT Indore, payable at Indore.

The entry is placed in hybrid mode (Participants, please send the details to the coordinator).

Interested person(s) preferably should send the filled google registration form by July 14, 2022.

Registration Link is as follows:

<https://forms.gle/UigMZd5MG4bFsUEKA>

MODE OF PAYMENT: Through DD drawn in favour of "Registrar, IIT Indore" payable at Indore, or through online payment/bank transfer (Bank: Canara Bank, Branch: IIT Indore, Simrol Campus; Account Number: 1476101027440; IFS Code: CNRB0006223)

Address for Correspondence

Dr. Neelima Satyam (Coordinator)

Professor

Department of Civil Engineering

Indian Institute of Technology Indore

Indore, Madhya Pradesh

Ph: + 91-9440391956/ +91-9173106834

Email: outreach.ce@iiti.ac.in

Short Course on GEOTECHNICAL ASPECTS OF EARTHQUAKE ENGINEERING

21- 23 July 2022

(Hybrid mode)



Organized By



**Department of Civil
Engineering
Indian Institute of
Technology Indore,
Indore, Madhya Pradesh**

In Association with



**Indian Society of
Earthquake Technology
Indian Institute of
Technology Roorkee
Roorkee, Uttarakhand**

About Course

India has experienced the most disastrous earthquake-like Assam (M=8.7), Kaogra 1905 (M=8.6), Bihar-Nepal 1934 (M=8.4), Assam-Tibet 195(M=8.7), Uttarkashi 1991 (M=6.5), Latur 1993 (M=6.4), Jabalpur 1997 (M=6.0), Chamoli 1993 (M=6.8), Bhuj 201 (M=7.6), Kashmir 2005 (M=7.4) and Sikkim 2011 (M=6.9), Kashmir 2015 (M=5.7), Bharatpur 2015 (M=7.3), Tripura 2017 (M=5.7), North-east 2018 (M=5.5), Mirpur 2019- (M=4.7), Jhelum Punjab 2019 (M=5.6) in the recent past

The large and rapidly growing urban seismic risk, particularly in developing countries like India is a problem that needs to be quickly solved. Urbanization is rapidly increasing in every city in India. Huge infrastructure developmental plans have been laid in all these cities, which are demanding a large number of trained structural engineers/consultants. It is observed that a large concentration of damage in specific areas during an earthquake is due to site-dependent factors related to surface geological conditions and local soil altering seismic motion. To reduce the gap and transfer the knowledge, many workshops, seminars, short courses and technical lectures were conducted by IIT Indore to bring awareness amongst the professional engineers.

The course is designed to have a broader review of the various aspects of Geotechnical Engineering interlinked with Earthquake Engineering. Each of these lectures during this short course addresses specific issues from the beginning to end (from engineering seismology to Earthquake resistant design). The course lectures cover fundamentals and applications, including hands-on experience in seismic design of sub-structures.

About IIT Indore

IIT Indore, located at Simrol, Khandwa Road, Madhya Pradesh, is one of the eight new Indian Institutes of Technology (IIT) established by the Ministry of Human Resource Development (MHRD), Government of India in 2008-09. Recently IIT Indore has made a new entry and has secured the 396th rank in the QS World University Rankings 2023. For more details, visit: www.iiti.ac.in

About Department of Civil Engineering

The Department of Civil Engineering was started in 2016. The faculty members of the department are well equipped to conduct high-quality research programs in various fields of civil engineering and also engaged in interdisciplinary research activities. Department is committed to high-quality research. Interested people are encouraged to contact the concerned faculty for collaborative research. The department is actively engaged in organizing various research activities. More details can be found at:

www.ce.iiti.ac.in

Important Dates

Last Date for receiving filled registration: July 14, 2022

Notification of acceptance: July 17, 2022

Who Should Participate?

This short course is planned for design and construction engineers, project managers, faculty members, research scholars and students.

Course Faculty

**Dr. Neelima Satyam D (Course Coordinator)
Professor
Department of Civil Engineering, IIT Indore**

The speakers from academia and industry will also share their knowledge and experience in the field of geotechnical earthquake engineering.

Lecture Topic

Day 1:

Lecture-1: Overview of Earthquake Engineering

Lecture-2: Dynamic Soil Properties

Lecture-3: Geotechnical Testing Methods

Tutorial-1: Demo on Geophysical Testing

Day 2:

Lecture-4: Seismic Hazard Analysis

Lecture-5: Ground Response Analysis

Lecture-6: Local Site Effect

Tutorial-2: Detailed Ground Response Analysis

Day 3:

Lecture-7: Liquefaction Hazard Assessment

Lecture-8: Seismic Design of Shallow and Deep Foundation.

Lecture-9: Seismic Design of Retaining Walls

Tutorial-3: Assessment of Liquefaction Potential