



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी Indian Institute of Technology Guwahati

Short Term Course on



Recent Advances in Construction Materials and Building Technologies

December 26 - 31, 2020 with a gap on 27 December, 2020

Conducted by :
Department of Civil Engineering



Organized by :
Knowledge Incubation for TEQIP
Centre for Educational Technology
URL: <http://www.iitg.ac.in/cet>

ABOUT THE COURSE / EVENT

The event includes training on recent advances in building materials and building technologies by experts in the area. The overall scenario of recent developments in construction materials and emerging building technologies practiced in India at present will be discussed. The details of some of the widely used construction materials and their processes will be covered. Building technologies which are emerging and are being used in faster development of infrastructures in our country by government and private agencies will be demonstrated in detail. Further, particulars of various typologies and their technologies of masonry construction practiced at present all over the world will be delivered. Prefabrication and 3D printing works of concrete structure will also get the scope to show about recent happenings.

COURSE CONTENTS

- Recent development in building materials and building technologies.
- Recent advanced materials used for improvement of soil for building foundation including processes and building construction.
- Development in building base isolation technology.
- National Building Codes 2016 of India and its practice.
- Durability of concrete and performance of light-weight concrete.
- Repairing of concrete structures.
- Advances in analysis and design of masonry infilled RC frame Buildings
- Unreinforced masonry structures and retrofitting.
- Wooden housing and their seismic performance.
- 3D printing technology for concrete elements.
- Confined masonry buildings and their analysis/design

Topics to be covered

- Recent development in building materials.
- Emerging building technologies.
- Addition in new National Building Code
- Improvement of foundation (materials and process).
- Masonry Structures and technologies.
- Repairing/rehabilitation process
- Base Isolation
- Corrosion in concrete and resistance
- Light weight concrete
- Concrete in 3D printing
- Masonry Infilled RC Frame Buildings
- Wooden Houses
- Confined Masonry Buildings

ELIGIBILITY

The course/event is open to Faculty members/Students from TEQIP mapped Institutions/Engineering Colleges/ATUs. **No course fee will be charged.**

BOARDING AND LODGING

Not Required as the Course will be conducted in online mode.

IMPORTANT DATES

The last date for the receipt of duly sponsored application:

By email: scanned copy: 21/12/20

Intimation of selection: 22/12/20

SELECTION CRITERIA

Number of seats: 30.

Selection will be based on First cum first served basis.

ADDRESS FOR CORRESPONDENCE

Course Coordinator: Dr. Arun Chandra Borsaikia

Email: arubors@iitg.ac.in, aruborsiitg@gmail.com

Course Co-coordinator: Prof. Hemant B. Kaushik

Email: hemantbk@iitg.ac.in

Department of Civil Engineering

Indian Institute of Technology Guwahati

Guwahati- 781 039

<https://www.iitg.ac.in/civil/arubors/>

<https://www.iitg.ac.in/hemantbk/>

Please send the soft copy of the Application Form along with Sponsorship/Nomination Certificate from the Head of the Department to the course coordinators. Hard copy is not required. The Head of the Department can also send an email nomination without the soft copy of the nomination form.

Application Form

1. Name (block letters):

2. Sex: Male Female

3. Category: General Reserved

4. Highest Academic Qualification:

5. Specialization:

6. Designation & pay scale:

7. Name of the organization:

8. Experience:

(a) Teaching:

(b) Industrial:

9. Address for communication:

Pin code:

Mobile No.:

E-mail:

Please register me for the course on “**Recent Advances in Construction Materials and Building Technologies**” to be held at IIT Guwahati in online mode from 26/12/20 to 31/12/20. The soft copy of this application is being sent by email to the coordinators of the course.

Place:

Date:

Signature of the applicant

SPONSORSHIP / NOMINATION CERTIFICATE

Prof/Dr./Mr./Ms./Mrs./

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is an employee of our institute and his/her application is hereby sponsored/nominated. The applicant is permitted to attend the short-term course "**Recent Advances in Construction Materials and Building Technologies**" at IIT Guwahati during 26/12/20 to 31/12/20 if selected.

I also certify that our institute/college is under the "Institution List" of 3rd phase of TEQIP Project of MHRD.

Date

Signature of Authority

Designation

Official Seal

Selected participants will be informed by e-mail. The duly sponsored/nominated application form should be emailed to: arubors@iitg.ac.in and hemantbk@iitg.ac.in

The concerned authority can also send the Sponsorship/Nomination details by email without filling up the above form.

Dr. Arun Chandra Borsaikia

Department of Civil Engineering

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ABOUT TEQIP

TEQIP conceived in pursuance of the NPE-1986 (revised in 1992) by Govt of India as a long term program to be implemented in different phases. After successful execution of TEQIP II, TEQIP III starts from 2017-18 as Central Sector Scheme with a focus on the Low Income States, Northeast, Hill States and Islands. The third phase of TEQIP is also special in a way that it incorporates twinning arrangements between mentee & mentor institutions with an emphasis on Focused Training (PT) and Focused Interventions from IITs in terms of deliverables and accountability. KIT, established at IIT Guwahati under 2nd phase of TEQIP is a focal point for training Faculty, Staff and students from TEQIP-III institutions in Knowledge Engineering, Content Creation, Improving Teaching, Pedagogy & administrative skills in identified niche areas/disciplines.

ABOUT KIT

KIT (**K**nowledge **I**ncubation **C**ell for **TEQIP**) at IIT Guwahati functions as a multi-disciplinary as well as interdisciplinary Innovation Incubation Centre with a focus to impart Knowledge, infusing innovation and leading a path to achieve academic excellence. Its activities are in the area of improving quality of technical education, incubator of Innovative Ideas; implementer of contemporary pedagogy practices and development of Learning Content in Technical institutions while mentoring them.

ABOUT IIT GUWAHATI

SNAP OF CAMPUS

IIT Guwahati campus is spread over a sprawling 785 hectares plot of green land on the north bank of the river Brahmaputra around 25 km from the heart of the city. With hills and vast open spaces, the campus provides an ideal setting for training. Details on how to reach IITG Campus are available on the institute website

Website: www.iitg.ac.in