

SPONSORSHIP / NOMINATION FORM

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 will be permitted to attend the short-term course on **“Mechanics of composites for engineering applications”** in the Department of Mechanical Engineering at IIT Guwahati during 21/05/2019 to 25/05/2019 if selected. Our institute is (tick one):

- TEQIP Project funded / listed Institution
 CFTI
 Sate Govt. Funded Institution
 Other Institutions

Date: _____ Signature of Authority _____

Designation _____

Official Seal _____

Selected participants will be informed by e-mail. The duly sponsored / nominated application form should be mailed to: kpmech@iitg.ac.in, nelsonm@iitg.ac.in

Address for correspondence

Dr. Poonam Kumari
Dr. Nelson Muthu
(Course Coordinators)

Department of Mechanical Engineering
Indian Institute of Technology
Guwahati
Guwahati-781039, Assam (India)
Ph. No.: 0361-2583434/3440

ABOUT TEQIP

TEQIP conceived in pursuance of the NPE-1986 (revised in 1992) by Government 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. A total of 177 Engineering institutions and 14 Affiliating Technical Universities (ATUs) covering 1165 unaided institutions are sealed for participation in TEQIP III. 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. Further, IIT Guwahati is given huge responsibility to mentor 12 engineering institutions of NER of India along with IIT Kharagpur.

ABOUT IIT GUWAHATI

Indian Institute of Technology Guwahati, the sixth member of the IIT family came into being in 1994. The Department of Mechanical Engineering, one of the oldest in the institutes, started functioning since 1995. IIT Guwahati campus stands on a sprawling 785 hectare of land on the north bank of the river Brahmaputra. The campus is about 25 km. from the heart of the city. Details on how to reach IITG Campus are available on the website: www.iitg.ac.in.



TEQIP SHORT- TERM COURSE ON

MECHANICS OF COMPOSITES FOR ENGINEERING APPLICATIONS

MAY 21st-25th, 2019



Conducted by:

Department of Mechanical Engineering
Indian Institute of Technology Guwahati
Guwahati -781039
Assam, India

Organized by:

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

ABOUT THE COURSE

This course will provide an in-depth coverage of the mechanics of fibre-reinforced polymer materials and structures. The core of the course encompasses modelling of the 2D orthotropic lamina reduced from 3D continuum mechanics for anisotropic solids, classical laminate theory and the assumption of orthotropic material behaviour, structural modelling of composite beams and plates, and prediction of failure. The participants will gain an understanding of the deformation and failure behaviour of composite materials and structures. The concepts of damage and failure will be introduced along with details of assessing material behaviour through mechanical testing and microscopic evaluations. A laboratory class will introduce the computational modelling of composite material for fail safe design.

Outlines of the broad topics that will be covered during the course are as follows:

- *In-depth understanding of the overall topical area of composite materials*
- *Applications of composites*
- *Fiber and polymer resin materials*
- *Manufacturing methods*
- *Lamina and laminate theory*
- *Fracture and failure of laminate*
- *Modeling of layered composite structure*
- *Sandwich structures*
- *Finite element modelling of composite material*

ABOUT COURSE COORDINATORS

Dr. Poonam Kumari and Dr. Nelson Muthu (Assistant Professor in mechanical department at IITG) have tremendous experience in the field of composites. Dr. Poonam Kumar research areas include smart structures, computational mechanics, plates and shells theory. Dr. Nelson Muthu research interests include composite materials, fracture mechanics and numerical methods.



ELIGIBILITY

The course/ event is open to Faculty members, of TEQIP listed Institutions / Engineering Colleges and Govt. funded NE State Technical Institutions. Seats that remain unfilled will be open to other institutions. Candidates from TEQIP institutions will be reimbursed TA & DA from their respective institutions. Candidates from non-TEQIP institutions has to pay one-time fee of INR 4500 (faculty)/1500 (students).

BOARDING AND LODGING

Boarding and lodging facilities (Guest House or Hostel rooms) will be provided for the selected candidates from TEQIP listed institutions.

Depending on availability lodging may be extended to non TEQIP candidates on self-payment basis.

IMPORTANT DATES

The last date for the receipt of duly sponsored applications:

By email: scanned copy: **22/04/2019**

Hard copy must reach by: **26/04/2019**

Intimation of selection: **03/05/2019**

SELECTION CRITERIA

Number of seats: 30

Selection will be based on first cum first served basis from priority

(i) TEQIP mapped Institution, (ii) CFTI, (iii) State Govt. Institutions and (iv) Other institutions.

FINANCIAL ASSISTANCE FROM IIT GUWAHATI

Limited number of selected participants from CFTIs & State Govt. institutions in the NE (i.e., Non TEQIP funded institutions) may be eligible & considered for reimbursement of to and fro railway fare via shortest route (proof of journey / ticket needed) and free lodging and boarding in the hostel during course period. **For all other participants, no TA/DA will be paid by IIT Guwahati.**

TEQIP SHORT TERM COURSE

ON

MECHANICS OF COMPOSITES FOR ENGINEERING APPLICATIONS

MAY 21st-25th, 2019

Application Form

1. Name (block letters):
2. Designation & pay scale:
3. Organization:
4. Address for communication:

Pin code: _____ Ph. No.: _____

E-mail: _____

Fax No.: _____

Mobile No./ Telephone: _____

5. Highest Academic Qualification:

6. Specialization:

7. Experience (in years):

(a) Teaching: years

(b) Industrial: years

8. Choice of Accommodation:

Hostel

will make my own arrangement.

Not required

9. Category:

GENERAL OBC SC ST PH

Please register me for the course on "**Mechanics of composites for engineering applications**" to be held at IIT Guwahati.

I am sending an advance copy of this application by email to the coordinator of the course.

I undertake to send the Hard copy signed by the Head of our Institution.

Place: _____

Date: _____ *Signature of the applicant*

The application form can be downloaded from the link