



AICTE-NEQIP  
sponsored Faculty  
Development Program  
on



Recent Trends in Computational and  
Experimental Mechanics  
December 11-15, 2017

**Chief Patron**

Prof. M.M. Sarma, Vice-Chancellor, Tezpur University (TU)

**Advisor**

Prof. C.L. Mahanta, Dean School of Engineering, TU

**Coordinator**

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**About Mechanical Engineering Department, Tezpur University**

The Department of Mechanical Engineering (ME) is one of the seven departments under School of Engineering of Tezpur University, which was established in the year, 2006. Presently, the department is offering B.Tech. M. Tech. (Specializations: Applied Mechanics and Thermal and Fluid Engineering), and PhD programme. Its B.Tech. and M.Tech. Programmes are approved by AICTE. The B.Tech program is also accredited by NBA. The department aims at producing skilled human resources for the industry and conducting cutting-edge research. The department has various laboratories with state of the art facilities, one central workshop with modern facilities. In addition to these, there are other common facilities of Computer Centre, Seminar Hall, Lecture Gallery, Video Conferencing room etc. for the students of School of Engineering.

**About the programme**

The proposed faculty development program (FDP) is aimed at dissemination of the latest information to the participants in order to enrich their knowledge in the recent trends in computational and experimental mechanics. The one-week FDP is supported by AICTE-NEQIP and the course is designed covering a wide range of topics of current teaching and research trends pertaining to mechanics of solids and fluids. The various topics that are expected to be covered in the course are as follows.

1. Introduction to finite element method (FEM)
2. Analysis of solid structure using FEM software package
3. Introduction to computational fluid dynamics (CFD)
4. Analysis of fluids using CFD package
5. Fracture mechanics
6. Mechanics of wind-power generation
7. Automobile Engineering
8. Mechanics of nanofluids
9. Optimization methods
10. Exposure to experimental facilities

**Resource persons**

Distinguished faculty from IIT Guwahati and other institutes including Tezpur University will join the course as resource persons for delivering lectures on current topics of teaching and research related to computational and experimental mechanics.

**Registration and Accommodation**

Faculty members from AICTE approved institutes are eligible for registration to this course without paying any registration fees. Participants from non AICTE institutions need to pay Registration fees of Rs. 1000/- by crossed demand draft in favour of Registrar, Tezpur University, payable at SBI, Tezpur University Branch (Branch Code: 14259). The number of participants is limited to 30. Hostel facility will be provided to a limited number of outstation candidates. No TA will be provided to the participants.

**Important dates**

Last date of registration: 25<sup>th</sup> November, 2017  
Intimation of selected participants: 30<sup>th</sup> November, 2017

# REGISTRATION FORM

AICTE-NEQIP sponsored Faculty  
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on  
Recent Trends in Computational and  
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December 11-15, 2017

Name: .....

Designation: .....

Department: .....

Address of Institute: .....

.....

.....

E-mail address: .....

Mobile No.: .....

Payment details (if applicable):

Bank: DD NO.:

Place: Date:

Signature of applicant

Recommendation of the Head of the Organization

Signature with official seal

Faculty Development Program  
on  
Recent Trends in Computational and  
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December 11-15, 2017



Organized by  
Department of Mechanical Engineering  
Tezpur University  
Napaam, Tezpur 784028  
Sonitpur, Assam



Sponsored by AICTE-NEQIP



# Tezpur University

## Department of Mechanical Engineering

Napaam, Tezpur, India – 784028

<http://www.tezu.ernet.in/dmech/index.htm>

### Brief Report on Faculty Development Programme on “Recent Trends in Computational and Experimental Mechanics”

**Title of the Faculty Development Programme:** Recent Trends in Computational and Experimental Mechanics

**Date:** 11.12.2017 to 15.12.2017

**Organized by:** Department of Mechanical Engineering


**Funded by:** NEQIP (AICTE)

**Number of participants:** 16

**Highlights of the programme:** The Faculty Development Programme (FDP) was aimed at dissemination of the latest information to the participants in order to enrich their knowledge in the recent trends in computational and experimental mechanics. The various topics that are expected to be covered in the course are as follows.

- Introduction to finite element method (FEM)
- Analysis of solid structure using FEM software package
- Introduction to computational fluid dynamics (CFD)
- Analysis of fluids using CFD package
- Fracture mechanics
- Mechanics of wind-power generation
- Automobile Engineering
- Mechanics of nanofluids
- Optimization methods
- Exposure to experimental facilities

Eminent resource persons from outside Tezpur University as well as from various related Departments of Tezpur University delivered the various sessions during the FDP. The resource persons from outside the University were invited from IIT Guwahati, Jadavur University, and Indian Institute of Engineering Science and Technology, Shibpur. Participants from Dibrugarh University, Girijananda Chowdhury Institute of Management and Technology (Tezpur), Assam Don Bosco University, and Tezpur University successfully completed the FDP.

  
Head  
Department of Mechanical Engng  
Tezpur University  
(Prof: Tapan Kumar Gogoi)  
Head  
Department of Mechanical Engineering  
Tezpur University



# Tezpur University

## Department of Mechanical Engineering

Napaam, Tezpur, India – 784028

<http://www.tezu.ernet.in/dmech/index.htm>

### List of participants in Faculty Development Programme on “Recent Trends in Computational and Experimental Mechanics”

Organized by: Department of Mechanical Engineering

Funded by: AICTE (NEQIP)

Date: 11.12.2017 to 15.12.2017

Sr.No	Name of Participant	Affiliation
1	PrabinHaloi	Department of Mechanical Engineering, Tezpur University
2	Satadru Kashyap	Department of Mechanical Engineering, Tezpur University
3	Sanjib Banerjee	Department of Mechanical Engineering, Tezpur University
4	Seikh Mustafa Kamal	Department of Mechanical Engineering, Tezpur University
5	Kalpajyoti Borah	Department of Mechanical Engineering, Tezpur University
6	Manoj Bardalai	Department of Mechanical Engineering, Tezpur University
7	Rakesh Bhadra	Department of Mechanical Engineering, Tezpur University
8	Shikha Bhuyan	Department of Mechanical Engineering, Tezpur University
9	Zahnpriya Kalita	Department of Mechanical Engineering, Tezpur University
10	Barnali Choudhury	Department of Mechanical Engineering, Tezpur University
11	SantanuMaity	Department of Electrical Engineering, Tezpur University
12	Nishant R. Swami Hulle	Department of Food Engineering & Technology, Tezpur University
13	Uditya Borah	Department of Mechanical Engineering, Tezpur University
14	Faruque Aziz	Department of Mechanical Engineering, Girijananda Chowdhury Institute of Management and Technology (Tezpur)
15	Pranjal Das	Department of Mechanical Engineering, Girijananda Chowdhury Institute of Management and Technology (Tezpur)
16	Sidharth Borkataky	Department of Mechanical Engineering, Assam Don Bosco University

(Prof. Tapan Kumar Gogoi)

Head

Department of Mechanical Engineering  
Tezpur University



Photo 1:  
FDP On recent trends in Computational and Experimental Mechanics



Photo 2:  
FDP On recent trends in Computational and Experimental Mechanics