

## Chief Patron

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Director, VIT, Pune – 37

## About The Institute

Vishwakarma Institute of Technology, Pune, India is one of the premier technical institutes of high repute. The institute was established in 1983 and over the journey of 37 years, it has grown up from an undergraduate institute to research centric institute along with well established post graduate programs. It is an autonomous institute and its programs are accredited by NBA. The institute is awarded A++ grade by NAAC in 2018.

## About The Department

Mechanical Engineering Department is one of the leading department established in 1986 and runs B.Tech, M.Tech and Doctoral programmes. We have experienced faculty with a strong background of academics, industry exposure, research and consultancy activities. The department is in active collaboration with many industries like Forbes Marshall, Mahindra and Mahindra etc. and foreign Universities like Binghamton and Purdue Universities in USA. Department has well established laboratories with high end equipments and latest software. Our SAE student chapter and ISHRAE student chapter are giving practical exposure to the students through various technical activities.

## Important Instructions

**No registration fees for any participants for this STTP.** Accommodation will be provided on prior request to faculty/research scholar/student members from AICTE approved institutes. The travelling expenditure will be reimbursed to the outstation participants as per AICTE guidelines. Participants should submit copy of the ticket during registration along with the photocopy of ID card. The organizing committee's decision will be final for selection of participants and approvals. Participants should remain present for all the sessions of the STTP to be eligible to receive the certificate, TA and accommodation claims. All the terms and conditions of the participations and approvals will be governed by AICTE and institute norms.

**Last date for receiving application: 10<sup>th</sup> March 2020**

Information of the selection: 12<sup>th</sup> March 2020

Scanned copy of properly filled registration form to be submitted to

**Prof. S. R. Yevale**

Contact No.-9834132418

Email:- swapnil.yevale@vit.edu

**Prof. G. D. Pandit**

Contact No.-9503469919

Email:- girish.pandit@vit.edu

## Organizing Committee

- |                        |                           |
|------------------------|---------------------------|
| • Dr. S. R. Bahulikar  | • Dr. L. D. Mangate       |
| • Dr. S. Pavithran     | • Dr. N. S. Kulkarni      |
| • Dr. M. K. Nalawade   | • Prof. R. K. Bhagat      |
| • Dr. M. V. Walame     | • Prof. N. V. Borse       |
| • Dr. U. S. Chavan     | • Prof. S. P. Joshi       |
| • Dr. J. P. Shete      | • Prof. S. R. Padalkar    |
| • Dr. D. B. Hulwan     | • Prof. H. K. Gaikwad     |
| • Dr. S. P. Chippa     | • Prof. K. A. Shirbavikar |
| • Prof. G. D. Korwar   | • Prof. C. R. More        |
| • Dr. S. S. Shinde     | • Prof. M. R. Kharde      |
| • Prof. M. R. Khodke   | • Prof. P. D. Khaire      |
| • Prof. S. P. Komble   | • Prof. G. D. Pandit      |
| • Prof. S. D. Chougule | • Prof. S. R. Yevale      |
| • Prof. A. R. Mujumdar | • Prof. R. G. Deokar      |



**BRACCT's**

**Vishwakarma Institute of Technology**

(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

**Department of Mechanical Engineering**

AICTE Sponsored

Short Term Training Program (STTP) on

**Advanced Measurement Techniques (AMT)**

16<sup>th</sup> to 21<sup>st</sup> March 2020

Co-Ordinator

**Dr. Shrinivas P. Chippa**

**Dr. Laxmikant D. Mangate**

Convener

**Dr. Mangesh B. Chaudhari**

Organized by

**Mechanical Engineering Department**

Vishwakarma Institute of Technology

666, Upper Indira Nagar, Bibwewadi, Pune,  
Maharashtra, India, 411037.

[www.vit.edu](http://www.vit.edu)



## About The Course

This STTP aims at studying different measurement and data interpretation techniques required for a variety of mechanical applications. Considering the vast advancement and high scope of research in measurement techniques in the field of mechanical engineering, the department has organized one-week STTP program on ADVANCED MEASUREMENT TECHNIQUES sponsored by AICTE. The sessions contain the measurement techniques in microfluidics, optical interferometry, vibration and acoustics, tribology testing, additive manufacturing and vibration measurement instruments. It combines theoretical sessions and hands-on measurement exercises.

## Speaker

**Dr. Dhanesh N. Manik**

IIT Bombay

**Dr. Amit Agrawal**

IIT Bombay

**Dr. Atul Srivastava**

IIT Bombay

**Dr. Anirban C. Mitra**

MESCOE, Pune

**Experts,**

Renishaw, Pune

**Dr. Debdutt Patro**

Ducom Instruments

**Mr. Ganesh Kamble**

Jost's Engineering Ltd.

**Mr. Sunil chore**

IndiaSoft Technologies

**Dr. Prasanna Bhat**

ARAI, Pune

**Dr. Laxmikant Dhamande**

Amrutwahini COE, Sangamner

## Advisory Committee

**Dr. D. N. Malkhede (Adviser, AICTE)**

**Dr. D. N. Manik (IIT Bombay)**

**Dr. A. Agrawal ( IIT Bombay)**

**Dr. A. Srivastava ( IIT Bombay)**

**Dr. S.S. Pardeshi ( BOS Chairman SPPU)**

**Dr. G. G. Dongre ( VIT Pune)**

## Course Content

### Micro fluidics and Turbulent flows

Measurement techniques such as PIV, hot wire anemometry and thermal imaging techniques

### Interferometers and interferometric techniques

Optical techniques for whole field measurements, Optical tomography, Crystal Growth, Biomedical applications of lasers

### Vibrations and Acoustics

Advanced measurements in noise and vibrations along with NI instruments LAB View, Fault identification

### Additive Manufacturing

Measurement techniques related to 3D printing.

### Measurement techniques in Industrial Fluid Power

Advanced measurement techniques related electro hydraulics and electro pneumatics using PLC and Automation Studio.

### Tribology

Advanced measurement techniques related to friction and wear measurement under dry and lubricated environmental conditions.

### Emission Measurements

Modifications required while converting BSIV to BSVI emission norms and related measurement techniques.

### Fluid Mechanics and Structural testing

Flow diagnosis with optical measurement techniques and measurement techniques for structural testing.

**In addition, industrial visit will be organized during the STTP.**

## Vishwakarma Institute of Technology

**Department of Mechanical Engineering**

**Registration Form**

**AICTE Sponsored STTP on**

**Advanced Measurement Techniques**

**16<sup>th</sup> to 21<sup>st</sup> March 2020**

Name: \_\_\_\_\_

Gender: \_\_\_\_\_ Age in Yrs: \_\_\_\_\_

Designation: \_\_\_\_\_

Profession: Academician/Student/Researcher/Industry

Years of Experience: \_\_\_\_\_ Area of Interest: \_\_\_\_\_

Name of the Institute/Industry, the participant is affiliated to

Is the institute approved by AICTE? Yes/No

Current Address: \_\_\_\_\_

Mobile No: \_\_\_\_\_

Email ID: \_\_\_\_\_

Whether accommodation needed: Yes/No

TA Reimbursement claim requested? Yes/No

TA Amount: Rs. \_\_\_\_\_

*The information given is true to the best of my knowledge. I agree to abide by the rules of the STTP and shall attend the program for the entire duration.*

**Signature of the Applicant:**

**Seal and Signature of Head of the Department/Head of the Institute:**