



भारतीय
प्रौद्योगिकी
संस्थान
काशी हिन्दू विश्वविद्यालय

IIT INDIAN
INSTITUTE OF
TECHNOLOGY
BANARAS HINDU UNIVERSITY



AICTE SPONSORED QIP- SHORT TERM COURSE

In ONLINE Mode

On

Advances in Machining and Processing Technology

During

February 01- February 06, 2021



**Organized by
Department of Mechanical Engineering
IIT (BHU), Varanasi**



Chief Patron

Prof. Pramod Kumar Jain
Director, IIT(BHU), Varanasi

Patron

Prof. B. K. Srivastava, Chairman, QIP Cell

Chairman

Prof. A.P. Harsha
Head, Department of Mechanical Engineering, IIT
(BHU) Varanasi

Course Coordinator

Dr. Uppu Srinivas Rao

Course Co-Coordinators

Dr. R.K. Gautam, Dept. Of Mech. Engineering &
Dr. P. K. Roy, Dept. of Ceramic Engineering



About Department of Mechanical Engineering

The Department of Mechanical Engineering came into existence in 1919 under the leadership of Professor Charles A. King, the first Head of the Department and Principal of the erstwhile Benaras Engineering College (BENCO). It is the largest academic department of IIT (BHU) offering regular undergraduate, postgraduate and doctoral degree programs in all major specializations. It has contributed a lot to the national growth by grooming stalwarts in the technology in the last 100 years of its existence.



Last date of Registration: January 28, 2021
Intimation of Selection by email: January 29, 2021

Contact Details:

Dr. Uppu Srinivas Rao

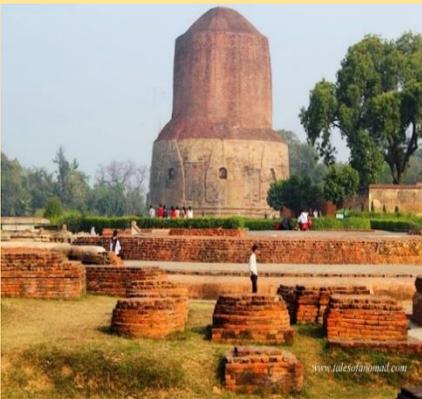
Department of Mechanical Engineering
Indian Institute of Technology (BHU)
Varanasi-221005

Mobile: +91 8765449290

Email: sruppu.mec@itbhu.ac.in

About the City

The holy city of Varanasi is known as the city of temples and learning. It is a place of great historical and cultural importance. This religious capital of India is situated on the bank of the holy river Ganges and is famous for temples of Lord Shiva, Buddha (at Sarnath) and Sankat Mochan etc. Varanasi is the premiere most place of oriental learning also. Simultaneously it is keeping pace with modern advanced knowledge. The city is reputed for silk fabrics, perfumes, artistic brass and copper wares and a variety of handicrafts. This vibrant



city with multiple dimensions of knowledge and liberation has a magnetic attraction for people all over the world.

Introduction and objectives of the course

Manufacturing Technology aims at fabricating different functional parts and structures with the desired shape, size and surface finish. With the progress in the society and scientific advancement, there is an ever increasing requirement of making this process more precise, accurate and cost effective. Moreover, due to the continuous developments in the materials technology and with the advent of newer and better advanced materials, the machining and other fabricating methods become more and more challenging. In addition to this, miniaturization of products and 3-D features poses another set of challenges for which the scientific community is thriving hard to find lasting solutions. Keeping in view of these challenges, a short term course on “**Advances in Machining and Processing Technology**” is being organized to bring together some of the domain experts and researchers to share their knowledge with the teachers and perspective researchers and also to create new collaborations. This program will be specifically useful for persons concerned with teaching, research, and industrial applications of micromachining, micro-fabrication, friction stir processing, surface metrology and machining of ceramics etc..

Course Content

- Overview of the current state of machining with specific emphasis on hybrid machining processes;
- Laser micro-machining for advanced materials;
- Grinding/Micro grinding of brittle and hard materials;
- Ductile regime machining of ceramics;
- Material processing for biomedical implants;
- Biotribology and processing of micro-textured surfaces;
- Single point diamond turning;
- Minimum quantity lubrication in micro-machining;
- Precision surface metrology;
- Friction stir processing
- Robot assisted machining etc.

Course Speakers

Faculty members of IIT (BHU) Varanasi and Subject experts from other IITs, NITs, Other reputed Institutes, Research Organizations and Industries will be delivering the lectures.

Who can attend?

Faculty members of **Universities/ Engineering colleges approved by AICTE** working in the departments of Mechanical Engineering/ Metallurgical/ Materials science/ Ceramic Engineering and other allied departments related to the mentioned area are eligible to attend the course.

Registration Process

Sponsored Participants (from AICTE approved institutions): NO COURSE FEE

Eligible candidates should fill the Google form and attach the scanned copy (pdf) of the filled in application form duly endorsed by the forwarding authority, **on or before January 28, 2019**. Application format is given in this brochure.



AICTE Sponsored QIP Short Term Course (Online)
Advances in Machining and Processing Technology
(February 01, 2021 – February 06, 2021)



REGISTRATION FORM

(<https://forms.gle/ZepbQ6iKPcmzAR1S6>)

Full Name	
Date of Birth (dd.mm.yyyy)	
Gender (Male/Female/ Others)	
Address for communication	
Email ID	
Mobile No	
Highest academic qualification	
Specialization	
Teaching experience in years	
Designation & Pay scale	
College/Institute/University	

Place:

Signature of applicant with date

Sponsorship

Prof./Dr./Mr./Ms./Mrs./ _____ an employee of our institute is hereby sponsored for the course. The applicant will be permitted to attend the “QIP short term course on “**Advances in Machining and Processing Technology**” in online mode, to be held during February 01, 2021 - February 06, 2021, if selected.

Signature with date of Sponsoring Authority
Designation & Official seal