

OBJECTIVE

Five day short term course on “Recent advances in manufacturing science and technologies” is aimed at enriching the skills and knowledge of students, professionals, and researchers with cutting-edge research, fundamental understanding, and on-going research of the subject.

COURSE CONTENT

- Description about various manufacturing technologies and their advancement
- Numerical modelling in various advanced manufacturing processes
- Physics behind the development of various thermal and mechanical responses during manufacturing of different products
- Techniques for monitoring and control of different manufacturing processes
- Additive manufacturing processes
- Green energy technologies

INVITED SPEAKER

Prof. Amitava De, Department of Mechanical Engineering, IIT Bombay.

Dr. Bipul Das, Department of Mechanical Engineering, NIT Silchar.

COURSE MATERIAL

Each of the participants will be provided with a set of lecture notes in the soft-copy format.

EXPECTED BENEFICIARIES

Faculty members, researchers and professionals from academic institutions as well from industries.

FINANCIAL ASSISTANCE

Participants will not have to pay any registration fee to attend this short term course.

BOARDING AND LODGING

Short term course on recent advances in manufacturing science and technologies will be held in online mode. The link for the same will be sent to participant's registered email ID.

SPEAKERS

- | | |
|-------------------------|----------------------|
| • Prof. U. S. Dixit | • Dr. Swarup Bag |
| • Prof. P. S. Robi | • Dr. Manas Das |
| • Prof. S. K. Dwivedy | • Dr. Deepak Sharma |
| • Prof. Sukhomay Pal | • Dr. S. N. Joshi |
| • Prof. Pankaj Biswas | • Dr. Sajan Kapil |
| • Prof. R. G. Narayanan | • Dr. Biranchi Panda |

IMPORTANT DATES

Last date of registration: 17/02/2021

Intimation of selection (by e-mail): 19/02/2021

TEQIP SHORT TERM COURSE

ON

RECENT ADVANCES IN MANUFACTURING SCIENCE AND TECHNOLOGIES

22nd February – 26th February 2021

Coordinator

Dr. Swarup Bag



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

CERTIFICATE

Each registered participant will receive a certificate of participation on successful completion of the short term course.

VENUE

The short term course will be organized in the online mode by Department of Mechanical Engineering, IIT Guwahati. The meeting link will be sent to the short-listed candidates.

TOPICS TO BE COVERED

- Wire arc additive manufacturing processes
- Finite element based thermo-mechanical analysis
- Micro-machining
- Mechanical behavior of materials
- Automation, monitoring, control and optimization of manufacturing processes
- Data driven modelling of welding processes
- Laser based manufacturing
- Micro joining of medical devices
- Challenges in the modelling of additive manufacturing processes
- 3D printing of concrete

The duly signed application should be mailed to

Dr. Swarup Bag, Associate Professor
Department of Mechanical Engineering
Indian Institute of Technology Guwahati
Guwahati - 781039, Assam, India
Tel: 0361-2582686

E-Mail: ramstiitg@gmail.com



ABOUT IIT GUWAHATI

The campus of IIT Guwahati is spread over 285 hectares of land on the north bank of River Brahmaputra at around 20 km from the Guwahati city. With the majestic Brahmaputra on one side, and with hills and vast open spaces on others, the campus provides an ideal setting for advanced learning and research. Guwahati city is gateway to beautiful North-Eastern region of the country and linked with all major cities by rail, road and air. The scenic panorama of the valley, the remarkable architecture, the local points of art and culture have made the city a popular destinations in the country.



TEQIP SHORT TERM COURSE

RECENT ADVANCES IN MANUFACTURING SCIENCE AND TECHNOLOGIES

Application Form

1. Name (Block letter):
2. Designation and Pay scale:
3. Gender: ☐ Male ☐ Female ☐ Other
4. Category: ☐ General ☐ OBC ☐ SC/ST
5. Highest academic qualification:
6. Specialization (if any):
7. Name of organization:
8. Type of organization: ☐ Educational ☐ Industry
9. Experience (if any):
(a) Teaching ☐ (b) Industrial ☐ (c) Research ☐
10. Address for communication:
Address:
Pincode: Mobile No.:
E-mail:

Please register me for the course of “Recent advances in manufacturing science and technologies” to be organized by Department of Mechanical Engineering, IIT Guwahati, during 22nd – 26th February 2021.

Place:

Date:

Signature of the applicant