ORGANIZING COMMITEE

Patron: Prof. UdayKumar R Yaragatti, Director, MNIT-Jaipur

Conveners:

Prof. Dilip Sharma, Head, Mechanical Engineering Department, MNIT-Jaipur

Prof. G. S. Dangayach, Dean (R & C), MNIT-Jaipur Dr. M.L.Meena, Mechanical Engineering Department, MNIT-Jaipur

Program Coordinators

Dr. Amar Patnaik, Mechanical Engineering Department, MNIT-Jaipur

Dr. Dinesh Kumar, Mechanical Engineering Department, MNIT-Jaipur

Dr. Amit Singh, Mechanical Engineering Department, MNIT-Jaipur

Dr. Gunjan Soni, Mechanical Engineering Department, MNIT-Jaipur

COMMUNICATE TO

Dr. Amar Patnaik

Associate Professor, Mechanical Engineering Department, MNIT JAIPUR (Rajasthan) -302017 +91-9530146812

apatnaik.mech@mnit.ac.in

www.mnit.ac.in

Note: All the correspondence regarding program shall be made through email only.

IMPORTANT DTAES

Registration closes: 8th May 2020 Notification of Selection: 11th May 2020 Commencement of program: 20th May 2020

ELIGIBILITY

Aspiring student of **B. Tech (1st, 2nd and 3rd year)/ M. Tech / Ph.D** in Mechanical/Automobile/ Aeronautical /Materials/Polymer / Metallurgical and Materials Engineering, Materials Science etc can apply for program. Entries from interested **final year polytechnic students** can also be considered.

REGISTARTION FEE

The registration fee for B.Tech students Rs. 7,000/- + GST@18% and for M.Tech/ Ph.D students: Rs. 25,000/- + GST@ 18% is to be paid through demand draft drawn in favour of "Registrar, MNIT Jaipur" payable at JAIPUR or through NEFT transfer: A/c No.: 676801081625

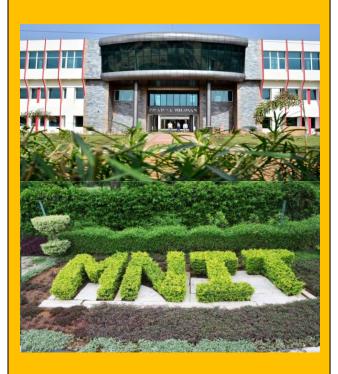
Bank: ICICI, Branch MNIT Jaipur IFSC Code: ICICOOO6768

ACCOMODATION

Limited accommodation is available in the MNIT Hostels for outstation participants on nominal charges on the first come first serve basis. The participants will not be paid any TA/DA. Charges of Institute Hostels are approximately Rs. 200/-* per day for accommodation (Excluding food).



Summer Internship Program In "Computational and Experimental Analysis in Industrial Applications in Mechanical Engineering" (May 20th -July 5th, 2020)



ORGANIZED BY:

MECHANICAL ENGINEERING DEPARTMENT MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY, JAIPUR (RAJASTHAN)-302017

(www.mnit.ac.in)

Scope & Objectives

Summer Internship Program (SIP) is an additional part of the course curriculum for the students of B.Tech and M.Tech in Mechanical Engineering and other engineering disciplines. This is a great opportunity for you to gain experience of research, develop project management skills, enhance your CV - and earn more knowledge in real Industrial problems. Internships run for six weeks through the summer.

Students are allocated self-contained projects by academic supervisors, spanning a broad range of subject areas and feeding directly into current research and teaching activities. During the SIP, each student is assigned to handle the various equipments and machines available in the laboratory. This course will be introductory in nature addressing the fundamental understanding as well as the applications of composite materials.

Venue of the Program

Malaviya National Institute of Technology Jaipur (earlier MREC) is one of the NITs established in Jaipur known as Pink City. The institute is actively engaged in research, consultancy and developmental activities besides imparting regular teaching. Mechanical engineering department started functioning in 1963 at the inception of the institute. The department offers a four-year course leading to the Bachelor's Degree in Mechanical Engineering as well as four full and parttime postgraduate programmes in Industrial Engineering, Production Engineering, Design Engineering and Thermal Engineering. The Department also offers Ph. D programme in various specializations of the Mechanical Engineering.

COURSE CONTENTS

Fundamentals of Tribology: Step-1

- Fabrication and Development of Polymer/Metal allov composites
- 2. Friction, Wear, Lubrication, importance of tribology.
- 3 Rasic characteristics of contact surfaces Friction: causes of friction in mechanical systems

List of Projects: Step-2

- 1. Modelling and Simulation of various wear Mechanisms
- 2. Biotribology for dental and Hip prosthesis applications
- Tribology analysis of automobile brake friction analysis
- 4. Tribology analysis of brake lining applications
- Tribology analysis of piston ring applications
- Tribology analysis of marine structural applications
- Tribology analysis of bearing applications
- 8. Tribology analysis of hydro-turbine blade applications
- Tribology analysis of wind turbine blade applications
- 10. Mechanical properties characterization is also to be performed for all the selected candidates. Like fracture mechanics, tensile strength, flexural strength, compression strength, impact strength, hardness test analysis along with few thermal and physical properties analysis.

Using Hyper-Mesh / ANSYS

- 1. To introduce the basics of Hyper-Mesh/ANYS and its features.
- 2. To perform bending analysis of simply supported beam under uniformly distributed load using Hyper-Mesh/ANSYS.

REGISTRATION FORM

Malaviya National Institute of Technology Jaipur, Jaipur (Rajasthan)-302017 (May 20th -5th July 2020)

| Full Name: |
|---|
| Course studying: |
| Institute: |
| Address of Correspondence: |
| |
| |
| |
| |
| Pin Code: Mobile: |
| E.mail: |
| |
| Details of Registration Fee: |
| Name of Bank & Branch: |
| |
| DD No.:Dated: |
| |
| For Rs |
| (DD should be in favour of "Registrar, MNIT Jaipur", payable at |
| Jaipur) |
| |
| |

Date: Signature of Participant

The student is bonafied student of our institute and we recommend his/her candidature for the program.

Signature and stamp of the head of the institution

(Note: Please post your completely filled registration form)