

Coordinators

- **Dr. Himanshu Chaudhary**
himanshumnitj@gmail.com; 95496-54498
- **Dr. Dinesh Kumar**
dkumar.mech@mnit.ac.in; 95496-54562
- **Dr. Amar Patnaik**
patnaik.amar@gmail.com; 95496-57318

Registration Fees

Registration Fees (with GST @ 18%): 15000/-

Overview and Objectives of Internship

This Summer Internship is aimed to make learn the trainees the theoretical concepts and practical aspects of Modelling, Simulation and Analysis of Mechanisms and Machines. This will include in detail the Engineering Drawing, Mechanical Drawing, Finite Element Methods, Kinematics and Dynamics of Mechanisms and Machines, and most importantly, the theory taught will be properly blended with practical hands-on on the relevant modelling, simulation and analysis tools - AutoCAD, Autodesk Inventor, Hypermesh, Motion View/Solve, and MATLAB. It is well known that the world of Virtual Experimentation through such commercial packages has replaced the traditional method of validation/verification of a design or theory, and has also drastically reduced the time and money spent on final physical testing. These tools are used now-a-days in almost all engineering fields, including automotive, aerospace, defence and many others.

At the end of the training, the participants:

- would have learned the theoretical concepts of Engineering Drawing, Mechanical Drawing, and Finite Element Methods, and Kinematics and Dynamics of Machines.
- would have practical hands-on on the relevant modeling, simulation and analysis tools- AutoCAD, Autodesk Inventor, Hypermesh, Motion View/Solve, and MATLAB.

About MNIT



Malaviya National Institute of Technology (MNIT) Jaipur is one of the NITs established by Ministry of Human Resource Development (MHRD), Government of India (GOI). Earlier, the Institute, known as MREC Jaipur, was established in 1963 as a joint venture of the GOI and the Government of Rajasthan. Later in 2002, the college was given the status of National Institute of Technology, and on 15 August 2007, proclaimed Institute of National Importance through Act of Parliament. MNIT campus spreads over 325 acres of lush green area in the prime location of Jaipur city. At present, in addition to the research, consultancy and developmental activities, the Institute offers UG and PG level courses (M.Tech./M.Sc. & Ph.D.) to about 4500 students in almost all leading fields of engineering, technology, management and sciences.

How to Reach MNIT

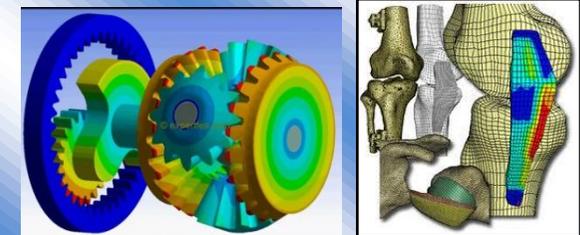
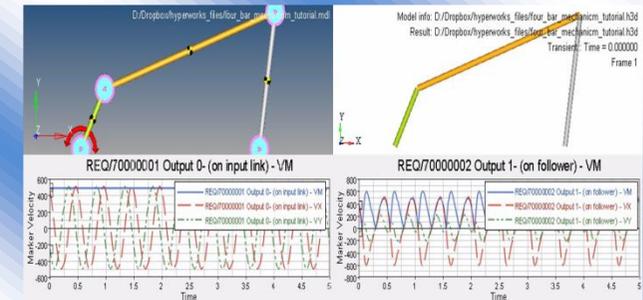
Jaipur is well connected by road, rail and air services. MNIT is situated on Jawaharlal Lal Nehru (JLN) Marg and is about 9 kms from main-railway station as well as Central Bus Stand (Sindhi Camp) of Jaipur. Airport (located at Sanganer) is about 5 kms away from the institute.

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR



ANNOUNCES

Summer Internship 2019 under TEQIP-III



Modelling, Simulation and Analysis of Mechanisms and Machines

(15 May – 30 June, 2019)

About Mechanical Engg. Deptt.

Mechanical Engineering Department started functioning in 1963 at the start of the institute. The department offers a four-year course leading to the Bachelor's Degree in Mechanical Engineering. It also offers four full-time and/or part-time postgraduate programs in Industrial Engineering, Thermal Engineering, Design Engineering & Production Engineering. Department also offers Ph.D programme in various specializations of the Mechanical Engineering.

Course Contents

The training is aimed to include following contents:

- ✦ Introduction to Engineering Drawing, Mechanical Drawing:- Methods of Projection, Isometric and Orthographic Projections, Projection of Lines, planes and Solids, Section of Solids.
- ✦ Introduction to Finite Element Method:- Basic Steps of FEM, FEM Modelling and applications of FEM to 1D Problems in Solid Mechanics, Fluid Mechanics and Heat Transfer Problems.
- ✦ Hands-on training on Modelling, Simulation and Analysis packages, such as AutoCAD, Autodesk Inventor, Hypermesh.
- ✦ Kinematics and Dynamics & methods of synthesis and analysis of mechanisms and machines:- Introduction to Kinematic Diagrams, Degree of Freedom, Four-bar Linkages, Grubler's Criteria Linkages: Position Analysis, Linkages: Velocity and Acceleration Analysis.
- ✦ Hands-on Training for building and analyzing multibody systems using Altair Hyper-works Motion View and Motion Solve software and MATLAB.

Experts

The course content will be delivered from a pool of experts on the subject from MNIT, Jaipur.

Who Should Attend?

The Summer Internship Programme is intended to provide an opportunity to train the undergraduate (UG)/graduate (PG) students as well as faculty of engineering at Degree / Diploma levels,

Accommodation

Limited accommodation would be available in the MNIT Hostels for outstation participants on nominal charges at first come first serve basis.

Important Dates & Address for Correspondence

Last date of Registration with Fees: 10 May, 2019

Address for Correspondence

Dr. Dinesh Kumar
Associate Professor, Department of Mechanical Engineering, MNIT Jaipur, JLN Marg, Jaipur 302 017
Email: dkumar.mech@mnit.ac.in;
(M) 95496-54562

(Note: DD should be drawn in favour of "The Registrar MNIT, Jaipur (TEQIP Phase-III)" payable at Jaipur OR for NEFT/RTGS transfer: A/c No.: 36875887782, Bank: SBI, Branch: MNIT Jaipur, IFSC Code: SBIN0015921)

REGISTRATION FORM

Summer Internship under TEQIP-III on Modelling, Simulation and Analysis of Mechanisms and Machines

Full Name (ID No.): _____

Name of Institute: _____

Department: _____

Email ID: _____

Mobile No.: _____

Details of Registration Fee:

Name of Bank & Branch _____

NEFT Tr. / DD No.: _____

Date of DD/NEFT Transaction: _____

for Rs. _____

Date:

Signature of Participant

(Please email your completely filled registration form along with scanned copy of DD or NEFT/RTGS transaction)