

## About MNIT Jaipur

Malaviya National Institute of Technology Jaipur (Deemed University) is one of the premier NITs, designated with the status of “Institute of National Importance” by MHRD. The institute was established in 1963, and its campus spreads over 325 acres of lush green area in the central location of Jaipur city. The institute offers undergraduate and postgraduate courses (B.Tech., M.Tech. /MBA/ M.Sc. & Ph.D.) to about 4500 students, in leading fields of engineering, technology, architecture, management & sciences. Through the internationally renowned faculty, laboratories with state of art equipments and excellent infrastructure, the institute is actively engaged in research, consultancy and developmental activities, besides imparting regular teaching.

## Mechanical Engineering Department

Welcome to the Department of Mechanical Engineering at Malaviya National Institute of Technology Jaipur, where experienced faculty and highly motivated students - supported by a dedicated staff - experience a unique engineering education. The Department offers academic programmes at three levels leading to Bachelor of Technology (B.Tech.), Master of Technology (M.Tech.), and Doctor of Philosophy (Ph.D.) degrees. In addition, continuing education programmes in specialized areas are offered on a regular basis for industry professionals and academic staff from other colleges.

### About Jaipur

The city of Jaipur also known as Pink City and is the capital and largest city of Rajasthan. Jaipur has the attractions like Hawa Mahal, Amber Fort, Jaigarh Fort, Nahargarh Fort, Jal Mahal, Kanak Vrindavan Valley, City Palace, Jantar Mantar, Albert Hall Museum, Sisodia Rani Garden, Govind Dev Ji Temple, Birla Temple, etc

## BENEFITS TO THE STUDENT INTERNS

- Materials cum Certifications
- Hands on Oriented Training
- Labs for their preparation
- Certificate on Internship Completion / Implementation

## Patron

Prof. Udaykumar R Yaragatti  
Director, MNIT Jaipur

### Chairman

Prof. Dilip Sharma, Prof. & Head, MED

### Conveners

Prof.G.S.Dangayach, MED  
Prof. R.K. Goyal , MME

### Coordinator

Dr. Jinesh K. Jain, Asso. Prof., MED  
Dr. Rajeev Agrawal, Asso. Prof., MED  
Dr. M.L.Meena, Asso. Prof., MED  
Dr. Tapas Bajpayi, Asst. Prof., MED

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## Accommodation

Limited accommodation is available in the MNIT Hostels for outstation participants on nominal charges at 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 guest room, excluding food.

## Self-financed Summer Internship Program-19 (An TEQIP III Initiative)

With aim  
“Make India the Skill India”  
on

## Modeling, Simulation data Analysis and Experimentation of Manufacturing and Material

(13<sup>th</sup> May to 28<sup>th</sup> June, 2019)



Organized By

Department of Mechanical Engineering  
Malaviya National Institute of  
Technology Jaipur- 302 017  
Rajasthan- India

## Objective of the summer Internship program

This internship/ training program is aimed to the need of Undergraduate and Post Graduate Students of Engineering who have enthusiasm to learn the new computational techniques. This training program will cover Simulation, modeling Data analysis and experimentation of manufacturing processes and material which will automatically nurture the participants to grasp the fundamental concepts of various domains of engineering, science and technology in a deeper sense. In totality there will be five modules in this programme covering properties and application of composites, Nano materials, sustainability in manufacturing, and state of art knowledge in the area of life cycle assessment for sustainability. Also concept of application of work system design to manufacturing and service sectors will be dealt in. Modeling and simulation of various manufacturing processes including fundamentals of joining processes, heat source models, thermal and structural measurements and finite element modeling of manufacturing processes will be covered. This course is designed not only to cover all the aspects of modeling, simulation, data analysis and experimentation of manufacturing and materials but also guide the proper content requirement for research paper publications.

### Course Outline

- Sustainable Manufacturing
- Data Analytics
- Fundamentals of Advanced Micro- and Nano-composites
- Fabrication, Properties and Applications of Advanced Polymeric Materials
- Life Cycle Assessment (LCA)
- LCA Software and examples
- Introduction of Work System Design
- Productivity Measurement Models
- Method Study and its techniques
- Advancements in welding processes
- Joining of dissimilar materials
- Laboratory experiments and practical sessions on finite element modeling of manufacturing processes

### Resource Persons

The various sessions of this internship program will be preceded by faculty members of MNIT Jaipur, faculty of other reputed institutions like IITs, NITs, IIITs and experts from industries. During the programme, participants will undergo lectures followed by equipment demonstration and hand on practice on industrial case studies.

### Eligibility / Target Audience

This SIP is targeted towards UG, PG students and Faculty of Govt. / Govt. aided / self-financed Engg. Colleges. All the undergraduate students of Mechanical Engineering /Industrial Engineering/ Prod. Engg., who are appearing in the 4th and 6th semester examinations are eligible to apply.

### Important date

Last Date of receiving complete Registration from 1<sup>th</sup> May 2019  
Confirmation of selection By E-mail 5<sup>th</sup> May 2019

### How to Apply / Registration

UG/PG/PhD Students/Faculty:

15000/-**(Including GST)**

Fee will be payable through Online Transaction/NEFT/IMPS to the account of "The Registrar MNIT, Jaipur (TEQIP Phase III)" of Account No. 36875887782, SBI, MNIT Jaipur (IFSC Code SBIN0015921). Duly filled application form in the prescribed format may be sent to the Coordinator so as to reach on or before 5<sup>th</sup> May 2019. The applicant may also send an advance scanned copy of the application form and transaction detail through E-mail. The selection is on first come first served basis depending upon the availability of the seats. Registration charges are non-refundable for selected participants. The participants will be intimated by May 5<sup>th</sup>, 2019. **After fee submission, the applicant must register themselves by submitting details on <http://bit.ly/2Kgw5nw>**

### Venue

Deptt. of Mechanical Engineering, Malaviya National Institute of Technology, Jaipur

### Registration Form

## Summer Internship Program

On

## “Modeling, Simulation, Data Analysis and Experimentation of Manufacturing and Material”

13th May – 28th June 2019

Department of Mechanical Engineering  
MNIT Jaipur – 302017 Rajasthan

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

Category (UG/PG): \_\_\_\_\_

Branch: \_\_\_\_\_

Year of Study: \_\_\_\_\_

Department: \_\_\_\_\_

Institute: \_\_\_\_\_

MailingAddress: \_\_\_\_\_

Phone (M) \_\_\_\_\_ (O) \_\_\_\_\_

Email \_\_\_\_\_

Accommodation required? Yes/ No

### Registration fee Details

Transc. No. \_\_\_\_\_

Bank \_\_\_\_\_ Dt \_\_\_\_\_

For Rs \_\_\_\_\_ is enclosed.

The above information provided is true and to the best of my knowledge. If, selected, I agree to abide by the rules and regulations of the program and MNIT Jaipur.

Date: \_\_\_\_\_ Signature of Candidate

The applicant will be permitted to participate in the above program, if selected.

Date \_\_\_\_\_

Signature of Competent Authority