

Five Day AICTE Sponsored Workshop

on

“Industry 4.0”

(April 22-26, 2019)

Jointly Organized by

**Department of Electrical Engineering
and
Department of Management Studies**



Malaviya National Institute of Technology Jaipur

J.L.N. Marg, Jaipur-302017 (Rajasthan)
(Website-<http://mnit.ac.in>)

Sponsored By:
AICTE Training and Learning (ATAL)



All India Council of Technical Education, New Delhi

About MNIT

Malaviya National Institute of Technology (MNIT), Jaipur is one of the NITs established by Ministry of Human Resource Development, Government of India. The institute was established in 1963, as Malaviya regional college of Engineering (MREC) as joint venture of the Government of India and Government of Rajasthan. The institute was given the status of National Institute of Technology in 2002 and afterwards, on 15th August 2007, it was declared as Institute of National Importance through act of Parliament. MNIT campus extends over 317 acres of lush greenery in the prime location of Jaipur city. The institute had completed its Golden Jubilee in 2012-13. The campus is well equipped with all modern facilities. Presently, the institute offers UG and PG (M.Tech/M.Sc. and Ph.D) courses to about 5000 students in almost all major fields of engineering, technology and management science. The institute is also actively engaged in heading various research projects and other developmental activities.

About Electrical Engineering Department

The Electrical Engineering Department is one of the oldest department of the institute which was established in the year 1963. At present the department offers both undergraduate and postgraduate courses in Electrical Engineering. The department has well equipped laboratories such as Electrical Machines laboratory, Power Systems Laboratory, Control Systems laboratory, Electrical Measurements laboratory, Power Electronics & Drives Laboratory, Electrical workshop & Computer laboratory.

About Department of Management Studies

The Department of Management Studies was established in 1996 as a center of management studies. The department offers full-time MBA programme along with the full time and part time doctoral programme in various fields of management like finance, marketing, human resources and operations management. The department has also organized many conferences and seminars at National and International level.

About the Workshop

World is in the midst of a significant transformation regarding the way we produce products. Digitization of manufacturing process has affected many industries. This transition is so compelling that it is being called Industry 4.0 to represent the fourth revolution that has occurred in manufacturing. From the first industrial revolution (mechanization through water and steam power) to the mass production and assembly lines using electricity in the second, the fourth industrial revolution will take what was started in the third revolution of industry with the adoption of computers and automation and enhance it with smart and autonomous systems fueled by data and machine learning.

Hence main objectives of this workshop is to expose participants with the concept of Industry 4.0. The programme will extensively cover recent advancements in manufacturing, artificial intelligence, cloud computing and inter-connected robots for the purpose of manufacturing in industries.

Contents Covered:-

The following topics will be covered during the FDP-

- Smart Machines, Knowledge work automation, Creating a digital enterprise
- Analytics, Discovery, Interpretation, and Communication of meaningful patterns in data, Big data, sensors
- Internet of things, Inter-networking of physical devices, collection and exchange of data, Industrial internet
- Connectivity, Optimization and industry processes, Supply Chain Management, Value Chain Management, Virtual Reality in Manufacturing
- Computer and automation, Collaborative robots, Robotics and manufacturing
- Disrupt effect of exponential technologies, 3D printing, Medical implants, Plastic Prototypes
- Cyber Security, Realization of Industry 4.0 vision, Industrial network security.
- Artificial Intelligence, Industry practices in AI
- Introduction to Cloud Computing
- Financial technologies

Workshop Pedagogy

The sessions of the programme will be conducted in workshop mode and will focus on highly interactive methods of teaching pedagogy including interactive discussions, case-studies, and hands-on sessions.

Participants

Faculty member working in AICTE approved Institutions/Colleges are eligible for the workshop.

Resource Persons

The course content will be delivered from a pool of experts on the subject, Institute Faculty, Industry and other institutions of repute.

General Information

Accommodation and travelling expenses are to be borne by the participants/ sponsoring agency. Limited accommodation on actual charges may be available at MNIT Guest House II/ Hostels. A request for this need is to be made in advance. The participant will not be paid any TA/DA. The organizers will provide working lunch.

Registration Details

- Selection Process: A limited number of seats (50) will be there on first-cum-first-serve basis and selected candidates will be intimated through email only.
- Last date of Registration – **April 19, 2019 (Monday)**
- **Registration Fees: No fees will be charged from participants for workshop.**
- Number of Seats : **50 (Fifty only)**
- Registration is open to Faculty/ PhD & PG scholars from all branches of Engineering. Register on line at- <https://goo.gl/forms/k569upVKqCjLBAGb2>

How To Reach MNIT

Jaipur is well connected by road, rail and air services. MNIT is situated on Jawaharlal 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 6 kms away from the institute.

For any queries, please contact:

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Patron

- Prof. Udaykumar R Yaragatti, Director, MNIT Jaipur

Organizing Team

- Prof. Rajesh Kumar, Head, Department of Electrical Engineering
- Dr. Satish Kumar, Head, Department of Management Studies
- Dr. Divesh Kumar, Assistant Professor, Department of Management Studies