

## Registration Form

### Faculty Development Programme (FDP)

on

### Role of Advanced Manufacturing in Industry 4.0

(RAM in Industry 4.0) - 2024

(15-20 October, 2024)

Hybrid Mode

1. Name:.....

2. Gender:.....

3. Designation:.....

4. Organization:.....

5. Correspondence address:.....

.....

Mobile. No.:.....

E-mail:.....

6. Qualifications: .....

7. Teaching/Research Exp.(years):.....

8. Area of Research: .....

.....

9. Registration fee details: .....

The above information provides is true and to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the programme.

(Signature of the Applicant with date)

(Signature of Head of Department/ Institute with date)

**Note: Registration can be done either through the link or send the hard copy of the above registration form.**

## Registration

### How to Register

Duly filled applications form need to be submitted on or **before October 10, 2024**. The selection is on a first come first served basis depending upon the availability of seats. As seats are limited, so pre-registration is required by applying online through Google link form below.

Google form link: <https://forms.gle/e4FaXcAmdnqPhBBt7>

### Registration Fee:

Research Scholars & Students :INR 500/-

Faculty : INR 1000/-

Industry Person : INR 1500/-

**Beneficiary** : NIT Delhi STC Conf.

**Bank Name** : CANARA BANK

**Account No** : 2983101006538

**IFSC Code** : CNRB0002983

### Important Dates

Last date of Registration : **October 10, 2024**

Notification of Selection : **October 13, 2024**

## ORGANIZING COMMITTEE

Patron	
Prof. (Dr.) Ajay K. Sharma	Hon. Director, NIT Delhi
Convenor	
Dr. Harish Kumar, Head	M & AE Department
Coordinator(s)	
Dr. Leeladhar Nagdeve	M & AE Department
Dr. Ashok Kumar Dewangan	M & AE Department
Organizing Committee Members	
Dr. Abhishek Mishra	Dr. Hargovind Soni
Dr. Abhishek Pandey	Dr. CS Chitransh Mr. Dalvinder Sangwan

**Dr. Leeladhar Nagdeve, Assistant Professor**

**Mechanical & Aerospace Engineering**

**National Institute of Technology Delhi**

**Plot No. FA7, Zone P1, GT Karnal Road, Delhi-110036**Phones:

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**CONVENOR**

**Dr. Harish Kumar**

**COORDINATOR(S)**

**Dr. Leeladhar Nagdeve**

**Dr. Ashok K. Dewangan**



**ORGANISED BY**

**Department of Mechanical & Aerospace  
Engineering**

***National Institute of Technology  
Delhi***

**(An Institute of National Importance)**

**[www.nitdelhi.ac.in](http://www.nitdelhi.ac.in)**

## About the institute

National Institute of Technology, Delhi (NITD) was established in 2010 by Ministry of Human Resource Development, Government of India during the 11th Five Year Plan. It has been declared as an Institute of National Importance by an act of Parliament of India. It aims to provide instructions and research avenues in the areas of Engineering, Technology, Management, Education, Sciences and Humanities and for advancement of learning and dissemination of knowledge in such areas.

The institute offers six undergraduate programs, five PG programs and Ph. D. program in all disciplines not only to keep pace with the expanding frontiers of knowledge but also to provide research training relevant to the present social and economic objectives of the country and the world.

The institute is located in Plot No. FA7, Zone P1, GT Karnal Road, Delhi-110036, INDIA. Campus is situated at around 12 km from Jahangirpuri Metro Station and is well connected with public conveyance.

## About the Department

The Department of Mechanical & Aerospace Engineering is a diverse field, which involves design, analysis, manufacturing, and Aerodynamics from small machine parts and devices to large systems. We aspire to have a distinguished tradition of excellence in the theme areas ranging from thermal, mechanics, design and manufacturing and aerodynamics to CAD/CAM/CAE. The department currently runs two undergraduate program B.Tech. (Mechanical Engg.) & B.Tech. (Aerospace Engg.) and one master's program M.Tech. (CAD/CAM). Currently department offers two executive programme in Additive Manufacturing & CAD/CAM. Ph. D. program is also offered by the Department in all areas of the Mechanical Engineering since Academic year 2016-2017. The Department is currently equipped with CAD Laboratory, Academy for Advanced & Reverse

Manufacturing (ARM) Lab, Central Workshop, Engineering Visualization, Advanced Manufacturing Lab, and Advanced Composites Lab.

Intake for M. Tech. CAD/CAM program is 34 seats + 2 seats (through DASA) including GATE scholarship, self-financed & sponsored seats. The program has been started from academic session 2016-17. The Department's dream is to translate its research and to develop teaching methods so that the underprivileged minds can find technological solutions to future challenges. Faculty members of the department have excellent academic & research credentials and published numerous peer reviewed journal articles/ papers, Books, Book Chapters etc. in diversified field and having adequate experience in advanced research.

## Objectives of the Course

Advanced manufacturing in industry 4.0 such as advanced machining processes, Digital Manufacturing, and Micro-Electromechanical systems etc. are needed for the present era in the global competitiveness and considered major thrust areas for the innovative research. Advanced Machining processes and 3-D printing are the key factor in bio-medical, automotive, aerospace, nuclear, and aerospace industries etc. Therefore, the precise understanding of these processes in actual practice is required for all engineering fields.

The development of innovative technologies has been increasing in the field of manufacturing industries for processing metals and building materials, food, pharmaceuticals, chemical, biomass, refrigeration & air-conditioning and numerous other applications which enables us to explore, discuss and address the various issues.

The purpose of this FDP is to disseminate the scientific, theoretical and applied research in the field of Industry 4.0, to serve as a platform for demonstrating research-oriented outcomes with their implementations in the real applications. This FDP will emphasize the gap between

research and actual practice, and cover applications of technologies which present new insights, innovative modelling techniques and novel optimization methodologies associated with Industry 4.0.

Advanced research topics related to advanced manufacturing in Industry 4.0 will be addressed during FDP. The included topics are as:

- Advanced Machining in Industry 4.0
- AI & ML in Manufacturing
- Nano-Finishing of Biomaterials
- Hybrid Machining Processes
- Precision Manufacturing & Measurement
- Digital Manufacturing in Industry 4.0
- Sustainable Manufacturing
- Modern Machining Sciences
- Machining of Novel Materials
- Advanced Tribology
- Manufacturing of Functional Materials
- Micro/ Nano-electromechanical System (MEMS/NEMS)
- Nano Sciences and Nanotechnologies
- Automation & Robotics in Industry 4.0
- Metrology in Industry 4.0

This course will offer a unique opportunity to the faculty members, researchers, engineers and research student working in the hybrid theme of the manufacturing and thermal Sciences. Talks will be delivered by eminent academicians, scientists, and industry persons as well as field professionals.

## Eligibility for Participants

The faculty development programme is open to faculty members, research scholars, students and industry person belonging to engineering/ science disciplines.