

A One-Week AICTE Training and Learning (ATAL) Academy Faculty Development Program



ON 3D PRINTING DESIGN AND TECHNOLOGY

July 19-23, 2021

Coordinators

Dr. Yogesh Singh

Dr. Rajeev Nayan Gupta

Dr. S. Negi



Organized by

**Department of Mechanical Engineering
National Institute of Technology Silchar
Silchar-788010**

Assam, India.

Web: <http://www.nits.ac.in>

OVERVIEW

3D printing system is used by designers for more than 30 years as a prototyping tool to reduce the product realization time. In the last decade it gained attraction as an inevitable manufacturing technology for various fields such as Defence, Medical, Aerospace and Automobile. It empowers the innovators with enormous design freedom to manufacture customized products. The versatility of 3D printers is evident in variety of ways they are used today. It has the potential to democratize the production of components, and goods from food to medical supplies. In future, 3D printing machines could make their way into homes and offices. This faculty development program will introduce you to 3D Printing and enable you to gain knowledge and skill in this promising technology by interacting with experts in the field. To create a skilled and experienced manpower in the domain of 3D Printing, this FDP will provide a platform for the participants to explore the various research possibilities and opportunities in this interdisciplinary field.

OBJECTIVES

- ❖ To explore the 3D Printing technology
- ❖ To apprise the participants of emerging trends in 3D Printing technology.
- ❖ To aware the participants of applications of 3D Printing technology.
- ❖ To share in-depth knowledge of 3D printing system and technologies and its real-time applications
- ❖ To bridge the gap between academic learning and industry demands in the field of 3D printing technology

WHO CAN APPLY (ELIGIBILITY)?

The faculty members of the AICTE approved institutions, final year UG students, research scholars, PG Scholars, participants from Government Sector, Industry.

REGISTRATION & CERTIFICATION

- There are no registration fees.
- Number of participants is limited to 150 (first come first serve basis)
- Interested candidates can register by filling the online registration form with the link given below:

<https://forms.gle/4UXzwPZy9M1ScuZ86>

CERTIFICATES

Certificates shall be issued to those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the test conducted at the end of the online FDP.

IMPORTANT DATES

- Last date for online registration: 05th July 2021
- Date of confirmation to participants: 10th July 2021
- Date of webinar: 19th – 23rd July, 2021

CONTACT DETAILS

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Assistant Professor, Department of Mechanical Engineering, NIT Silchar

ABOUT NIT SILCHAR

National Institute of Technology (NIT) Silchar, an Institute of National Importance under the NIT Act was established in 1967 as Regional Engineering College (REC) Silchar in Assam. In year 2002, it was upgraded to the status of an NIT from REC. NIT Silchar is situated on the banks of river Barak and on a sprawling campus spread over 600 acres of land on the outskirts of Silchar. The landscape of NIT Silchar campus is beautiful with natural lakes and hillocks, surrounded by tea gardens. NIT Silchar has achieved 9th position among NITs, 46th in Engineering institutions and 94th in overall category in NIRF 2020 ranking.

ABOUT MECHANICAL ENGINEERING DEPARTMENT

The Department of Mechanical Engineering is one of the oldest and finest Departments in the region. The workshops of the Department contain highly sophisticated machines presenting a unique and unparalleled quality. The Department offers a four-year B.Tech. Programme in Mechanical Engineering, and a two-year M.Tech. Programme in Thermal engineering, Design and Manufacturing, CAD-CAM and Automation, Materials and Manufacturing Technology, and Ph.D. Programme in the related research topics. Department is having different UG/PG and advanced research laboratory, which is useful for the research and development purpose.

TENTATIVE RESOURCE PERSONS

Highly qualified and experienced faculties from various reputed institutes (IITs and NITs) and industry experts.

- Yogendra Srivastava, Founder, VSD Enterprises, Hyderabad
- Rakesh Koppunur, National manager VSD Enterprises, Hyderabad
- Balaji, Founder iforge 3D - Medical modelling for 3D Printing, Telangana
- Dr. Y Ravi Kumar, Asst. Prof, NIT Warangal
- Dr. M Ravi Shankar, IIT Tirupati
- Dr. Yeole Shivraj Narayan, VNR VJiet, Hyderabad
- Dr. M Manjaiah, NIT Warangal
- Mr. Dileep Menzes, India Head, 3D Systems
- Prof. Pulak Mohan Pandey, IIT Delhi
- Dr. Harshit K. Dave, Associate Professor, SVNIT Surat
- Dr. L Siva Rama Krishna, Asst. Prof., Osmania University
- Dr. Gururaj Telsang, Scientist E, Center for Laser Processing- ARCI Hyderabad
- Dr. Santosh Kumar M, Asst. Prof, Acharya Institute of Technology – Bangalore
- Dr. A. Manmadha Chary, Assistant Professor, IFHE University, Hyderabad

TOPICS TO BE COVERED

- Introduction of 3D printing technology
- 3D printing processes
- File formats
- Emerging trends in 3D printing
- Introduction to Reverse Engineering - 3D Scanning
- Applications of 3D printing
- Case studies in Medical, Dental, Automotive, Aerospace, Defence, Jewellery, Fashion, Architecture etc.

CHIEF PATRON

Prof. Sivaji Bandyopadhyay,
Director, NIT Silchar

Patrons

Prof. Rajat Gupta
Prof. P. K. Patowari, Dean (Faculty Welfare)
Prof. R. D. Mishra

Advisory Members

Dr. S. Bhowmik, HOD, Mechanical Engineering
Dr. Sukumar Pati, Coordinator, Nodal Officer, ATAL
FDP

Organizing Committee Members

All the faculty members of Mechanical Engineering
Department, NIT Silchar

Coordinators

Dr. Yogesh Singh & Dr. R. N. Gupta, Dr. S. Negi
Assistant Professor, ME Department



Department of Mechanical Engineering

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