



SVKM's NMIMS Mukesh Patel School of Technology Management & Engineering, Shirpur Dist-Dhule, (MH), India.

ATAL BASIC FDP (Six Days) Faculty Development Program on

Exploring the Frontier: Additive Manufacturing & 3D Printing in Industry 4.0

(9th -14th December 2024)



About the Institute and Department

SVKM's NMIMS Shirpur is a constituent Campus of NMIMS (Deemed-to-be-University) with A+ NAAC accreditation and Tier 1 UGC recognition, offers industry-oriented programs in Engineering, Pharmacy, Agriculture, and Textile. With AICTE and PCI approvals for its technology and pharmacy schools respectively, the campus emphasizes interdisciplinary education for holistic development of students.

About the Institute

MPSTME Shirpur is a leading engineering institution offering undergraduate programs in engineering and technology management. Known for its advanced infrastructure, research collaborations, industry and centers it emphasizes high-quality technical education of UG and PG students. With a globally-aligned curriculum and a research-driven faculty, MPSTME Shirpur equips students with strong technical skills and critical thinking, preparing them for success in the evolving technical landscape.

MPSTME's Mechanical Engineering section is equipped with state-of-the-art laboratories. It has Bosch Rexroth Centre of Excellence in Automation. It also has full-fledged CAD lab installed with advance design software. It is equipped with AION 500 MK2 3D Multi extruder and two ENDER 3 Max single extruder printers.

Organizing Committee

Chief Patrons

Shri Amrishbhai R. Patel Chancellor, SVKM's NMIMS and President, SVKM

Shri Rajgopal Bhandari Managing Committee Member, SVKM & Mentor, NMIMS Shirpur Campus

Mrs. Rita Patel In-charge, NMIMS Shirpur Campus

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Coordinator

Dr. Rakesh Chaudhari Associate Professor, NMIMS, MPSTME, Shirpur

Co-Coordinator

Mr. Rajesh Verma Assistant Professor, NMIMS MPSTME Shirpur

Administration Mr. Rahul Dande

Chief Accountant and Administrator, NMIMS Shirpur Campus

Mr. Bhupesh Jaware Deputy Registrar, NMIMS Shirpur Campus

Objective of the FDP

The FDP on "Exploring the Frontier: Additive Manufacturing & 3D Printing in Industry 4.0" empowers educators to integrate advanced 3D printing techniques, like bio-printing and multimaterial printing, into their teaching. Covering applications in fields like space exploration, medicine, as well as economic and practical challenges, it aligns with NEP 2020 by promoting cutting-edge, hands-on STEM learning. This program equips faculty to curriculum relevance, fostering enhance creativity and problem-solving for future-ready education.

Who can attend the FDP ?

The Faculty members/Research scholars/PG students from AICTE approved institutions are eligible for this FDP. There is no registration fee to attend this FDP.

How to reach Shirpur

Air: Nearest airports - Indore, Aurangabad (200 km), Mumbai (370 km), Jalgaon (120 km). Rail: Closest stations - Chalisgaon, Jalgaon, Bhusawal (120 km), Manmad (200 km), AmaIner (50 km).

Road: 50 km from Dhule; connected via NH-3.

Registration Procedure

- 1. Participants must register exclusively through the AICTE-ATAL portal. <u>https://atalacademy.aicteindia.org/signup</u>
- 2. To begin, click on "Sign Up" and create an account as a "Participant." After creating your login credentials sign in and update your profile.
- Navigate to the "FDPs" section and search for the program titled "Exploring the Frontier: Additive Manufacturing & 3D Printing in Industry 4.0" (Application No: 1716526736). To register, click on the "+" sign next to the FDP title.
- 4. When filtering the FDPs, ensure you select "All" or "December" in the month filter.
- 5. Submission of a No Objection Certificate (NOC) is mandatory for registration to the FDP. (NOC template is given below)
- 6. After successful registration for FDP through the AICT-ATAL portal, <u>the scanned copy of NOC to</u> <u>is to be sent on rakesh.chaudhari@nmims.edu</u> <u>and rajesh.verma@nmims.edu</u>
- 7. No Registration Fee: There is no registration fee for any participant attending the program.
- 8. Refreshments and Meals: Complimentary refreshments and lunch will be provided to all participants throughout the duration of the FDP.
- 9. Travel Allowance: External participants traveling more than 20 km (one-way) and attending at least 90% of the sessions are eligible for travel allowance (maximum up to Rs. 1600/-).

Last Date of Registration is 1st Dec. 2024

Participant NOC Format

Letter Head Subject: NOC for Attending ATAL FDP

Ref No.

Date: To Whomsoever It May Concern

This letter is to express No Objection on Mr./Mrs./Ms./Dr.

in

attending FDP on "Exploring the Frontier: Additive Manufacturing & 3D Printing in Industry 4.0" conducted at 'SVKM's NMIMS, Mukesh Patel School of Technology Management and Engineering, Shirpur Campus, Dhule from 09th – 14th December, 2024.

This certificate is issued as per requirement of AICTE for successful conduction of ATAL Faculty Development Program.

Yours Sincerely, (Sign & Stamp) Hol/Competent Authority

Contact Us

- Dr. Rakesh Chaudhari, Coordinator rakesh.chaudhari@nmims.edu Mob. 7083892916
- **Mr. Rajesh Verma**, Co-Coordinator <u>rajesh.verma@nmims.edu</u> Mob. 7011580675

SVKM's NMIMS Mukesh Patel School of Technology Management & Engineering, Shirpur ATAL BASIC FDP (Six Days)

on

Exploring the Frontier: Additive Manufacturing & 3D Printing in Industry 4.0

FDP Schedule

		FDP Sci	leume		
Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
9/12/2024 9.00 am to 9.30 am Inauguration	10/12/2024	11/12/2024	12/12/2024	13/12/2024	14/12/2024
9:30 am - 12:00 noon Session 1	9:30 am - 12:00 noon Session 3	9:30 am - 12:00 noon Session 5	9:30 am - 12:00 noon Session 7	9:00 am – 1:00 pm Industrial visit	9:30 am - 12:00 noon Session 10
 Name of the Expert: Dr. A.M. Kuthe . Designation : Professor Organization: VNIT Nagpur.MH Topic to be taught: Use of Fused Deposition Modelling (FDM) for Medical Application in Developing Countries 	Name of the Expert: Dr. Pranav Sapkal. Designation: Founder and CEO Organization: LUCID Implants, Nagpur, MH Medical device innovation research to commercialization	Name of the Expert : Dr. Kran Bhole Designation : Associate Professor Organization: SPCE, Mumbai, MH Topic to be taught: Design and development of Microstereolithography and bulk lithography for 3D microfabrication	 Name of the Expert : Dr. Asha Ingle Designation : Former Professor & Head Organization: NNIMS MPSTME Mumbai Topic to be taught: Applications of Additive Manufacturing in Industry 4.0 		 Name of the Expert : Dr. Dinesh Singh Thakur Designation : Professor Organization: DIAT, Deemed to be University (DRDO Ministry of Defense), Pune, MH Topic to be taught: 3D composite material Printing for aerospace applications
12:00 noon – 1:00 pm Article-1 Discussion	12:00 noon – 1:00 pm Article-1 Discussion	12:00 noon – 1:00 pm Article-2 Discussion	12:00 noon – 1:00 pm Article-2 Discussion		12:00 noon – 1:00 pm Article Summary
1:00 pm – 2:00 pm Lunch	1:00 pm – 2:00 pm Lunch	1:00 pm – 2:00 pm Lunch	1:00 pm – 2:00 pm Lunch	1:00 pm – 2:00 pm Lunch	1:00 pm – 2:00 pm Lunch
2:00 pm-4:30 pm Session 2	2:00 pm-4:30 pm Session 4	2:00 pm- 4:30 pm Session 6	2:00 pm-4:30 pm Session 8	2:00 pm-4:30 pm Session 9	2:00 pm- 4:00 pm MCQ & Reflection Journal
Name of the Expert : Dr. Sandeep Dahake Designation : CEO & Founder Organization: Precisurg Private Limited, CIVN VNIT Nagpur, MH Topic to be taught: Application of CAD and AM in Medical Sciences	 Name of the Expert : Mr. Piyush Ukey Designation : Cofounder, Director. Organization: NU OSSA Mediquip Put. Ltd., Nagpur, MH Topic to be taught: 3 D Printing opportunities in healthcare 	 Name of the Expert : Dr. Vishal Francis Designation : Assistant Professor Organization: Lovely Professional University, Panjab Topic to be taught: Surface enhancement approach for FDM rapid prototypes 	 Name of the Expert : Dr. Rakesh Chaudhari Designation : Associate Professor Organization: NNIMS MPSTME, Shirpur Topic to be taught: Joining of dissimilar metals by transition grading using metal 3D printing. 	 Name of the Expert : Dr. Shrikant P. Wadile Designation : Ayurvedic Medical Practitioner and Yoga therapist Topic to be taught: Stress Management & Mindfulness Meditation 	
4:30 pm- 5:30 pm	4:30 pm- 5:30 pm	4:30 pm- 5:30 pm	4:30 pm- 5:30 pm	4:30 pm- 5:30 pm	4:30 pm- 5:30 pm
Hands on training/Labs (Designing of CAD Models)	Hands on training/Labs (G Codes formation)	Hands on training/Labs (Slicing and data preparation)	Hands on training/Labs (Testing & Calibration of 3D Printer)	Hands on training/Labs (Post-processing of products)	Valedictory Session