

Final Schedule: Two Week online FDP on Technological Development in Advanced Manufacturing – Challenges, Scope and Applications, Nov. 3-14, 2025												
Date	Day	2:30-3:00 PM	3:00 - 4:00 PM		4:00-5:00 PM	5:00-5:45 PM	5:45 PM-7:00 PM			7:00-8:15 PM		
November 3, 2025	Monday	Inaugural Session	L1: Applications of AI in Advanced Manufacturing (Prof. G. L. Samuel, IIT Madras)				Break	L2: Technological Development in Advanced Manufacturing (Dr. Tej Pratap, MNNIT Allahabad)			L3: Hybrid Manufacturing: Additive Manufacturing (Prof. Puneet Tandon, PDPM IITDM Jabalpur)	
November 4, 2025	Tuesday		L4: Challenges in Abrasive Machining and Surface Integrity Assessment (Prof. Meghanshu Vashista, IIT BHU)				Break	L5: Conventional Micromachining Technology (Dr. Tej Pratap, MNNIT Allahabad)			LAB 1: On-Machine Measurements and Inspection in Micromachining (Dr. Tej Pratap, MNNIT Allahabad)	
November 5, 2025	Wednesday		L6: Advanced Joining Techniques in Manufacturing (Dr. Chandrakant Kumar Nirala, IIT Ropar)		L7 Modeling and Analysis of Micromilling Process (Prof. Karali Patra, IIT Patna)		Break	LAB 2: Surface Roughness Parameters and its Measurement Techniques (Dr. Ashwani Pratap, IITDM Kurnool)				
November 6, 2025	Thursday		L8: Effect of Coatings and its Thickness in Micro-milling Performance (Dr. Priyabrata Sahoo, IIT Goa)				Break	L9: Cryogenic Micromachining of Soft Polymers (Prof. Karali Patra, IIT Patna)			L10: Modeling and Simulation of Manufacturing Processes (Dr. Vishwas Divse, Hexagon Manufacturing Intelligence)	
November 7, 2025	Friday		LAB 3: Molecular Dynamics (MD) Simulation of Nanocutting (Dr. Ashwani Pratap, IITDM Kurnool)				Break	LAB 4: Advancement in EDM with Hands on Practice of Virtual Instrumentation in EDM Monitoring (Dr. Chandrakant Kumar Nirala, IIT Ropar)				
November 8, 2025	Saturday		LAB 5: Topology Optimization for Additive Manufacturing (Prof. Mukul Shukla, MNNIT Allahabad)		L11: Nano Finishing by Soft Grinding Tool (Dr. Priyabrata Sahoo, IIT Goa)		Break	LAB 6: Hand-on-session on FE Modeling of Laser-Assisted Machining Processes (Dr. Vishwas Divse, Hexagon Manufacturing Intelligence)				
November 9, 2025	Sunday		Holiday									
November 10, 2025	Monday		LAB 7: Image Analysis for Surface Characterization (Dr. Ashwani Pratap, IITDM Kurnool)				Break	L12: Laser Surface Texturing and its Interdisciplinary Applications (Dr. Tej Pratap, MNNIT Allahabad)			L13: Hybrid Manufacturing: Additive Manufacturing (Prof. Puneet Tandon, PDPM IITDM Jabalpur)	
November 11, 2025	Tuesday		LAB 8: Simulation of Metal Additive Manufacturing (Prof. Mukul Shukla, MNNIT Allahabad)		L14: Condition Monitoring of Micromachining (Prof. Karali Patra, IIT Patna)		Break	L15: Hybrid Manufacturing: Metal Forming Processes (Prof. Puneet Tandon, PDPM IITDM Jabalpur)				
November 12, 2025	Wednesday		L16: Engineered Surfaces and its Interfaces for Interdisciplinary applications (Dr. Tej Pratap, MNNIT Allahabad)				Break	L17: Laser Manufacturing Processes (Prof. A. K. Dubey, MNNIT Allahabad)			L18: Laser Based Additive Manufacturing (Dr. Ponappa K, PDPM IITDM Jabalpur)	
November 13, 2025	Thursday		L19: Advanced Post Processing of Additive Manufactured Complex Surface Features (Prof. Mamilla Ravi Sankar, IIT Tirupati)				Break	Feedback and Suggestions from Participants			Online Quiz for the participants (From 7:00 PM) 30 minutes	
November 14, 2025	Friday	L20: Electrochemical Subtractive and Additive Micro-manufacturing Technology (Dr. Divyansh Patel, IIT Bhubaneswar)				Break	Online Certificate Distribution & Valedictory Session (From 6:00 PM)					
				L: Lectures								
				LAB: Hand-on Session								
				Feedback and Suggestions								
				Online Quiz (30 min.)								