



Event Circular

01/08/2025

We are pleased to announce an upcoming Program titled “**5-days bootcamp on Additive Manufacturing / 3D Printing**” organized by the Department of Mechanical Engineering in association with the Center for Development of Advanced Computing (CDAC), India.

This bootcamp aims to introduce students to the rapidly evolving field of additive manufacturing. It will cover fundamental concepts, industrial applications, and the latest technological advancements in the domain. The sessions are designed to benefit students from all engineering branches and academic years, regardless of prior experience.

Event Details:

- **Dates:** 4th August to 8th August 2025
- **Time:** 10:00 AM to 4:00 PM
- **Venue:** Department of Mechanical Engineering, J.B. Institute of Engineering and Technology, Hyderabad
- **Resource Person:** Mr. Yelti Shiva Reddy
(Project Engineer at CDAC & Futureskills Prime Coordinator)

HOD-ME



JB INSTITUTE OF ENGINEERING & TECHNOLOGY

UGC Autonomous

Accredited by NAAC & NBA, Approved by AICTE & Permanently Affiliated to JNTUH

Department of Mechanical Engineering JBIET

Event Schedule

Workshop Title: "5-days bootcamp on Additive Manufacturing / 3D Printing"

Date: 4th August 2025 – 8th August 2025

Venue: Department of Mechanical Engineering, JBIET

Time: 10:00 AM – 4:00 PM

Day 1: August 4, 2025 (Monday)

- **11:30 AM – 11:55 AM: Inauguration Ceremony**
- **11:55 AM – 12:30 PM: Introduction Session**
 - Introduction to FutureSkills Prime
 - Fundamentals of Additive Manufacturing (AM)
 - Evolution of AM Technologies
 - AM vs. Subtractive Manufacturing
 - Advantages of AM
- **01:10 PM – 03:00 PM: Topic: Classification of AM Processes (ASTM)**
 - Material Extrusion
 - Photo Polymerization
 - Sheet Lamination
 - Powder Bed Fusion
 - Binder Jetting
 - Material Jetting
 - Direct Energy Deposition
- **03:00 PM – 04:00 PM: Q&A and Recap Session**

Day 2: August 5, 2025 (Tuesday)

10:00 AM – 11:30 AM: Topic: AM Process Chain

- CAD to Part – Data Translation, Realization & Post Processing
- CAD, STL Conversion, File Manipulation
- Transfer to AM, Machine Setup
- Part Build, Removal, Clean-up, Finishing
- Part Density, Surface Finish, Dimensional Accuracy

11:30 AM – 12:30 PM: Practical Discussion Role of CAD tools

- Live examples of AM chain stages

01:10 PM – 03:00 PM: Topic: Applications of AM

- Rapid Tooling, Medical Models
- Bi-metallic Parts, Aerospace, Automotive, Healthcare
- Tooling & Manufacturing Sectors

03:00 PM – 04:00 PM: Topic: Post-processing & Enhancements

Day 3: August 6, 2025 (Wednesday)

10:00 AM – 12:30 PM: Topic: CAD Modeling and STL Conversion (Theory)

- 3D CAD Tools Overview
- STL Format and Geometry Considerations

01:10 PM – 04:00 PM: Hands-on Session:

- Designing CAD Models
- STL File Conversion

Day 4: August 7, 2025 (Thursday)

10:00 AM – 12:30 PM: Topic: FDM Slicer – Theory

- Introduction to Slicing Software
- G-code Generation and Parameters
- Material Selection

01:10 PM – 04:00 PM: Hands-on Session:

- Working with FDM Slicer Tools
- Live Slicing of Sample CAD Models
- Preparing for 3D Printing

Day 5: August 8, 2025 (Friday)

10:00 AM – 12:30 PM: Assessment and Validation

- Quiz/Test on AM Concepts
- Validation of CAD Models
- Review of Sliced Models

01:10 PM – 03:00 PM: Feedback and Reflection

- Participant Reflections
- Sharing of Key Takeaways
- Suggestions and Improvements

03:00 PM – 04:00 PM: Valedictory Function & Certificate Distribution

Event Banner



JB INSTITUTE OF ENGINEERING AND TECHNOLOGY

Bhaskar Nagar, Moinabad Mandal, Hyderabad, Telangana - 500075



Department of Mechanical Engineering



Resource Person

Mr. Yelti Shiva Reddy

Project Engineer at CDAC &
Futureskills prime coordinator

5 - DAYS BOOTCAMP ON ADDITIVE MANUFACTURING / 3D PRINTING

In Association with

**Center for Development of Advanced
Computing (CDAC), India**



Date : 4th To 8th August 2025

Time : 10 am to 4 pm



Venue: Department of Mechanical Engineering.

Chief Patron

Shri. J.V. Krishna Rao
Secretary, JBES

Patron

Prof. Sanjay Chintakindi
Director, JBES

Patron

Dr. P. C. Krishnamachary
Principal, JBIET

Convener

Dr. Anoop Kumar
HOD-ME, JBIET

Coordinators

Mr.G. Gopinath . Asst. Professor
Mr.J. Nagaraju. Asst. Professor
Mr.P. Seema Rani. Asst. Professor
Mr.A. Sai Kumar . Asst. Professor

Resource Persons Profile

Mr. Yelti Shiva Reddy is a dedicated and accomplished Project Engineer at the Centre for Development of Advanced Computing (CDAC), a premier R&D institution under the Ministry of Electronics and Information Technology, Government of India. He serves as a key coordinator for the **Future Skills Prime** initiative — a joint venture by NASSCOM (National Association of Software and Services Companies) and Ministry of Electronics and Information Technology aimed at upskilling India's youth and professionals in emerging digital technologies.

With a strong foundation in engineering and deep domain expertise in digital technologies, Mr. Reddy brings rich experience in implementing skilling programs aligned with national digital transformation goals. His work focuses on capacity building, digital literacy, and enabling future-ready engineer for the industry.

As a resource person, he has conducted various workshops, training sessions, and orientation programs for faculty, students, and working professionals, covering topics related to AI, cybersecurity, cloud computing, and digital learning platforms. His sessions are known for being interactive, insightful, and highly aligned with industry needs.

Expertise:

- Emerging Digital Technologies
- Capacity Building & Skilling
- Digital Transformation
- Academic-Industry Collaboration
- Program Coordination and Implementation

Notable Contributions:

- Spearheading the promotion and adoption of future skills Prime across academic institutions
- Facilitating awareness on digital career pathways for students and faculty
- Supporting the integration of industry-certified courses into academic curricula

Event Report: “5-Days Bootcamp on Additive Manufacturing / 3D Printing”

Event Title: 5-Days Bootcamp on Additive Manufacturing / 3D Printing

Date: August 4 - 8, 2025

Venue: J.B. Institute of Engineering & Technology, Hyderabad

Organized by: Department of Mechanical Engineering

In Association with: Center for Development of Advanced Computing (CDAC), India

Resource Person: Mr. Yelti Shiva Reddy, Project Engineer at CDAC & Futureskills Prime Coordinator.

Introduction

The “5-days bootcamp on Additive Manufacturing / 3D Printing” was organized with the aim to provide an in-depth understanding of the fundamentals and applications of 3D printing technologies across various engineering disciplines. The program was open to students of all branches and years, offering them a unique opportunity to explore one of the most transformative areas of modern engineering. The bootcamp featured expert lectures, practical demonstrations, and hands-on sessions, ensuring comprehensive exposure to participants.

Objectives

1. To introduce students to the fundamentals of Additive Manufacturing and its significance in modern engineering.
2. To demonstrate real-world applications and benefits of 3D Printing in various sectors.
3. To offer hands-on exposure to 3D Printing technologies and tools.
4. To foster interdisciplinary learning and encourage innovation among students.

Schedule Overview

Day 1: Inauguration and Overview of Additive Manufacturing

The session began with the inauguration by the Principal, Director and HOD, followed by an introductory lecture on the history, importance, and types of additive manufacturing processes.

Day 2: 3D Printing Technologies and Processes

The resource person introduced various 3D printing techniques such as FDM, SLA, and SLS with practical demonstrations.

Day 3: Software and Design Tools for 3D Printing

Participants were trained on CAD tools and slicing software used to model and prepare objects for 3D printing.

Day 4: Applications and Industry Insights

Discussion on real-world applications in aerospace, healthcare, automotive and consumer products. Industrial case studies were presented.

Day 5: Hands-on Session and Closing

A live demonstration and student interaction session concluded the bootcamp, followed by certificate distribution and feedback collection.

Feedback

Feedback collected from students highlighted:

- Strong appreciation for the real-time demonstrations and interactive sessions.
- Gained clear understanding of industry applications of 3D Printing.
- Students from non-mechanical backgrounds found it equally accessible and valuable.
- Valuable insights into CAD and 3D slicing software tools.

Vote of Thanks

Dr. Anoop Kumar, Head of the Department, extended heartfelt thanks to Mr. Yelti Shiva Reddy, Project Engineer at CDAC & Futureskills Prime Coordinator for delivering a highly informative and engaging 5 days bootcamp on Additive Manufacturing / 3D Printing, and for generously sharing his expertise with all participants.

He expressed special gratitude to Dr. P. C. Krishnamachary, Principal of JBIET, whose visionary leadership and constant encouragement laid the foundation for organizing such impactful academic initiatives. Dr. Anoop Kumar also extended his deep appreciation to Prof. Sanjay Chintakindi, Director of JBIET, for his strategic guidance and continued support, which played a pivotal role in the smooth execution and success of the bootcamp.

Furthermore, Dr. Anoop Kumar acknowledged the tireless efforts of the organizing team — Mr. G. Gopinath, Mr. J. Nagaraju, Mr. P. Seema Rani, and Mr. A. Sai Kumar — whose meticulous planning and coordination ensured a seamless learning experience for all attendees.

He also thanked all faculty members of the Department of Mechanical Engineering for their active involvement and enthusiastic participation throughout the bootcamp, which significantly contributed to its overall success.

Introduction

The Workshop on "Fundamentals of Meshing" aimed to equip participants with essential knowledge and skills related to meshing techniques, a critical component in engineering simulations. Over six days, the workshop featured expert sessions, hands-on training, and interactive discussions, fostering an engaging learning environment for all participants.

Objectives

1. To provide a comprehensive understanding of meshing techniques and their applications.
2. To introduce participants to various meshing software tools.
3. To enhance practical skills through hands-on exercises and real-world case studies.
4. To encourage networking and collaboration among participants and industry professionals.

Schedule Overview

Day 1: Inauguration and Introduction

The workshop commenced with an inauguration ceremony, featuring speeches from **Dr. P. C. Krishnamachary**, Principal, and **Dr. Anoop Kumar Shukla**, Head of the Department, highlighting the significance of meshing in engineering. Participants were introduced to the objectives of the workshop, followed by sessions on basic meshing concepts and types.

Day 2: Advanced Techniques

Participants engaged in advanced meshing techniques, focusing on mesh refinement and adaptive meshing. A guest lecture discussed real-world applications of meshing in various industries, followed by a practical exercise on meshing irregular shapes.

Day 3: Software Training

This day focused on popular meshing software tools, with hands-on sessions allowing participants to practice setting up meshing projects. Case studies were presented, illustrating successful applications of meshing techniques.

Day 4: Best Practices and Feedback

The focus was on best practices in meshing, with participants working in groups on real-world applications. Feedback sessions encouraged participants to share insights and reflections on their learning experiences.

Day 5: Final Presentations and Advanced Strategies

Participants presented their group projects, showcasing their understanding of meshing techniques. The day included discussions on specialized meshing strategies and troubleshooting common issues faced in meshing.

Day 6: Closing Ceremony

The workshop concluded with a facilitation ceremony, where participants received certificates of participation. A feedback session was conducted to gather insights on the workshop, followed by a networking forum for participants to connect and discuss future collaboration opportunities.

Feedback

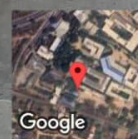
Feedback collected from participants highlighted the following:

- **Content Quality:** Participants appreciated the depth of knowledge shared by the resource persons, particularly in practical applications of meshing.
- **Hands-on Experience:** The hands-on sessions received positive feedback, with many participants finding them beneficial for understanding software tools.
- **Networking Opportunities:** The informal discussions and networking sessions were valued as they allowed participants to connect with peers and industry professionals.

Vote of Thanks

At the conclusion of the workshop, a formal **Vote of Thanks** was delivered by **Dr. Anoop Kumar Shukla, HOD-ME**. He expressed gratitude towards Mr. Sameer and Mr. Prithvi for their invaluable contributions and expert guidance throughout the workshop. Special thanks were also extended to **Mr. G. Gopinath** and **Mr. Rafeeq-Ur-Rahman**, Coordinators of the workshop, for their dedicated efforts in organizing and facilitating the event. Their meticulous planning and execution were instrumental in ensuring the smooth flow of the workshop. Dr. Shukla encouraged participants to apply the skills and knowledge gained during the workshop in their academic and professional pursuits.

Event Photos



Hyderabad, Telangana, India
87jx+34h, Hyderabad, Telangana 501504, India
Lat 17.329972° Long 78.297877°
04/08/2025 11:34 AM GMT +05:30



Hyderabad, Telangana, India

Yenkapally, Moinabad (m), Hyderabad, Telangana 500075, India

Lat 17.330302° Long 78.297028°

05/08/2025 11:05 AM GMT +05:30

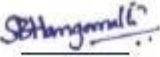
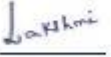


Hyderabad, Telangana, India
87jx+34h, Hyderabad, Telangana 501504, India
Lat 17.32967° Long 78.298333°
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Hyderabad, Telangana, India
87jx+34h, Hyderabad, Telangana 501504, India
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Sample Certificate

 MINISTRY OF ELECTRONICS & INFORMATION TECHNOLOGY GOVERNMENT OF INDIA	 futureskills — p r i m e — A Maitty & nasscom Digital Skilling Initiative	 सी डैक C-DAC	 नैसकॉम NIELIT
CERTIFICATE OF COMPLETION			
This is to certify that Mohd Rafeeq Ur Rahman has successfully completed			
Bootcamp on CAD Designs to 3D Printing			
conducted by			
C-DAC Hyderabad in association with JB Institute of Engineering and Technology, Hyderabad			
from 04-08-2025 to 08-08-2025 as part of the FutureSkills PRIME Project			
	 Chief Investigator C-DAC Hyderabad	 Centre Head C-DAC Hyderabad	
Date of Issue: 18-08-2025		FSP/BCMP/CDAC/HYD/FSP/3DPAM/CDACH/BCMP01/2024/2508/126	
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