

3D PRINTING

July 10, 2025

Organized by

Department of Mechanical Engineering

9.30 AM 04.00 PM

Convenors

Dr. H. Siddhi Jailani, Dean - SMS Dr. A.S. Selvakumar, Head - Mechanical

Coordinators

Mr. M. Balasrinivasan, Asst. Professor (Sr. Gr.) / Mech Dr. M. Pervaz Ahmed, Asst. Professor (Sr. Gr.) / Mech

Contact No.: 97911 09114



Venue: CIM Lab,

School of Management Sciences Block, BSA Crescent Institute of Science and Technology, Vandalur, Chennai, Tamil Nadu



One Day Faculty Training Program on 3D printing

Date: July 10, 2025

Organized by: Department of Mechanical Engineering & Institution's Innovation Council

Venue: CIM Lab

In a forward-thinking initiative to promote technological fluency and hands-on innovation, the Department of Mechanical Engineering, in collaboration with the Institution's Innovation Council, hosted a one-day faculty training program on 3D printing. Held on July 10, 2025, the event brought together over 15 faculty members from various departments—both teaching and non-teaching staff—with a strong presence from the Mechanical Engineering community.

The session was designed to demystify the 3D printing process and empower educators with practical skills that can be applied in classrooms, labs, and research projects. Participants were guided through:

• 3D Modeling with Autodesk Fusion 360:

• Faculty members learned the fundamentals of CAD design, creating their own digital models from scratch.

• Exporting to STL Format:

• The models were converted into the widely used Stereolithography (STL) format, preparing them for the next stage of fabrication.

• Slicing with Bambu Lab Studio:

 Using slicing software, participants configured print settings and prepared their models for physical production.

• Hands-On 3D Printing:

• Each attendee printed their own design, gaining first hand experience with machine operation, material handling, and troubleshooting.

This training wasn't just about learning a new tool, it was about reimagining how we teach, create, and innovate. By equipping faculty with 3D printing skills, the program opens doors to:

Enhancing student engagement through project-based learning

Supporting interdisciplinary research and prototyping

Encouraging creative problem-solving across departments

Participants praised the interactive format and expressed enthusiasm for future sessions. Many noted how accessible and empowering the technology felt once they had the chance to use it themselves. The success of this training has sparked interest in advanced workshops, including multi-material printing, design for manufacturing, and collaborative student-faculty projects. The Institution's Innovation Council is exploring ways to expand access and integrate 3D printing into the broader academic ecosystem.





