



Maharaja Agrasen Institute of Technology, Delhi
PSP Area, Plot No. 1, Sector-22, Rohini, Delhi-110086
Department of Mechanical Engineering

EVENT REPORT

Name of the Event:	Report of SAEINDIA-MAIT Club's "Workshop on 3D Printing"
Date: 10 th May- 13 th May, 2022	No. of Participants: 125

SAEINDIA collegiate club of Maharaja Agrasen Institute of Technology, conduct the 4- day "Workshop on 3D Printing" in association with, Curiosity 3D on 10th May 2022 to 13th May 2022. To give the hands-on experience to students, provided three 3D printer of Creality Ender – 3D Printers. The 3D printer is available in lab for students with material to learn the design methodology, generate idea and check their ideas by manufacturing the part by 3D printer.

EVENT OBJECTIVES:

- To impart basic knowledge about the 3D printing process.
- To explain the considerations and constraints for designing a part for 3D printing (Design for Additive Manufacturing).
- To explain the process of preparing a model for 3D printing using Slicer software, along with its various settings.
- To further encourage the understanding of the students about the 3D printing process through a Design Competition.

EVENT SCHEDULE:

Day 1 to 3 - 2 session each day

Day 1 – Basics of 3D Printing

Day 2 – Design for 3D Printing (DFAM)

Day 3 – Preparing a model for 3D Printing (Slicing)

Day-4 - Design Competition

EVENT HIGHLIGHTS:

- The key speaker for the workshop was Mr. Raunaq Dua from Curiosity 3D.
- The event was conducted in a span of three days.
- A design competition was organised after the workshop in which various teams participated

DAY 1:

- The first day of the workshop began with an introduction of the Additive Manufacturing (3D Printing) process.
- Multiple 3D Printers were set-up in the room for live demonstration of the 3D printing process.
- Next, various industrial applications of the AM process were shown through a presentation.
- The first day of the workshop was concluded with a Q&A session.

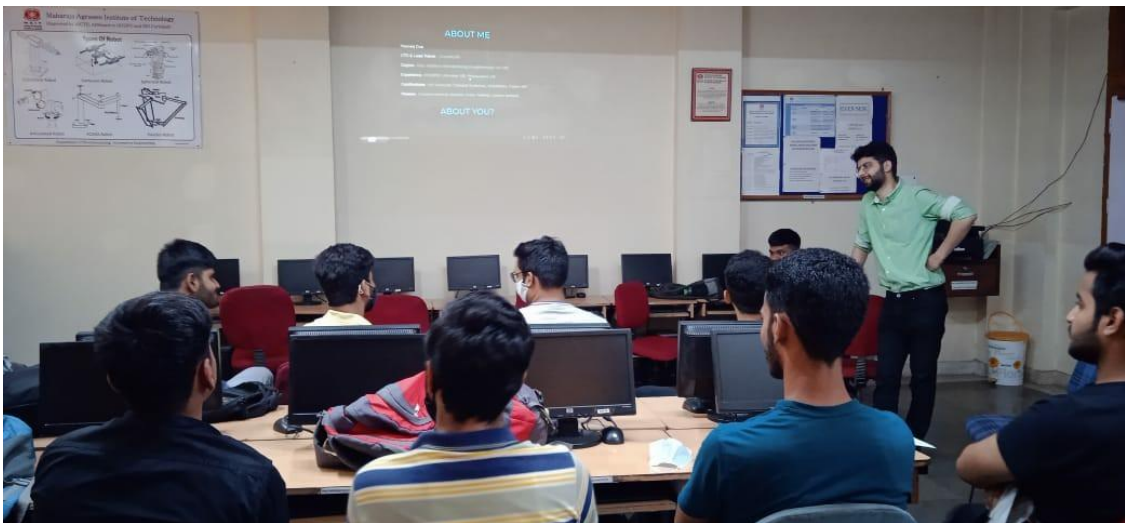
DAY 2:

- On day two of the workshop, the students were taught about Design for Additive Manufacturing (DFAM).
- Various considerations and constraints for designing a part for 3D printing were introduced.
- Good practices while designing a part for 3D printing were also explained.
- The second day was concluded with a QnA session.

DAY 3:

- On the third day of the event, the students were introduced to the complete workflow of 3D printing.
- The process of “Slicing” was explained.
- Functions of different settings were explained.
- A model was printed for demonstration.
- The final day of the workshop was wrapped up with a QnA session.

EVENT PHOTOS:





Day 4 (Design Competition):

- A design competition was organised at the end of the 3-day workshop on 3D printing.
- The competition was conducted on 13 May, 2022 from 11am to 3pm.
- Participants formed teams of 3 and designed and printed their parts.
- Designs were printed on “Creality Ender – 3 Printers” kindly funded by **AICTE SPICES**.
- The top three best designs were selected as winners.



3D Printer

1st Position:

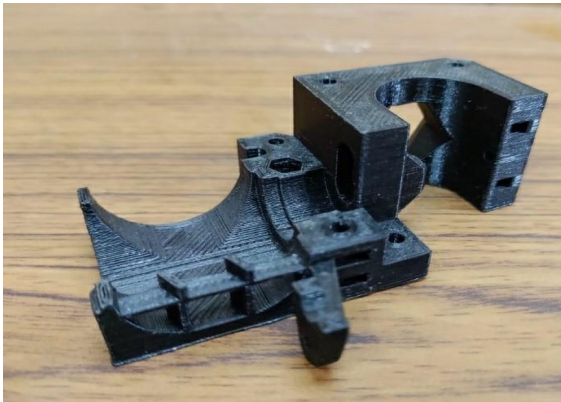




3rd Position:



2nd Position:



Design Competition Winner:

1. Abhinav
2. Aryaman Batra
3. Siddharth Aggarwal
4. Abhishek Kumar
5. Ajay
6. Bhavye Goel
7. Sanyam Jain
8. Rohan

ATTENDEE FEEDBACK:**Abhijeet Sharma:**

“It was a very educating experience. I learned a lot about the uses of 3D printing in the industry.”

Jasdeep Singh:

“3D printing is a great technology. The process of sparking an idea in your mind to holding a finished model in your hand can be realised within a few hours.”

Total Cost for the workshop is Rs. 66,000/- for buying three 3D printer and its material to conduct the workshop.