Event Report

1. **Name of Event:** 3D Printing Hands on Workshop

2. **Nature of the Event:** Capacity Building Program

3. **Date & Time:** 16th – 18th September 2025, 9.30 AM to 5.30PM.

4. **Mode of Event:** Offline session

5. **Venue:** Conference Room, GF, Anviksha and Maker Lab-2,GSFC University

6. **Organized by:** GSFC University, GUIITAR Council, SSIP, Startup Gujarat, and IIC (MoE GoI) in association with VEXMA Technologies Pvt. Ltd.

7. **Number of Participants**: 16, Annexure – 1

8. **Feedback :** For Workshop Feedback please Click Here

9. **Speakers:**

   - Mr. Shaurin Patel, MD & CEO, Vexma Technologies Pvt. Ltd.
   - Mr. Amit Duggal, Senior Executive Technical, GUIITAR Council.

10. Discussions in the event

The GUIITAR Council, in association with GSFC University and Vexma Technologies Pvt. Ltd., Vadodara, successfully organized a three-day **"3D Printing Hands-on Workshop"** from **16th to 18th September 2025**. The workshop brought together students from different schools of GSFC University, providing them with both theoretical knowledge and practical exposure to additive manufacturing.

Renowned industry expert **Mr. Shaurin Patel**, MD & CEO, Vexma Technologies Pvt. Ltd., along with his team, and **Mr. Amit Duggal**, Senior Executive (Technical), GUIITAR Council, conducted the sessions.

A. Objectives of the Event

The primary objectives of the workshop were:

- To introduce participants to the fundamentals of **3D printing technology** and its **industrial applications**.
- To provide **hands-on experience** in CAD modeling, slicing, and operating 3D printers.
- To expose students to **real-world applications** of 3D printing in industries such as aerospace, automotive, healthcare, and education.

- To encourage **innovation, creativity, and design thinking** through prototype development.
- To create awareness about **future trends, ethics, and IP rights** in additive manufacturing.

B. Outcomes

Day 1

- Students gained an understanding of the fundamentals of 3D printing, including its history and evolution.
- They also got familiarized with different 3D printing technologies such as Fused Deposition Modelling (FDM), Multi Jet Fusion (MJF), Direct Metal Laser Sintering (DMLS), Selective Laser Sintering (SLS), Electric Discharge Machining (EDM).
- Students acquired knowledge on various materials used in 3D printing, including (Poly Lactic Acid) PLA,(Acrylonitrile Butadiene Styrene) ABS, composites, and biomaterials.

- In the workshop students also learned basic knowledge of CAD and slicing software tools like SolidWorks, AutoCAD, and UltimakerCura.

Day 2

- Students understood the complete workflow of 3D printing from design to final product.

- Students explored the applications of 3D printing across diverse industries like aerospace, bio printing and jewelry CAD Design.

- They also practiced hands-on skills in Solidworks software through lab sessions.

- Students also gained insights into advanced techniques such as multi-material printing and 3D scanning.

Day 3

- Students applied knowledge in project-based learning by designing and printing customized prototypes in Maker lab 2 using Prusha, Creality and 300Max FDM 3D Printers.
- Students understood the role of 3D printing within the framework of Industry 4.0. And its ethics in Bio Printing.
- They discussed the ethical considerations in bio printing and safety regulations in additive manufacturing.

- Students experienced real-world industrial exposure through a visit to Vexma Technologies, observing advanced 3D printing setups, and also gained knowledge about post processing techniques in 3D printing.

11. Photos

Workshop Creative

Theory Session

Maker lab 2 Hands on 3-D Printing

MJF 3D Printer at VEXMA

Customer Experience center at VEXMA

Group Photo

General Feed back :

Students suggested for more hands-on practice in CAD modelling and Designing softwares like AutoCAD and Solidworks, further they suggested longer workshops focusing on robotics with the application of mechanics, electronics, AI & programming with 3D printing.

Annexure-1: For participants list please **Click Here**

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