



## Event Report

- 1. Name of Event:** Workshop on Prototype Development using 3D Printer
- 2. Nature of the Event:** Workshop
- 3. Date:** 14<sup>th</sup> May, 2022
- 4. Time:** 10:00 A.M. to 12:030 P.M.
- 5. Venue:** CAD lab, 1<sup>st</sup> Floor, School of Technology, GSFC University, Vadodara
- 6. Organized by:** GSFC University, GUITAR Council, SSIP, Startup Gujarat and IIC (MoE GoI)
- 7. Number of Participants:** 21, Annexure – 1
- 8. Speaker:** Dr. Ghanshyam Tejani, Asst. Professor (Mech. Engg.), SoT, GSFCU
- 9. Major discussions in the event:**

GSFC University, GUITAR Council, Students Startup & Innovation Policy (SSIP), Institution's Innovation Council (MoE) and Startup Gujarat organized a Workshop on "Prototype Development using 3D Printer" on 14<sup>th</sup> May, 2022 from 10:00 A.M. to 12:30 P.M. at CAD Lab, SoT, GSFCU.

Mr. Kirankumar Parmar, Sr. Manager, GUITAR Council has welcomed invited speaker Dr. Ghanshyam Tejani, Asst. Professor (Mech. Engg.), SoT, GSFCU, Sr. Management GSFC University, CEO-GUITAR Council and Participants.

Dr. Ghanshyam Tejani explained Additive Manufacturing technology most commonly known as 3D printing to the participants. He explained Fused Deposition Modeling (FDM), Stereolithography (SLA), Digital Light Processing (DLP) and other technology used for 3D printing.

Mr. Harsh Rajpoot, Mr. Devarshi Shirke and Mr. Neelkumar Patel, Mech. Engg, SoT, GSFCU students explained how to use solid work software for 3D design preparation. They instructed and explained to participants to prepare Square over Circle and write G on top of Square step by step to the participants.

Dr. Ghanshyam Tejani explained Cura Software usage for 3D printing such as raft usage, when to give support, how to decide infill, increasing or decreasing no of Shells effect of prototype, layer height and printing resolution. He explained the



printing workflow to the participants. At the end of the workshop participants selected one design and printed it in FDM 3D printer available at the University.

Mr. Kirankumar Parmar, Sr. Manager, GUITAR Council expressed the vote of thanks to the participants for attending the workshop, Dr. Ghanshyam Tejani, Asst. Professor (Mech. Engg.), GSFCU for conducting workshop, Sr. Management, GSFC University and Dr. Saroj Shekhawat, CEO, GUITAR Council for guidance and support.

## 10. Learning outcomes of the event:

Participants learned the correct and effective use of 3D Printers for rapid prototyping. They learned solid work software usage for 3D design preparation and Cura software usage for printing the prepared design. They have also printed one design in the 3D printer and understand the concept of Fused Deposition Modeling (FDM) Technology.

## 11. How will it be useful for Students/Schools/University:

Participants will use 3D printer for their academic project Prototype Development.

## 12. Feedback:

Participants enjoyed the workshop and learned a lot in a short time. They requested to organize similar workshop for Laser Cutting Machine for Prototype Development.

## 13. Resources:

- A. **Solid Work:** <https://my.solidworks.com/training/catalog>
- B. **Solid Work Online Help:**  
[https://help.solidworks.com/2021/english/SolidWorks/sldworks/r\\_welcome\\_sw\\_online\\_help.htm](https://help.solidworks.com/2021/english/SolidWorks/sldworks/r_welcome_sw_online_help.htm)
- C. **Solid Work Video Tutorial:**  
<https://www.youtube.com/channel/UCRmLnVaHsSAH0HkXfeoxG6w>
- D. **Cura Software Usage:** <https://www.youtube.com/watch?v=eUNT1b5pEWA>
- E. **Free design for 3D printing:** <https://www.thingiverse.com/>
- F. **Additive manufacturing?:** <https://www.youtube.com/watch?v=EHvO-MIzAIM>
- G. **The Journey of Additive Manufacturing and Artificial Intelligence:**  
<https://www.youtube.com/watch?v=8bKYdsMrWZ8&t=540s>
- H. **Post Processing after 3 D printing:**  
<https://www.makerbot.com/professional/post-processing/>



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GUITAR COUNCIL

## 14. Photos:

**GSFC UNIVERSITY**  
EDUCATION RE-ENVISIONED

**Industries Commissionerate**  
Government of Gujarat

**GUITAR COUNCIL**

**Workshop on  
PROTOTYPE DEVELOPMENT  
Using 3D Printer**

**Speaker:**  
**Dr. Ghanshyam Tejani**  
Asst. Professor (Mechanical Engg.), GSFCU

**Date:** 14/05/2022

**Time:** 10:00 AM. to 12:00 PM

**Location:** CAD Lab, SoT, GSFC University

**INSTITUTION'S INNOVATION COUNCIL**  
(Ministry of Education Initiative)

**StartUp**  
Igniting the Future

**SSIP**











Annexure-1

Participant Details:

*Workshop on Prototype Development using 3D Printers*

14-05-2022

Sr. No.	Full Name (Name Fathername Surname)	School Name	Division	Sem	Category	Mobile No.	Email Id	Gender	Signature
1	Anshita Srivastava	SoT, GSFCU	Computer Science Engineering	4	OPEN	9426354573	20bt04003@gsfccuniiversity.ac.in	Female	
2	HETA RAKESH PANDYA	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	9979991793	21msc02003@gsfccuniiversity.ac.in	Female	<i>WSP</i>
3	Maitri Pancholi	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	7201800348	21msc02006@gsfccuniiversity.ac.in	Female	
4	Onaja Katir	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	9974151687	21msc02015@gsfccuniiversity.ac.in	Female	<i>Onaja</i>
5	KRUPA ARVIND KHRISTI	Sos, GSFCU (B.Sc.)	Biotechnology	2	SEBC	9638439817	21msc02010@gsfccuniiversity.ac.in	Female	<i>Krupa</i>
6	Aswathy Anilkumar	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	9898112149	21msc02002@gsfccuniiversity.ac.in	Female	<i>Aswathy</i>
7	Akanksha Dogra	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	9685987234	21msc02013@gsfccuniiversity.ac.in	Female	<i>Akanksha</i>
8	Khushboo Viz	Sos, GSFCU (M.Sc.)	Industrial Microbiology	2	OPEN	9033032648	21msc03005@gsfccuniiversity.ac.in	Female	<i>Khushboo</i>
9	Harshil Rakesh Bhavsar	SoT, GSFCU	Computer Science Engineering	6	OPEN	9328843160	19bt04004@gsfccuniiversity.ac.in	Male	
10	Patel MeetKumar Bhupendrabhai	SoT, GSFCU	Chemical Engineering	6	OPEN	8156085331	19bt01038@gsfccuniiversity.ac.in	Male	<i>Meet</i>
11	Yashika Ajay Maheshwan	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	6264753597	21msc02016@gsfccuniiversity.ac.in	Female	<i>Yashika</i>
12	Swati Mohapatra	Sos, GSFCU (M.Sc.)	Industrial Microbiology	Teaching/Non-Teaching	OPEN	8755919925	swatimohapatrailtr@gmail.com	Female	
13	smit harshchandra sonar	SoT, GSFCU	Computer Science Engineering	2	OPEN	8401450628	21bt04123@gsfccuniiversity.ac.in	Male	<i>Smit</i>
14	Roma Robins Ankleshwaria	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	8128630076	21msc02001@gsfccuniiversity.ac.in	Female	<i>Roma</i>
15	Nandini Ahuja	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	9909957268	21msc02014@gsfccuniiversity.ac.in	Female	<i>Nandini</i>
16	Krish Bharatbhai Patel	SoT, GSFCU	Computer Science Engineering	2	OPEN	7862059560	21bt04081@gsfccuniiversity.ac.in	Male	<i>Krish</i>

Sr. No.	Full Name (Name Fathername Surname)	School Name	Division	Sem	Category	Mobile No.	Email Id	Gender	Signature
17	Preksha Nikunjhai Agrawal	SoT, GSFCU	Chemical Engineering	4	OPEN	9825411338	20BT01003@gsfccuniiversity.ac.in	Female	<i>Preksha</i>
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22	Harshi Pankaj Agrawal	Sos, GSFCU (M.Sc.)	Biotechnology	2	OPEN	9407501391	Harshiagrawal3967@gmail.com	Female	<i>Harshi</i>
23	Sija Rajeevan	Sos, GSFCU (M.Sc.)	Industrial Microbiology	2	OPEN	7284939338	21msc03004@gsfccuniiversity.ac.in	Female	<i>Sija</i>
24	Mansi Ramesh Adwani	Sos, GSFCU (M.Sc.)	Industrial Microbiology	2	OPEN	7600629742	21msc03001@gsfccuniiversity.ac.in	Female	
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29	Malav Devang Shah	Sos, GSFCU (M.Sc.)	Industrial Microbiology	2	OPEN	9601666062	21msc03008@gsfccuniiversity.ac.in	Male	<i>Malav</i>
30	Hrshikesh singh	SoT, GSFCU	Computer Science Engineering	1	OPEN	8490063271	hrshikeshsingh1320@gmail.com	Male	<i>Hrshikesh</i>