

Report on
Session on “Design Thinking, Critical Thinking & Innovation Design”



Design Thinking, Critical Thinking & Innovation Design



Speaker: Dr. Bhavik A Ardesana, Mechatronics Department, GCET.

For 2nd Semester Mechatronics Students



23rd FEB 26, Monday



10:00 am onwards



IDEALAB GCET, V. V. Nagar

Organized by:
Mechatronics Department
G H Patel College of Engineering & Technology
(The Charutar Vidya Mandal (CVM) University)

Event Report

Design Thinking, Critical Thinking & Innovation Design

Organized by:

Department of Mechatronics Engineering
G H Patel College of Engineering and Technology (GCET), V. V. Nagar

Event Details

- **Date:** 23rd FEB 2026 (Monday)
- **Time:** 10:00 AM onwards
- **Venue:** IDEALAB, GCET, V. V. Nagar
- **Coordinators and Speaker:**
 - Dr. Bhavik Ardeshana (Assistant Professor)
- **Participants:** 40 Students and 11 Faculty Members

Objective

The primary objectives of the session were:

- To introduce students to Design Thinking methodology.
- To enhance critical thinking and problem-solving skills.
- To demonstrate the practical application of 3D printing (Additive Manufacturing) in innovation.
- To encourage students to transform ideas into tangible prototypes.
- To promote a startup and innovation mindset among early semester students.

Session Report

The session began with an introduction to the concept of **Design Thinking**, emphasizing empathy-driven problem identification, ideation, prototyping, and testing.

Dr. Bhavik A. Ardeshana explained:

- The importance of identifying real-world problems.
- Structured problem-solving approaches.
- The role of creativity and analytical thinking in engineering.
- Fundamentals of 3D printing technology and rapid prototyping.

Students were introduced to:

- Types of 3D printing technologies.
- Workflow from concept → CAD model → slicing → printing.
- Applications of 3D printing in healthcare, automotive, aerospace, and product design.
- Case studies of innovative student projects.

A practical exposure session was conducted at **IDEALAB**, where students observed live 3D printing demonstrations. They were shown how digital designs are converted into physical models using additive manufacturing.

The session was interactive, with students actively participating in discussions related to innovation, sustainability, and product development.

Outcomes

By the end of the session, students were able to:

- Understand the stages of the Design Thinking process.
- Develop a structured approach toward solving engineering problems.
- Gain basic knowledge of 3D printing operations and applications.
- Appreciate the importance of rapid prototyping in innovation.
- Build motivation to participate in future innovation and startup activities.

The session successfully sparked curiosity among students toward practical implementation of their theoretical learning.

Social Media Coverage

- **Facebook:**

- <https://www.facebook.com/share/p/1DEDMkAKsN/?mibextid=wwXlfr>

- Instagram

- <https://www.instagram.com/p/DU28gy1Evkt/?igsh=MXBleWJsNjMyc3QzcQ==>

Conclusion

The session “*Design Thinking, Critical Thinking & Innovation Design*” was highly informative and impactful for 2nd semester Mechatronics students. It successfully bridged the gap between theoretical concepts and practical innovation.

The event encouraged students to think creatively, approach problems systematically, and leverage modern technologies like 3D printing to transform ideas into reality. Such initiatives significantly contribute to building an innovation-driven academic ecosystem aligned with national innovation policies.

PHOTOGRPHS



Attendance sheet

Sr. No.	Enrollment No.	Name	Year	Branch	Sign
1	12502100501051	MENDAPPA SHREYASH K.	1 st	MC	
2	12502100501024	ARAVANI KRISHIV J.	1 st	MC	
3	12502100501042	ALIAJANI PRIYANSHU A.	1 st	MC	
4	12502100501031	Mangurkiya Nithil S	1 st	MC	
5	12502100501005	Naidu Anjum J	1 st	MC	
6	12502100501036	Nakmani Pri P.	1 st	MC	
7	12502100501050	PATIL RUSHIKESH R.	1 st	MC	
8	12502100501060	Tirth B Bhoi	1 st	MC	
9	12502100501051	Sankat V Patel	1 st	MC	
10	12502100501032	Balawala Mohammad Syaz	1 st	MC	
11	12502100501061	Tithi D Barwad	1 st	MC	
12	12502100501053	Shwani Yadav	1 st	MC	
13	12502100501030	Vaidi mait	1 st	MC	
14	12502100501089	Patel Such Areshkumar	1 st	MC	
15	12502100501034	Neel Praetkhai Rupa	1 st	MC	
16	12502100501043	Rudra Rajat.	1 st	MC	
17	12502100501017	Dhyey Ituliyai	1 st	MC	
18	12502100501036	Akshay A Patel	1 st	MC	
19	12502100501041	Rudra S. Siddhanta	1 st	MC	
20	12502100501056	Shubh K Patel	1 st	MC	
21	12502100501017	Jaka Hiran	1 st	MC	
22	12502100501044	PRATHVI PATEL	1 st	MC	
23	12502100501011	Dhruv Jasani	1 st	MC	
24	12502100501009	PATEL ARYAN B.	1 st	MC	
25	12502100501031	Ankita Basusya	1 st	MC	
26	12502100501018	Mamthem salanki	1 st	MC	
27	12502100501037	shah Nishit	1 st	MC	
28	12502100501025	kushkya krushika	1 st	MC	
29	12502100501048	Kudka Patil	1 st	MC	
30	12502100501008	Darshan R chhangari	1 st	MC	
31	12502100501003	Apoor Vishwakarma	1 st	MC	
32	12502100501014	Chaturv Varsani	1 st	MC	
33	12502100501027	Mait Anant	1 st	MC	
34	12502100501057	Momin Farhuseen	1 st	MC	
35	12502100501015	Jasul Patel	1 st	MC	
36	12502100501010	Ahvatiya DHRUV	1 st	MC	

37	12502100501009	patel Deval Jagabhai	1 st	MC	
38	12502100501002	Ashviya Gopani	1 st	MC	
39		Rishi J. Machhi		MC	
40		Saury C. Bann		MC	
41		Dr. Vinod Patel		MC	
42		Pratik P. Patel		MC	
43		Dr. Saurin Shah		MC	
44		Umang Jani		MC	
45		Dr. Raju Gaudin		MC	
46		Dr. Bhavik Ardeshna		MC	
47		Dr. Anbu Des		MC	
48		Sanjiv Rajput		MC	
49		Krishnak S. Bhatt		MC	
50		Hemant S. Bhatt		MC	
51		Dr. Vinod N. Patel		MC	