



REPORT ON
Workshop on Design Thinking, Critical thinking and Innovation
Design

Date: 10th March, 2025

Resource Person:

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Bharat Institute of Engineering & Technology Hyderabad



Organized by
INSTITUTION INNOVATION COUNCIL
**BHARAT INSTITUTE OF ENGINEERING &
TECHNOLOGY, HYDERABAD**

Workshop Report on Design Thinking, Critical Thinking, and Innovation Design

1. Introduction

In today's rapidly evolving world, the ability to think creatively, critically, and empathetically is more important than ever. Recognizing this need, a workshop on **Design Thinking, Critical Thinking, and Innovation Design** was conducted to equip participants with the tools and mindset necessary to tackle complex problems with innovative and human-centered solutions.

The workshop was designed to provide a comprehensive understanding of these three interconnected domains, fostering an environment that encourages problem-solving, analytical reasoning, and ideation.

2. Objectives of the Workshop

The primary objectives of the workshop were:

- To introduce participants to the principles and process of **Design Thinking**.
 - To enhance **Critical Thinking** skills to better analyze and evaluate information.
 - To promote **Innovation Design** strategies for developing user-centric solutions.
 - To provide hands-on experience through practical activities and collaborative exercises.
 - To cultivate a mindset of empathy, experimentation, and iterative learning.
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3. Target Audience

The workshop was targeted at:

- Undergraduate and postgraduate students
 - Faculty members and educators
 - Early-career professionals and entrepreneurs
 - Innovators and individuals interested in creative problem solving
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4. Workshop Structure and Content

The workshop was conducted over a period of **2** days, with each day focusing on different aspects of the three key themes. The methodology involved a mix of lectures, interactive sessions, group activities, case studies, and prototype development.

Introduction to Design Thinking

- **Overview of Design Thinking:** Definition, significance, and applications.
- **The 5 Stages of Design Thinking:**
 - Empathize
 - Define
 - Ideate
 - Prototype
 - Test
- **Empathy Mapping and User Research:** Understanding users' needs and pain points.
- **Activity:** Creating empathy maps and user personas.

Critical Thinking Fundamentals

- **What is Critical Thinking?**
- **Elements of Thought (Paul-Elder Framework):**
 - Purpose
 - Questions
 - Assumptions
 - Inferences
 - Implications
- **Barriers to Critical Thinking**
- **Techniques to Enhance Critical Thinking:**
 - Socratic questioning
 - Logical reasoning
 - Bias identification
- **Activity:** Case analysis using critical thinking tools.

Ideation and Innovation Design

- **From Problems to Ideas:** Brainstorming techniques, SCAMPER method.
- **Innovation Design Principles:** Human-centric, sustainable, and feasible innovation.
- **Designing Solutions:** Transforming insights into ideas and ideas into prototypes.
- **Activity:** Ideation sprints and design challenges.

Prototyping and Feedback

- **Low-Fidelity vs High-Fidelity Prototypes**
- **Storyboarding, Wireframing, and Mockups**
- **User Testing and Feedback Loops**
- **Activity:** Building and presenting prototypes.

Presentation and Reflection

- **Team Presentations:** Final solution pitches and demonstrations.
- **Peer and Mentor Feedback**
- **Reflection and Learning Outcomes**
- **Award/Certificate Distribution Ceremony**

5. Key Takeaways

Participants gained:

- A structured approach to innovation through the design thinking process.
 - Enhanced ability to analyze problems critically and objectively.
 - Practical experience in team collaboration, ideation, and prototype development.
 - Improved presentation and communication skills.
 - A growth mindset focused on empathy and continuous learning.
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6. Feedback and Evaluation

Feedback was collected through post-workshop surveys and group discussions. Key highlights from participant feedback include:

- **Engaging content** and dynamic presentation style.
- **Interactive activities** helped reinforce concepts.
- **Real-life case studies** added practical relevance.
- Requests for **longer sessions** or **follow-up advanced workshops**.

Average participant rating: **4.8/5**

7. Conclusion

The **Workshop on Design Thinking, Critical Thinking, and Innovation Design** proved to be a highly enriching experience for all participants. It not only provided theoretical insights but also emphasized experiential learning and real-world application. The skills acquired during the workshop are expected to significantly contribute to participants' academic, professional, and entrepreneurial pursuits.

8. Recommendations and Future Plans

Conduct follow-up advanced workshops and bootcamps.

- Integrate design thinking into the academic curriculum.
- Encourage interdisciplinary collaborations to solve local and global challenges.
- Establish innovation clubs or labs within institutions to promote continuous practice.

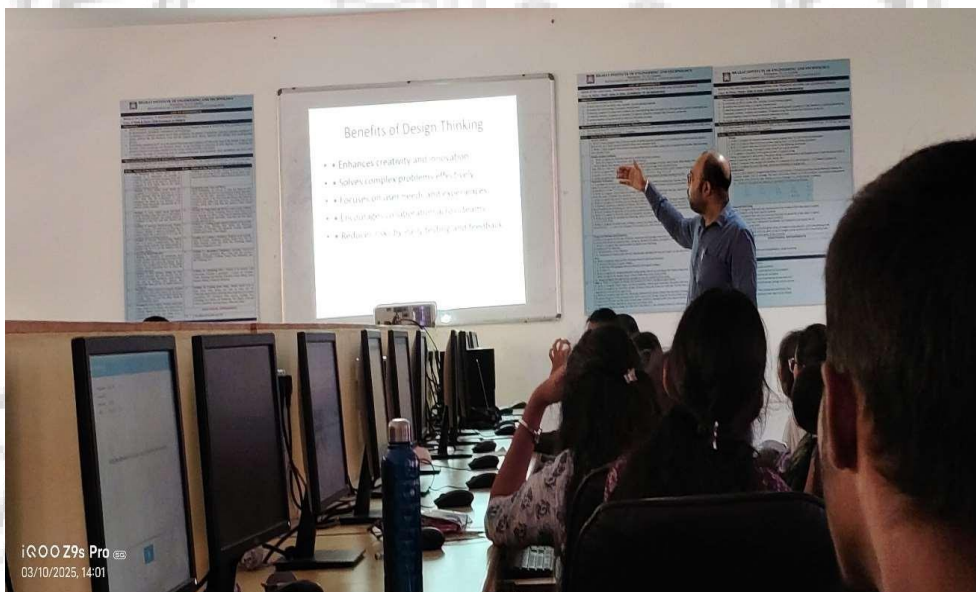
1. About the College:

Bharat Institute of Engineering & Technology (BIET), established in 2001 by Chinta Reddy Madhusudhan Reddy Educational Society (CHMR) under the leadership of Sri Ch. Venugopal Reddy, an eminent educationist with a social conscience and commitment. It has grown in its size and stature over the years, from an initial intake of 240 to 1350 students. BIET is one of the largest Engineering Colleges in Telangana. It offers 10 B.Tech programs, 8 M.Tech programs and 1 MBA program. With consistent and excellent academic performance of students in the University examinations, the Institute has endeared itself to many students and parents. Bharat Institute of Engineering & Technology (BIET) boasts of well experienced and highly qualified faculty, State-of-the-art Infrastructure, regular placements and well equipped laboratories. Bharat Institutions sprawling 120 acres campus with a built-up area of 6,00,000 sq.ft at Mangalpally, Ibrahimpatnam. It is a wholly self-contained campus comprising of everything that students on campus would ever require.



2. Participants: 110 students

3. Photos of the Session







4. Session poster:



BHARAT
INSTITUTE OF ENGINEERING AND TECHNOLOGY
NAAC Accredited, NBA Accredited for UG Programmes: CSE, ECE
Approved by AICTE, New Delhi, Affiliated to JNTUH



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





RESOURCE PERSON
MR SUBHADIP GOSWAMI
ASST. PROF. DEPT OF EEE

DESIGN THINKING, CRITICAL THINKING AND INNOVATION DESIGN

DATE: 10TH MARCH

ORGANISED BY IIC BIET , EEE DEPT

DR PAPIYA DUTTA
IIC PRESIDENT

DR SUBHAJIT AICH,
IIC VICE PRESIDENT.

MR SHUBHADEEP GOSWAMI
CONVENER IIC

DEPT. INCHARGE
DR.CHANDRALEKHA



VENUE:212 LAB

TIME : 2:30 PM
ONWARDS

5. Attendance Sheet:

Bharat Institute of Engineering and Technology
Institution Innovation Council BIET
Attendance of Students

Title of the Session: *Workshop on Design Thinking, Critical Thinking and Innovation Design.*

SL No.	Student Name/ Faculty Name	Roll No.	Department	Signature
1	A. Jagadeesh	24E11A04B3	ECE	<i>[Signature]</i>
2	B. Nandulal	24E11A04F0	ECE	<i>[Signature]</i>
3	G. Preetham	24E11A0408	ECE	<i>[Signature]</i>
4	B. Aditya	24E11A04B8	ECE	<i>[Signature]</i>
5	N. Abhishek	24E11A04E4	ECE	<i>[Signature]</i>
6	M. Soni	24E11A04C3	ECE	<i>[Signature]</i>
7	K. Madhavi	24E11A04D6	ECE	<i>[Signature]</i>
8	K. Pavallika	24E11A04D5	ECE	<i>[Signature]</i>
9	A. Vaishnavi	24E11A04B2	ECE	<i>[Signature]</i>
10	A. Tejaswini	24E11A04B5	ECE	<i>[Signature]</i>
11	Pooresh	24E11A66A8	CSM	<i>[Signature]</i>
12	M. Navaleg	24E11A66C2	CSM	<i>[Signature]</i>
13	Y. Lokesh	24E11A66B7	CSM	<i>[Signature]</i>
14	B. HIMABINDU	24E11A66C4	CSM	<i>[Signature]</i>
15	P. J. Nikitha Ssi	24E11A66A0	CSM	<i>[Signature]</i>
16	S. Ssi. Satvik	24E11A66B3	CSM	<i>[Signature]</i>
17	P. Chasanjeeth	24E11A66A3	CSM	<i>[Signature]</i>
18	Jella Abhinav	24E11A66B5	CSM	<i>[Signature]</i>
19	E. shashank Reddy	24E11A1674	CSM	<i>[Signature]</i>
20	CH. MUNI. munohar	24E11A66D0	CSM	<i>[Signature]</i>
21	Ramovair Pavan	24E11A66B0	CSM	<i>[Signature]</i>
22	V. Praveen	24E11A66B7	CSM	<i>[Signature]</i>
23	C. Spandana	24E11A66C7	CSM	<i>[Signature]</i>
24	S. Snehittha	24E11A66B2	CSM	<i>[Signature]</i>
25	N. Kruthika Reddy	24E11A6696	CSM	<i>[Signature]</i>

26	ch. srinidhi	24E11A6668	CSM	Bsp
27	G. Mani Sree	24E11A6679	CSM	Gmanf
28	R. Vaishnavi	24E11A6674	CSM	Vaishnavi
29	N. Likhitha	24E11A6678	CSM	Likhitha
30	K. Harshitha	24E11A6685	CSM	Harshitha
31	Purvi	24E11A6683	CSM	Purvi
32	Dhanunjay	24E11A6670	CSM	Dhanunjay
33	Raviindram (son)	24E11A6681	CSM	Ravi
34	Sreesenth	24E11A6672	CSM	Sreesenth
35	Shiva	24E11A6671	CSM	Shiva
36	B. Charan	24E11A6666	CSM	Charan
37	D. Shiva Krishna	24E11A6672	CSM	D. Shiva Krishna
38	J. Sai Teja	24E11A6684	CSM	J. Sai Teja
39	P. Pavan	24E11A6672	CSM	P. Pavan
40	G. Srujan Prakash Reddy	24E11A6676	CSM	G. Srujan
41	V. Hasini Reddy	24E11A6685	CSM	V. Hasini
42	K. Deepthi	24E11A6689	CSM	K. Deepthi
43	K. Mahalaxmi	24E11A6687	CSM	K. Mahalaxmi
44	G. Srujan Reddy	24E11A6678	CSM	G. Srujan
45	G. Nishitha	24E11A6683	CSM	G. Nishitha
46	Y. Jashwanth	24E11A6680	CSM	Y. Jashwanth
47	T. Sravya	24E11A6677	CSM	T. Sravya
48	M. Sai Varad Prasad	24E11A6695	CSM	M. Sai Varad
49	N. Rajesh	24E11A6677	CSM	N. Rajesh
50	R. Satish Reddy	24E11A6686	CSM	R. Satish

Bharat Institute of Engineering and Technology
Institution Innovation Council BIET
Attendance of Students

Title of the Session:

Sl. No.	Student Name/ Faculty Name	Roll No.	Department	Signature
51	Godugu Humpy	24E11A6681	CSM	Humpy
52	G. Vamsi	24E11A6677	CSM	G. Vamsi
53	M. Keerthana	24E11A6686	CSM	M. Keerthana
54	Ch. Chandu	24E11A6667	CSM	Chandur
55	P. Manoj	24E11A6668	CSM	Manoj
56	P. Sai Bhargav	24E11A6676	CSM	P. Sai
57	P. Varshitha	24E11A6685	CSM	P. Varshitha
58	E. Mani Kumar	24E11A6673	CSM	E. Mani
59	V. Rahul	24E11A6686	CSM	V. Rahul
60	Ch. Anshith Reddy	24E11A6669	CSM	Ch. Anshith
61	Ch. Prabhas	24E11A6669	CSM	Ch. Prabhas
62	B. Chaitanya Aditya	24E11A6675	CSM	B. Chaitanya
63	B. Sadhwik	24E11A6693	CSM	B. Sadhwik
64	M. KARTHIK	24E11A6691	CSM	M. Kartik
65	A. Sai Eswara	24E11A6681	CSM	A. Sai
66	T. Sahithi	24E11A0569	CSE	T. Sahithi
67	E. Ramya	24E11A0582	CSE	E. Ramya
68	S. Abhinava Reddy	24E11A0584	CSE	S. Abhinava
69	Kolla Rohitha	24E11A0598	CSE	Kolla Rohitha
70	S. Varun Reddy	24E11A0581	CSE	S. Varun
71	K. Aslesha	24E11A0588	CSE	K. Aslesha
72	P. Nikharika	24E11A0589	CSE	P. Nikharika
73	Pravalika Tallaju	24E11A0583	CSE	Pravalika
74	B. Prashanthi	24E11A0571	CSE	B. Prashanthi
75	B. Sowjanya	24E11A0570	CSE	B. Sowjanya

76	G. Bojitha	24E11A0586	CSE	G. Bojitha
77	P. Jahnavi	24E11A0576	CSE	Jahnavi
78	V. Sri Lekha	24E11A05C0	CSE	Sri Lekha
79	N. Ragamalika	24E11A0577	CSE	Ragamalika
80	K. Shruthi	24E11A0590	CSE	K. Shruthi
81	V. Soumya	24E11A05C2	CSE	V. Soumya
82	Ch. Thejasree	24E11A0573	CSE	Thejasree
83	T. Megana	24E11A05B8	CSE	Megana
84	A. Hasini	24E11A05C4	CSE	Hasini
85	A. Sahithi	24E11A05C5	CSE	Sahithi
86	N. Vigneshwari	24E11A0595	CSE	Vigneshwari
87	P. Vyshali	24E11A05A2	CSE	P. Vyshali
88	B. Sowroddhan chary	24E11A0568	CSE	Sowroddhan chary
89	B. Lokesh	24E11A0564	CSE	Lokesh
90	S. Tharun	24E11A05B0	CSE	S. Tharun
91	D. Tharun	24E11A0579	CSE	D. Tharun
92	S. S. S. Abhinav	24E11A05B5	CSE	S. S. S. Abhinav
93	M. Ganesh Sri Raj	24E11A0594	CSE	M. Ganesh Sri Raj
94	A. Sharath Kumar	24E11A05C6	CSE	A. Sharath Kumar
95	T. Aravind chary	24E11A05B7	CSE	T. Aravind chary
96	S. Sai Karthik	24E11A05B2	CSE	S. Sai Karthik
97	S. Harshith Reddy	24E11A05A8	CSE	S. Harshith Reddy
98	M. Girismani Sai	24E11A0593	CSE	M. Girismani Sai
99	J. Vijay Rajeshwari Reddy	24E11A0585	CSE	J. Vijay Rajeshwari Reddy
100	B. Akhil	24E11A0565	CSE	B. Akhil