

Report on

“Industrial Visit to NAMTECH”

IIT Gandhinagar Campus

EVENT DATE: 24/03/2026

1. Introduction

The Mechatronics Department of **G. H. Patel College of Engineering & Technology (GCET), Vallabh Vidyanagar** organized an industrial visit to **NAMTECH (New Age Makers Institute of Technology)** located at the **IIT Gandhinagar campus**.

A total of **21 students of 6th semester Mechatronics**, along with two faculty members **Mr. Sanjiv Rajput and Dr. Ravi Gandhi**, visited the institute on **24th March 2026**. The visit was conducted between **11:00 AM to 4:00 PM**.

This visit was conducted as part of the current semester subjects:

- **Hydraulic & Pneumatic Systems for Mechatronics**
- **Programmable Logic Controllers (PLC Programming)**

The visit aimed to provide students with exposure to **advanced manufacturing technologies, Industry 4.0 concepts, and modern engineering laboratories**, thereby bridging the gap between academic learning and industrial practices.

2. Objectives of the Visit

- To understand the **concept of Industry 4.0 and smart manufacturing systems**
 - To explore **advanced laboratories in robotics, automation, and cyber-physical systems**
 - To relate theoretical knowledge of **Hydraulic & Pneumatic Systems and PLC programming** with industrial applications
 - To gain exposure to **modern design, prototyping, and simulation tools**
 - To motivate students through **interaction with industry experts and alumni**
 - To understand the importance of **skill-based and interdisciplinary learning**
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3. Details of the Visit

- **Date of Visit:** 24th March 2026
- **Time:** 11:00 AM to 4:00 PM
- **Venue:** NAMTECH, IIT Gandhinagar Campus
- **Participants:** 21 students (6th Semester Mechatronics)

- **Faculty Coordinators:**
 - Mr. Sanjiv Rajput (Assistant Professor)
 - Dr. Ravi Gandhi (Associate Professor)
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4. Inaugural Session

The visit commenced with an introductory session on NAMTECH, delivered by **Dr. Amit Patel (Sr. Associate Director)**.

The session included:

- Overview of **NAMTECH's vision and programs**
 - Introduction to **industry-oriented education model**
 - Emphasis on **practical and hands-on learning approach**
 - Focus on **Industry 4.0 technologies**
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5. Motivational Session

A motivational talk was delivered by **Mr. Dishank Upadhyay**, a GCET Mechatronics alumnus.

Highlights:

- Shared his professional journey
 - Discussed real-world applications of **automation and advanced manufacturing**
 - Highlighted his achievement in guiding students who won a **Bronze Medal at WorldSkills 2024 (France)** in Industry 4.0 category
 - Encouraged students to focus on **skills, innovation, and research**
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6. Laboratory Visits and Learning

After the lunch session, students visited various advanced laboratories at NAMTECH.

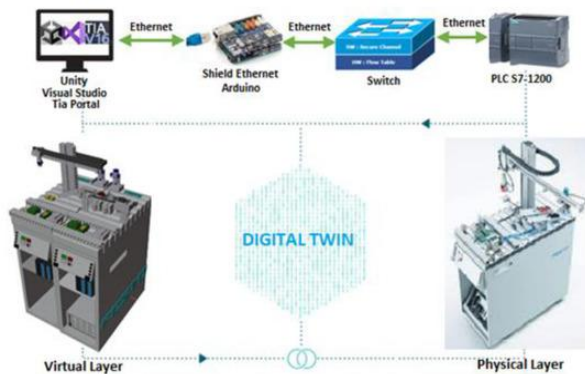
6.1 Robotics and Automation Laboratory

- Demonstration of **industrial robots and automation systems**
- Understanding of **robot programming and control mechanisms**
- Correlation with **PLC-based automation systems** studied in curriculum



6.2 Simulation and Cyber-Physical Systems Lab

- Exposure to **digital twins and simulation tools**
- Understanding real-time monitoring and control systems
- Applications in **smart manufacturing and Industry 4.0**



6.3 Design and Prototyping Studio

- Use of **3D printing and prototyping tools**
- Exposure to **AR/VR technologies in engineering design**
- Understanding product development from concept to prototype

6.4 Competency Centres

- Domain-specific training in **advanced manufacturing technologies**
- Skill development aligned with industrial requirements
- Hands-on exposure relevant to **automation and control engineering**



6.5 Cloud-Based Learning Systems

- Introduction to **digital learning platforms**
- Real-time tracking of learning progress
- Flexible and interactive learning methods

7. Key Learnings

- Understanding of **Industry 4.0 concepts and smart manufacturing systems**
- Practical exposure to **robotics, automation, and simulation technologies**
- Application of **PLC programming and control systems in industry**
- Importance of **interdisciplinary learning and innovation**
- Awareness of emerging career opportunities in **advanced manufacturing sectors**

8. Student Feedback

- Students found the visit **highly informative and motivating**
- Practical exposure enhanced understanding of **automation and control systems**
- Motivational session encouraged focus on **skills and career development**

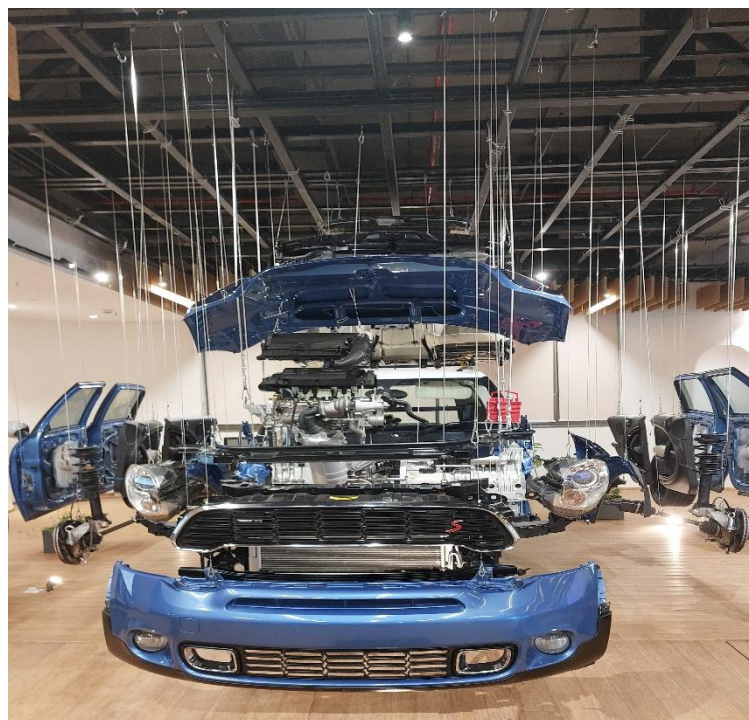
9. Conclusion

The industrial visit to NAMTECH was highly successful in providing students with valuable insights into **modern manufacturing technologies and Industry 4.0 practices**. The visit effectively strengthened the connection between academic subjects such as **Hydraulic & Pneumatic Systems and PLC Programming** and their real-world industrial applications.

10. Acknowledgment

We sincerely thank **NAMTECH, IIT Gandhinagar** for their support and hospitality. We also extend our gratitude to **GCET management and CVM University** for facilitating this visit.

PHOTOGRAPHS





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Participant List

G. H. PATEL COLLEGE OF ENGINEERING & TECHNOLOGY

MECHATRONICS DEPARTMENT

Class: Third Year (Sem VI)

Industry: NAMTECH, Education Initiative by ArcelorMittal Nippon Steel India

Location: IIT, Gandhinagar- 382055.

Date: 24-03-2026

Visit Time: 11:00 Am to 04:00 Pm

Sr. No.	Enrollment No.	Name	Signature
1	12302100501001	ANKIT PARBAT BHUDIA	
2	12302100501002	JOSHI HARSHIL VIJAY	
3	12302100501003	PRAJAPATI KATHAN HIMANSHU	
4	12302100501004	PATEL KAX MANISHKUMAR	
5	12302100501005	MAKWANA MADHAV BRIJESHKUMAR	
6	12302100501006	KOLADIYA MANTRA MAGANBHAI	
7	12302100501007	MANVEER SINGH KAINTH	
8	12302100501008	JOSHI MITUL SHAILESHKUMAR	
9	12302100501009	SAIYED MOHAMMAD ANEEQ MAYUDDIN	
10	12302100501010	CHAWDA PANTH AKSHAY	
11	12302100501011	BAMBHROLIYA PARTH RATILAL	
12	12302100501012	PATEL POOJAN ATULKUMAR	
13	12302100501013	PRASHILKUMAR JITENDRASINH SOLANKI	
14	12302100501014	VAGHELA VANSH KALPESH	
15	12302100501015	KACHHIA ZEEL PINALKUMAR	
16	12402100503001	PANESAR BALJINDER SINGH PARVINDER SINGH	
17	12402100503002	JOSHI DEV RAJENDRAPRSSAD	
18	12402100503003	PANCHAL JAY ANILKUMAR	
19	12402100503004	PATEL MANAV JAYKUMAR	
20	12402100503005	PISAVADIYA JAY RAJESHBHAI	
21	12402100503006	SURANI RUSHIT JITENDRA	- Ab -
22	12402100503007	DOMADIYA TARUN BHAVESHBHAI	- Ab -
23	12402100503008	PANCHAL VRAJ TUSHAR	- Ab -
24	12402100503009	KACHHADIYA MAYUR MALLIKARJUN	

Faculty In-charge: Sanjiv Rajput, Dr. Ravi Gandhi;

Signature:

Lab Assistant: _____

Signature: _____