



छोटुभाई गोपालभाई पटेल प्रौद्योगिकी संस्थान, बारडोली
Chhotubhai Gopalbhai Patel Institute of Technology, Bardoli

Uka Tarsadia University

Department of Mechanical, Automobile, and Mechatronics Engineering, C G Patel Institute of Technology

Report on One-day Workshop on “Industrial Automation”

Date	October 16, 2024
Venue	BoschCOE, Maya Tarsadia Industrial Automation Research and Development Centre, CGPIT
Time	9:00 AM
Total Number of Participants	19 students of B.E Mechanical Engg., SCET, Surat
Name of Expert	BOSCH Team
Event Coordinator	Dr. Hiren Shah and BOSCH Team
Program Objective	The objective of this workshop is to provide hands-on experience and insights into industrial automation, enhancing participants' understanding of automation technologies and their applications in modern manufacturing processes.
Program Outline	The program covers an introduction to industrial automation, hands-on sessions with BOSCH equipment, real-time application demonstrations, and discussions on

	the latest trends in automation technologies and their industry relevance.
Program Outcome	Participants will gain practical skills in industrial automation, understand its applications in manufacturing, and be equipped with knowledge of current automation technologies and trends for enhancing operational efficiency.

Schedule of Event:

Sr. No.	Time	Description	Content
1	09:00-09:30 am	Breakfast	
2	09:30-11:00 am	Introduction to hydraulics	Theory+Hands on
3	11:00-12:15 pm	Introduction to Sensor & PLC	Theory+Hands on
4	12:15-01:00 pm	Lunch	
5	01:00-02:15 pm	Introduction to Pneumatics	Theory+Hands on
6	02:15-03:00 pm	Felicitation	Certi. Distribution

List of Participants:

Sr. No.	Enrollment no.	Name of Participant
1	ET21BTME004	Behera Ranjan Simanchal
2	ET21BTME015	Deep golakiya
3	ET21BTME036	Shirgar Taahaa Tanveer Ahmed
4	ET21BTME037	Shukla Anurag Jayprakash
5	ET21BTME039	Solanki parth v.
6	ET21BTME040	Harsh Soni
7	ET21BTME044	Vyas Krishkumar Jitendra
8	ET21BTME045	Anil Yadav
9	ET22BTME802	Bhalala Aryal Mahendrabhai
10	ET22BTME805	Chauhan Heminsh Rakeshbhai
11	ET22BTME806	Deep Vinaykumar Joshi
12	ET22BTME807	Dubey Mridul Kripacharya
13	ET22BTME809	Ghodadara Daksh Bachubhai
14	ET22BTME812	Joshi Dhruvil Nareshbhai
15	ET22BTME813	Soni Kush rushiraj
16	ET22BTME818	Patel Rishikumar Kiritbhai
17	ET22BTME819	Patel vivekkumar Rajeshkumar
18	ET22BTME820	Rajbhoj Mohilkumar Rajnikant
19	ET22BTME821	Ramsnehi Harsh RajuBhai
20	ET22BTME822	Rixawala Yash Dipeshkumar
21	ET22BTME824	Shah yash shishir

Introduction:

The Department of Mechanical, Automobile, and Mechatronics Engineering at C G Patel Institute of Technology organized a one-day workshop on "Industrial Automation" at the prestigious BOSCH Centre of Excellence on October 16, 2024. This workshop aimed to provide students and professionals with a comprehensive understanding of the latest industrial automation technologies, emphasizing hands-on experience with cutting-edge BOSCH equipment. As industries shift toward automation to enhance productivity and efficiency, it is crucial for engineering students and professionals to stay abreast of these advancements. Through interactive sessions, practical demonstrations, and expert-led discussions, participants explored the applications of automation in modern manufacturing processes. The workshop served as a platform for bridging the gap between academic learning and industry practices, preparing participants for the evolving industrial landscape.

Objective and Significance:

The key objective of the one-day workshop on "Industrial Automation" was to equip participants with practical knowledge and skills related to the application of automation technologies in modern industries. Through hands-on training and expert-led sessions, participants gained insights into the workings of BOSCH automation equipment and its integration into manufacturing processes. The workshop emphasized the importance of automation in improving productivity, efficiency, and quality control in industrial settings.

The significance of the session lies in preparing students and professionals for the ongoing transformation in manufacturing driven by automation. By bridging the gap between theoretical knowledge and real-world applications, the workshop empowered participants to adopt cutting-edge technologies, enhancing their readiness for the future of smart and automated industries.

Key Highlights:

- **Hands-on Training:** Practical exposure to BOSCH industrial automation equipment, enabling participants to learn through real-time applications.
- **Expert Guidance:** Sessions led by industry experts, offering valuable insights into automation technologies and their industrial significance.
- **Real-world Applications:** Demonstrations of automation in various manufacturing processes, highlighting its role in enhancing productivity and efficiency.

- **Cutting-edge Technology:** Exploration of the latest automation trends and tools, providing participants with up-to-date knowledge of industry advancements.
- **Interactive Discussions:** Opportunities for participants to engage in discussions with professionals, clarifying concepts and exploring future possibilities in automation.
- **Industry Readiness:** The workshop focused on preparing students and professionals for the evolving landscape of smart and automated industries, equipping them with essential skills.

Summary of Discussions:

The discussion during the session centered around the practical applications of industrial automation in enhancing manufacturing efficiency and productivity. Experts highlighted the significance of BOSCH automation technologies in modern industries and discussed emerging trends like smart factories and AI integration. Participants engaged in interactive conversations, gaining deeper insights into automation's role in driving innovation and its potential to shape the future of industrial operations.

Overall Success and Impact:

The one-day workshop on "Industrial Automation" at the BOSCH Centre of Excellence was highly successful, offering participants an enriching experience that combined theoretical knowledge with practical, hands-on training. The sessions, led by industry experts, provided deep insights into modern automation technologies and their applications in real-world manufacturing. Participants were able to engage with state-of-the-art BOSCH equipment, gaining valuable skills that are highly relevant to current industry needs. The workshop significantly enhanced their understanding of industrial automation trends, making them more equipped to meet the evolving demands of the industry. This initiative also fostered stronger ties between academic learning and industry practices.

Pictures:



Session at Industrial Hydraulics Lab



Session at Industrial Hydraulics Lab



Session at PLC Lab



Session at Sensor Technology Lab



Session at Sensor Technology Lab



Students addressed by Registrar sir



Felicitation of Student with Certificate



Group photo



Thanks Giving letter

Conclusion:

The one-day workshop on "Industrial Automation" at the BOSCH Centre of Excellence concluded with resounding success, offering participants invaluable knowledge and hands-on experience with advanced automation technologies. Through expert-led sessions, real-world applications, and interactive discussions, the workshop bridged the gap between academic theory and practical industry needs. Participants left with a clearer understanding of automation's role in enhancing productivity, efficiency, and innovation in modern manufacturing. The session not only equipped them with relevant skills but also emphasized the importance of staying current with technological advancements. This initiative will undoubtedly contribute to their future career growth and industry readiness.

Mr. Jayeshkumar Parekh
Centre In charge, BoschCOE

Mr. Darshan Kapadia
Head of Mech/Mecha/Auto Department