



MECHAZINE

THE DEPARTMENTAL NEWSLETTER

MECHANICAL ENGINEERING DEPARTMENT

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L. E. College, Morbi

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HIGHLIGHTS:

- ◆ *Departmental Activities*
- ◆ *Industrial Visit*
- ◆ *Faculty Corner*
- ◆ *Student Corner*

Departmental Activities

❖ *Cyber Security Awareness*

Mechanical Engineering Department organized a seminar on "Cyber Security Awareness" on 11th February 2025, aiming to educate students about the importance of digital safety in today's technology-driven world. The session took place in the presence of Dr N M Bhatt, Head of the Department, and was effectively delivered by Prof. Chirag Maradiya, who covered essential topics such as password protection, phishing attacks, data privacy, and responsible internet usage. Faculty members actively participated and supported the smooth execution of the event. The seminar successfully enhanced the students' understanding of cyber threats and encouraged them to adopt safe and secure digital practices in their academic and personal lives. Total 50 students were benefited of this awareness program.

divisions. The session for Div. A took place on Thursday, 20th March 2025, while Div. B attended their session on Friday, 24th March 2025. During these sessions, students received hands-on training and practical knowledge of AutoCAD software, which plays a crucial role in engineering design and drafting. Experienced instructors guided the students through various tools, commands, and drawing techniques, helping them understand the fundamentals and applications of computer-aided design. The sessions were highly interactive, and students actively participated, making the learning experience both engaging and productive and total 95 students get benefited of it.

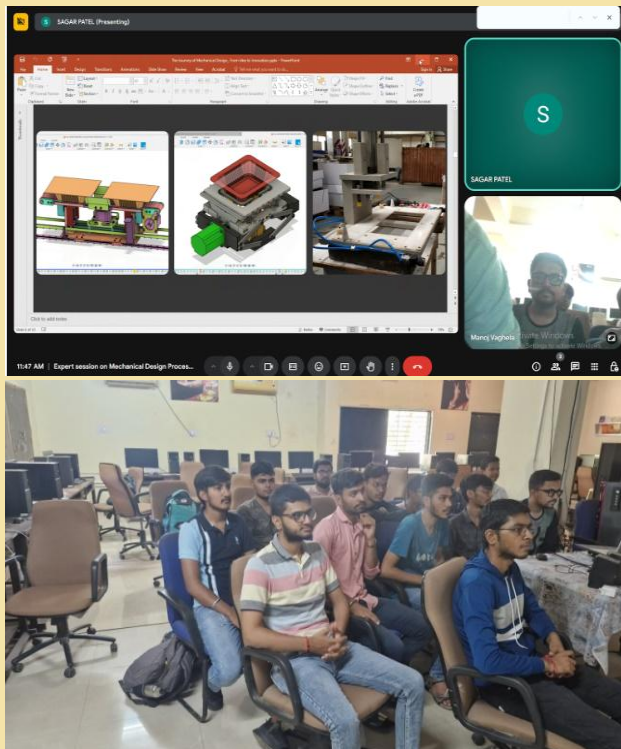


❖ *Expert Session*

The Department organized expert sessions on AutoCAD for 2nd semester students with the objective of enhancing their technical drawing and CAD skills. The sessions were held in the CAD Lab, according to the scheduled lab time slots for both

❖ *Virtual Seminar*

The Department conducted a seminar on "Mechanical Design Process – From Imagination to Final Model" for 2nd, 4th, and 6th semester students on 9th May 2025. Mr. Sagar Patel, Senior Design Engineer at COPEs TECH India Pvt. Ltd., Bengaluru, led the session, offering a detailed overview of the entire mechanical design workflow—from concept and modeling to simulation, prototyping, and final product development. He also introduced key industry tools like Fusion 360, SolidWorks, Siemens NX, Ansys, Abaqus, and COMSOL, and illustrated the process through a practical case study. The session enriched students' understanding of real-world design practices, with 14 students actively participating and benefiting from the expert insights. The seminar was coordinated by Dr. M B Vaghela.



❖ *Workshop on Robotics and Automation*

The Department organized a two-day workshop on Robotics and Automation on 4th and 5th June 2025, for 8th standard students from government schools across Morbi district who excelled in the NMMS exam. Aimed at sparking interest in technical education, the event was inaugurated by Mr. J. S. Prajapati (DDO, Morbi), who encouraged students to pursue higher education. Dr. C. A. Maradiya and Dr. M. B. Vaghela conducted informative sessions on robotics and automation, emphasizing their relevance in modern industries and the integration of AI. Students toured advanced labs like CIM and RP to witness demonstrations on industrial automation, robotics, and 3D printing. The workshop concluded with an engaging quiz, and Dr. Anand Kalani, motivated students to keep innovating. A total of 36 students actively participated and benefited from this enriching experience.



✚ *Industrial Visit* ❖ *Simpolo Ceramic*

The Department organized an industrial visit to Simpolo Vitrified Pvt. Ltd., Morbi, for 2nd, 4th, and 6th semester students to enhance their practical understanding of Industry 4.0, CAD, CAM, Advanced Manufacturing Processes, and Mechanical Measurement and Metrology. During the visit, students explored key areas such as raw material handling, automatic press and dryer lines, automated design and printing, AGV, and ASRS systems. Two industry experts guided the tour, offering detailed insights into the fully automated ceramic production process and the company's emphasis on high-quality output. A total of 16 students and 2 faculty members participated in this enriching experience.



❖ *Shree Bhagwati Works*

The Department organized an industrial visit on 28th April 2025, to Shree Bhagwati Engineering Works in Morbi with participation of 14 students accompanied by Prof. J. H. Solanki and Prof. A. N. Dave. Specializing in boiler manufacturing for the ceramic industry, the company allowed the students to observe key processes such as design, fabrication, assembly, and quality testing. The visit provided valuable practical exposure, helping students to connect theoretical knowledge with real-world industrial applications.



Faculty Corner

❖ Welcome Aboard

The Department warmly welcomed Dr. Reeta Jani, Dr. Anand Kalani and Dr. P. B. Mandanka, recognizing the valuable expertise and academic excellence they bring. With their diverse experience in Mechanical engineering, they began contributing actively to teaching, research, student mentoring, collaborative innovation and supporting the department's continued growth and success.



Dr. Reeta Jani

Dr. Anand Kalani

Dr. P. B. Mandanka

❖ Faculty Achievement

- Dr N M Bhatt has published a research paper titled 'Experimental insights of a novel stepped solar distiller by augmenting condensing cover cooling and heat recovery mechanisms' in the journal of 'Solar Energy' (IF: 6.6), DOI: <https://doi.org/10.1016/j.solener.2025.113506>, Accepted on 4/04/2025
- Dr N M Bhatt attended one day awareness workshop on 'Outcome Based Education and Accreditation (OBE&A)' organized by National Board of Accreditation and GTU on 29/03/2025.
- Dr N M Bhatt is appointed as co-member secretary of central NBA committee constituted by Commissionerate of Technical Education, Gandhinagar.
- Dr N M Bhatt conducted academic inspection of GP Jamnagar, GP Bhuj and GEC Bhuj on 26/03/2025, 8/04/2025 and 9/04/2025 respectively as per TIIM manual of CTE, Gandhinagar.
- Dr N M Bhatt delivered an expert lecture on 'An Overview of Solar Energy Technologies' on 28/03/2025 for the students of B. Tech. Sem 6 Mechanical Engineering at Institute of Technology, Nirma University.
- Prof. Reena N. Makadia has successfully completed her Ph.D. from R.K. University, Rajkot, for her research work titled "Development of Advanced Technique to Improve Energy Efficiency of Updraft Coal Gasifier with Reduced Pollution Discharges." She carried out this research under the guidance of Dr. Marmik Dave.



❖ Faculty Training

- Prof. A. D. Vadaliya and Dr. Reena Makadia successfully completed a two-week online MOOC course on "Education for Sustainable Development" offered by NPTEL. The course was conducted from 20th January 2025 to 11th April 2025.
- Dr. J. M. Pujara and Dr. A. N. Dave successfully completed a two-week online MOOC course titled "Basics of Mechanical Engineering – 2" through NPTEL. The course was conducted from 20th January 2025 to 11th April 2025.
- Dr. A. N. Dave successfully completed a two-week industrial training program at Orbit Bearings India Pvt. Ltd., Metoda GIDC, Rajkot during 1st July 2024 to 13th July 2024.
- Dr. A. N. Dave successfully completed a one-week online training program on "AI and Digital Tools in Education," organized by AVPTI, Rajkot. The training was held from 20th January 2025 to 25th January 2025.
- Prof. A. D. Vadaliya successfully completed a one-week offline training program on "Futuristic, Sustainable, and Green Energy – Solar PV System" at GPR. The training was held from 6th January 2025 to 10th January 2025.

Student Corner

❖ Lenco Alumni Gold Medalist

Chirag Goyal (200310119051), a student of the Mechanical Engineering Department received a gold medal from the LENCO Alumni Association on 5th March 2025. He was honored with two awards for his outstanding performance in the categories of Machine Design and overall excellence in the Mechanical Engineering branch.



❖ Indian Air Force Visit

The Indian Air Force's Induction Publicity Exhibition Vehicle (IPEV) visited the institute on 30th January 2025, offering students insights into career opportunities and aviation technology. All the students and faculty members of the department actively participated in the event. Students explored the exhibition and received demonstrations on gyroscopic effects and Air Force operations.



❖ Students Participants

LENCO Alumni Gold Medal function was organized on 23rd May 2025. Palak Mangroliya (2nd Sem), Sahdevsinh Jadeja and Tejas Kamaiya (4th Sem), students from the department, actively participated in the event by showcasing their talent in various dance categories. Several students also contributed to the smooth execution of the program through volunteering. The core volunteer team included Sujal Vyas, Ayush Kaneria, Shrey Joshi, and Om Jadav, while Kaushal Nanda and Smit Adroja served as event volunteers.



❖ Students Internship with Stipend

Sr. No.	Student Name	Enrollment No.	Company Name
1.	Jay Kavaiya	220313119023	GM Engineering, Rajkot
2.	Ayush Domadiya	220313119009	GM Engineering, Rajkot
3.	Parth R. Rajyaguru	210310119027	Echjay Industries, Rajkot
4.	Rathod Rajiv	220313119037	Echjay Industries, Rajkot
5.	Rupadiya Dhruv	220313119039	Echjay Industries, Rajkot
6.	Vishal Ranpara	220313119035	Echjay Industries, Rajkot

❖ Students Placement

Sr. No.	Student Name	Enrollment No.	Company Name and location
1	Parmar Bhavdip B.	210310119004	Adani Enterprises Ltd.
2	Rathod Rajiv Chandubhai	220313119037	Adani Enterprises Ltd.
3	Kalola Kartik Alpeshbhai	220313119020	Adani Enterprises Ltd.
4	Rajyaguru Parth R	210310119027	Adani Enterprises Ltd.
5	Kuldip Mokaria	220313119024	Rajoo Engineers Ltd., Rajkot
6	Ravi Vanvi	220313119042	Rajoo Engineers Ltd., Rajkot
7	Deep Parmar	210310119017	Electrotherm (India) Ltd. Ahmedabad
8	Jaydeep Parmar Jaysukhbhai	210310119016	Orbit Bearings India Pvt. Ltd., Rajkot
9	Jay Kavaiya	220313119023	Shiv Om Brass Industries, Rajkot
10	Manan Jagad Rajeshbhai	220313119018	Harsha Engineers International Limited, Ahmednagar
11	Karan Gohel Bipinkumar	220313119014	J. J. Solar Pvt. Ltd., Rajkot
12	Ayush Domadiya Rameshbhai	220313119009	GM Engineering Pvt. Ltd., Rajkot

❖ Faculty Editors:

1. Prof. Amisha D. Vadaliya
2. Dr. Reena N. Makadia

❖ Students Coordinator:

1. Sujal Vyas (230313119015)
2. Ayush Kaneria (22010119004)
3. Harshil Dave (240313119003)
4. Palak Mangroliya (240310119007)
5. Krish Gohel (3rd Semester DTD student)