



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

❖ **Expert Session on : Role of Engineers in Industry**

Mr. A H Menpara, President, LENCO Alumni Association, Morbi; recently conducted an enlightening expert session for the students of Mechanical Engineering Department, delving into the pivotal "Role of Engineers in Industry." The session was organized on 19th July 2023 for 1st semester students. His insights covered crucial aspects, highlighting the evolving responsibilities and skills essential for engineers to thrive in today's dynamic industrial landscape. With the help of some case studies, he highlighted engineers as an entrepreneur. The session provided valuable guidance for our aspiring engineers, fostering a deeper understanding of their future roles and contributions in the industry. Dr. M B Vaghela was the coordinator and 12 students were beneficiaries of this expert session.

Glimpse of the Session:



❖ **One Day Workshop on: Creo Parametric**

Unlocking Design Excellence: A recap of the Creo Parametric one day Workshop was organized by Mr. Utkarsh Mahaliya, (Center Manager, Khodiyar E-Solutions LLP, Rajkot) for 3rd and 5th semester students on 25th October 2023. The expert guided through the intricacies of Creo Parametric.

Attendees delved into the software's features, honing their design skills and gaining valuable insights into the latest trends in Mechanical engineering. Mr. Utkarsh illuminated the potential of Creo Parametric to empower students to innovate and excel in the ever-evolving field of Mechanical design. A total of 13 students were beneficiary of this expert session.

Glimpse of the Session:



❖ *Pledge Taken:*

➤ *HIV Pledge*

In a powerful display of unity and commitment to social responsibility, the Mechanical engineering department recently came together to take a collective HIV pledge on 5th December 2023.

This initiative, driven by a shared sense of responsibility and awareness, underscores the department's dedication to fostering a safe and supportive community.



➤ *Panch Pran Pledge*

"Meri Maati Mera Desh", with the tagline 'Mitti ko naman, Veeron ka vandan', was a nationwide and people led "Jan bhagidari" initiative to commemorate 75 years of India's independence. It was the finale of Azaadi ka Amrit Mahotsav program. 'Meri Maati Mera Desh' celebrated the many achievements of the nation. It involved paying tribute to the 'Veers' who protected our nation. The ceremonies were conducted at different levels i.e. village, panchayat, block, urban local body, state and national.

To affirm the bond to the nourishing earth and honour braves, all the staff members and students took Panch Pran Pledge on 9th August 2023.



❖ *Equipment Purchase:*

In a significant development for our department's "Material Science and Metallurgy Laboratory" the department acquired a "Muffle Furnace" at a cost of Rs. 21,000. This instrumental addition to our resources has been meticulously investigated and tested by Prof. H N Jani, Prof. J M Pujara & Mr. S H Rauma of the department, ensuring its alignment with the department's commitment to cutting-edge research and education. The Muffle Furnace is poised to play a pivotal role in advancing our capabilities for hands-on experimentation and analysis in material science, contributing to the overall enrichment of our academic results.

The purchase was initiated by laboratory in charge Prof. H N Jani and subject teacher Prof. J M Pujara. The procurement process in GeM was done by Prof. H D Patel and Prof. H N Jani under the guidance of Dr N M Bhatt, Head of the department.



✚ *Industrial Visits:*

➤ *Amtech Technocast Private Limited*

An industrial visit to Amtech Technocast Pvt. Ltd., Pipaliya, Rajkot, was held on 21st October 2023. Students of 5th semester gained invaluable insights into the intricacies of investment casting. The visit covered diverse aspects such as wax pattern

making, coating on wax patterns, material characterization, and quality control processes by visiting advance sections of the company. This firsthand experience deepened the understanding of the practical applications of these techniques in the manufacturing industry.

All doubts regarding investment casting were handled by a technical person of the industry itself. The visit to Amtech Techno cast proved to be an enriching experience, bridging the gap between theoretical knowledge and real-world industrial practices for our mechanical department. Total 12 students along with Dr. J M Pujara & Prof. J H Solanki visited the industry.



➤ **EPP Composites Pvt. Ltd., Rajkot**

Department of Mechanical Engineering organized an industrial visit to EPP Composites Pvt. Ltd., Rajkot on 21st October, 2023 for 3rd and 7th semester students. Particularly the pultrusion division was visited. Immersed in the manufacturing realm, they delved into the intricacies of the pultrusion process, witnessed quality control measures, machining and finishing techniques, and gained insights into effective packaging. The exploration extended to diverse departments, including Research and Development, showcasing the company's capability in manufacturing approximately 400 applications of GRP/FRP. This hands-on encounter broadened students' understanding of practical applications and industry processes, contributing to their holistic learning experience.

Total 18 students along with Dr. M B Vaghela & Prof. H N Jani visited the division.



Faculty Corner

❖ **Faculty Achievements**

Dr N M Bhatt has been granted an Indian patent for his invention entitled “ Improved Heat Exchanger” by Indian patent office on 26/10/2023. Dr Feng C Lai and Dr K T Dodiya were other innovators.

❖ **Faculty Contributions**

1. Dr N M Bhatt is appointed as a coordinator for GTU practical examination.
2. Dr N M Bhatt is appointed as a member of Board of studies for Robotics and Automation branch by GTU.
3. Dr N M Bhatt is appointed as a member of Board of studies member for Smart and Sustainable Engineering branch by GTU.
4. Dr N M Bhatt is appointed as a member of Capital Works Advisory committee of ICMR-NIOH, Ahmedabad.
5. Dr N M Bhatt is appointed as a member of Board of studies for Mechanical and Automobile Engineering by Kadi Sarva Vishwavidhyala, Gandhinagar.
6. Dr N M Bhatt was appointed as member of committee constituted by CTE for coordinating the G20 related activities done by various colleges under CTE.
7. Dr N M Bhatt is appointed as Advisory committee member for Mechanical, Automobile and Production Engineering to prepare video lecture under “Empowering Digital Learning through Course Digitization” by CTE.
8. Dr N M Bhatt is appointed as member of the committee constituted by CTE for updating the academic inspection module on COGENT portal.
9. Dr N M Bhatt is appointed as member of committee constituted by Education Department, GoG to establish Advanced Prototyping centre (Fab-lab) at i-Hub, Ahmedabad.
10. Dr N M Bhatt worked as coordinator of the committee constituted by Education Department for stall distribution and allied activities for Hall 11 – “Knowledge Economy and TECHADE” under VGGTS – 2024.

❖ **Faculty Training**

1. Dr N M Bhatt attended two days workshop on National Institutional Ranking Framework (NIRF) and National Board of Accreditation (NBA) on 24th and 25th August 2023 jointly organized by GTU and CTE at GTU
2. Prof. A D Vadaliya successfully completed a two-week course on "Public Speaking" funded by the MoE, Govt. of India through MOOCs Mode

during July–Oct 2023.

3. Dr. C A Maradiya successfully completed a one-week course on "Managerial skills and its relation with Indian knowledge system" at NITTTR Bhopal during 24th to 28th July 2023.
4. Dr. M B Vaghela successfully completed a one-week course on "NABL Standards Process and Practices" at NITTTR Bhopal during 24th to 28th July 2023.
5. Prof. J H Solanki successfully completed a one-week course on "Green technologies for sustainable development" at NITTTR Bhopal during 24th to 28th July 2023.
6. Prof. J H Solanki successfully completed a one-week course on "Technical English for Engineers" funded by the MoE, Govt. of India through MOOCs Mode during Aug–Oct 2023.
7. Dr. M B Vaghela successfully completed a one-week course on "Innovation, Business Models and Entrepreneurship" funded by the MoE, Govt. of India through MOOCs Mode during Aug–Oct 2023.

Student Corner

❖ ExtracurricularActivity

1. 7thsemester Students Mohitkumar V. Solanki, Swayam M. Thakkar, Shyam A. Sabariya, Deep H. Valand and Anurag S. Zala successfully completed skill development course in "**Automation and Simulation in Casting**" and Kapil N. Savaniya completed course of "**Quality Inspection in Casting**" under the "Marwadi University Jyoti CNC Automation Limited" organization.
2. 7th semester student Anurag S. Zala successfully completed "**IOT Arduino Course**" on "**Learn Vern**" online platform.

❖ On-Campus Interns

All the 8thsemester students in the Mechanical Engineering Department are currently engaged in 12-week internships across various esteemed companies. Notably, 16 students, as per the following details, have secured/offered on-campus stipend internships, showcasing the department's commitment to providing valuable opportunities for professional growth and development.

Sr. No.	Student Name	Company Name
1	Vikani Ridham D (200310119012)	Highly Electrical Appliances India Pvt. Ltd.

2	Badrakiya Devin P (200310119065)	Highly Electrical Appliances India Pvt. Ltd.
3	Makwana Savan J (210310119511)	Highly Electrical Appliances India Pvt. Ltd.
4	Nimavat Bhagyesh R (200310119008)	Jupiter Roll Forming Solution Pvt. Ltd.
5	Sorani Devraj G (200310119043)	Jupiter Roll Forming Solution Pvt. Ltd.
6	Gohil Gautam B (200310119014)	Jupiter Roll Forming Solution Pvt. Ltd.
7	Yadav Manish Ranjit (200310119018)	Jupiter Roll Forming Solution Pvt. Ltd.
8	Akhaja Meet (200310119042)	Jupiter Roll Forming Solution Pvt. Ltd.
9	Savaniya Kapil N (210310119509)	Jupiter Roll Forming Solution Pvt. Ltd.
10	Dhoriyani Ravi M (200310119016)	Jupiter Roll Forming Solution Pvt. Ltd.
11	Zala Anurag S (200310119040)	Oswal Industries Limited
12	Vaghela Kishan D (200310119054)	Oswal Industries Limited
13	Chavda Uttam C. (200310119038)	Oswal Industries Limited
14	Gondhaniya Harshal (200310119007)	Oswal Industries Limited
15	Thakkar Swayam M (210310119506)	Oswal Industries Limited
16	Solanki Mohit V (210310119502)	Oswal Industries Limited
17	Dhoriyani Ravi M (200310119016)	Pengvin Ceramics /Platina Vitnified Pvt. Ltd.
18	Chavda Uttam C (200310119038)	Pengvin Ceramics /Platina Vitnified Pvt. Ltd.

❖ Faculty Editors:

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

❖ Student coordinators

1. Chirag Goyal (200310119051)
2. Anurag S. Zala (200310119040)