



MECHAZINE

THE DEPARTMENTAL NEWSLETTER

MECHANICAL ENGINEERING DEPARTMENT

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L. E. College, Morbi

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HIGHLIGHTS:

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

+ Departmental Activities

❖ SSIP 2.0 Sensitization Workshop

A seminar on “SSIP 2.0 Sensitization Workshop” was organized by the SSIP Cell for the students of the 1st and 3rd semester of the Mechanical Engineering Department on 6th October 2025 at Lukhdhirji Engineering College, Morbi. The program was attended by a total of 70 students.

During the session, the benefits of the SSIP 2.0 scheme were explained to the students and awareness regarding the objectives and scope of the scheme was created. The students were motivated through detailed explanations of the opportunities provided under SSIP 2.0 and future plans were discussed to ensure the effective implementation and success of the scheme. Guidance and motivation were provided by Dr. Reena Makadia and Prof. Jalpesh Solanki, through which the importance of innovation and student participation was highlighted. Active participation was shown by the students throughout the seminar. Several innovative ideas were shared by the students, and valuable insights



regarding the scheme were gained during the discussion. Overall, awareness about SSIP 2.0 was successfully enhanced among the students, and encouragement towards innovation and participation in the scheme was effectively achieved.

+ Faculty Corner

❖ Faculty Deputation under QIP

Prof. H. D. Patel was deputed to Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, to pursue his Doctor of Philosophy (PhD) studies for a duration of three years under the Quality Improvement Program (QIP) scheme. On this significant academic occasion, a farewell gathering was organized by the Mechanical Engineering Department to formally acknowledge his departure and to honor his academic commitment.



During the gathering, heartfelt best wishes were extended for his successful completion of doctoral studies, meaningful and impactful research work, and continued professional development. His dedication to teaching, research and departmental activities were sincerely appreciated and it was expressed that his advanced studies would contribute positively to both

his personal growth and the academic enrichment of the institution upon his return.

❖ *Faculty Achievement*

- Dr N M Bhatt has published a research paper titled ‘Design and performance of a dual-function mixed-mode solar dryer with heat recovery for grapes drying: A 4E and sustainability study’ in the journal of ‘Solar Energy’ (IF: 6.6), DOI: <https://doi.org/10.1016/j.solener.2025.113875>, Accepted on 11th August 2025.
- Dr N M Bhatt participated in “AI for Educators-2025” a nation-wide online faculty development campaign by Swayam Plus Ministry of Education, in collaboration with Intel India, from 18th August 2025 to 22nd October 2025.
- Dr N M Bhatt attended two days Science Communication Conference on Public Understanding of Quantum Science and Technology organized by GUJCOST on 22nd and 23rd December 2025 at Gujarat Science City, Ahmedabad.
- Dr N M Bhatt worked as coordinator of Exhibition committee of Startup Conclave 2025 organized by Higher and Technical Education, Education Department, Government of Gujarat on 23rd and 24th September 2025. He also received a letter of appreciation from Smt. Sunaina Tomar, IAS, Additional Chief Secretary (Higher and Technical Education).
- Dr N M Bhatt worked as DTE representative during NBA expert committee visit of GMCA, Maninagar for accreditation of its MCA program.
- Dr N M Bhatt conducted Mock visit for NBA of Mechanical Engineering Department of VGEC, Chandkheda on 25th September 2025 and worked as DTE representative during NBA expert committee visit of the department during 10th to 12th October 2025.
- Dr N M Bhatt worked as examiner during Boiler Operation Engineers’ examination conducted by Director of Boiler, Government of Gujarat at LDCE, Ahmedabad during 8th November to 16th November 2025.
- Dr N M Bhatt served as session chair during 12th International and 52nd National Conference on Fluid Mechanics and Fluid Power (FMFP-2025), held at Institute of Technology, Nirma University, Ahmedabad on 20th December 2025.
- Dr N M Bhatt is nominated as GTU representative in the Academic Council of BVM, Vallabh Vidyanagar for a period of 3 years from 01st July 2025.
- Dr N M Bhatt is appointed as member of a committee for checking eligibility to provide Diploma/Post Diploma equivalency certificate to Armed Forces Officers and Retired Technicians of EME School, Vadodara.
- Dr N M Bhatt conducted classes of a core course on Research Methodology for all the research scholar of All Engineering and Computer Science disciplines enrolled in batch 2024 under GTU, Ahmedabad.
- Dr. Rita Jani and Dr. Anand Kalani have published a research paper titled “Experimental Analysis and Forecasting of 17-4PH Steel in Turning Operations through TiAlN Tool Insert by Employing Artificial Neural Network and Rice Bran Oil for Sustainable Manufacturing” Journal of Harbin Engineering University, Vol 46, no.8.
- Dr. Rita Jani and Dr. Anand Kalani have published a research paper titled “Comparative Evaluation of Bio-Organic Adsorbent Materials as Sustainable Alternatives to Activated Carbon Filters for Kitchen Chimney Applications” Kronika Journal, Vol 25, Issue 11.
- Dr. A N Dave has published a research paper titled “Analytical and FEA Based Optimization of EOT Crane Girder Beam with Experimental Validation” International Journal of Science, Mathematics and Technology Learning ISSN: 2327-7971 (Print) ISSN: 2327-915X (Online) Volume 33 No. 2, 2025.
- Dr. M B Vaghela, Dr. C A Maradiya, Dr. J M Pujara, Prof. D B Patel, Prof. J H Solanki have published a research paper titled “Applying XFEM Analysis and Stochastic Approaches to Interfacial Crack Modeling in Bimaterial Systems with Void Inclusions” International Journal of Mechanical Engineering, vol. 12, no. 10, pp. 46-59, 2025.
- Prof. A D Vadaliya has published a research paper titled “Parametric Optimization of Friction Torque and Bearing Temperature in Tapered Roller Bearings Using Response Surface Methodology” in the journal of ‘JETIA – Journal of Engineering and Technology for Industrial Applications (e-ISSN: 2447-0228 | DOI prefix: 105935), 2025.

❖ *Faculty Training*

Faculty members of the Mechanical Engineering Department at L. E. College have participated in various training programs. They have also successfully completed several MOOC courses to enhance their knowledge, skills, and professional development. These initiatives help the faculty

stay updated with the latest advancements in education and technology, ultimately benefiting the teaching–learning process.

- Dr N M Bhatt attended one-week training program on “UG Engineering Accreditation (in Context of New SAR 2024/2025) organized by NITTTR, Bhopal during 21st to 25th July 2025.
- Dr N M Bhatt attended two days FDP on “A Hands-on Approach on Wellbeing & Sustainability” conducted by Bridge4Change Foundation on 8th and 09th October 2025 at Government Polytechnic, Ahmedabad.
- Dr M B Vaghela successfully completed a one-week online training program on “Recent Developments in Micro/Nano Machining in context of Industry 4.0”. The training was held from 15th to 20th September 2025.
- Dr. R N Makadia successfully completed a one-week training program on “Machine Learning in Industrial IoT” at AVPTI, Rajkot. The training was held from 15th to 20th September 2025.
- Dr. J M Pujara and Prof. H N Jani successfully completed a two-week online MOOC course titled “Automation in Production Systems & Management” through NPTEL. The course was conducted from 21th July 2025 to 10th October 2025.
- Dr. R K Jani and Prof. A D Vadaliya successfully completed a one-week online MOOC course titled “Artificial Intelligence in Industrial and Management Engineering” through NPTEL. The course was conducted from 18th August 2025 to 10th October 2025.
- Dr. Anand Kalani successfully completed a one-week online MOOC courses titled “Metal Additive Manufacturing” and “Carbon Accounting and Sustainable Designs in Product Lifecycle Management” through NPTEL. The course was conducted from 21th July 2025 to 10th October 2025.
- Prof. J H Solanki successfully completed a one-week online MOOC courses titled “Advanced Machining Processes” and “Ethics in Engineering Practice” through NPTEL. The course was conducted from 20th January 2025 to 11th April 2025 and 16th February 2025 to 10th April 2025 respectively.

Student Corner

NPTEL Course Completion

Students of the Mechanical Engineering Department at L. E. College are encouraged to attend MOOC courses to enhance their knowledge and skills.

NPTEL Online Certification course on Six Sigma was successfully completed by Sujal Rameshbhai Vyas during the July–October 2025 session. The course was offered by IIT Kharagpur under the aegis of the Ministry of Education, Government of India. Conducted over a duration of 12 weeks, the program provided structured exposure to Six Sigma principles, quality management tools, and process improvement techniques, contributing to the development of analytical and problem-solving skills.

❖ Students’ Placement

Through the dedicated efforts of the department and the Institute Placement Cell, the following students have successfully secured placements in various reputed companies, offering attractive and competitive salary packages.

Sr. No.	Student Name	Enrollment No.	Company Name and location
1	Bambhaniya Santosh N.	220310119002	Gn Altech Private Limited – Rajkot
2	Kanjariya Karan D.	220310119005	Gn Altech Private Limited – Rajkot
3	Kaushal Nanda	220313119028	Gn Altech Private Limited – Rajkot
4	Asodiya H.Sagunray	230313119002	Gn Altech Private Limited - Rajkot
5	Jadav Om N.	230313119005	Electrotherm India Ltd.
6	Chavda Sudhir M.	230313119003	Electrotherm India Ltd.
7	Joshi Shrey K.	230313119006	Gn Altech Private Limited – Rajkot
8	Jaydeep J Parmar	210310119016	Orbit Bearings India Pvt. Ltd., Rajkot
9	Ratandeep Singh Chauhan	230313119012	Electrotherm India Ltd.
10	Tank Dhaval K.	230313119014	Gn Altech Private Limited – Rajkot
11	Vyas Sujal R.	230313119015	Gn Altech Private Limited – Rajkot
12	Pithava Keval B.	230313119017	GM Engineering Pvt. Ltd., Rajkot
13	Ramoliya Prashant R.	220313119033	Gn Altech Private Limited – Rajkot
14	Bhardava Jay N.	220313119002	Gn Altech Private Limited – Rajkot
15	Devera Vinay K.	210310119041	Gn Altech Private Limited – Rajkot
16	Chudasma Rushik	220313119006	Gn Altech Private Limited – Rajkot
17	Yadav Dipak R.	220313119043	Gn Altech Private Limited – Rajkot

18	Pal Abhishek V.	220313119031	Gn Altech Private Limited – Rajkot
19	Goswami Darshit K.	200310119034	Gn Altech Private Limited – Rajkot

20	Vadsola Divy R.	220310119006	Electrotherm India Ltd.
21	Kanjariya Aashish A.	230313119007	Electrotherm India Ltd.

❖ *Faculty Editors:*

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

❖ *Students Coordinator:*

1. Harshil Dave (240313119003)
2. Palak Mangroliya (240310119007)
3. Krish Gohel (250313119013)