Gyanmanjari®
Innovative University

MECHANICAL ENGINEERING

TIMES OF GMIU

MISSION

The department is committed to provide high quality education to the students by constantly striving to improve the teaching-learning methods, delivering good academic programmes and responding to fast evolving scientific & technological challenges while inculcating right values with environmental consciousness.

VISION

Develop professionally competent Mechanical Engineers to meet the needs of industry & society by promoting excellence in teaching, learning and research.

Aeronautical Activity

The Department of Aeronautical Engineering at Gyanmanjari Innovative University organized a series of Aeronautical Activities during the Even Term 2024-25 for B.Tech. Aeronautical Engineering, Semester 2 students, coordinated by Prof. Mitesh A. Rajput. Conducted within the university campus and at selected external venues, the program offered rich practical exposure to aviation and aerospace technologies. Highlights included a field visit to an aerospace museum, airport, or airbase for direct observation of historical and modern aircraft; the FlyTech Challenge with aero-modelling and drone racing; and an expert talk on "The Future of Aviation: Sustainable Aircraft and Electric Propulsion". Students actively participated in hands-on experiences such as a Hydro Rocket Demonstration and a Paper Glider Challenge, along with flight simulation training using X-Plane and Microsoft Flight Simulator. Academic enrichment came through research on ICAO/DGCA safety guidelines, an introduction to spacecraft dynamics with ISRO/SpaceX insights, and group discussions on aviation accident case studies. The activities successfully blended theoretical learning with real-world applications, fostering innovation, technical skills, and industry awareness among students.

Industry Visit

The Department of Mechanical Engineering at Gyanmanjari Innovative University organized an industry visit for B.Tech. Mechanical Engineering, Semester 4 students during the Even Term 2024-25, coordinated by Prof. Deepak S. Jani. The visit was conducted at UB Nuts, a leading bulk cashew nuts supplier in India, providing students with practical exposure to industrial processing, machinery operations, and quality control systems. Students observed the end-to-end workflow, from raw cashew handling to grading, roasting, and packaging, gaining valuable insights into manufacturing processes, automation in food processing, and industry safety practices. The visit bridged classroom learning with real-world industrial applications, enhancing students' technical knowledge and understanding of production efficiency.

Bridge Course

The Mechanical Engineering Department of Gyanmanjari Innovative University conducted a Bridge Course in Introduction to Mechanical Engineering for all 1st-semester B.Tech. students during the Odd Term 2025-26. Designed to build foundational knowledge and spark curiosity in engineering concepts, the program combined creative model-making, technical sessions, and practical demonstrations. Students engaged in hands-on projects such as building balloon-powered cars using waste materials, designing hydro rocket models to understand propulsion, and creating functional prototypes of home appliances like hair dryers, vacuum cleaners, and boats using small motors and assembly kits. In addition, interactive sessions were held on key topics such as Refrigeration & Air Conditioning and Internal Combustion Engines, offering early exposure to core mechanical engineering domains. The bridge course effectively blended creativity, teamwork, and technical learning, providing first-year students with an engaging introduction to the field and motivating them for future engineering studies.

Hands-on Workshop

The Mechanical Engineering Department of Gyanmanjari Innovative University, through its Startup & Innovation Cell, organized a Hands-on Design Workshop for Diploma and B.Tech. Mechanical Engineering students during the Even Term 2024-25, coordinated by Prof. Deepak S. Jani. Held on March 5, 2025, at the university's Drawing Hall (FF-16, GMIU Campus), the session was led by Mr. Prashant Mamtora, CEO of Havi.co. Students immersed themselves in the full design cycle—starting with concept sketches (2D & 3D), then crafting prototypes using cardboard, basic electronics, and power supplies, and exploring the principles of design thinking and product development. The workshop not only bolstered their creative and technical skills but also highlighted the importance of teamwork and iterative prototyping in engineering innovation

Mini-Kalamanjari

The Mechanical Engineering Department of Gyanmanjari Innovative University, along with Civil, Electrical, Aeronautical, Interior Design, and Chemical Engineering departments, actively participated in Mini Kalamanjari, a cultural event held on 12th July 2025 during the Odd Semester 2025-26. Coordinated by Prof. Prajesh Dave, Prof. Amisha Rathod, Prof. Anjali Nair, and Prof. Bhavesh Tukadiya, the event aimed to provide a creative platform for students, encouraging talent showcase, inter-departmental bonding, and cultural celebration within the academic environment.

Held from 11:00 AM to 1:00 PM at the university campus, the program featured diverse performances including dance, singing, drama, dual acting, group dance, and mime, reflecting the creativity, enthusiasm, and teamwork of students. The vibrant participation of 43 students from various departments created an engaging and lively atmosphere, with each performance adding a unique flavor to the event. The program concluded with resounding applause and appreciation from faculty members, HODs, and the audience.

Special thanks were extended to Dr. Viram Sir and Dr. Chetan Sir for their guidance, as well as to all departmental cultural coordinators, faculty, and volunteers whose efforts ensured the event's success. Mini Kalamanjari not only celebrated cultural diversity but also strengthened the sense of unity and collaboration among students across disciplines.

National Startup Day Celebration

The Mechanical Engineering Department of Gyanmanjari Innovative University organized a session on Startup and Entrepreneurship in celebration of National Startup Day for B.Tech. Mechanical Engineering students during the Even Term 2024-25, coordinated by Prof. Deepak S. Jani. The talk was delivered by the Young Indians Team, focusing on fostering an entrepreneurial mindset, understanding the fundamentals of starting a business, and exploring opportunities for innovation in engineering.

Students gained valuable insights into idea generation, business model development, and the role of startups in driving economic growth. Real-life success stories and case studies inspired participants to think creatively and pursue innovative solutions to real-world problems. The session encouraged aspiring engineers to view entrepreneurship as a viable career path, aligning with the vision of developing self-reliant and industry-ready graduates.

Student Development Program

The Mechanical Engineering Department of Gyanmanjari Innovative University organized a Student Development Program to commemorate the 100th year of electrification of the Indian Railways for Diploma and B.Tech. Mechanical Engineering as well as B.Tech. Aeronautical Engineering students during the Even Term 2024-25, coordinated by Prof. Bhavesh U. Makwana.

The program highlighted the historical journey of railway electrification in India, tracing its technological advancements and impact on transportation efficiency and sustainability. Students learned about the evolution of electric locomotives, energy efficiency in modern rail systems, and the role of electrification in reducing carbon emissions. The session also covered current trends and future innovations in railway technology, inspiring students to appreciate the engineering excellence behind large-scale infrastructure projects.

By linking history with modern engineering practices, the program enriched students' technical knowledge while fostering an understanding of the significance of sustainable transportation in national development.

Placement Drive

The Mechanical Engineering Department of Gyanmanjari Innovative University organized a Placement Drive for 6th-semester Diploma Mechanical Engineering students during the Odd Term 2024-25, coordinated by Prof. Jigar K. Andharia. The drive was conducted by Tamboli Castings Limited, a leading precision investment casting manufacturer based in Bhavnagar.

The recruitment process included a company orientation session, aptitude test, and personal interviews, giving students an opportunity to showcase their technical knowledge, problem solving abilities, and communication skills. Participants also learned about the company's operations, work culture, and growth opportunities in the manufacturing sector. The event not only created direct employment prospects for final-year students but also motivated them to prepare for industry demands and professional challenges.

Workshop

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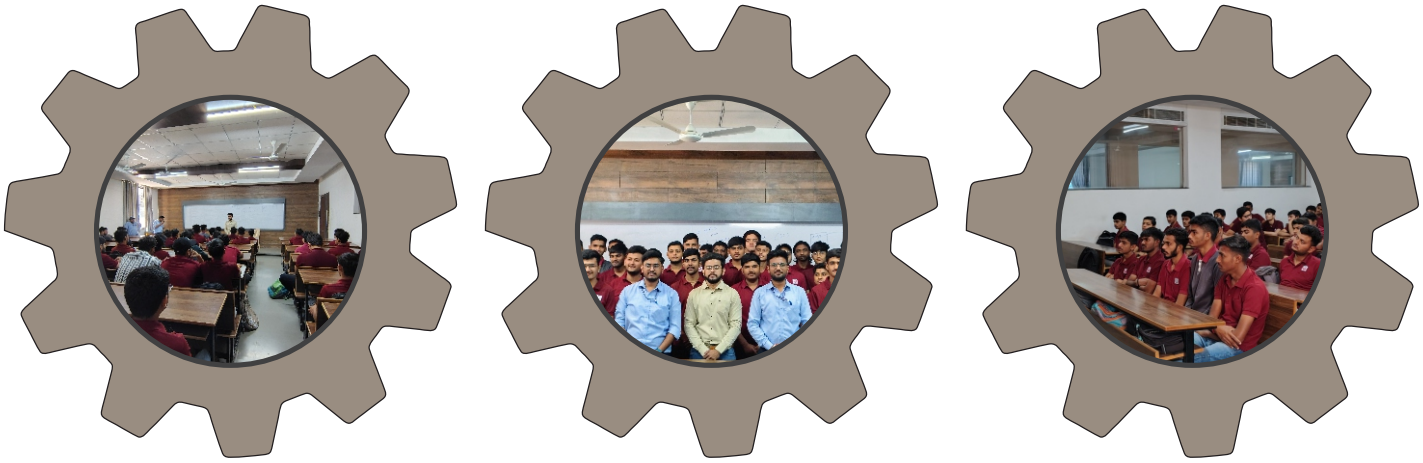
TPA Activities

The Mechanical Engineering Department of Gyanmanjari Innovative University conducted a comprehensive series of Training & Placement Activities (TPA) during the Even Term 2024-25 for Diploma Mechanical Engineering (Semesters 2, 4, and 6), B.Tech. Mechanical Engineering (Semesters 2, 4, 6, and 8), and B.Tech. Aeronautical Engineering (Semester 2) students. Coordinated by Dr. Jigar K. Andharia, these activities were designed to enhance students' technical, professional, and employability skills, aligning academic learning with industry expectations.

Across the various semesters, students participated in industrial visits, expert talks, and workshops to gain hands-on exposure to industrial practices and emerging technologies. Project-based learning and prototype development were encouraged through micro, minor, and major projects, as well as social impact projects. Skills in communication, leadership, and teamwork were strengthened through targeted enhancement activities. Students were also involved in state and national-level technical events and competitions, fostering innovation and problem-solving abilities.

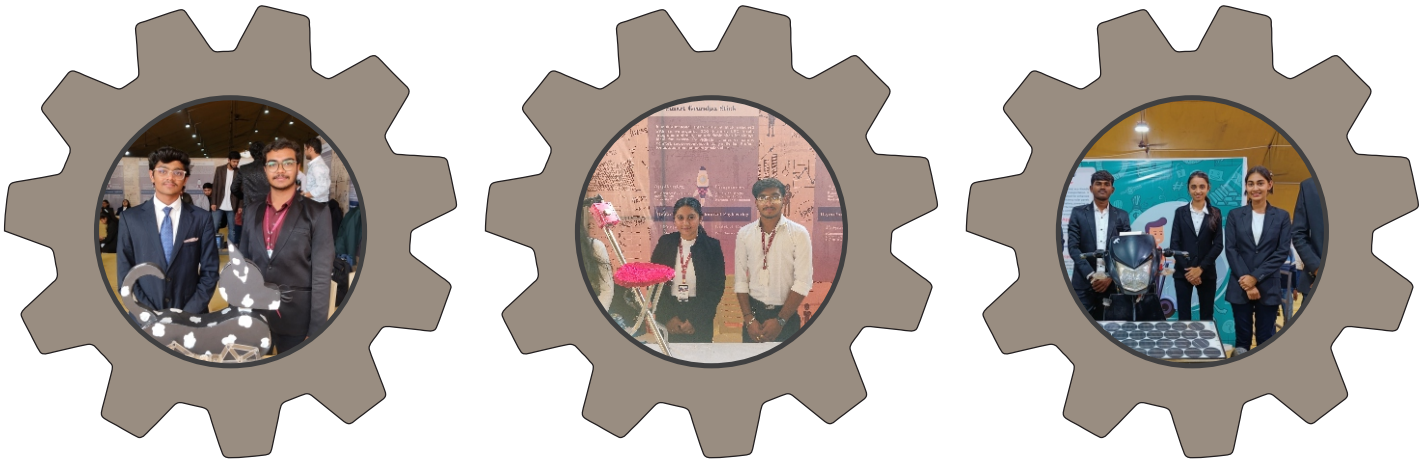
Career readiness was addressed through pre-placement activities such as resume building, mock interviews, aptitude and logical reasoning tests, group discussions, and personality grooming sessions. Students also completed GEPS activities, developed their LinkedIn profiles, and participated in entrepreneurship development programs. For higher semester students, guidance for higher studies and overseas education was provided, along with exposure to cutting-edge technologies and startup incubation opportunities.

The program's holistic approach ensured that every student—from early semesters to final-year batches—benefited from a blend of academic enrichment, industry exposure, and career development, reinforcing the department's commitment to producing industry-ready engineering graduates.



Techmanjari

The Mechanical Engineering and Aeronautical Engineering Departments of Gyanmanjari Innovative University jointly hosted TechManjari 2K25, a flagship technical exhibition for Diploma and B.Tech. students in Mechanical and Aeronautical Engineering, held during the Even Term 2024-25 at the GMIU Dome from January 9 to 12, 2025, coordinated by faculty from both departments. The four-day event featured a showcase of over 150 innovative student projects and startups across various engineering domains, attracting around 5,000 visitors, including more than 100 industry professionals.



Highlights included a Fly Zone for drone demos, a Robo Zone, dedicated departmental project areas, fun and runtime games, expert lectures, and hands-on workshops, creating a vibrant carnival of creativity, learning, and interdisciplinary collaboration.

TechManjari 2K25 not only provided students with a platform to present real-world solutions—from road safety to space exploration—but also fostered interaction with industry mentors, making it one of the most memorable and enriching technical events at the university.