Department of Mechanical & Mechatronics Engineering

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Secretary message...

It gives me immense pleasure to learn that the Department of Mechanical & Mechatronics Engineering is bringing out its "Newsletter–2025." Such initiatives provide an excellent platform for students to showcase their creativity, exchange knowledge, and foster a strong sense of community and collaboration.

I extend my heartfelt congratulations to the department for this commendable effort and wish it continued success in all its future endeavors. I sincerely appreciate the dedication, teamwork, and commitment of everyone involved in curating this inspiring edition of the newsletter.

My best wishes to all the students and faculty members for their continued growth, achievements, and success in the years ahead.

With Best Wishes,
Mrs. Swati Mahesh Kori, DKSST
Secretary, DKSST.

Principal message...

It is a matter of great pride and pleasure to note that the Department of Mechanical & Mechatronics Engineering is publishing its "Newsletter–2025." This initiative beautifully reflects the academic excellence, creativity, and dynamic co-curricular spirit of the department. A newsletter such as this serves as an effective platform for both students and faculty to present their ideas, achievements, and innovations to the wider academic community.

I sincerely appreciate the dedicated efforts of the editorial team, along with the enthusiastic contributions of students and faculty members who have made this publication possible. Such initiatives play a vital role in nurturing a culture of continuous learning, collaboration, and intellectual growth.

I extend my best wishes to the Department of Mechanical & Mechatronics Engineering for continued success in all its future endeavors. May this newsletter inspire many more individuals to participate actively, contribute meaningfully, and strive for excellence.

Dr. Dinkar V. Ghewade
Principal, DADSCOE, Bhadgaon

Vice-Principal Message...

It gives me great pride and pleasure to extend my warm greetings to the Department of Mechanical and Mechatronics Engineering for the academic year 2025–26. The department continues to stand as a strong pillar of technical excellence, nurturing young minds with a perfect blend of theoretical knowledge and practical innovation. In today's rapidly evolving technological landscape, the integration of mechanical systems with advanced automation and intelligent control is shaping the future, and I am confident that our students and faculty are well-prepared to meet these challenges with creativity and competence. I wish all students and faculty members a successful and inspiring academic year ahead, filled with achievements, innovation, and growth.

Mr. Kishor S. Joshi
Vice-Principal, DADSCOE, Bhadgaon

DEPARTMENT VISION

- To provide best education in Mechanical Engineering & Technology to the aspirants & serve the nation through development of innovative human asset.

DEPARTMENT MISSION

- To make the department of Mechanical Engineering a preferable destination for aspiring students.
- To provide quality technical education using modern tools in the field of mechanical Engineering.
- To create competent & skilled Mechanical Engineers who are able to handle Mechanical & affiliated systems.
- Cultivate & nurture the spirit of entrepreneurship among students

HOD's Note

- It gives me immense pleasure to present the vibrant and progressive face of the Department of Mechanical Engineering. As one of the core pillars of engineering, the department has consistently upheld a tradition of excellence in academics, research, and meaningful industry collaboration.
- Mechanical Engineering is not merely a discipline; it is a gateway to innovation and endless possibilities. Our approach emphasizes a strong foundation in theoretical knowledge complemented by practical exposure and project-based learning, enabling students to confidently address real-world challenges with creativity and technical expertise.
- Our dedicated faculty members play a pivotal role in mentoring and inspiring students, fostering critical thinking, and contributing to advanced research. We take great pride in our state-of-the-art laboratories, strong industry connections, and the remarkable accomplishments of our students in academics, internships, and placements.
- Looking ahead, the department remains committed to embracing interdisciplinary learning and advancing in emerging areas such as robotics, artificial intelligence in manufacturing, and sustainable engineering practices. We invite you to be a part of this journey—to explore, innovate, and grow with us.

College Vision & Mission

Vision:

- To provide best quality education in the field of Engineering and Technology to the aspirants and serve the nation through development of Scientific, Creative, Trustworthy human asset.

Mission:

- To meet engineering manpower needs for the social, techno-economical development of region and nation.
- To contribute to the knowledge through research and development.
- To imbibe habits of creativity and innovation to generate IPRs.
- To inculcate noble values of ethics, morality, integrity and humanity.

ACHIEVEMENTS.

Our Toppers—Academic Year2025-26

1. CLASS – Second Year B. Tech

Rank	NAME OF STUDENT	%
1	SHINDE ANIRUDHA VITTHAL	78.38
2	KADAM VIGHNESH VILAS	74.88
3	KUMBHAR ARATI UTTAM	71.75

Expert Lecture

- Three Days Faculty Development Program arranged at DADSCOE, on Python with Data Science
  Resource person- Mr. Nitin B. Naik

- A one-day workshop on Intellectual Property Rights (IPR) was held to create awareness about patents, copyrights, trademarks, and trade secrets, highlighting their role in innovation and economic growth.
- On the same day, a Memorandum of Understanding (MoU) was signed between Dr. A. D. Shinde College of Engineering and MY Crave Consultancy & Services to strengthen industry-academia collaboration.
- The event was graced by Sou. Swati Tai Kori, Secretary of Dinkarrao K. Shinde Smarak Trusts, and Dr. Dinkar V. Ghewade, Principal, DADSCOE.
  Chief Guests included Mr. DhruvBrambhatt, Miss PoojaMenon, Mr. KishorShendge, and Abay Power from MYCrave.
  Dr. Vireshkumar Mathad, Dean Academics and IP Cell Coordinator, coordinated the event.
- Over 60 faculty members and 300 students from both Dr. A. D. Sinde College of Engineering and Dr. A. D. Shinde Institute of Technology participated actively.

Industrial Visit

Dr. A D Shinde College of engineering, Mechanical Department visit at TATA Motors & PUC Center

General Activities at a PUC Center:

Vehicle Registration & Data Entry

- Vehicle number and engine type (petrol/diesel/CNG) are recorded.
- Owner details may be entered into the system.

Exhaust Emission Testing

- A gas analyzer is connected to the vehicle's exhaust pipe.
- The engine is run at idle and/or high RPM as per the required test procedure.
  The analyzer measures the concentration of harmful gases such as:
- CO (Carbon Monoxide)
- HC (Hydrocarbons)
- CO_2 (Carbon Dioxide)

- O_2 (Oxygen)
- Smoke density or opacity (in diesel vehicles)

Emission Result Analysis

- The measured values are compared against the permissible limits set by Bharat Stage (BS) emission norms (currently BS-VI in India).
- If the values are within limits, the vehicle passes the test.
- PUC Certificate Generation
- A printed or digital Pollution Under Control Certificate is issued.
- This certificate is valid for 6 months (for private vehicles) or as per the latest government rule.
- Advisory to Owner
- If the vehicle fails, the technician advises the owner to:
- Get the engine tuned or serviced.
- Check for fuel or ignition issues.
- Reduce idling time or improve driving habits.

Other Activities

1. *N.S.S. Activity at Mahagaon*

- NSS helps the student to grow individually and also as a group. Volunteering for various tasks under NSS activities allows students to become confident, develop leadership skills, and learn about different people from different walks of life.

1. Parents Meet

Teachers and Parents Meet – 2025-26

Venue: Dr. A. D. Shinde College of Engineering, Bhadgaon

Dr. A. D. Shinde College of Engineering organized a successful Teachers and Parents Meet – 2024 to discuss student progress and strengthen parent-teacher collaboration.

Key Highlights:

- ✓ Attended by 80+ parents
- ✓ Presence of Sou. Swati Tai Kori (Secretary), Dr. D. V. Ghewade (Principal), Mr. C. N. More (Parent Representative), and Dr. Vireshkumar Mathad (Academic Dean)
- ✓ Productive interaction between parents and faculty.

Farewell function

The farewell function for the final-year students of Dr. A. D. Shinde College was a heartfelt and memorable occasion. It marked the end of a significant academic journey and the beginning of new paths for our graduating students.

Throughout their time at the college, these students had shown remarkable dedication, talent, and spirit. They contributed immensely to academics, extracurricular activities, and the overall growth of the college. Their presence brought energy and inspiration to all.

As they moved ahead toward their future—whether in higher education, professional careers, or other endeavors—we extended our best wishes and blessings. We hoped they would carry forward the values and lessons learned here and make their mark in the world.

The college fraternity expressed pride and gratitude for being part of their journey. It was not just a goodbye, but a celebration of everything they had achieved.

Cultural Programme

Dr.A.D. Shinde College of Engineering, Bhadgaon Gadhinglaj.
Cultural Programme By students during the NAAC PEER
TEEM VISIT TO INSTITUTE

2. Marathi Bhasha Din

मराठीभाषादिन – डॉ.ए. डी. शिंदेअभियांत्रिकीमहाविद्यालय, भडगाव

डॉ.ए. डी. शिंदेअभियांत्रिकीमहाविद्यालय, भडगाव येथे मराठी भाषादिन उत्साहात साजरा करण्यातआला.या विशेष कार्यक्रमासाठी प्रमुख पाहुणे म्हणून सुप्रसिद्ध वक्ते आणि साहित्यिक श्री.सतीश सालणकुरकर उपस्थित होते.

कार्यक्रमाचा उद्देश विद्यार्थ्यां मध्ये मराठी भाषेप्रती अभिमान, जाणीव व जपणूक निर्माण करणे हा होता.श्री.सालणकुरकर यांनी आपल्या प्रेरणादायी भाषणातून मराठीभाषेचे सांस्कृतिक आणि बौद्धिक महत्त्व विद्यार्थ्यां पर्यंत पोहोचवले. त्यांनी आधुनिक युगातही मातृभाषेचे मूल्य टिकवण्याचे महत्व पटवून दिले.

या कार्यक्रमात विद्यार्थ्यांनी मराठी कविता, भाषण आणि सांस्कृतिक सादरीकरणांद्वारे आपली कला सादर केली.मराठी भाषादिनाचे हेऔचित्य सर्वांच्या मनात कायमचीआठवण ठेऊन गेले.

As a part of the initiative, students visited a school for differently-abled children. Students like Sushant Nevade, Nisha Patil, and Sudesh Mali addressed and motivated the children through inspiring words. The interaction created an emotional impact—especially during the fruit distribution, when many students were moved to tears.

Following this, the team visited the Blind Assistance Workshop at PanchayatSamiti, Gad, where visually impaired technicians are engaged in assembling LED bulb units. On the occasion of Engineers' Day, students conveyed their greetings and presented a humble donation to support this noble initiative.

This celebration stood out for its compassionate approach, reflecting engineering not just as a profession, but as a means to serve society.

Special words of appreciation were expressed by Mrs. Sathe, who also requested to convey her regards to Hon. Shinde Saheb, Swati Tai, and Principal Sir for supporting such a noble cause.

3. "Do It Yourself" workshop on Mechatronics.

A "Do It Yourself" (DIY) workshop on Mechatronics was successfully conducted to promote hands-on learning among students. The workshop focused on integrating mechanical systems with electronics and programming through practical mini-projects. Students enthusiastically participated and built functional models using sensors, microcontrollers, and actuators. This initiative greatly enhanced their technical confidence and teamwork. The event highlighted the importance of experiential learning in engineering education.

Article by Students on 3-D Printing- Shaping the Future Layer by Layer

In recent years, 3D printing, also known as Additive Manufacturing (AM), has emerged as one of the most transformative technologies in engineering and design. Unlike traditional subtractive methods, 3D printing builds objects layer by layer directly from digital models, enabling rapid prototyping, complex geometries, and significant material savings.

From biomedical implants to aerospace components, 3D printing has found applications across diverse industries. Its ability to produce customized, lightweight, and functional parts with minimal waste is revolutionizing how we think about manufacturing. Moreover, desktop 3D printers have made this cutting-edge technology more accessible to students and innovators.

In our department, exposure to 3D printing has empowered us to think beyond textbooks. Hands-on experience with CAD software and printing techniques has encouraged creativity, problem-solving, and real-world application of design concepts.

As the technology continues to evolve—with

Robo SprintX 1.0

Robo SprintX 1.0, organized by the Department of Mechanical and Mechatronics Engineering, was a remarkable and grand success. The event featured an exciting robot racing competition conducted on a specially designed track built in our department workshop, showcasing innovation and technical excellence. Students from various colleges actively participated with great enthusiasm and competitive spirit. The success of this event was made possible through the valuable guidance and constant support of our respected Principal, Vice Principal, Head of the Department, and dedicated staff members, along with the committed efforts of our student coordinators. Robo SprintX 1.0 provided an excellent platform for practical learning, creativity, and collaboration, making it a memorable and impactful experience for all.

Faculty Development Program

All the staff members of the Department of Mechanical and Mechatronics Engineering have successfully participated in the Faculty Development Program on Industry 4.0 and Industry 5.0, marking a significant step towards academic and technological advancement. This program provided valuable insights into modern industrial transformations, where Industry 4.0 focuses on automation, smart manufacturing, Internet of Things (IoT), artificial intelligence, and data-driven decision-making, while Industry 5.0 emphasizes human-centric innovation, collaboration between humans and machines, sustainability, and personalized production. Through this FDP, our faculty gained practical knowledge and hands-on exposure to emerging technologies, enabling them to enhance teaching methodologies and bridge the gap between industry and academia. This collective achievement reflects the department's commitment to continuous learning, innovation, and preparing students to meet the evolving demands of the modern engineering world.

ABOUT THE NEWSLETTER

DADS, COE, DEPARTMENT OF MECHANICAL & MECHATRONICS ENGINEERING PROUDLY PRESENTS ITS NEWSLETTER 2024–25, A REFLECTION OF INNOVATION, LEARNING, AND COMMUNITY.

THE NEWSLETTER AIMS TO KEEP STUDENTS, PARENTS, FACULTY, AND INDUSTRY PARTNERS INFORMED AND CONNECTED THROUGH HIGHLIGHTS OF DEPARTMENTAL ACTIVITIES.

THIS BIANNUAL PUBLICATION SHOWCASES ACADEMIC ACHIEVEMENTS, TECHNICAL EVENTS, SOCIAL OUTREACH, AND STUDENT CREATIVITY.

IT SERVES AS A PLATFORM TO STRENGTHEN ENGAGEMENT AND COLLABORATION AMONG ALL STAKEHOLDERS.

WE INVITE YOU TO EXPLORE THIS EDITION AND BE A PART OF OUR JOURNEY TOWARD EXCELLENCE IN MECHANICAL ENGINEERING.