



DEPARTMENT OF MECHANICAL ENGINEERING

MECH VOICE



Newsletter

JAN-JUNE 2023

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Vision

The Mechanical Engineering Department strives to become a premier academic and research centre to mould competent and innovative mechanical engineers and dedicated to the betterment of deprived socio-economic sections of the society.

Mission

- M1. To offer good quality education & research to create employable mechanical engineering professionals.**
- M2. To create a society of engineers who are conversant with modern technologies and their applications by emphasising the significance of higher education.**
- M3. To create a society of engineers who values societal ethics through education gained.**
- M4. To create an ecosystem that encourages interdisciplinary research and entrepreneurship skills for transforming technical knowledge into socially relevant products and processes**

HOD's Message

Department of Mechanical Engineering was established in 2010, and since then, it has been an integral element of KMEA Engineering College. The department provides a mechanical engineering undergraduate programme that is approved by APJ Abdul Kalam University. Yearly 90 students are admitted, and it has produced mechanical engineers of the highest calibre. Mechanical engineering is one of the oldest and most diverse engineering specialties .



Dr. Sajith T A

Young, exceptional engineers who are academically excellent in both theory and practise are moulded by the department.

The department features well-equipped labs where the students get practical training. To mention a few, there are labs for machine tools, heat transfer, refrigeration and air conditioning, internal combustion engines, fluid mechanics and machinery, CAD/CAM, CNC machines, metrology, and others. Additionally, our division has a CNC turner facility centre that is permitted for Tuner Factory & Engineering's commercial manufacturing. Additionally, the department provides consulting in the area of CNC turning equipment.

The department and Universiti Teknologi MARA in Malaysia have signed a Memorandum of Understanding to facilitate student exchange programmes and academic and research interactions. In order to provide our students internship opportunities and industry-academic interaction, the department has also inked MOUs with Sunsenz Solar, Popular Automobiles, Poomkuddy Automobiles, Amy Jewellery and Designers, J and G Toolings Ltd, and Tritech Design Academy. We also collaborate with the State Resource Council (SRC) to provide our students value-added courses in MEP & QAQC.

Students and faculty are assisted in their research and projects by the departmental research centre. By taking part in research-focused programmes and quality improvement trainings, all faculties actively work to enhance their standards. The projects of our students demonstrate their technical quality and expertise, and they have won awards in contests held at the state level. Faculty members have publications in highly regarded international journals. The department has launched a new venture called GARAGE, which will serve as a platform for turning the concepts of our students into cutting-edge automobile learning in the present.

The department has an official student organisation called "ARME" that routinely organises co-curricular and extracurricular activities. Department participates actively in ISHRAE (professional body involved in air conditioning and refrigeration). The Department is a leader in the entrepreneurship and start-up industries. Our cell for ongoing education is fantastic. To improve the technical abilities of young people, the cell provides a CNC turner course through PMKVY and ASAP. These courses demonstrate the department's dedication to social issues.

The department routinely holds FDPs, workshops, seminars, and invited speakers. The Department's biannual newsletter, MECHVOICE, which highlights the department's accomplishments during the current semester, is published. The department is also a leader in extracurricular pursuits. The participation of the pupils in academic, co-curricular, and extracurricular activities is encouraged. Conferences, tech fests, and sports events all see enthusiastic participation from our students.

Workshop on Racing Car



The Department of Mechanical Engineering at KMEA Engineering College organized an engaging one-day workshop focused on "Fabrication, Assembly, and Knowledge Sharing" with a special emphasis on racing car technology. The workshop brought together enthusiastic students and faculty members to explore the intricacies of building a high-performance racing car from scratch. The day began with an enlightening presentation on the principles of vehicle design, including aerodynamics, suspension systems, and engine tuning, delivered by industry experts and seasoned engineers.

The hands-on session of the workshop allowed participants to work in teams and assemble key components of a racing car chassis. Students gained practical experience in welding, precision machining, and vehicle assembly techniques. Additionally, the workshop encouraged knowledge sharing and collaboration, with attendees actively discussing their insights and ideas for optimizing car performance.

RC Car show



The Mechanical Engineering Department of KMEA Engineering College organized an exhilarating RC Car Show, showcasing the innovative prowess of its students and faculty in the realm of remote-controlled vehicles. The event, a testament to engineering ingenuity, featured a dazzling array of RC cars, each meticulously designed and crafted by students. These miniature marvels raced around a specially designed track, demonstrating precision control and agility. Spectators were treated to an impressive display of engineering talent.

MEP Add-on course



The Department of Mechanical Engineering at our institution recently organized an insightful MEP (Mechanical, Electrical, and Plumbing) Addon Course, led by a group of talented and industrious mechanical engineering students. This course aimed to provide students with a comprehensive understanding of MEP systems, which play a critical role in building design and construction. Over the course of several weeks, participants delved into various aspects of MEP, including HVAC (Heating, Ventilation, and Air Conditioning), electrical systems, and plumbing.

3D Printing Workshop



The Department of Mechanical Engineering at KMEA Engineering College organized an enlightening and hands-on 3D Printing Workshop, catering to students' growing interest in cutting-edge manufacturing technologies. The workshop was a remarkable platform for both novices and enthusiasts to explore the world of additive manufacturing. The day began with an informative presentation on the principles, applications, and evolving trends in 3D printing technology.

Participants were then guided through the entire 3D printing process, from designing CAD models to operating the printers. The hands-on sessions allowed students to bring their own creations to life, promoting creativity and problem-solving skills.

Kapricious'23 events



In the spirit of promoting technical excellence and fostering a competitive yet collaborative environment, KMEA Engineering College's Department of Mechanical Engineering proudly organized "Kaprecious 2023." This annual event brought together engineering enthusiasts from various disciplines for a day of thrilling competitions and learning experiences. Among the highlights were the Lathe Competition, where participants demonstrated their precision machining skills, and the Fitting Competition, which challenged students to assemble intricate mechanical components with utmost accuracy.

In addition to these hands-on competitions, Kaprecious 2023 also featured a Motography contest, where students showcased their creative prowess in capturing the dynamic world of engineering through the lens. The CAD Competition tested participants' digital design acumen, emphasizing the importance of computer-aided design in modern engineering. Through these diverse programs, Kaprecious 2023 not only celebrated the talents and technical expertise of the students but also encouraged interdisciplinary collaboration, sparking innovation and nurturing future mechanical engineers. This event exemplified the department's commitment to providing holistic learning experiences that extend beyond the classroom, preparing students for the challenges and opportunities in the world of engineering.

Pedal to power



The "Pedal to Power" workshop, organized by Innomech, a dynamic club within the Department of Mechanical Engineering at KMEA Engineering College, was a fascinating exploration of sustainable energy generation. With a focus on harnessing human energy, the workshop aimed to educate participants on the innovative concept of pedal-powered devices and their potential applications. The day commenced with an engaging presentation on the principles of energy conversion, followed by a hands-on session where students got to build and experiment with pedal-powered mechanisms.

Throughout the workshop, participants were challenged to design and fabricate various pedal-driven devices, such as generators and water pumps, to better understand the

practical applications of human-powered energy. Innomech facilitated a collaborative atmosphere where students shared ideas, troubleshooted design challenges, and learned from one another's experiences. By the end of the workshop, participants not only gained a deeper insight into sustainable energy solutions but also left with newfound skills and enthusiasm for engineering innovations that have a positive impact on the environment. "Pedal to Power" exemplified the commitment of Innomech and the Department of Mechanical Engineering to fostering creativity, technical knowledge, and a sense of responsibility towards sustainability among the engineering community.

NDT Add-on Course



The Department of Mechanical Engineering at KMEA Engineering College organized an informative and hands-on Non-Destructive Testing (NDT) Add-on Course tailored exclusively for its students. This specialized course delved into the principles and practices of NDT techniques, equipping students with valuable skills in inspecting and evaluating materials and structures without causing any damage. The course covered a comprehensive range of NDT methods, including

ultrasonic testing, radiography, magnetic particle testing, and liquid penetrant testing, providing students with a holistic understanding of these critical industrial processes. Throughout the course, students engaged in practical sessions.

Speaker of IEDC Summit



Mohamed Iqbal PB, an illustrious passout from the Mechanical Engineering Department of KMEA Engineering College, delivered an inspiring keynote address as a speaker at the IEDC Summit 2023, hosted at Rajagiri Engineering College. His remarkable journey from a student to an accomplished professional was a source of motivation for the aspiring entrepreneurs and innovators in attendance. Iqbal shared invaluable insights into his entrepreneurial endeavors, highlighting the role of innovation, perseverance, and interdisciplinary collaboration in his success. His address not only underscored his expertise in

the field of mechanical engineering but also served as a testament to the caliber of individuals produced by KMEA Engineering College.

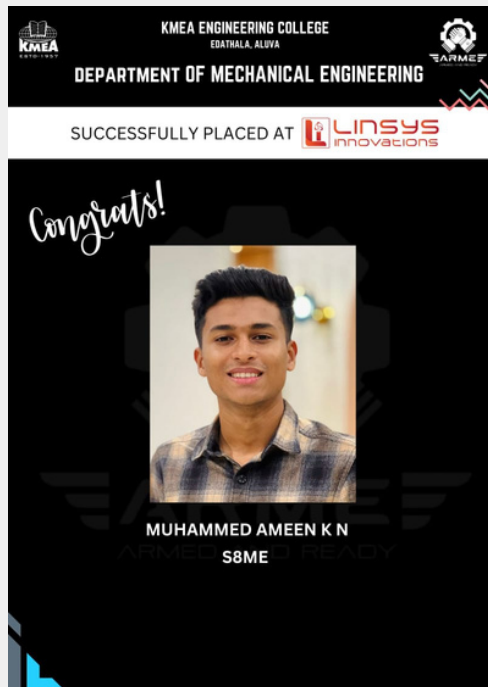
The IEDC Summit 2023 was further enriched by Iqbal's impactful presentation, which resonated with the spirit of innovation and entrepreneurship. His achievements serve as an inspiration to the next generation of engineers and entrepreneurs, emphasizing the importance of combining technical knowledge with an entrepreneurial mindset. Mohamed Iqbal PB's participation as a speaker at this prestigious event reflects the college's commitment to nurturing and celebrating the achievements of its alumni and contributing to the broader entrepreneurial ecosystem in the region.

IDE Bootcamp



Dr. Paulose, a distinguished faculty member of the Mechanical Engineering Department at KMEA Engineering College, has been selected to participate in the prestigious IDE BOOTCAMP, conducted by the Ministry of Education, Government of India. This remarkable achievement underscores Dr. Paulose's exceptional dedication to education and his significant contributions to the field of mechanical engineering. The IDE BOOTCAMP is a commendable opportunity for him to further hone his skills, engage in cutting-edge research, and collaborate with experts from across the nation. It also reflects positively on KMEA Engineering College, which continues to produce educators and researchers of the highest caliber.

Placement



Alumni Meet

MILAN'23 GLOBAL ALUMNI MEET

DAY
JULY, 22

TIME
2PM-8PM

VENUE:
KMEA ENGINEERING COLLEGE AUDITORIUM

ALL ARE INVITED!

*"Everything is better
when we are together"*



KMEA Engineering College hosted a memorable Alumni Meet, "Milan '23," bringing together a vibrant community of alumni, particularly those from the esteemed Mechanical Engineering department. This event served as a delightful reunion for former students, allowing them to reconnect, reminisce about their college days, and share their experiences and accomplishments since graduating. The gathering also provided a platform for alumni to network, exchange ideas, and discuss the latest developments in the field of mechanical engineering. Milan '23 was not only a testament to the enduring bonds formed during their time at KMEA but also a celebration of the department's enduring impact in shaping successful engineers. It highlighted the college's commitment to fostering lifelong relationships with its alumni and maintaining a strong sense of community among its graduates.

Graduation Ceremony



The Graduation Ceremony of KMEA Engineering College's Mechanical Department, aptly named "Arohana '23," was a momentous occasion that marked the culmination of years of hard work and dedication for the graduating students. The ceremony, held with great pomp and splendor, celebrated the academic achievements and personal growth of the graduates as they embarked on the next chapter of their lives. Distinguished faculty, esteemed guests, and proud families gathered to witness this moment of transition, as degrees were conferred upon the students who had successfully completed their mechanical engineering programs. Arohana '23 not only symbolized the end of an educational journey but also the beginning of a promising future, where these young engineers are poised to make significant contributions to the field and society at large. The event was a testament to the college's commitment to nurturing talent and producing well-rounded professionals ready to tackle the challenges of the engineering world.

Editorial Board

Faculty



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