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Department Of Mechanical Engineering



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VISION

To become a nationally recognised knowledge hub in Mechanical Engineering by moulding professionally competent and socially responsible engineers.

MISSION

To create a conducive learning platform for students to excel as professionals, through quality technical education and training.

To involve students in socially committed projects and programs to broaden their knowledge and integrity.
To mould students with good leadership qualities, ethical values, and life-long learning.

HOD's DESK

It gives me immense pleasure to present this edition of the Department Newsletter, highlighting the academic, technical, and professional activities of the Department of Mechanical Engineering. This issue reflects our continued commitment to developing competent engineers through quality education, industry interaction, innovation, research, and experiential learning.

Over the past year, the department has organized a variety of technical programs, expert talks, hands-on workshops, competitions, project exhibitions, and skill development initiatives that have enhanced our students' technical knowledge, creativity, problem-solving ability, and professional competence. These activities have provided valuable opportunities to bridge the gap between classroom learning and industry expectations while fostering innovation and teamwork.

I am proud of the enthusiasm and dedication shown by our students and faculty in making these initiatives a success. Their achievements are a reflection of the department's focus on academic excellence, practical learning, and continuous improvement.

I extend my sincere appreciation to our faculty members, students, alumni, industry experts, and the college management for their unwavering support and valuable contributions. I hope this newsletter inspires our students to continue striving for excellence and making meaningful contributions to the engineering profession.

I wish everyone continued success in all their future endeavours.

Dr. Viswanath K Kaimal

Head of the Department

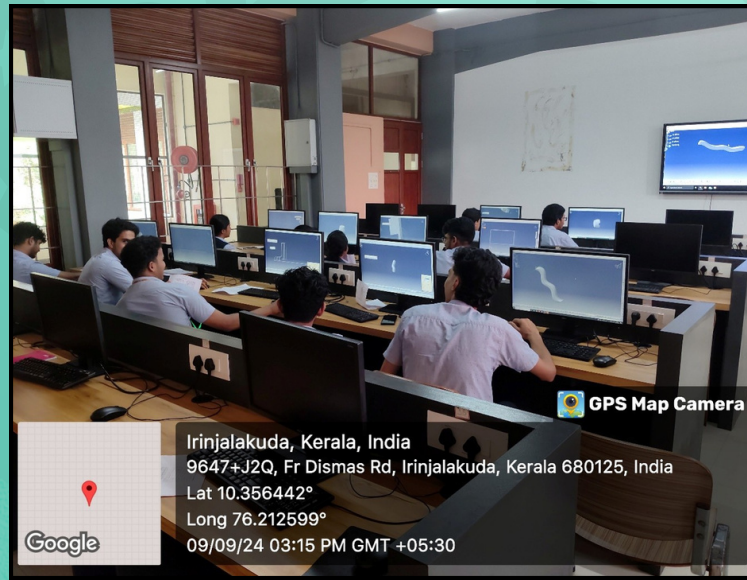
Basic Skill Training Program

On 6-7 September 2024, the Department of Mechanical Engineering organized a Basic Skill Training Program at the Basic Mechanical Workshop, St. Chavara Block, for Third Semester B.Tech Mechanical Engineering students. The programme was conducted by Mr. Reynold Jose, Asst. Professor, Dept. of ME, with technical sessions led by Mr. Joy E. T. and Mr. Bejoy Jose, Technical Staff, Dept. of ME, under the coordination of Mr. Jackwin Vincent K., Asst. Professor, Dept. of ME. The two-day hands-on training focused on developing practical maintenance and troubleshooting skills in refrigeration systems, air conditioners, washing machines, plumbing, basic automotive systems, and drilling operations. Through interactive demonstrations and practical exercises, participants gained valuable exposure to essential engineering skills that complement their academic curriculum and enhance their technical competence. The programme successfully strengthened the students' problem-solving abilities, practical knowledge, and industry readiness, reflecting the department's commitment to providing skill-oriented, experiential learning opportunities.



Hands-on Workshop on CATIA

On 8 September 2024, the Department of Mechanical Engineering, organized a Hands-on Workshop on CATIA at the Computer Lab, Third Floor, St. Chavara Block, for Fifth Semester B.Tech Mechanical Engineering students. The workshop was conducted by Mr. Jackwin Vincent K., Asst. Professor, Dept. of ME, with the objective of enhancing students' proficiency in industry-standard CAD software used for advanced product and automotive design. The technical sessions focused on Pressure Vessel Design and Body-in-White (BIW) Fixture Design, providing participants with practical exposure to 3D modelling, assembly design, and engineering design methodologies using CATIA. Through interactive demonstrations and hands-on exercises, students gained valuable insights into design workflows widely adopted in the manufacturing and automotive industries. The workshop significantly strengthened the participants' CAD skills, design capabilities, and industry preparedness, reaffirming the department's commitment to providing application-oriented learning experiences aligned with current engineering practices.



Expert Talk on Building Information Modelling (BIM)

On 13 January 2024, the Department of Mechanical Engineering, organized an Expert Talk on Building Information Modelling (BIM) at the Conference Hall for Mechanical Engineering students and faculty members. The programme was conducted by an industry expert in BIM implementation, who provided participants with comprehensive insights into the principles, applications, and future scope of Building Information Modelling in the Architecture, Engineering, and Construction (AEC) industry. The session covered the fundamentals of BIM, its role in improving collaboration, visualization, project coordination, and lifecycle management, along with its applications in mechanical building services such as HVAC, plumbing, and electrical system design. Participants also gained exposure to the integration of BIM with emerging technologies, including the Internet of Things (IoT), Augmented Reality (AR), Artificial Intelligence (AI), and cloud computing, as well as the growing career opportunities in the field. The interactive question-and-answer session further enhanced participants' understanding of BIM, making the programme a valuable learning experience that strengthened their awareness of digital engineering practices and future industry trends.

AI Image Generation Competition

Commencing on 15 October 2024, the Department of Mechanical Engineering, Christ College of Engineering, in association with IEDC CCE and the IEEE PES Student Chapter, organized an AI Image Generation Competition as part of Maschinen Fest '24. The competition was open to students with an interest in artificial intelligence, digital creativity, and visual design, providing them with an opportunity to explore the capabilities of AI-powered image generation tools. Coordinated by Mr. Reynold Jose, Asst. Professor, Dept. of ME, with student coordinators Antony K. Wilson and Sidharth K. R., the event encouraged participants to create innovative digital artwork by leveraging emerging AI technologies. The competition witnessed enthusiastic participation from students across disciplines, fostering creativity, technological innovation, and interdisciplinary collaboration. Attractive prizes were awarded to the best creations, recognizing originality and technical excellence. The event successfully showcased the transformative potential of artificial intelligence in creative design while inspiring students to explore the intersection of engineering, technology, and art.

Big Fight Season 7 – Intercollegiate Debate Competition

As part of Maschinen Fest '24, the Department of Mechanical Engineering, organized Big Fight Season 7, an intercollegiate debate competition, to promote critical thinking, effective communication, and intellectual discourse among engineering students. The event, coordinated by Ms. Aswathy P. Sajeew and Mr. Jackwin Vincent, Asst. Professors, Dept. of ME, with student coordinators Aman Ashish and Abhinav K. Binoi, attracted enthusiastic participation from students representing various colleges. Sponsored by Roundabout and conducted in association with the YUVA Talkathon Club, the competition featured the debate topic "Media – Does it Reveal the Truth or Construct It?", with English as the medium of communication. Participants demonstrated exceptional analytical thinking, persuasive speaking, and rebuttal skills while presenting diverse perspectives on the contemporary issue. The event offered a prize pool of ₹7,500, recognizing outstanding performances and encouraging healthy academic competition. Big Fight Season 7 successfully provided a dynamic platform for students to enhance their public speaking, critical reasoning, and leadership abilities while fostering meaningful discussions on issues of societal relevance.



Hatch Pitch 2.0 – Intercollegiate Idea Pitching Competition

On 17 October 2024, the Department of Mechanical Engineering, organized Hatch Pitch 2.0, an intercollegiate idea pitching competition, as part of Maschinen Fest '24'. The event brought together students from Christ College of Engineering and various other colleges, providing a platform to showcase innovative ideas and entrepreneurial thinking. The programme commenced at Christ Hall with an introductory session by Ms. Anupama K., followed by an expert session on the Art of Pitching by Ms. Ashwathy P. Sajeew and a briefing on the competition guidelines by Mr. Albin Benny. After receiving randomly assigned problem statements, teams were given dedicated preparation time before presenting their solutions in the Conference Hall. The presentations were evaluated by a distinguished panel comprising Mr. Nice Menachery, IEDC Nodal Officer, Jyothy Engineering College; Mrs. Daisy P. K., IEDC Nodal Officer, St. Joseph's College; and Mr. Sudheer Sudhakaran, YUVA Nodal Officer, SCMS Business School, based on feasibility, innovation, market analysis, teamwork, and presentation skills. The event concluded with a prize distribution ceremony, where Dr. Sajeew John, Principal, Christ College of Engineering, presented certificates and cash prizes from a ₹7,500 prize pool to the winners, while all participants received certificates of appreciation. Hatch Pitch 2.0 successfully fostered innovation, teamwork, and entrepreneurial mindset among participants, reaffirming the department's commitment to promoting creativity and problem-solving through experiential learning.



Thar ROXX Workshop

On 18 October 2024, the Department of Mechanical Engineering, organized the Thar ROXX Workshop at St. Mary's Block as part of Maschinen Fest '24'. The workshop was conducted for Mechanical Engineering students, faculty members, and automotive enthusiasts, with the objective of providing practical exposure to the engineering and technology behind modern off-road vehicles. The programme featured interactive technical sessions and hands-on demonstrations centered on the Mahindra Thar ROXX, enabling participants to explore its design, drivetrain, suspension, off-road capabilities, and advanced engineering features. The event witnessed the enthusiastic participation of 140 students, who gained valuable insights into automotive design, vehicle performance, and emerging technologies in the automotive sector. The programme was organized under the guidance of Dr. Sijo M. T., HoD, Dept. of ME, with the support of Dr. Adarsh S. J., Dr. Alos James, and Ms. Aswathy P. Sajeew, Asst. Professors, Dept. of ME, along with a dedicated team of student coordinators and volunteers. The workshop successfully bridged the gap between classroom learning and real-world automotive engineering, inspiring students to explore advanced concepts and career opportunities in the automotive industry.



Industry–Institution Interaction Talk on "The EV Industry and Its Growth"

On 18 October 2024, the Department of Mechanical Engineering, organized an Industry–Institution Interaction Talk at the Conference Hall as part of Maschinen Fest '24'. The session was conducted for students and faculty members by Mr. Anil Jangid, General Manager, Tata Motors, an industry expert with extensive experience in the fields of Electric Vehicles (EVs), Commercial Vehicles, and Material Handling Equipment (MHE). The expert talk on "The EV Industry and Its Growth" provided participants with valuable insights into the rapidly expanding electric mobility sector, covering emerging technologies, battery innovations, charging infrastructure, software integration, and the future of sustainable transportation. The session also highlighted the diverse career opportunities available in the EV industry and the technical competencies required to excel in this evolving domain. An engaging interactive question-and-answer session enabled participants to interact directly with the speaker and gain practical industry perspectives. The programme was coordinated by Mr. Nithin V. K., Asst. Professor, Dept. of ME, with the support of student coordinators Ashiya Jose, Daniel Davis, Savio Shiju, and Judit Mariyam John. The event successfully strengthened industry–academia interaction and inspired students to explore emerging opportunities in electric vehicle technology and sustainable mobility.



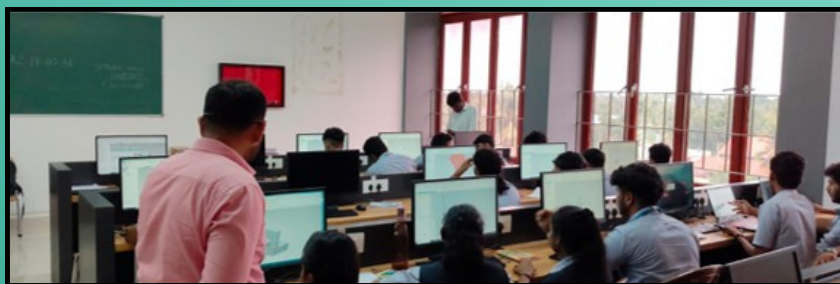
Mextalk 3.0 – Industry Interaction Session

On 18 October 2024, the Department of Mechanical Engineering organized Mextalk 3.0 at the Conference Hall as part of Maschinen Fest '24'. The session was conducted for Mechanical Engineering students and faculty members by Mr. Mansoor P. K., General Manager, Steel & Industrial Forgings Ltd., who shared valuable industry insights on the latest trends, challenges, and career opportunities in the steel and industrial forging sector. The interactive talk highlighted the importance of practical exposure, technical competence, innovation, and adaptability in the modern manufacturing industry. Participants gained a deeper understanding of industrial forging processes, emerging technologies, current industry challenges, and the skillsets expected from aspiring engineers. The session concluded with an engaging question-and-answer interaction, allowing students to clarify their queries and benefit from the speaker's extensive professional experience. The programme was coordinated by Mr. Nithin V. K., Asst. Professor, Dept. of ME, with the support of student coordinators Savio Jerry, Judit Mariyam, Ashiya Jose, and Daniel Davis. The event successfully strengthened industry-academia collaboration and motivated students to prepare for rewarding careers in the manufacturing and forging industries.



Student Enrichment Program on Siemens NX

From 24–27 July 2024, the Department of Mechanical Engineering organized a Student Enrichment Program on Siemens NX (PLM Software) at the Computer Lab, Third Floor, St. Chavara Block, for Third Semester B.Tech Mechanical Engineering students. The programme was conducted by Mr. Muhammed Shameem K., Faculty, CIPET: IPT, Kochi, Government of India, with Mr. Jackwin Vincent K., Asst. Professor, Dept. of ME, serving as the Faculty Coordinator. The four-day hands-on training introduced students to the fundamentals of Siemens NX, an industry-standard CAD/CAM/CAE software widely used in product design and manufacturing. Participants gained practical experience in 3D modelling, part design, assembly modelling, drafting, and product lifecycle management (PLM) concepts through interactive sessions and guided exercises. The programme significantly enhanced students' technical proficiency in advanced design software while strengthening their industry readiness and employability skills. The initiative reflects the department's continued commitment to providing outcome-based, skill-oriented training aligned with modern engineering and manufacturing practices.



CAD Clash – Design Your Destiny

On 24 August 2024, the Department of Mechanical Engineering, in association with the SAEINDIA CCE Collegiate Club, organized CAD Clash – Design Your Destiny for Mechanical Engineering students. The competition was designed to evaluate participants' proficiency in Computer-Aided Design (CAD) by challenging them to create accurate and innovative 3D models within a stipulated time. The event encouraged students to apply their engineering drawing knowledge, design principles, and modelling skills in a competitive environment, thereby enhancing their technical competence and problem-solving abilities. The programme was coordinated by Mr. Jackwin Vincent K., Asst. Professor, Dept. of ME, with the support of student coordinators Nayan Krishna and Karthik N. V. Participants demonstrated creativity, precision, and technical expertise while working on real-world design tasks, making the event an engaging platform for experiential learning. CAD Clash successfully strengthened students' CAD capabilities, promoted healthy technical competition, and reinforced the department's commitment to developing industry-ready engineering professionals.

Go-Kart Revealing & Blessing Ceremony

On 9 October 2024, the Department of Mechanical Engineering, organized the Go-Kart Revealing & Blessing Ceremony at the Open Auditorium to officially unveil the department's Phoenix Racing Go-Kart. The programme was attended by students, faculty members, and the Phoenix Racing team, marking the commencement of the team's participation in national go-kart engineering competitions. The event showcased the student-designed and fabricated go-kart, highlighting the technical expertise, innovation, and teamwork demonstrated throughout its development. The ceremonial blessing symbolized the department's encouragement and best wishes for the team's competitive journey, while the unveiling inspired students to actively engage in design, manufacturing, and motorsport engineering. The programme reflected the department's commitment to experiential learning, project-based education, and fostering a culture of innovation, technical excellence, and competitive engineering among students.

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