



CHRIST
COLLEGE OF ENGINEERING

VOLUME 6
ISSUE 1
DEC 2025

CHRIST COLLEGE OF ENGINEERING, IJK

Department Of Mechanical Engineering

CCF DIGEST



STAFF EDITOR
MR. REYNOLD JOSE
STUDENT EDITOR
SAVIO JERRY (S5 ME)

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

Dear Students, As we approach the end of the year 2025, I extend my warm greetings and best wishes to all of you on the occasion of Christmas and the forthcoming New Year 2026. This is a time to reflect on the journey we have completed and to look forward with optimism to the opportunities that lie ahead.

The year 2025 has been one of learning, perseverance, and progress for our department. Through your active participation in academic pursuits, technical activities, and co-curricular initiatives, you have contributed significantly to the growth and achievements of the department. I appreciate the dedication shown by our students and faculty in maintaining academic excellence and a vibrant learning environment.

As we move into the new year, I encourage final-year students to remain focused on their projects, placements, and career aspirations. Second- and third-year students should continue to strengthen their technical knowledge, develop professional skills, and explore emerging areas relevant to their field. First-year students are advised to concentrate on building a strong academic foundation and adapting positively to the academic culture of the institution.

May the coming year bring renewed motivation, clarity of purpose, and success in all your endeavors. I wish you and your families a joyful Christmas and a prosperous, peaceful, and fulfilling New Year 2026.

With best regards,
Head of the Department

3D CAD Competition

The RPM Association of the Mechanical Engineering Department, Christ College of Engineering, Irinjalakuda, in collaboration with Techletics 2026, successfully organized the 3D CAD Competition as a pre-Techletics event on 23rd September 2025. The event was conducted from 3:30 PM to 4:30 PM in the CAD Lab. The participation fee was ₹50 per person, and the event featured a prize pool of ₹1000.

The competition was conducted in an individual format, drawing 27 enthusiastic participants who showcased their creativity, problem-solving ability, and CAD modelling skills. Students were allowed to use AutoCAD, CATIA, and Fusion 360 provided in the lab, while some participants opted to work on their own laptops. A model along with its 2D sketch was displayed on the LED screen, and each participant was required to replicate the design within one hour using any of the permitted software.

The event was coordinated by Mr. Jackwin Vincent (Faculty Coordinator, Mechanical Engineering Department), along with student coordinators Vaibhav K. R. (S5 ME), Aswin Sreejith (S5 ME), Rohidh T. R. (S5 ME), Jeswin Babu (S5 ME), and Albin Benny (S5 ME). The coordinators actively assisted the participants by addressing queries and offering guidance throughout the event, thereby enhancing the overall learning experience.

At the end of the competition, the first prize was awarded to the top performer, and e-certificates were issued to all participants as a token of appreciation for their effort and involvement. The event concluded on a highly successful note, fostering innovation, technical expertise, and individual excellence, while building momentum for the upcoming Techletics 2026.



Student Enrichment program on Additive Manufacturing & Product Design

The Department of Mechanical Engineering, Christ College of Engineering, Irinjalakuda, organized a Three-Day Skill Enhancement Program (SEP) on Additive Manufacturing & Product Design for the S5 Mechanical Engineering students in collaboration with Shapes 3D InnoFab. The program was conducted from 21st August to 23rd August 2025.



The objective of the SEP was to familiarize students with the latest developments in Additive Manufacturing technologies, with a particular emphasis on Fused Deposition Modelling (FDM). The program provided a comprehensive blend of theoretical sessions and practical hands-on training, enabling participants to gain a clear understanding of the complete workflow in 3D printing—from concept to final product.

Throughout the three days, students were introduced to:

- The fundamentals and working principles of 3D printing technologies, especially FDM.
- The end-to-end process of designing 3D models, preparing them for printing, and executing successful prints.
- Modern digital tools including cloud-based CAD platforms, their mobile applications, and the increasing role of Artificial Intelligence in CAD modelling.

The sessions were designed to enhance students' technical competence while equipping them with industry-relevant skills in digital manufacturing. The practical component allowed learners to work directly with 3D printers, slicing software, and CAD systems, enabling them to gain confidence in handling real-world product development tasks.

The program concluded successfully, with students demonstrating improved proficiency in product design, 3D model development, and additive manufacturing workflows. The collaborative effort with Shapes 3D InnoFab provided an enriched learning experience, supporting the department's commitment to offering cutting-edge training aligned with current industrial advancements.

Academia-Industry Confluence Session

“Design Your Career in BIM”

The Department of Mechanical Engineering, Christ College of Engineering, Irinjalakuda, organized an expert session titled “Design Your Career in BIM” on 13 August 2025 during the SEP hour. The session, held in the Department Seminar Hall, was conducted exclusively for S5 and S7 Mechanical Engineering students as part of the department's ongoing initiative to strengthen industry-academia collaboration.

The resource person for the session was Er. Prijith P, Academic Business Head, Bimlabs Global, who shared valuable insights into the rapidly growing field of Building Information Modelling (BIM). He explained how BIM is transforming the global Architecture, Engineering, and Construction (AEC) sector through digital design, data integration, and multidisciplinary coordination.

Er. Prijith introduced students to widely used BIM platforms such as Autodesk Revit, Navisworks, Archicad, and Civil 3D, and highlighted the relevance of 4D and 5D BIM, which integrate project scheduling and cost management with digital models. The session also covered international BIM standards including ISO 19650, along with real-world case studies from infrastructure and smart-city projects.

Students gained clarity on the various career pathways, skill requirements, and certification options available for aspiring BIM professionals. The interactive session helped the participants understand the increasing demand for BIM expertise and its relevance for mechanical engineers in modern construction and design workflows.

The program was coordinated by Mr. Jackwin Vincent K and Mr. Nithin V. K, Assistant Professors, Department of Mechanical Engineering.

Overall, the session served as an eye-opening experience for students, motivating them to explore emerging opportunities in digital construction technologies. The Department continues to encourage such initiatives to equip students with industry-ready competencies and future-focused skills.

Expert Visit by Mr. C. Varadarajan – Industry Interaction Session

The Department of Mechanical Engineering, Christ College of Engineering, Irinjalakuda, in association with SAE CCE, hosted an expert interaction session with Mr. C. Varadarajan, Retired Chief Engineer (R&D) at TAFE and former Chief Engineer at TATA Motors, Ashok Leyland, and TVS Motors, on 2 August 2025 at the SAE Lab.

A veteran with decades of experience in the Indian automotive sector, Mr. Varadarajan has been instrumental in driving innovation across multiple leading automobile companies. His visit provided students with a rare opportunity to engage with an industry leader who has contributed significantly to India's automotive technology landscape.

The event began with a welcome address and felicitation, followed by a brief overview of his illustrious career. During the session titled "Innovation and Engineering in Automotive Engineering through SAE", Mr. Varadarajan emphasized the importance of strong engineering fundamentals, hands-on technical skills, continuous learning, and meaningful industry-academia collaboration.

He shared deep insights into evolving trends in the automotive industry, including electric and hybrid mobility, sustainability challenges, and the technological competencies required for future mobility solutions. Students also received practical guidance on research, internships, and career-building in the automotive sector.

An interactive discussion followed, during which Mr. Varadarajan addressed student queries and offered personalized advice drawn from his vast professional experience. He also reviewed the SAE activities of the college and provided valuable suggestions to enhance ongoing projects.

The session significantly enriched students' understanding of industry expectations and real-world engineering challenges, inspiring them to pursue innovation and practical problem-solving. The visit also strengthened the department's commitment to fostering strong industry engagement and experiential learning.

The event was coordinated by Mr. Dony Dominic and Mr. Reynold Jose under SAE CCE, with support from the Department of Mechanical Engineering. The department extends its gratitude to the Principal, faculty members, and student volunteers for ensuring the success of the program.



GEAR UP – 24 Hours to Learn, Build & Bond

The Department of Mechanical Engineering, Christ College of Engineering, Irinjalakuda, organized "GEAR UP", a 24-hour residential enrichment camp for first-year Mechanical Engineering students on 24-25 October 2025. The program aimed to support the smooth transition of newcomers into the engineering environment while fostering confidence, teamwork, and a sense of belonging within the department.

The camp began with an orientation session led by the Head of the Department, who briefed students on academic expectations, discipline, and the culture of engineering learning. This was followed by a series of team-building games and collaborative tasks, which helped students develop communication, leadership, and problem-solving skills while building strong peer connections.

Interactive sessions on confidence building, time management, and emotional resilience enabled students to reflect on effective habits for academic and personal growth. An insightful alumni interaction provided practical guidance on navigating college life and understanding the opportunities ahead in the field of mechanical engineering.

Technical learning activities and the Student Master Program introduced students to fundamental engineering thinking and encouraged curiosity beyond the classroom.

A major highlight of the camp was the Fire Walk session, conducted under expert supervision. This powerful activity helped students overcome fear, boost self-belief, and embrace challenges with a positive mindset.

The camp concluded with a lively cultural night, where students showcased their talents, strengthening camaraderie and creating lasting memories.

Overall, GEAR UP successfully fulfilled its objective of preparing first-year students for their academic journey while nurturing confidence, teamwork, and a strong departmental identity. The enthusiastic participation of students and the dedicated efforts of the faculty made the event a remarkable success.



KSRTC Workshop & Expert Talk Session

The Department of Mechanical Engineering, Christ College of Engineering, Irinjalakuda, through its student association RPM, in association with Techletics 2026, successfully organized a KSRTC Workshop and Expert Talk Session on 25 September 2025.

The workshop, held at St. Thomas Hall, Open Auditorium, was open to all students and featured a display of various KSRTC bus components. S3 Mechanical Engineering students demonstrated and explained the working mechanisms of the components, giving participants valuable hands-on exposure to real-world automotive systems. The session was coordinated by Mr. Balakrishnan C. B., Faculty Coordinator, along with Student Coordinator Sajvin (S3 ME).

Following the workshop, an expert talk session was conducted exclusively for S1 Mechanical Engineering students. The session was led by Mr. Rajesh, Assistant Depot Engineer, KSRTC Regional Office, Aluva, who shared insights on KSRTC operations, vehicle maintenance practices, and career opportunities in the transport sector. The talk session was coordinated by Mr. Balakrishnan C. B. and Mr. Nithin V. K., Assistant Professors, with Student Coordinators Jeswin Babu (S5 ME) and Kiranshankar M. S. (S5 ME).

The event provided an excellent blend of practical learning and industry-oriented knowledge, enabling students to gain clarity on automotive systems while understanding the professional environment of KSRTC. The enthusiastic participation of students made the program a noteworthy success.

MEXTALK 4.0 –

The Future of Aerospace: Emerging Technologies & Career Paths

The Department of Mechanical Engineering, Christ College of Engineering, Irinjalakuda, successfully conducted MEXTALK 4.0 on 24 September 2025 at the Conference Hall. The expert session, titled “The Future of Aerospace: Emerging Technologies and Career Paths”, offered students valuable exposure to the rapidly evolving aerospace sector.

The event featured two eminent speakers:

- Dr. Saji Devadathan, Former Chief Scientist, CSIR-NAL, Bangalore, and Professor of Practice, IIT Madras
- Mr. Rajesh Panachikkuth, Ex-Indian Air Force professional and Aircraft Structure Repair Engineer

Both speakers delivered insightful talks on emerging aerospace technologies, structural innovations, and the expanding opportunities for engineers in the global aerospace industry. They emphasized the importance of innovation, adaptability, and continuous skill development to meet future industry demands.

Students actively engaged in discussions, gaining clarity on real-world aerospace applications and diverse career pathways. The session effectively bridged academic learning with industry expectations, inspiring students to explore advanced domains within aerospace engineering.

The department extends its gratitude to faculty coordinators Mr. Roshan David and Mr. Nithin V. K., along with student coordinators Yash (S5 ME) and Alan Sadil (S5 ME), for organizing a highly impactful and enriching session.



Alumni Interaction Session – Stories Beyond the Campus

The Department of Mechanical Engineering, in association with RPM, organized an inspiring alumni interaction session titled “Stories Beyond the Campus” on 9 September 2025 at Christ College of Engineering, Irinjalakuda.

The session featured two distinguished alumni of the department:

- Mr. Abhijith Jose, Corporate OSH Trainer, Zublin Strabag, UAE
- Mr. Kiran P. Sunilkumar, 4th Engineer, Executive Ship Management, Singapore

Both speakers shared their professional journeys, experiences across global work environments, and insights into the fields of safety management and maritime engineering. Their talks offered students a valuable perspective on the transition from campus to corporate life, highlighting the importance of perseverance, adaptability, and continuous learning.

The presence of Dr. Sajeev John, who honoured the alumni during the event, added to the significance of the occasion. The enthusiastic Q&A session that followed enabled students to engage closely with the speakers, gaining practical clarity on career paths and industry expectations.

Overall, the program successfully strengthened alumni relations while motivating students to explore diverse opportunities and build strong professional foundations.



Tech Quiz – Pre - Techletics 2026 Event

The RPM Association of the Department of Mechanical Engineering, Christ College of Engineering, Irinjalakuda, successfully organized the Tech Quiz as part of the pre-Techletics 2026 events on 22 September 2025. The competition was held from 3:30 PM to 4:30 PM.

The quiz aimed to enhance students' technical awareness, logical reasoning, and problem-solving skills. A total of 35 teams participated, each consisting of two members. The event featured two rounds of 15 questions each, covering a range of technical and analytical topics. After the first round, the top 10 teams advanced to the final round, creating an exciting and competitive atmosphere.

The event offered a prize pool of ₹500 and attracted students from various departments, showcasing strong teamwork and vibrant participation. Winners were announced at the conclusion of the event.

The program was coordinated by Dr. Alish James (Faculty Coordinator). The main student coordinators were Rohidh T. R. (S5 ME) and Dev Varsh P. A. (S5 ME), supported by John Joseph (S3 ME), Jain Thomas (S3 ME), Athul S. Menon (S3 ME), and Zeeco Johnson (S3 ME). Their dedicated efforts ensured the smooth and successful conduct of the event.

The Tech Quiz proved to be a resounding success, reinforcing RPM's commitment to promoting technical excellence and building momentum for Techletics 2026.

Wheel Assembly Competition – Pre - Techletics 2026 Event

The Department of Mechanical Engineering (RPM), Christ College of Engineering, Irinjalakuda, in association with Techletics 2026, successfully conducted the Wheel Assembly Competition on 24 September 2025 (3:30 PM–4:30 PM) and 26 September 2025 (1:30 PM–3:30 PM).

The competition attracted 15 teams, each consisting of two members, with a registration fee of ₹100 per team. A prize pool of ₹1000 added to the enthusiasm and competitive spirit among participants. The event began with a detailed briefing session outlining the rules and procedures, ensuring clarity and fairness. The challenge tested participants' technical skills, teamwork, precision, and speed in assembling the wheel mechanism within the given time.

The event was coordinated by Mr. Reynold Jose and Mr. Nithin V. K., Assistant Professors, Department of Mechanical Engineering. Student coordinators Zeeco Johnson, Andrin Binu, and Ann Rose ensured smooth execution throughout both days.

The Wheel Assembly Competition saw energetic participation and high levels of engagement, making it one of the standout pre-Techletics events of the year.

.....