



FRANCIS XAVIER[™]
ENGINEERING COLLEGE
AN AUTONOMOUS INSTITUTION

Accredited BY NBA | AICTE Sponsored Margdarshan Mentor Institution
DST-FIST Supported Institution | ISO 9001:2015 Certified
Recognized under Section 2(f) & 12(B) of the UGC Act, 1950

[f /fxengg](#) [t /fxengg](#) [i /fx_ec](#) [in /fxengg](#)
[y /francisxavierengineeringcollege](#)

DEPARTMENT OF MECHANICAL ENGINEERING

MONTHLY NEWS – MARCH 2023

About Department of Mechanical Engineering

The department offers UG program in B.E Mechanical engineering from the year 2005. The department started a PG program M.E Industrial Safety Engineering from this academic year 2018-2019. This course has wide range of job opportunity in the Industrial and Academic sector of India as well as abroad. The Department aims at providing the students with a perfect blend of intellectual and practical experiences with the support state-of-the-art laboratories and well-defined academic structure. The UG program is accredited by National Board of Accreditation (NBA). The special feature of the Department has established three applied laboratories, in addition to the regular labs to support students to master skills to make each one industry-ready, with a solid grounding in the principles and practice of Mechanical Engineering. We also have a strong academy for training students to appear for GATE exam.

Vision of the Department

To produce competent Mechanical Engineers of excellent technical and managerial skills with profound morality for global, national and confront societal development.

Mission of the Department

1. To provide quality education in Mechanical Engineering with an interdisciplinary approach, encouraging innovation, research, and Entrepreneurship through world-class infrastructure and proficient teachers.
2. To make the department self-reliant through multiple programs with excellent curricula, best practices, and industry exposure.
3. To inculcate technical, professional, and leadership skills, moral ethics, and lifelong learning.

Programme Educational Outcomes

The Bachelor of Mechanical Engineering curriculum is designed to impart Knowledge, Skill, and Attitude to the graduates to

PEO 1: Have a successful professional career in Mechanical Engineering and allied industries, either by employment or through entrepreneurship.

PEO 2: Establish competency in Design, Thermal, Materials, and Manufacturing system with ethics and social responsibility.

PEO 3: Have a continual receptiveness for leadership and social challenges.

Message from the Head of the Department

**Dear Colleagues,
Greetings!**

I have great pleasure and pride to announce that the Department of Mechanical Engineering is publishing the newsletter for the month of March 2023. Amidst the Covid Pandemic situation, we strived hard to keep the students engaged, and utilize the time not only for quality education and for self-development. We are steadfast in our progress as it involved various activities that enabled the hidden talents of the department students and faculty members to be brought into light. Besides the lockdown, our faculty members are continuously attending various training programs, publishing research papers, book chapters and are also working on getting patents.

This newsletter is the reflection of department activities which showcases all the events held in the department, contribution of faculty members, students and the best practices adopted. I would like to congratulate all the members of the editorial board for their sincere effort to realize this venture.



Dr. R. Samuel Hansen, M.E., Ph.D.
Professor & Head
samuel_hansen@rediffmail.com

EDITORIAL BOARD

Dr. Dr. R. Samuel Hansen, Professor & Head of Department, Editor – in – Chief.

Dr. S. Balakrishnan, Assistant Professor, Mechanical Department, Faculty In charge.

WORKSHOP

The Workshop on the topic “Discover New ideas and opportunities for your future” was conducted by the Department of Mechanical Engineering on 11-03-2023 for the interested Mechanical Engineering Students. The resource person for the programme was Mr. M. Arun B.E, ASNT Level III, IMAYA Academy, Chennai. Dr. R. Samuel Hansen, HOD/MECH welcomed and introduced the resource person.

The resource person thoroughly discusses the various NDT testing techniques and applications during the lecture. He also provides the workshop participants with hands-on practise in radiography, magnetic particle, ultrasonic, and penetrant testing.

The programme was Cordinated by Mr S.Thanumalaya Perumal, AP/MECH (Skill Coordinator MECH) and supported by Mr. S. Rahesh AP/MECH under the guidance of Dr. R. Samuel Hansen, HOD/MECH.



ASME – IDEATHON WORSHOP

The ASME Student Section organized a National level design hackathon event "IDEATHON" on 10/03/2023 at APJ Block Auditorium. The event was organized to bring together talented developers, designers, and critical thinkers to collaborate and create innovative solutions to real-world problems.

The event was attended by participants from various leading Institutions across India and from various backgrounds. The participants formed teams of a maximum of three and worked tirelessly for a minimum of 5 hours to find solutions that addressed the given problem statements.

The wide variety of problem statements based on the theme of SUSTAINABILITY, HEALTH CARE, FOOD STORAGE, and AGRICULTURE for the IDEATHON was carefully curated to ensure that they were relevant, impactful, and challenging.

The event started with seeking blessings from the lord almighty and kicked off with a welcome speech from the chairman of ASME Student Section Pravin P, followed by kuthuvilaku lightning from the dignitaries on the dais. The felicitation address was given by Dr. Lourdes Poobala Rayan, Director Entrepreneurial Cell and Dr.R. Samuel Hansen, Head of the Department, Mechanical Engineering. The presidential address was given by Dr. V. Velmurugan, Principal of FXEC, and finally, the rules and regulations, of the event were explained by Dr.M.Kannan, ASME Section Co-ordinator. Immediately the participated teams started working on their problem statements to develop design solutions.

The evaluation of the design has two stages. The first evaluation is table discussion, A team of four juries visited to individual tables and interacted with the team members to assess the design for the following criteria: Problem Weightage, Solution Scheme, Approach, Technological Readiness, Innovation and Originality.

the winners of the IDEATHON are 1st Place: TEAM 2, Mepco Schlenk Engineering College 2nd Place: TEAM 7, Mepco Schlenk Engineering College.



STUDENT MOBILITY PROGRAMME – UNIVERSITY

The students and faculties from Francis Xavier Engineering College has attended the student mobility programme in University Putra Malaysia from Mar 26, 2023 to Apr 01, 2023. In the university, everyday students visited the advanced laboratory in the campus. From that, students understood about what the modernized equipment's in the robotics lab and fibre optics communication lab in ECE department are, networking lab in IT department, engines lab and simulation lab in marine department and welding and CNC lab in mechanical department. In addition to this, students learnt Malaysian traditional activities and dances and students visited many historical places in Malaysia. Around 16 students from various departments and 2 faculties benefited from this programme. Sudharson V M, Samuel Jenefa Raja K, Deepthyka K, Cibi Arul Raj E of III ECE, Roger De Raja, Prakash Raj M of III Civil, Mohamed Irshath, Muthu Yogesh S, Somachesan K of III IT, Bertana R, Ashnat M of IV CSE, Shamma Arokia Maria Rayamal A of I PG EEE, Ramesh Babu E of I MCA, Jaithoon Rehana M P K, Mahalakshmi A of I MBA, Balasooria S of II Mech and members of the faculty Dr. L.R. Priya, Professor from Electronics & Communication Engineering Department and Dr. R. K. A Bhalaji, Assistant Professor from Mechanical Engineering Department.



FACULTY DEVELOPMENT PROGRAM

The Department of Mechanical Engineering conducted the Faculty Development Programme with the topic “Design using Onshape” on 29.03.2023. Resource person Dr. P. Balamurugan, Associate Professor, Department of Mechanical Engineering, Kalasalingam University. The programme was felicitated by Head of the Department Dr. R. Samuel Hansen, Professor/Mech. First, Resource person discussed about the concepts of design and software usage in academic. He demonstrates the design using Onshape 3D open-source software. He elaborated the design with Example and thought about Engineering graphics using Onshape software. Finally, he showed the cloud and storage usage. Dr. Ariyanayagam, Asst. Professor, Coordinator for this event. Around 10 faculty members from FXEC, 2 faculty members from SMTEC and 3 faculty members from SCADCET are benefited from this programme.



The poster is for a Faculty Development Programme organized by the Department of Mechanical Engineering at Francis Xavier Engineering College, an autonomous institution in Vannarpettai, Tirunelveli. The event is held on 29th March 2023, from 2:00 PM to 5:00 PM. The topic is 'Design using Onshape'. The resource person is Dr. P. Balamurugan, an Associate Professor in the Department of Mechanical Engineering at Kalasalingam University. The poster also features the college's logo and the names of the participating departments: FXEC, SMTEC, and SCADCET.

