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ENGINEERING COLLEGE
AN AUTONOMOUS INSTITUTION

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DEPARTMENT OF MECHANICAL ENGINEERING

MONTHLY NEWS – OCTOBER 2022

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 October 2022. 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.

SEMINAR

A “Be a Startup Founder & Start Earning While Learning” was organized by Entrepreneurship Development Cell & Institution’s Innovation Council in association with the Department of Mechanical Engineering on 17th October 2022 at 11:00 am to 12.00 pm. The program was held via offline mode. Dr.R.K.A.Bhalaji, AP/Mech inaugurated the session with welcome address.

Mr.P.Jamal Mohammed, Student Entrepreneur, Third Year Mechanical Engineering, FXEC was the resource person. First of all the resource person shared lot of ideas about how to become a startup founder with huge benefits and also based upon recent market trends. As well as he told the hints about how to face the obstacles in the beginning stage of startup. In addition to this, resource person shown graphical representation regarding startup hubs in India by city and, he indicated the rising startups in India such as oyo, flipkart, paytm etc. Finally, he revealed about his own startup and its background as well as shared the concepts regarding start earning while learning.

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Vannarpettai, Tirunelveli - 627 003.

INSTITUTION'S INNOVATION COUNCIL
Ministry of Education, Government of India

India Startup Day - Celebration Day Activity

17th
OCTOBER, 2022
12.00 PM

TOPIC
Be a Startup Founder & Start Earning While Learning

Organised by
Entrepreneurship Development Cell & Institution's Innovation Council

In association with
Department of Mechanical Engineering

RESOURCE PERSON

Mr. P. Jamal Mohammed
Student Entrepreneur,
Third Year Mechanical Engineering,
Francis Xavier Engineering College.

Co-ordinator
Dr. R.K.A. Bhalaji
Assistant Professor / MECH

Convener
Dr. R. Samuel Hansen
HoD / MECH

Dr. Lourdes Poobala Rayen
Director EDC and IC President

Dr. K. Jeyakumar
General Manager - Development

Dr. V. Velmurogan
Principal



PRODUCT DEVELOPMENT - ELECTRIC CAR

The department of mechanical engineering along with Innovation and Product Development applied lab team has developed Eco-friendly Electric car. It has 6 seating arrangement and approximate 750 kg load carrying capacity. We can ride up to 70 kilometers with a speed of 40 km/hour. A special customized Lithium Ferro Phosphate 60 Volts 30 Amps battery has used as power source, with high efficiency, durable and quick chargeable alternates to ordinary lithium-ion battery. We produce this vehicle design as simple, easy for maintenance and other accessories fittings with affordable budget (less than 1.5 lakhs) compared to other readily available vehicles in the market. We hope this car will be very useful for visitors and all the department people in our college campus. In future, there are modifications and improvements to be carried in the electric car as for the needful.

The first test ride made in the presence of our Honourable Chairman, Vice-Chair person, Dr. K.Jeya Kumar, GM (D), Mr. S.Krishana Kumar, GM (A), Director Applied Labs, Dr. V.Velumurgan, Principal & Dr. R. Samuel Hansen, Professor & Head of Department.

Mr.S.Sheik Sulaiman, AP/Mech, Innovation and product development Applied lab in-charge, Mr.J.Jeremy Jeba Samuel, AP/Mech, Manufacturing and Fabrication Applied lab in-charge, Mr. Kannan, Technician/Mechanical Labs and Mr. Muthu Manikandan, Technician/ Applied Labs have involved to complete this project.

