



Department of Mechanical Engineering
NEWSLETTER

2022

volume 1 , issue 4 June

**Excel
Engineering
College**



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ENGINEERING COLLEGE

DEPARTMENT OF
MECHANICAL ENGINEERING

NEWS LETTER

2022-23-Volume-1: Issue-4-JUNE

VISION OF THE DEPARTMENT

To create competitive manpower in the field of Mechanical engineering for the advantage of mankind.

MISSION OF THE DEPARTMENT

- To create a conducive learning environment to make student as competent engineers.
- To nurture the entrepreneurial ability among students.
- To maintain sustainable development for creative learning to serve the engineering society.
- To inculcate human values and sensitivity.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

Programme Educational Objectives (PEOs) are established through a consultation process. PEOs are broad statements that describe the career and professional accomplishments that the graduates should achieve three to five years after graduation. The Electronics and Communication Engineering programme graduates will

PEO 1: Graduate will have the ability to handle industrial challenges through advanced engineering technologies.

PEO 2: graduate expertise with essential technical, managerial and soft skills that make them to be professionally competent.

PEO 3: graduate expertise with essential technical, managerial and soft skills that make them to be professionally competent.

PROGRAMME SPECIFIC OUTCOMES (PSOS)

On completion of the B.E (Mech) degree the Electronics and Communication graduates will be able to

PSO 1: Ability to apply their knowledge to design and analyze by using software tools.

PSO 2: Engage them professionally in industries or as entrepreneurs in the field of manufacturing and design

PSO 3: Apply CAD/CAE tools to design and analyze the mechanical components

KEY FINDINGS IN MECHANICAL ENGINEERING

Mechanical Transistor for Logic-with-Memory Computing

- A new *mechanical transistor* (M-Transistor) was proposed that uses a metamaterial thermal channel as a “gate,” driving a nonlinear bistable soft actuator. This enables combining logic and memory (both volatile and non-volatile) in a mechanical, non-electrical device.
- It shows how circuits could be built (registers, logic gates) using purely mechanical bits (via thermal inputs), which could be useful in harsh, high-temperature or electromagnetic hostile environments.

ACADEMIC ACTIVITIES



Collaborate with ISTE conducted, Academic Guest Lecture on “**Generative Design of Components for Weight Reduction**” **Dr. Renold Elsen**, Department of Design and Automation, School of Mechanical Engineering, VIT, Vellore.

Collaborate with Indian society of Mechanical Engineers conducted, “**Industry Guest Lecture- Role of Engineers in the Era of Industry 4.0**” **Mr.N.Lakshminarasimhan**, General Manager- HRD, Brakes India Ltd.,- Chennai.



Collaborate with Indian society of Mechanical Engineers conducted one day Workshop “**Automotive Transmission**” **Mr.P.P.Gowtham**, Assistant Professor, Excel Hyundai Professional Center, Excel Engineering College.



Collaborate with Indian society of Mechanical Engineers conducted Seminar- **“Disruptions in the Automotive Industry Mr.Suppuraj.C** General Manager- Product Development, Ford Motor India, Chennai.

Collaborate with Society of Automotive Engineers Conduct a contest on **“Mr. Machinist” (Machining of component using Lathe)** **Dr.S.P. Vekatesan** Head of Department, Aeronautical Engineering, Excel Engineering College, Komarapalayam.



Collaborate with ISTE conducted Seminar on **“Accelerators – Opportunities for students & Faculties – Early stage Entrepreneurs”** **Mr. D. Deepak**, Manager Product Engineering, Amphicore Technologies Pvt. Ltd, Coimbatore.

STUDENTS ACHIVEMENTS



Elangovan S, a fourth- year student won a **first prize** in sheet metal at **SAE-Loyola Chennai**.



Gokul T, fourth-year student won **first prize** in sheet metal at **SAE Loyola Chennai**.



Nivas K. S, fourth-year student won **first prize** in sheet metal at **SAE Loyola Chennai**.

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