# NEWSLETTER 'ELECTIC'

#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



#### INTRODUCTION

The Department of Electrical and Electronics Engineering was established in 1999 with an undergraduate intake of 60 students.

Due to increasing demand and consistent academic growth, the intake was raised to 120 in the academic year 2004-2005 and further to 180 in 2011.

In the same year, the department introduced a postgraduate programme M.Tech in Power Electronics and Drives with an approved intake of 18 students. Since its inception, the department has focused on delivering quality education while adapting to technological advancements and industry needs.



The department offers a curriculum that blends core electrical engineering principles with emerging technologies. Subjects include smart grids, electric vehicles, embedded systems, digital signal processing, and renewable energy integration.

Regular workshops, hands-on training sessions, and industry collaborations ensure students receive practical exposure alongside theoretical knowledge. The department also offers consultancy and training services to industries, strengthening its engagement with the professional world

Faculty members are actively involved in research and have published papers in renowned journals like **IEEE**, **Elsevier**, and **Springer**. The department emphasizes innovation, ethical practices, and producing skilled graduates equipped to address real-world engineering challenges globally.

# VISION OF THE INSTITUTE

# MISSION OF THE INSTITUTE

To be globally recognized for excellence in quality education, innovation and research for the transformation of lives to serve the society.

**M1: Quality Education:** To provide comprehensive academic system that amalgamates the cutting-edge technologies with best practices.

**M2: Research and Innovation:** To foster value-based research and innovation in collaboration with industries and institutions globally for creating intellectuals with new avenues.

**M3: Employability and Entrepreneurship:** To inculcate the employability and entrepreneurial skills through value and skill-based training.

**M4: Ethical Values:** To instil deep sense of human values by blending societal righteousness with academic professionalism for the growth of society.

# VISION OF THE DEPARTMENT

# MISSION OF THE DEPARTMENT

To promote proficiency in the field of Electrical and Electronics Engineering by creating a stimulating environment for research, innovation and entrepreneurship

M1: Quality Education: To impart high quality technical education with problem solving capabilities by innovative pedagogy in emerging technologies.

**M2: Industrial and Societal Needs:** To cater the dynamic needs of the industry and society by strengthening industry-institute interaction.

**M3: Research and Innovation:** To nurture the spirit of research attitude by carrying out innovative technologies pragmatically.

**M4: Placement and Entrepreneurship:** To inculcate the professionalism in career by advancing synergetic skills to compete in the corporate world.

## PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

**PEO 1 Professional Knowledge**: To possessstrong educational foundation in Electrical and Electronics Engineering to attain successful career with professional responsibility

**PEO 2 Innovative Skills:** To enrich the skills to design and develop innovative solutions for engineering problems in a multidisciplinary environment

**PEO 3 Ethics:**To actively embrace leadership qualities for achieving professional skill with ethical values

**PEO 4 Adaptability**: To enhance intellectual competency along with technical skills by adapting to the current trends through eternal learning.

# PROGRAMME SPECIFIC OUTCOMES (PSOS)

**PSO1: Core Proficiency:** Utilize the engineering core knowledge to identify, formulate, design, and investigate the complex engineering problems of Power Electronics, Electrical Machines and Power Systems.

**PSO2: Cutting Edge Technologies:** Explore the new cutting-edge technologies in the field of Electric Vehicle, Automation, Artificial Intelligence, Robotics and Renewable Energy to compete in global market

**PSO3: Design and Evolution**: Capability to comprehend the technological advancements with the usage of modern design tools for analysing and designing systems to confront the rapid pace of industrial innovations.

### PROGRAMME OUTCOMES (POS)

**PO1: Engineering knowledge:** Applying knowledge of mathematics, science, engineering fundamentals, and specialization to the solution of engineering problems.

**PO2: Problem Analysis:**Identifying, formulating, and solving complex engineering problems by applying engineering, scientific, and technology principles.

**PO3: Design/Development of Solutions:** Designing solutions to complex engineering problems and creating systems, components, or processes.

**PO4: Conduct Investigations of Complex Problems**: Using research-based methods to conduct investigations of complex problems, including designing experiments, analyzing data, and interpreting results.

**PO5: Engineering Tool Usage:** Using relevant engineering tools, software, and technologies, including the use of modelling, simulation, and data analytics.

**PO6: The Engineer and The World:** Understanding the impact of engineering solutions on society and the environment, including the principles of sustainable development.

**P07: Ethics:**Understanding the principles of engineering ethics and applying these principles in realworld situations.

**PO8: Individual and Collaborative Team work:** Collaborating effectively with peers, stakeholders, and experts to accomplish shared goals.

**PO9: Communication:** Communicating effectively both orally and in writing with experts and the general public.

**PO10: Project Management and Finance:** Planning, managing, and delivering complex engineering projects within defined timeframes and budgets.

**PO11: Life-Long Learning:** Recognizing the importance of lifelong learning and engaging in continuous professional development.



#### FACULTY DEVELOPMENT PROGRAM

Faculties from Core Departments participated in Faculty Development Program on "Electric Vehicles" from 2<sup>nd</sup> to 5<sup>th</sup> July, 2024 Organized by Department of Electrical and Electronics Engineering under Industry Institute Collaboration in association with IEEE Student Branch & TVS Training & Services (A TVS Group Company).

#### **IEEE SB ACTIVITIES**

A Guest Lecture on "IoT Protocols for Electrical Engineers" was conducted on 10.08.2024, delivered by Dr. Krishna Prasad, Co-Founder & CEO of KanProKagno Innovation Private Limited





Mukeshkumar R, Arokia Anandu Prasanthu A, and Lalith Kumar S, third-year students from the Department of EEE, secured the First Prize with a cash award of ₹1,00,000/- for project development showcase and secured for IDEA Lab event held at AICTE, New Delhi



#### **ALUMINI MEET**

Department of EEE Conducted Alumni meet on 15<sup>th</sup> August 2024.

#### **GUEST LECTURES/WORKSHOPS**

Er.Coumarane, Additional chief manager, NLC, Neyveli, provided Guest Lecture titled "IoT Applications at Neyveli Lignite Corporation India Limited" on September 26<sup>th</sup> 2024. The session provided a valuable learning experience on real time project in NLC such as Smart Metering, Roof Top Solar, Township Smart Control, Street Light Control System, Bore Well Control System, Ambient and Weather Monitoring System.





#### TRAINING AND PLACEMENT

20 students from Electrical and Electronics
Engineering, Mechanical Engineering and Civil
Engineering were received Placement offer by Srinsoft
Engineering.



### **Students Activity**

An Origami session was conducted on 11.09.2024, where students participated in a two-hour creative workshop exploring the art of paper folding and showcased their imagination through unique and intricate designs.

## **NEWSLETTER**

**{JUNE 2024-OCT 2024}** 

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