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 realworld 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)

- **PO 1 (Engineering knowledge):** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO 2 (Problem analysis):** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **PO 3 (Design / development of solutions):** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO 4 (Conduct investigations of complex problems):** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO 5 (Modern tool usage):** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **PO 6 (The engineer and society):** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **PO 7 (Environment and sustainability):** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO 8 (Ethics)**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO 9 (Individual and team work):** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO 10 (Communication):** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO 11 (Project management and finance):** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi-disciplinary environments.
- **PO 12 (Life-long learning):** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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INDUSTRIAL VISIT

First-year EEE students visited Sri Ramakrishna
Transformers in December 2023 as part of their
industrial exposure program. The visit provided handson learning about transformer manufacturing, testing
procedures, and quality control processes. Students
gained practical insights into the working principles,
design aspects, and maintenance of transformers,
bridging the gap between theoretical knowledge and
real-world applications.



GUEST LECTURE

An Expert Lecture on "Electric Vehicle Career Opportunities" was conducted on 06.08.2023, providing students with insights into emerging roles and skills in the electric vehicle industry.



AWARD FROM CII AND EATON TEAM

EEE students receiving Awards and Certificates from CII and Eaton team for their innovative projects and outstanding performance, bringing pride to the department and the institution.

INVENTORS CHALLENGE 2023 - AICTE EVENT

EEE students were shortlisted and participated in the Inventors Challenge 2023 organized by AICTE, Arm Education, and STMicroelectronics at Delhi in November 2023. They presented their innovative solutions to real-world problems, demonstrating strong technical knowledge, creativity, and teamwork. The event provided them with valuable exposure to industry experts, cutting-edge technologies, and collaborative learning with peers from across the country.



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ALUMINI MEET

Department of EEE organized "ALUMNI MEET" on September 2023

GUEST LECTURES/WORKSHOPS

A Hands-on Training on "Installation of Inverter and Solar Panel" was conducted on 01.07.2023 for EEE students. The session covered solar energy fundamentals, panel installation, power station design, and maintenance practices, enhancing students' practical knowledge in renewable energy systems and photovoltaic technology.





TRAINING AND PLACEMENT (MOCK TEST)

The Department of EEE conducted various placement activities for final-year students, including training sessions, mock interviews, and workshops to enhance their skills and prepare them for recruitment.

ENGINEERING CLINIC

The Department of EEE conducted Engineering Club activities every Saturday, encouraging students to engage in hands-on projects, technical discussions, and skill-building exercises. These sessions helped enhance creativity, teamwork, and practical knowledge in various domains of electrical and electronics engineering.



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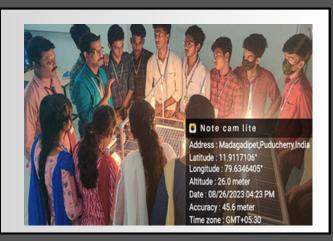


INDEPENDENCE PARADE EVENTS

The Department of EEE celebrated
Independence Day in August 2023 on the
college premises with great enthusiasm. The
event included flag hoisting, patriotic
speeches, and cultural performances by
students, fostering a spirit of unity, pride, and
respect for the nation

RENEWABLE ENERGY CLUB

The Renewable Energy Sources Club of the Department of EEE conducted a practical session on solar panel systems on 26th August 2023. Students actively participated in hands-on demonstrations, learning about solar panel components, wiring connections, and energy generation principles. The session enhanced their understanding of renewable energy technologies and promoted awareness of sustainable power solutions.





ELECTRIC VEHICLE CLUB

The Electric Vehicle Club of the Department of EEE conducted an interactive session on electric vehicle technology. The session covered the fundamentals of EV components, working principles, and charging infrastructure. Students gained insights into advancements in e-mobility, sustainable transportation solutions, and career opportunities in the electric vehicle industry.

SPORTS EVENTS

The EEE department Kabaddi team emerged victorious in the tournament, showcasing exceptional teamwork, strength, and strategic play. Their dedication, discipline, and sportsmanship brought pride to the department, inspiring fellow students to participate actively in sports and extracurricular activities.



NEWSLETTER

{JUNE 2023-DECEMBER 2023}

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