

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

NEWSLETTER- 2022-2023

About the Department:

The Department was started in the year 2008 with an objective of creating a leader in engineering education and research with the application of knowledge for uplifting the society globally. Initially, the Department was started with an intake of 60 students and later it was increased to 120 students in the year 2011. The Department inaugurated IEEE students' chapter in the year 2012. The faculty members are consistently doing well in teaching and research activities. The Department had well established and equipped laboratories like Electrical Machines Lab, Power Electronics Lab, Power System Simulation Lab, Microprocessor Lab & Measurements and Instrumentation Lab with equipment cost of Rs. 65 Lakhs. The Department provides exposure to the students with hands-on experience on various Electrical Engineering subjects to face the challenges of the modern corporate world and to mould them as responsible citizens of the country with a willingness to serve the society.

The Department established internal Library with 400 titles and IEEE volumes for the welfare of the Faculty members and students.

<u>VISION</u>

To create comprehensive electrical engineers to meet up the growing technological demands of the society.

<u>MISSION</u>

- **Higher Order Thinking:** To impart high quality education to help the students hone their professional skills.
- **Competency:** To improve the competencies of students and faculties on contemporary technologies through continuous improvement programs.
- **Continuous learning:** To undertake research on frontier areas of electrical and electronics engineering.
- Entrepreneurship: To imbibe the spirit of innovation and entrepreneurship among the students

Program Educational Objectives (PEOs)

- **Employability:** Graduates will have the ability to demonstrate skills in developing innovative ideas, and in providing effective solutions to complex engineering problems thereby being productive and participative global citizens
- **Higher Education:** Our graduates will have the ability and confidence to pursue higher education or exhibit professionalism in the career or take up entrepreneurial accomplishments.
- Entrepreneurship: Our graduates will have the technical competency to involve in multidisciplinary research within the suitable technological, global, societal, ethical, economical, environmental and organizational context.
- Ethical: Our graduates will engage themselves in life-long learning thereby keeping themselves abreast of the contemporary issues.

Program outcomes (POs)

POs	DESCRIPTION
P01	Engineering knowledge: An ability to apply the knowledge of mathematics and
	engineering fundamentals to provide solutions to complex Electrical Engineering problems
P02	Problem analysis: An ability to identify and analyse the problems on electrical engineering,
	and formulate the solutions appropriate to the problem through structured approach
P03	Design/development of solutions: An ability to design and develop software solutions to
	the problem with due considerations on socio-economical and environmental sustainability
P04	Conduct investigations of complex problems: An ability to design and conduct
	experiments, analyse and interpret data to provide valid conclusions and
	recommendations.
P05	Modern tool usage: An ability to use appropriate techniques and adapt modern electrical
	engineering simulation tools to solve intricate engineering problems
P06	The engineer and society: Apply logic informed by contextual knowledge to assess
	societal, health, safety, legal and cultural issues and recognise their responsibility relevant
	to the profession and explore the human side of engineering.
P07	Environment and sustainability: Understand the role of electrical engineers in society
	regarding social, cultural, environmental and global responsibilities for sustainable
	development.
P08	Ethics: Ability to understand and practice the professional, legal and ethical principles
	involved in the area of electrical engineering-
P09	Individual and team work: An ability to function effectively as a team member or a leader
	focusing on a common goal in multi disciplinary settings
P010	Communication: An ability to communicate effectively on technical activities both orally
	and in written form
P011	Project management and finance: An ability to apply the knowledge of engineering and
	management principles to manage projects in multi disciplinary environments
P012	Life-long learning: An ability to undertake self learning of contemporary issues and
	engage in lifelong learning

Programme Specific Outcome (PSO)

PSOs	Description
PS01	Products Development: An ability to design, analysis and to implement power
	electronics converters in renewable energy applications.
PSO2	Design Thinking: A capability to design and examine the power system and to solve the
	unit commitment with various constraints.

Staff Activities

- Dr. C. Shanmugasundram, Professor & Head/EEE, has Participated in the Five Day's Faculty Development Programme on "Electrical Vehicle Technologies-A Future Transportation Tool" organised by Department of Electrical and Electronics Engineering, Bangalore Institute of Technology from 28/11/2022 to 02/12/2022.
- Dr. C. Shanmugasundram, Professor & Head/EEE, has Participated in the Five Day's Faculty Development Programme on "Bio-Medical Sensor and Signal Processing" organised by Department of Electronics and Communication Engineering, Loyola Institute of Technology from 09/01/2022 to 13/01/2022.
- Dr. K. Sedhuraman, ASP/EEE, has Participated in the Five Day's Faculty Development Programme on "Electrical Vehicle Technologies-A Future Transportation Tool" organised by Department of Electrical and Electronics Engineering, Bangalore Institute of Technology from 28/11/2022 to 02/12/2022.
- Dr. K. Sedhuraman, ASP/EEE, has Participated in the Five Day's Faculty Development Programme on "Bio-Medical Sensor and Signal Processing" organised by Department of Electronics and Communication Engineering, Loyola Institute of Technology from 09/01/2022 to 13/01/2022.
- Mr.S.Rajkumar, AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Electrical Vehicle Technologies-A Future Transportation Tool" organised by Department of Electrical and Electronics Engineering, Bangalore Institute of Technology from 28/11/2022 to 02/12/2022.
- Mr.S.Rajkumar, AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Bio-Medical Sensor and Signal Processing" organised by Department of Electronics and Communication Engineering, Loyola Institute of Technology from 09/01/2022 to 13/01/2022.
- Mr.N.Amarabalan AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Electrical Vehicle Technologies-A Future Transportation Tool" organised by Department of Electrical and Electronics Engineering, Bangalore Institute of Technology from 28/11/2022 to 02/12/2022.
- Mr.N.Amarabalan AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Bio-Medical Sensor and Signal Processing" organised by Department of Electronics and Communication Engineering, Loyola Institute of Technology from 09/01/2022 to 13/01/2022.
- Mr.D.Muruganandhan AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Electrical Vehicle Technologies-A Future Transportation Tool" organised by Department of Electrical and Electronics Engineering, Bangalore Institute of Technology from 28/11/2022 to 02/12/2022.
- Mr.D.Muruganandhan AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Bio-Medical Sensor and Signal Processing" organised by Department of Electronics and Communication Engineering, Loyola Institute of Technology from 09/01/2022 to 13/01/2022.
- Mrs.R.Muthunagai AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Electrical Vehicle Technologies-A Future Transportation Tool" organised by Department of Electrical and Electronics Engineering, Bangalore Institute of Technology from 28/11/2022 to 02/12/2022.
- Mrs.R.Muthunagai AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Bio-Medical Sensor and Signal Processing" organised by Department of Electronics and Communication Engineering, Loyola Institute of Technology from 09/01/2022 to 13/01/2022.
- Mr.J.Vijaya Raghavan, AP/EEE, has Participated in the Five Day's Faculty Development Programme on "Electrical Vehicle Technologies-A Future Transportation Tool" organised by Department of Electrical and Electronics Engineering, Bangalore Institute of Technology from 28/11/2022 to 02/12/2022.
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PHOTO GLIMPSES OF SPECIAL LECTURES



Special lecture session titled **"High voltage DC transmission system"** by Dr.C.SHANMUGASUNDARAM, Professor & Head for III Year EEE students on 22-11-2022



Special lecture session titled **"Applications of power and distribution transformer"** by Dr.C.SHANMUGASUNDARAM, Professor & Head for IV Year EEE students on 13-10-2022



Special lecture session titled **"Optimization techniques of power System"** by Dr.K.Sedhuraman, Assot.Prof, for IV Year EEE students on 20-10-2022



Special lecture session titled **"Recent advances in battery management system"** by Mr.D.Muruganandhan, Asst.Prof for III Year EEE students on 08-11-2022



Special lecture session titled **"Two port network analysis and its applications"** by Mr.S.Rajkumar, Asst.Prof for II Year EEE students on 12-11-2022



Special lecture session titled **"Real time management applications in industry"** by Mr.S.Rajkumar, Asst.Prof for IV Year EEE students on 27-10-2022



Special lecture session titled **"Role of measuring instruments in power transmission system"** by Mr.D.Balaji, Asst.Prof for III Year EEE students on 18-10-2022



Special lecture session titled **"AI techniques application to power electronics"** by Dr.K.Sedhuraman, Assot.Prof, for III Year EEE students on 15-11-2022



Special lecture session titled **"Introduction to solar PV system"** by Mr.D.Muruganandhan, Asst.Prof for IV Year EEE students on 03-11-2022

DEPARTMENT ACTIVITIES:



Guest Lecture session titled **"Career Aspects for Electrical Engineers"** by **Mr.V.Hariharan, Director, SPACE ZEE Technologies Pvt Ltd, Chennai** on II, III & IV Year EEE students on 09.11.2022



Guest Lecture session titled **"Recent Advances and Opportunities in Electric Vehicles"** by **Mr.D.Durairaj,Technical Trainer, Break N Learn Technological Institute, Puducherry** for II,III & IV Year EEE students on 14.11.2022



Guest Lecture session titled **"Job and Career Aspects For Electrical Engineers"** by **Mr.P.Pouchepakaran, Director-Technical, LEDGEO Lights Pvt. Ltd, Puducherry** for II, III & IV Year EEE students on 16.11.2022



Guest Lecture session titled **"Electric Vehicle & Battery Management System"** by **Mr.Shanmuganandam.V, Director, Touch Solar Technologies, Puducherry** for II, III &IV Year EEE students on 16.11.2022



Guest Lecture session titled **"Electric Vehicle: Challenges and Opportunities"** by **Mr.G.K.Sathish Kumar, Deupty Manager-EV(HUB MOTORS),Lucas-TVS Pvt Ltd Puducherry** for II, III &IV Year EEE students on 26.11.2022



One Day Internal Workshop Titled "**INTRODUCTION TO ELECTRICAL CAD**" by Mrs.R.PRIYA, AP/EEE & Mr.J.VIJAYARAGHAVAN, AP/EEE, Conducted for II Year EEE Students On 12.10.2022



One Day Internal Workshop Titled **"ELECTRICAL CIRCUITS USING SIMULATION SOFTWARE**" by Mr.D.BALAJI, AP/EEE & Mr.N.AMARABALAN, AP/ EEE, Conducted for III Year EEE Students On 10.11.2022



One Day Internal Workshop Titled "HANDS-ON WORKSHOP USING MATLAB & SIMULINK- ADVANCE CONVERTER" by Dr.K.SEDHURAMAN, Asso. Prof. / EEE & Mr.S.RAJKUMAR, AP/EEE, Conducted for for IV Year EEE Students On 18.11.2022



II year EEE students has visited the **"AAVIN, Villupuram"** on **08th November 2022** as part of Industrial Visit Activity



III year EEE students has visited the **"AAVIN, Villupuram"** on **08th November 2022** as part of Industrial Visit Activity



II year EEE students has visited the **"GENLITE Engineering Pvt Ltd, Chennai"** on **15th November 2022** as part of Industrial Visit Activity