**Department of Electrical and Electronics Engineering** KPR Institute of Engineering and Technology



# NEWSLETTER





# **ELECTROBLITZ**

**VOLUME 9, ISSUE 10 April 2024** 

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# **VISION AND MISSION OF THE DEPARTMENT**

## Vision:

To be the **centre of higher learning** in the field of Electrical and Electronics Engineering by educating the students to meet the **global challenges** with **professional ethics and social consciousness**.

## **Mission:**

- Providing technical, intellectual and ethical environment to the students through knowledge centric education and research.
- Collaborating with industries in the vicinity, nationally and internationally for exposure and innovation.
- Enabling the students to serve the society through prolific ideas.

## **Programme Educational Objectives (PEOs)**

The Graduates of Electrical and Electronics Engineering will

- **PEO1** Possess an adequate knowledge to meet the needs of the stakeholders and excel in their chosen profession with good communication and managerial skills.
- **PEO2** Adapt to emerging technologies and practice their profession confirming to ethical and human values.
- **PEO3** Continuously improve the habit of self-study through professional development activities.

#### **Programme Outcomes (POs)**

Graduates of Electrical and Electronics Engineering will be able to:

- **PO1 Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO2 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.
- **PO3 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.



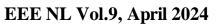
- **PO4 Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO5 Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **PO6 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.
- **PO7 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.
- **PO8 Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO9 Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10 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.
- **PO11 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 multidisciplinary environments.
- **PO12 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

## **Programme Specific Outcomes (PSOs)**

Graduates of Electrical and Electronics Engineering will be able to:

- **PSO1** Develop skills to the expectations of the dynamic industrial practices in Electrical Engineering and allied areas.
- **PSO2** Analyze, design, and integrate various renewable energy sources to meet the energy demand.

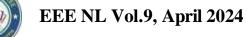




# FACULTY DETAILS

S.NO	NAME OF THE FACULTY	DESIGNATION	
1.	Dr.K.Mohana Sundaram	Professor & Head	
2.	Dr.V.Kumar Chinnaiyan	Professor	
3.	Dr.J.Karpagam	Professor	
4.	Dr.V.S.Chandrika	Associate Professor	
5.	Dr.P.Pandiyan	Associate Professor	
6.	Dr.A.Karthick	Associate Professor	
7.	Mr.S.Vivekanandan	Assistant Professor (Sl.G)	
8.	Mr.G.Saravanan	Assistant Professor (Sl.G)	
9.	Dr.R.Sampathkumar	Assistant Professor (Sl.G)	
10.	Dr.C.Pazhanimuthu	Assistant Professor (Sl.G)	
11.	Dr.D.Sathish Kumar	Assistant Professor (Sl.G)	
12.	Dr.I.Baranilingesan	Assistant Professor (Sl.G)	
13.	Dr.S.Ravindran	Assistant Professor (Sl.G)	
14.	Dr.A.Matheswaran	Assistant Professor (Sl.G)	
15.	Dr.V.Parimala	Assistant Professor (Sl.G)	
16.	Dr.A.Rakesh Kumar	Assistant Professor (Sr.G)	
17.	Dr.N.Prakash	Assistant Professor (Sr.G)	
18.	Dr.Rangu Seshu Kumar	Assistant Professor (Sr.G)	





19.	Ms.B.Lalitha	Assistant Professor (Sr.G)
20.	Ms.R.Revathi	Assistant Professor (Sr.G)
21.	Mr.A.Mohamed Ibrahim	Assistant Professor (Sr.G)
22.	Mr.P.Ravikumar	Assistant Professor (Sr.G)
23.	Mr.V.Kamalkumar	Assistant Professor (Sr.G)
24.	Mr.C.J.Vignesh	Assistant Professor (Sr.G)
25.	Mr.C.Dinesh	Assistant Professor (Sr.G)
26.	Mr.K.Balamurugan	Assistant Professor
27.	Mr.M.Mohana Sundaram	Assistant Professor
28.	Mr.G.Xavier Richards	Assistant Professor

#### SUPPORTING STAFF

S.NO	NAME OF THE STAFF	DESIGNATION
1.	Mr.M.Vinoth Kumar	Technical Officer
2.	Mr.R.Vinoth Kumar	Technical Officer
3.	Mr.C.Gobalakrishnan	Lab Technician
4.	Mr.M.Muthukumar	Lab Instructor
5.	Mr.M.Karuppusamy	Lab Technician
6.	Ms.R.Suvalakshmi	Lab Technician
7.	Mr.G.Siva Sankar	Technical Assistant
7.	Ms.P.Parameshwari	Office Assistant



KPRIET LEARN BEYOND

#### EEE PARENTS MEETING

The Department of Electrical and Electronics Engineering of KPRIET convened the parents' meeting on 27.04.2024 (Saturday) at 02.00 PM in IV EE B Classroom. Ms. R. Revathi, Assistant Professor (Sr.G), Department of Electrical and Electronics Engineering welcomed the parents. Dr. K. Mohana Sundaram, Professor and Head, presided over the function and presented the vision, mission and salient features of the department and institution to the parents. Mr. Barathan Kuppusamy, Founder & CEO, Ozotec Automobile Private Limited, Coimbatore was invited for the program and he delivered the chief guest address. Ms. B. Lalitha, Assistant Professor (Sr.G), delivered the vote of thanks. Points discussed by the Department HoD to the Parents:1. HoD disseminated the vision and mission of the department to all the parents.2. HoD displayed the status of NIRF Ranking of the institute.3. HoD briefed about the progress made by the student in various events like online course certifications in department, NPTEL courses, project presentation for the knowledge enhancement of both faculty members and students. 4. HoD explained about the ongoing training and placements classes for the students Viz. Full stack, Aptitude training and Soft Skills.5. HoD shared the placement details in the top recruiters like Schneider Electric, ABB, L&T;, Virtusa, Hexaware, BSH etc, in campus and also explained about the internship opportunities at ABB, Siemens, Ashok Leyland, etc.6. HoD shared the progress about the ongoing classes of the current academic year 2023-2024 (Even Sem) and insisted the parents to monitor their wards attendance on daily basis.7. HoD insisted the parents to motivate their wards to participate in curricular and extracurricular events in the reputed institutions within the state and outside the state too.8. HoD shared that the students are motivated and constantly encouraged to attend GATE coaching and given exposure about the scholarship for PG at national and international universities.9. HoD requested the parents to support the students for spending extra hours in laboratories to equip themselves in core training and project-based learning.10. Parents are requested to monitor the progress of their ward twice in month by communicating with the respective faculty mentors.









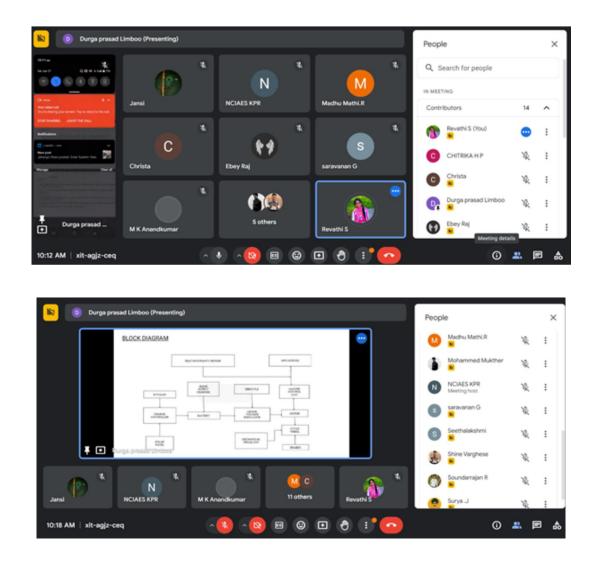


#### **CONFERENCE**

The Department of Electrical and Electronics Engineering of KPRIET organized the ninth national conference on Innovations and Advancements in Electrical Sciences (NCIAES' 24) on April 27, 2024. A heart-warming welcome remark was delivered by Dr. G. Saravanan, Assistant Professor (Sl. G), Department of EEE. Dr. K. Mohanasundaram, Professor and Head of Department of EEE presided over the function and delivered the conference keynote address. The conference accomplishment on recent trends in the field of Electrical, Electronics, Communication, and Computer Science Engineering. This conference served as a platform for scholars, faculty, and industrialists to share knowledge and discuss recent advancements in electrical and allied engineering domains. The event likely included technical article presentations, panel discussions, and networking opportunities focused on themes such as green energy, smart systems, and electric vehicles. This forum provided an opportunity for young budding engineers to exchange ideas, collaborate on projects, and contribute to the progress of the field. The NCIAES' 24 concludes with a vote of thanks delivered by Dr. I. Baranilingesan Assistant Professor (Sl. G), Department of EEE, KPRIET.







#### **GUEST LECTURE ON MORE ELECTRIC AIRCRAFT**

The Department of Electrical and Electronics Engineering of KPRIET was organized the expert talk on More Electric aircraft for II and III year EEE students. HOD-EEE welcomed the guest speaker Mr. Ashok Kumar Thirunarayana, Sr. Principal Engineer, Collins Aerospace, Bangalore .The guest delivered the lecture starting with the details of the Collins Aerospace and the importance of Hybrid electric aircraft and more electric aircraft. He explained the role of electrical engineer in designing the aircraft. The future projections on More electric aircraft by NASA and the motor specifications used in More electric aircraft were well explained. The frequency range maintained in the aircraft were explained by the guest. The CAGR of More electric aircraft for the next generation was discussed and the overall cost comparison between Hybrid electric aircraft and more electric aircraft were discussed. The deployment of aircraft will take another 10 years to make available in the market. The III year students interacted with guest regarding the scope of more electric aircraft and the motor used other than PMSM. The II year students asked about the software involved in designing the aircraft. Finally the program ended with vote of thanks by Dr.Baranlingesan







Department of Electrical and Electronics Engineering

organizes an

**Expert Lecture on** 

#### **More Electric Aircraft**

08.04.2024 | 10.30 am to 12.30 pm



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**Resource Person** 

Mr. Ashok Kumar Thirunarayana Sr Principal Engineer Collins Aerospace,Bangalore











#### **EXPERT LECTURE ON "SMART SENSORS FOR AUTOMOTIVE INDUSTRY"**

The Department of Electrical and Electronics Engineering organized expert lecture on "Smart Sensors for Automotive Industry" for the third year EEE students on 06/04/2024. A heart-warming welcome was delivered by Prof. R. Revathi, AP (Sr.G)/EEE.Er. S. Sriramprakash, Senior Software Engineer, ECD – Powertrain, Bosch Global Software Technologies Limited, Coimbatore has been invited as a resource person to deliver the lecture on smart sensors. The session provided a comprehensive overview of the latest developments and applications in this rapidly evolving field. Attendees gained valuable insights into the role of smart sensors in enhancing vehicle safety, performance, and efficiency, as well as the challenges and opportunities associated with their implementation. The lecture served as a platform for knowledge exchange and collaboration among automotive engineers, researchers, and industry professionals, fostering innovation and advancement in the automotive sector. Industry insights and trends were highlighted, including the increasing demand for LiDAR and camera-based sensors in autonomous vehicles, as well as the growing emphasis on data analytics and connectivity solutions. The session was an eye opening for all the participants. The session was ended with vote of thanks.











#### EXPERT LECTURE ON "GATE PULSE GENERATION FOR THE POWER CONVERTERS USING DSPACE 1104"

The Department of Electrical and Electronics Engineering organized expert lecture on "Gate Pulse Generation for the Power Converters using dSPACE 1104" for the students, teaching and non-teaching staffs on 06/04/2024. A heart-warming welcome was delivered by Prof.R.Revathi, AP (Sr.G)/EEE and Dr.K.Mohana Sundaram, Prof & Head/EEE addressed the gathering and shared the importance and opportunities of dSPACE software in power electronics field. Dr. G. Arunkumar, Associate Professor Senior, Department of Energy and Power Electronics, School of Electrical Engineering (SELECT), Vellore Institute of Technology, Vellore has been invited as a resource person to deliver the lecture on gate pulse generation for power converters using ds1104. He has shared his personal experience about how to record pulses using DS1104. He shared the data sheet and software tools available in dSPACE software. He also delivered the applications of dSPACE software in power grid, Micro lab box and its features, Control desk and RTI blockset and Rapid control prototyping. During the demo session, he demonstrated how to generate PWM signals for controllers and how to interface the hardware using ADC & DAC channels. The session was an eye opening for all the participants. The session was ended with vote of thanks.







# Faculty Participation in FDP/Seminar/Workshop/Orientation Program

S. No	Faculty Name	Event Name	Name of the Organization	Duration
1.	Saravanan G	NCICE 2024	P.A College of Engineering and Technology	16-04-2024
2.	Mohamed Ibrahim A	Load Flow Analysis using ETAP	Power Projects	28-04-2024
3.	Mohamed Ibrahim A	Harmonic Analysis	Power Projects	14-04-2024
4.	Chandrika V S	IEEE Sponsored 2024 International Conference on Cognitive Robotics and Intelligent Systems (ICC - Robins)	KPRIET	17-04-2024
5.	Parimala V Strategies for Writing High Quality Paper and Research Proposals		S.A. Engineering College	10-04-2024

## **Students Participation in**

## **FDP/Seminar/Workshop/Orientation Program**

S. NO	STUDENT NAME	YE AR	EVENT NAME	VENUE
1.	ABISHEK K	III	WORKSHOP ON ELECTRIC AND HYBRID VEHICLE	KPRIET
2.	BANUPUTRA B V K	III	PRODUCT EXPO - LUNARA'24	BANNARI AMMAN INSTITUTE OF TECHNOLOGY
3.	VELMURUGAN C	III	INNOVATION IN COMMUNICATION AND ELECTRICAL DRIVES	P.A COLLEGE OF ENGINEERING TECHNOLOGY
4.	GOWSHICK M S	III	INNOVISION	RVS COLLEGE OF ENGINEERING AND TECHNOLOGY
5.	JAYA SHALINI B	III	INOVISION 2K24	RVS COLLEGE OF ENGINEERING AND TECHNOLOGY
6.	MARIYA ASHILE K	III	MECHNOTRON 2K24	COIMBATORE INSTITUTE OF TECHNOLOGY
7.	PREETHI S	III	MECHNOTRON 2K24	COIMBATORE INSTITUTE OF TECHNOLOGY



8.	SHESAN K	III	GUSTO 2024	GOVERNMENT COLLEGE OF ENGINEERING
9.	SOWKANTHIKA V K	III	MECHNOTRON	CIT
10.	SWETHA R	III	INNOVISION 2K24 - PAPER PRESENTATION	RVS COLLEGE OF ENGINEERING AND TECHNOLOGY
11.	SWETHA R	III	INNOVISION 2K24 - TECH QUIZ	RVS COLLEGE OF ENGINEERING AND TECHNOLOGY
12.	VARUN S K	III	AWARENESS ABOUT NDL (NATIONAL DIGITAL LIBRARY )	PSV COLLEGE OF ENGINEERING AND TECHNOLOGY
13.	MOVIKA P	III	COURSERA	KPRIET
14.	NANDANA A	III	ELECTRIC AND HYBRID VEHICLE TECHNOLGY	KPRIET
15.	NANDANA A	III	GREEN OLYMPAID FOR YOUTH	MINISTRY FOR EDUCATION
16.	NYARIRI ASSEL T	III	PANDAS IN PYTHON	KAGGLE
17.	NYIKAVARANDA HAPPYMORE R	III	SIMULINK ONRAMP	KPRIET
18.	NYIKAVARANDA HAPPYMORE R	III	MATLAB ONRAMP	MATHWORKS
19.	RAJA NANTHIKA K V	III	ELECTRIC AND HYBRID VEHICLE TECHNOLOGY	KPRIET
20.	SESAMWA TATENDA	III	SPORTS DAY FOOTBALL	KPRIET
21.	SESAMWA TATENDA	III	SPORTS DAY ATHLETICS	KPRIET
22.	SUBHASHINI K	III	STASTICS ONRAMP	MATLAB
23.	SUBHASHINI K	III	INTRODUCTION TO MICROSOFT EXCEL	COURSERA
24.	SUBHASHINI K	III	CERTIFICATION	COURSERA
25.	MAHESH RAJAR A	III	GUSTO 2024	GOVERNMENT ENGINEERING COLLEGE ERODE

