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



NEWSLETTER





ELECTROBLITZ

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April 2023

-444

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INDEX

S.No.	Contents						
1	Vision and Mission	1					
2	PEOs POs and PSOs	2					
3	Faculty Details	3					
4	Association Activities						
5	Publication by the Faculty Members						
6	List of Eminent Academicians / Scientists Visit	13					
6	Faculty Participation in FDP/Seminar/Workshop/Orientation Program	13					
7	Student's Participation in FDP/Seminar/Workshop/Orientation Program	14					
8	Students Placement Details	16					





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	Gobalakrishnan Lab Technician	
4.	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	

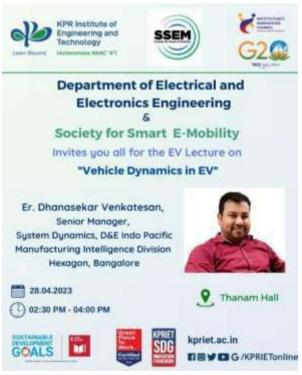




ASSOCIATION ACTIVITIES

EXPERT TALK

The department of Electrical and Electronics Engineering organized the expert talk on 28/04/2023. Dr. A Karthick, Asso. Prof. of EEE Dept, welcoming the guests in the Thanam Hall. The guests are Shri Dhanasekar Venkatesan Senior Manager – System Dynamics, D & E Indo-Pacific, Manufacturing Intelligence Division, Hexagon and Shri S M Manoharan, Executive Director of SSEM. The felicitation address given by Dr. K. Mohana Sundaram, Head of EEE deaprtment. Further, "Vehicle Dynamics in EV" expert talk by Shri Er Dhanasekar Venkatesan Senior Manager. Electric vehicles (EVs) have unique vehicle dynamics compared to traditional internal combustion engine (ICE) vehicles due to their distinct powertrain systems. The key difference is that EVs use electric motors to generate torque, whereas ICE vehicles use combustion engine. Overall, EVs have unique vehicle dynamics that offer advantages over ICE vehicles in terms of acceleration, energy efficiency, and handling. However, manufacturers must also consider the weight and placement of the battery pack and the behavior of regenerative braking to optimize the vehicle's performance. Instant Torque: Electric motors can generate maximum torque at zero RPM, providing instantaneous acceleration. This means that EVs can accelerate faster than ICE vehicles, which can give drivers a different driving experience. Battery Weight: The battery pack of an EV can be a significant portion of the vehicle's weight, which affects the vehicle's handling and braking. Car manufacturers must find a balance between battery capacity and weight to optimize the vehicle's performance. He also provided significant insights into the EV industry and interacted with faculty and students. At the end, the vote of thanks was offered by Dr A Rakesh Kumar, Asst. Prof, EEE Dept.









WORLD'S LARGEST CLIMATE CLOCK ASSEMBLY AND DISPLAY EVENT

Energy Swaraj Foundation (ESF) invited our organization to Become Climate Clock Centre for World Record Event - Global Climate Clock Assembly and Display event, jointly with Atal Innovation Mission (AIM) – NITI Aayog and All India Council for Technical Education (AICTE). KPRIET participated in the event on 22/04/2023 on the occasion of Mother Earth Day. Around 25 participants took part in Asia Book of Records and India Book of Records. The Event started with the welcome address by Dr. K. Mohana Sundaram, Professor and Head, Department of Electrical and Electronics Engineering and has given the instructions to all the participants about the event. About 25 participants were participated and they have given sufficient time to complete the clock assembly. More clarifications were given to all the participants during the event about the clock assembly. The participants from all years of study were interestingly attended the event. The resource person Prof. Chetan Singh Solanki (Solar Man of India) delivers the speech on understanding of energy generation, its consumption, its use, misuse and inefficient use, opportunities to conserve energy and generate clean energy. The session is enjoyable and engages with participants by means of exercises and simple quizzes. Energy Literacy Training would help individuals as well as institutions to achieve Sustainable Development Goals (SDGs) 7, 12 and 13. The participants were given the good feedback about the event. They really enjoyed the event in taking up the clock assembly. The event was concluded with vote of thanks by Prof. R. Revathi, Assistant Professor, Department of Electrical and Electronics Engineering.



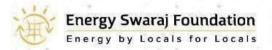












World Record Event

Global Climate Clock Assembly and Display Event

















ELECTRO BEATS'23

The Electro Beats'23, organized by the Department of Electrical and Electronics Engineering, took place on 12/04/2023. The event was coordinated by Mr. C. Vikash, a student member, who welcomed the gathering and ensured the smooth flow of the events. The festival brought together renowned DJs, artists, and passionate music lovers to create an unforgettable experience. With a diverse lineup of performers, captivating visual displays, and state-of-the-art sound systems, Electro Beats'23 provided an extraordinary atmosphere of music, dance, and community. The association student secretary award the best performer of each event and Ms . R . Kavipriya expressed appreciation to all involved in making the event a success . Highlights: Diverse Performers: Electro Beats'23 featured a diverse range of performers, including DJs and artists. Their captivating performances entertained the audience and added to the vibrant energy of the event. Immersive Visual Displays: The event showcased immersive visual displays that complemented the music. Through the creative use of lighting effects, and visual projections, the visual displays enhanced the overall experience for attendees. Cutting-edge Sound Systems: Electro Beats'23 utilized cutting-edge sound systems to deliver a high-quality audio experience. The advanced technology ensured that the music was crisp, clear, and powerful, creating an immersive environment for music enthusiasts. SDG3 Events: The SDG 3 Event served as a platform for meaningful discussions, sharing of experiences, and the identification of key actions to advance global health and well-being.









GUEST LECTURE ON RECENT TRENDS IN INDUSTRIAL DRIVES AND ITS CONTROL TECHNIQUES

The Department of Electrical and Electronics Engineering have organized a guest lecture on Recent trends in Industrial Drives and its control Techniques on 12/04/2023 from 10.00AM to 11.30AM at Veena hall in order to enrich the practical skills for electrical students. The student of third year EEE Ms. E. Divya welcomed the gathering and Assistant Professor (Sl.G) Dr. V. Parimala felicitated the gathering. The resource person Er. R. Sakthivishnu, Hardware lead, Versa Drives Private limited, Coimbatore delibrated the sessions and gave glimpse about, Motor controller - AC, DC, servo, and stepper, each having an input power type modified to the desired output function to match with an application Textile winding machine - A winding machine or winder is a machine for wrapping string, twine, cord, thread, yarn, rope, wire, ribbon, tape, etc. onto a spool, bobbin, reel, etc Power factor Meter - The power factor meter measures the power factor of a transmission system.





The power factor is the cosine of the angle between the voltage and current. Frequency drive - A variable-frequency drive is a device used in a drive system consisting of the three main sub-systems. Fan Accessories Nearly 121 students have benefited. He shared his own experiences and ignited the knowledge on drives and control techniques. The session was concluded with the vote of thanks delivered by the student Ms. Dhivya Dharshini, From his lecture students have learnt about the industrial needs for the young budding engineers. Resource Person: Er. R. Sakthivishnu Hardware lead, Versa drives Private limited, Coimbatore Faculty Coordinators: Dr. R. Sampathkumar, AP (Sl.G) / EEE, KPR Institute of Engineering and Technology, Coimbatore Dr. V. Parimala, AP (Sl.G) / EEE, KPR Institute of Engineering and Technology, Coimbatore.









EXPERT TALK

The department of Electrical and Electronics Engineering in association with students affairs conducted expert talk on 05/04/2023 with the resource person of P.S.Kumar, Executive Director, Prithivi Grow Care Private limited, Business and management consultancy, Chennai at Raagam Hall in KPRIET with the entitled as "Increasing Global Competitiveness for Engineering students". Dr.PSK has 30 Years Corporate Experience in Marketing and in Top Management Functions. The students from all the disciplines have participate from both II and III years. The resource person shared his life time experience and the opportunities in world wide for the engineering students. Head of the Department Dr.K.Mohanasundaram welcomed the resource person and all the Head of the Departments, faculty members and all the students. Dr.U.S.Ragupathy delivered the presidential address on behalf of Head of the Institute. The resourse person deliberated the following points for the students community regarding the international exposure and career opportunities in abroad. NLP - Neuro Linguistic Programming Industry 5.0 Building Business Plans Win-Win Negotiation Lead by Transforming Achieve Your Dreams Success Smart Methods Market & Marketing Research Success Skills Development Success Qualities Development Communication Skills Development 360 Degree Personal Transformation 360 Degree Business Transformation Students have close interaction with the resource person and networked with him to enhance the personal development. During the Q&A, students have interacted and clarified their doubts and thanked for his valuable suggestions. Prof.C.Dinesh - Assistant Professor(Senior Grade)/EEE delivered Vote of thanks and program ended with National Anthem.







Publication by the Faculty Members

- 1. Dr.V.Parimala, "Improving the Maximum Power Point Tracking in Wind Farms with PID and Artificial Intelligence Controllers for Switched Reluctance Generators" International Conference on Futuristic Technologies (INCOFT), April 2023.
- 2. Dr.A.Karthick "Agrivoltaic: A Strategic Assessment Using SWOT and TOWS Matrix", Energies, Volume 16, Issue 8, April 2023.





List of Eminent Academicians/Scientists Visit

S.No.	Name and Designation	Organization
1	Mr. Dhanasekar Venkatesan Senior Manager - System Dynamics	D & E Indo-Pacific, Manufacturing Intelligence Division, Hexagon
2	Mr. S.M. Manoharan Executive Director	Society for Smart E-Mobility (SSEM)
3	Er. R. Sakthivishnu, Hardware lead	Versa Drives Private limited, Coimbatore
4	Mr. P.S.Kumar, Executive Director	Prithivi Grow Care Private limited, Business and Management Consultancy, Chennai

Faculty Participation in FDP/Seminar/Workshop/Orientation Program

S. No	Faculty Name	Type of the Event	Event Name	Name of the Organization	Duration of the Event
1	Dr.C.Pazhanimuthu	Online Course	Electrical Power Distribution	Coursera	12/04/2023
2	C.J.Vignesh	Coursera	Fundamental Of Financial And Management	Politecnico di Milano, Italy	13/04/2023
3	Dr.C.Pazhanimuthu	Webinar	Real Time Case Study Using Etap	Power Projects, Chennai	16/04/2023
4	Dr. Rakesh Kumar	STTP	Cross-Cutting Issues- Dealing & Deliberations	Bajaj Institute of Technology, Wardha	18/04/2023 - 21/04/2023
5	Dr.C.Pazhanimuthu	Online Course	Introduction to Python Fundamentals	Coursera	21/04/2023
6	Dr.C.Pazhanimuthu	Online Course	Python for Data Analysis: Pandas & Numpy	Coursera	22/04/2023
7	Dr.C.Pazhanimuthu	Online Course	Python for Data Visualization- Matplotlib & Seaborn	Coursera	24/04/2023



8	Dr.C.Pazhanimuthu	Online Course	Python Data Structures	Coursera	24/04/2023
9	Dr.C.Pazhanimuthu	Online Course	Build a Python Gui With Tkinter	Coursera	25/04/2023
10	Dr.C.Pazhanimuthu	Online Course	Getting Started with Power Bi Desktop	Coursera	26/04/2023

Students Participation in FDP/Seminar/Workshop/Orientation Program

S. No	Student Name	Year	Event Name	Venue	Prize
1	Mr.P. R.Dwarakan,	II	Technical Event	Coimbatore Institute of Technology, Coimbatore	Second
2	Mr.M.Joseph Bharath	II	Technical Event	Coimbatore Institute of Technology, Coimbatore	Second
3	Mr.S.Deepan Kumar	II	National Level Technical Event Wavez'23	IIT, Madras	Second
4	Mr.S.Deepan Kumar	II	National Level Technical Event Wavez'23	IIT, Madras	Third
5	Mr.R.Alagar Samy	II	Paper Presentation	Hindustan College of Engineering and Technology, Coimbatore	First
6	Mr.R.Gowtham	II	Paper Presentation	Hindustan College of Engineering and Technology, Coimbatore	First
7	Mr.S.Sukant	II	Idea Hackathon	Amal Jyothi Engineering College, Kottayam	First Place with Cash Prize of Rs.10000
8	Mr.S.Nidhin	II	Idea Hackathon	Amal Jyothi Engineering College, Kottayam	First Place with Cash Prize of Rs.10000
9	Mr.S.Sukant	II	Business Pitch Event	Amal Jyothi Engineering College, Kottayam	Second Place with Cash Prize of Rs.5000
10	Mr.S.Nidhin	II	Business Pitch Event	Amal Jyothi Engineering College, Kottayam	Second Place with Cash Prize of Rs.5000
11	Mr.S.Sukant	II	Tech Expo	Amal Jyothi Engineering College, Kottayam	First Place with Cash Prize of Rs.10000
12	Mr.S.Nidhin	II	Tech Expo	Amal Jyothi Engineering College, Kottayam	First Place with Cash Prize of Rs.10000

13	Mr.S.Deepan Kumar	II	Robo Race	Adithya Institute of Technology, Coimbatore	First
14	Mr.P.Dhanraj	II	Robo Race	Adithya Institute of Technology, Coimbatore	First
15	Mr.V.Gowtham	II	Robo Race	Adithya Institute of Technology, Coimbatore	First
16	Mr.A.Abishek	II	Robo Race	Adithya Institute of Technology, Coimbatore	First
17	Mr.S.Keerthi Ragavendran	II	Annual Day Awards	KPRIET, Coimbatore	Academic Toppers
18	Ms.S.Harishmitha	II	Annual Day Awards	KPRIET, Coimbatore	Academic Toppers
19	Mr.S.Nidhin	II	English Oratorical Competition	KPRIET, Coimbatore	Third
20	Mr.K.Muthukumar	III	Project Presentation	Hindusthan College of Engineering and Technology, Coimbatre	First
21	Mr.M.Rajesh Kumar	III	Project Presentation	Hindusthan College of Engineering and Technology, Coimbatre	First
22	Ms.S.Salvini	III	Project Presentation	Hindusthan College of Engineering and Technology, Coimbatre	First
23	Mr.C.Palaniraja	III	Circuit Debugging	Hindusthan College of Engineering and Technology, Coimbatre	First
24	Mr.M.Sakthi	III	Circuit Debugging	Hindusthan College of Engineering and Technology, Coimbatre	First
25	Mr.S.Krishna	III	Innovsense 2023	KPRIET, Coimbatore	Second Place with Cash prize of Rs.25000
26	Mr.S.Mithunesh	III	Innovsense 2023	KPRIET, Coimbatore	Second Place with Cash prize of Rs.25000
27	Mr.V.S.Agassh	III	Innovsense 2023	KPRIET, Coimbatore	Second Place with Cash prize of Rs.25000
28	Mr.A.Harish	III	Innovsense 2023	KPRIET, Coimbatore	Second Place with Cash prize of Rs.25000
29	Mr.S.Kiran	III	Innovsense 2023	KPRIET, Coimbatore	Second Place with Cash prize of Rs.25000
30	Mr.J.Santhoshraj	III	Project Expo	Coimbatore Institute of Technology, Coimbatore	First
31	Mr.J.Saran	III	Project Expo	Coimbatore Institute of Technology, Coimbatore	First
32	Mr.S.Vijaya Raghavan	III	Project Expo	Coimbatore Institute of Technology, Coimbatore	First



33	Mr.M.Rajesh Kumar	III	Tech Fest 2023	Akshaya College of Engineering and Technology, Coimbatore	First Place with Cash prize of Rs.1000
34	Mr.K.Muthukumar	III	Tech Fest 2023	Akshaya College of Engineering and Technology, Coimbatore	First Place with Cash prize of Rs.1000
35	Mr.M.Sakthi	III	Tech Fest 2023	Akshaya College of Engineering and Technology, Coimbatore	First Place with Cash prize of Rs.1000
36	Mr.P.Jones Barnabas	III	Annual Day Awards	KPRIET, Coimbatore	Academic Toppers
37	Ms.M.Swetha	III	Annual Day Awards	KPRIET, Coimbatore	Academic Toppers
38	Mr.A.Manikandan	IV	Annual Day Awards	KPRIET, Coimbatore	Academic Toppers
39	Ms.E.Radhika	IV	Annual Day Awards	KPRIET, Coimbatore	Academic Toppers
40	Ms.R.Kavipriya	IV	Annual Day Awards	KPRIET, Coimbatore	Best Outgoing Student
41	Mr.V.Aravind	IV	Annual Day Awards	KPRIET, Coimbatore	Best Student in Co-curricular and Extra Curricular Activities

Achievement in Techfest



Mr.M.Rajesh Kumar



Mr.K.Muthukumar



Mr.M.Sakthi

Third Year - EEE

Won First Place in Fastest Line Follower Robot Contest with Cash Prize of Rs. 1000 in "Techfest 2023" held at Akshaya College of Engineering and Technology, Coimbatore on 01.04.2023











Centre for Excellence















Industry Institute Interaction





















Top Recruiters



R&D

h index	95+	i10	110+	Publications	410+
Patents	22+	Conferences	120+	Copyrights	1
NPTEL	250+	Awards	18+	Citations	5450+

Funds Received



Internships



CONTACT

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