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



NEWSLETTER





ELECTROBLITZ

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VISION AND MISSION OF THE DEPARTMENT

Vision:

To be a premier centre for quality education, innovation and research in the field of Electrical and Electronics Engineering to meet the global challenges with professional ethics and social consciousness.

Mission:

- Provide a holistic environment to students through knowledge-centric and skill-based education
- Collaborate with industries for effective research and innovation in Electrical Engineering and allied areas
- ❖ Enable students to serve the society through prolific ideas with professionalism and ethical values

Programme Educational Objectives (PEOs)

The Graduates of B.E. Electrical and Electronics Engineering, four years after graduation, will

- **PEO1:** Apply the acquired knowledge and skills to meet the emerging needs of the society and also excel in their chosen profession
- **PEO2:** Adapt to emerging technologies and continuously upskill through active research in Electrical Engineering and allied areas
- **PEO3:** Demonstrate leadership skills and practice their profession conforming to ethical and human values

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)

The Graduates of Electrical and Electronics Engineering will be able to

PSO1: Analyse, design and test power electronic components integrated withcomputer-based systems to meet industrial and societal needs

PSO2: Deploy modern engineering tools to model, simulate, fabricate and integrate electrical systems with renewable energy to enhance su stainability





FACULTY DETAILS

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

20.	Mr.A.Mohamed Ibrahim	Assistant Professor (Sr.G)
21.	Mr.V.Kamalkumar	Assistant Professor (Sr.G)
22.	Mr.C.J.Vignesh	Assistant Professor (Sr.G)
23.	Mr.C.Dinesh	Assistant Professor (Sr.G)
24.	Mr.K.Balamurugan	Assistant Professor
25.	Mr.M.Mohana Sundaram	Assistant Professor
26.	Mr.G.Xavier Richards	Assistant Professor

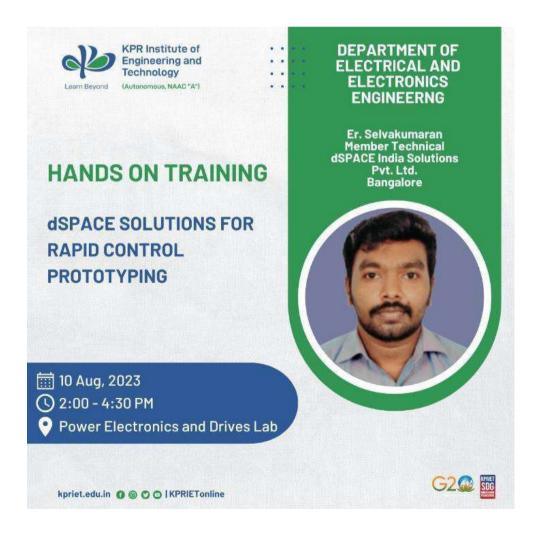
SUPPORTING STAFF

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.M.Soundharrajan	Lab Instructor	
8.	Mr.G.Siva Sankar	Technical Assistant	
9.	Ms.P.Parameshwari	Office Assistant	

ASSOCIATION ACTIVITIES

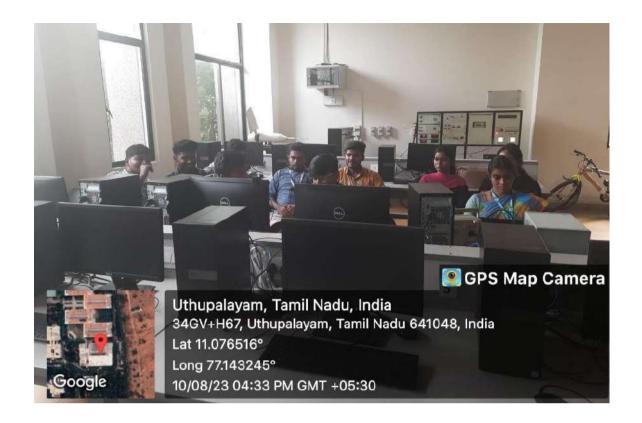
Hands on Training on dSPACE Solutions for Rapid Control Prototyping

The Department of Electrical and Electronics Engineering organized Hands on Training on dSPACE Solutions for Rapid Control Prototyping for the students, teaching and non teaching staffs on 10/08/2023. 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 of dSPACE software used in electrical engineering field. Er Selvakumaran, Member Technical, dSPACE India Solutions Pvt. Ltd., Bangalore has been invited as a resource person to deliver the training program on dSPACE software. He has shared his personal experience about how to integrate software and hardware 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, Controldesk and RTI blockset, V cycle 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.









Expert Lecture on IoT Based Home Automation Systems

The departments of Electrical and Electronics Engineering and Electronics and Communication Engineering organized an expert lecture on "IoT-based Home Automation Systems" on 16/82/2023. Dr.C.Pazhanimuthu, Assistant Professor (SI.G) has welcomed the speaker. Er.A.Syed Ibrahim, Technical Lead, Enthu Tech Solutions Private Limited, Coimbatore delivered a valuable presentation on importance of home automation systems, protocols for the development of product and internet of things-based home automation systems. Explored the insight of IoT systems and about his experience in real-time problem, solutions, and IoT applications. In addition, how to control the devices over cloud through mobile phones. Finally showed the remarkable various projects done in real-time and achievement done by Enthu Technologies. The following contents were delivered to the participants elaborately the role of sensors, actuators, various controllers and its importance, importance of IoT, controlling of loads through IoT, Recent technologies in IoT for automation. The lecture provided some of the interesting facts in development of projects using controller for IoT-based automation. The vote of thanks was delivered by Prof.C.Dinesh, AP (Sr.G)/ EEE. There were 170 students from department of ECE, Civil, AIDS and BME participated the lecture and get benef ited.













Guest Lecture on Smart Grid Technologies

The department of Electrical and Electronics Engineering organized a guest lecture on "Smart Grid Technologies" on 18/08/2023 exclusively for third year students of EEE. A heartwarming welcome was delivered by Dr. K. Mohana Sundaram, Professor and Head, Dept. of EEE. Dr. S. Thangavel, Associate Professor, NIT, Puducherry delivered a valuable presentation on the Smart Grid Technologies. He had presented the discussions on• Basics of smart grid which included evolution, characteristics and benefits of smart grid• Smart grid projects in India• Cyber security in smart grid• Consumer and prosumer• Components of smart grid• Smart metering which included AMI, PDC and PMU• Communication technologies for smart gridThe speaker covered everything that the electrical engineering students and practicing engineers need to know about smart grids. He also cleared all the queries of the participants in a detailed way. The participants gave a very good feedback on the presentation of the speaker. The vote of thanks was delivered by Dr. V. S. Chandrika, Professor / EEE. There were about 135 students and 15 faculty members attended the programme and got benefited. The department of EEE thanks the management for providing this opportunity to conduct the guest lecture successfully.









Alumni Series

The EEE Department had the privilege of organizing a significant event that brought together esteemed individuals from various sectors on 19/08/2023. The session was inaugurated by the Head of the EEE Department, Dr. K. Mohanasundaram, who set the tone for the day's proceedings. The event featured a diverse lineup of speakers who provided valuable insights to the Prof. Kamalkumar, the Placement Coordinator of the EEE Department, took the attendees. stage to enlighten the audience about the wide array of placement options available to the department's students. His comprehensive overview shed light on the various avenues students could explore for their future careers. The highlight of the event was the presence of Er. Kiruthic P, a distinguished Member of the Technical Staff at Zoho Corporation. As the chief guest, he shared his profound insights into the intricacies of the industrial landscape. His address provided attendees with a deeper understanding of the challenges and opportunities that await them in the professional world. Er. Kiruthic P's journey from being an alumnus of the department to a significant contributor at Zoho Corporation served as an inspiration to all. To conclude the event on a gracious note, Mohamed Ibrahim A, the Alumni Coordinator of the EEE Department, delivered the vote of thanks. His words expressed gratitude to all the participants, speakers, and organizers who made the event a success. The event served as a platform for knowledge sharing, networking, and inspiration, leaving the attendees better equipped to navigate their academic and professional journeys. It showcased the department's commitment to fostering meaningful connections between academia and industry.





DEPARTMENT OF ELECTRICAL AND **ELECTRONICS ENGINEERING** ORGANISES ALUMNI SERIES - II ON

BUILDING **BRIDGES**

Nurturing Alumni Connections for Junior Success



Guest Speaker



Alumnus (2018 - 2022) - EEE

Member Technical Staff





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11.00 AM TO 01.00 PM



19, Aug, 2023



EE Tutorial Hall

CONVENOR Dr.MOHANA SUNDARAM K HoD/EEE

COORDINATOR Prof. MOHAMED IBRAHIM A Asst. Professor / EEE



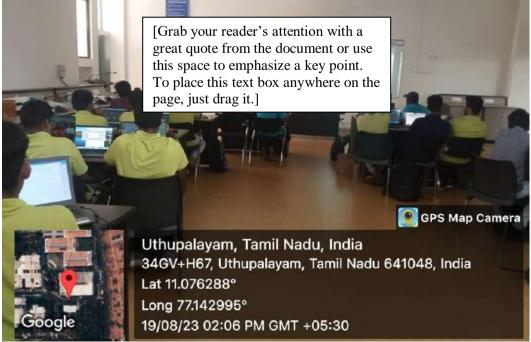




IAEMP Expert Talk

The department of electrical and electronics engineering organized the Hands on Training on 'Fundamentals of MATLAB, Simulink and Stateflow for Engineers (virtual mode)" on 19/08/2023. The head of the department Dr.K.Mohanasundaram welcome the gathering and gave glimpse about the core engineering demands in the market. The session was delivered by Dr. P. Anandraj, our esteemed resource person. During the session, Dr. P.Anandraj covered essential topics and demonstrated various aspects of MATLAB, Simulink, and Stateflow for the benefit of the participants. Specifically, the session included: An introduction to the basics of MATLAB, including writing and executing .m files, exploring various MATLAB functions, and understanding the scripting capabilities of MATLAB. An overview of Simulink, with a focus on creating Simulink models, connecting blocks, and simulating dynamic systems. Practical examples were shared to illustrate these concepts. An introduction to Stateflow, a powerful tool for modeling and simulating event-driven systems. Dr.P. Anandraj explained the fundamentals of Stateflow charts and demonstrated how to use them in engineering applications. Electric Vehicle (EV) Model: Dr.P. Anandraj provided insights into modeling electric vehicles using MATLAB and Simulink.

The Participants learned how to create and analyze models for electric vehicles, an essential skill in the rapidly evolving field of electric mobility. Throughout the training, participants actively engaged in hands-on exercises and had the opportunity to ask questions and seek clarifications. This virtual training program aims to equip engineers with the necessary skills and knowledge to meet the demands of the competitive engineering market. We thank all the participants for their active involvement and hope that this training has provided a solid foundation in MATLAB, Simulink, and Stateflow for their future endeavors in the field of electrical and electronics engineering.









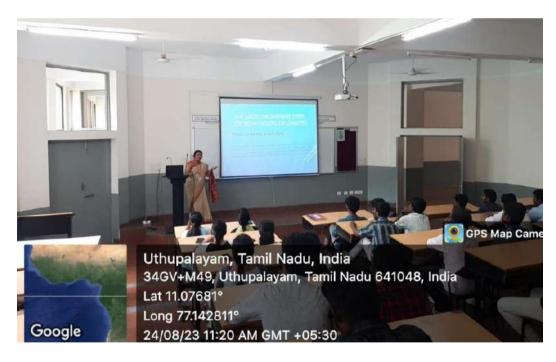
Expert Talk on Leadership Theories

The department of electrical and electronics engineering has organized a expert talk on 'LEADERSHIP THEORIES' in the management through offline mode on 24/08/2023. Dr.V.S.Chandrika, Professor/EEE has welcomed the gathering and gave an out sketch about the importance of leadership qualities. Dr.D.Sathish Kumar, AP(Sl.G.)/EEE has introduced the chief guest. The Session was handled by Dr.S.P.SREEKALA, Professor & Head, CFRD, KPR College of Arts, Science and Research. She explained the various types of leadership theories which includes Democratic Leadership, Autocratic Leadership, Laissez-Faire Leadership, Strategic Leadership and Bureaucratic Leadership that are followed in the management. The speaker has pointed out the real time leaders who follow these styles for their successful in their carrier. The speaker also advised the students to practice as a leader in their real-life time. The session ended with an activity provided to the students in such a way that kindled the leadership in the individuals. The participants have actively participated in the entire session and showcased their performance as a leader. A feedback session has been conducted. Dr.P.Ravikumar AP(Sr.G.)/EEE has provided the vote of thanks to the guest speaker.









Publication by the Faculty Members

 Dr.P.Pandiyan, "A deep convolution neural network model based on feature concatenation approach for classification of tomato leaf disease", Multimedia tools and applications, August 2023.





List of Eminent Academicians/Scientists Visit

S.No.	Name and Designation	Organization
1	Er Selvakumaran, Member Technical	dSPACE India Solutions Pvt. Ltd., Bangalore
2	Er.A.Syed Ibrahim, Technical Lead	Enthu Tech Solutions Private Limited, Coimbatore
3	Dr. S. Thangavel, Associate Professor	NIT, Puducherry
4	Er. Kiruthic P, Member of the Technical Staff	Zoho Corporation, Coimbatore
6	Dr.S.P.Sreekala, Professor & Head	CFRD , KPR College of Arts Science and Research, Coimbatore

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.V.S.Chandrika	Conference	International Conference on "Inventive Research in Computing Applications"	RVS College of Engineering and Technology, Coimbatore	03/08/2023
2	Dr.A.Karthick	Conference	International Conference on Smart Technology for Smart Nation	Amity global Institute, Singapore	18/08/2023 - 19/08/2023
3	Mr.C.J.Vignesh	Webinar	How to Design a Battery for EV's using Solidworks, Ansys, MATLAB	ISIEINDIA	22/08/2023
4	Dr.P.Naveen	Webinar	Reviewer Roulette: Understanding reviewer behaviors and motivations to improve our responses	LetPub Learning Nexus	23/08/2023
5	Dr.Rangu Seshu Kumar	Conference	TEECCON	Reva University	23/08/2023 - 24/08/2023
6	Dr.V.S.Chandrika	Conference	International Conference on "Augmented Intelligence and Sustainable Systems"	CARE College of Engineering, Trichy	23/08/2023 - 25/08/2023

7	Mr.C.Dinesh	FDP	Machine Learning in the Age of AI: Algorithms, Models and Beyond	Department of CSE (AIML), KPRIET	21/08/2023 - 01/09/2023
8	Mr.K.Balamurugan	Webinar	Importance of Power Electronics in EV	ISIEINDIA	30/08/2023

Students Participation in Seminar/Workshop/Hands on Training/ Orientation Program

S.No	Student Name	Year & Section	Event Name	Name of the Organization	Duration of the Event
1	Vishal Kannan S I	II EEE	Japanese Language NAT-Test	Senmon Kyouiku Publishing Co	06/08/2023
2	Vishva K S	II EEE	ESCALADE, TECHNIHE 23	IIT, Guwahati	31/08/2023 - 04/09/2023
3	Vishva K S	II EEE	AQUAWAR Competition	IIT, Guwahati	31/08/2023 - 04/09/2023
4	Dharani M	III EEE A	Workshop on Industrial IoT using PLC and SCADA	Karpagam College of Engineering, Coimbatore	11/08/2023
5	Binglang Lam	III EEE A	TEKOZURA 2023	Dr NGP Institute of Technology, Coimbatore	24/08/2023 - 26/08/2023

Student Placement Details

S.No.	Student Name	Organization		
1	Dhanapal M	Seyyon Technology, Coimbatore		
2	Yedunath M	Seyyon, Coimbatore		
3	Nishok Anand R	Pricol, Coimbatore		
4	Pranesh T	Pricol, Coimbatore		
7	Praveena K	BSH Core, Chennai		
8	Janani J	Kaar Tech, Bangalore		





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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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