



DEPARMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

JANUARY TO JUNE (2023)



EDITORIAL MESSAGE:

The Department of Electrical and Electronics has recorded consistent improvement in its academic, research and placement performance. The department offers a range of innovatively designed programs, and the curricula is constantly updated to meet the changing requirements of the industry and meet the needs of major stakeholders. When publishing these newsletters, the only thing I had in mind is that the Newsletter should reflect the outlook of the department in all aspects. Hereby, I take the responsibility of ensuring the continuity of the issues in the years to come with improvements and richness every time. I am pretty sure that you will get a lot of useful information reading it and the unbounded educational activities will make you Explore, Enrich and Enlighten.

Ms. R.S.SANDHYA DEVI, AP – II/EEE
(EDITOR IN CHIEF)



VISION

To be a Centre of Excellence in Globalizing Education and Research in the field of Electrical and Electronics Engineering.

MISSION:

Empower the students with state-of-art
knowledge to excel as eminent electrical
engineers with multi-disciplinary skills.
☐ Emphasize social values and leadership
qualities to meet the Industrial needs,
societal problems and global challenges.
☐ Enable the technocrats to accomplish
impactful research and innovations.



Message from HoD's Desk



The Newsletter Trenzetter'22 showcases the bright, colorful yet technical and innovative vibes of both students and academicians and together their involvement in many of the ongoing and futuristic events and projects. Many of these potential interactions on the technical and outreach activities happen during the after hours and indeed the real learning takes place after the scheduled hours.

I congratulate all the student members and my colleagues who have been a great support in making things possible. The department is scaling up in placement percentage and higher studies track with the support of our faculty members and students' involvement. I wish all the students Best Wishes for their future endeavors.

I'm grateful to the entire faculty team for their excellent support for their guidance and support to the students in both academic and extracurricular activities.

This newsletter is a book of all the remarkable moments of Team EEE

Thank You

Dr. K MALARVIZHI

Head of the Department



LIST OF FACULTY

S.No	Faculty Name	Signature
1.	Dr.K.Malarvizhi	Prof &Head
2.	Dr.P.Thirumoorthi	Professor
3.	Dr.K.Paramasivam	Professor
4.	Dr.K.Premalatha	Associate Professor
5.	Dr. V. Kandasamy	Associate Professor
6.	Dr. R. Kavitha	Associate Professor
7.	Dr .M. Mohanraj	Associate Professor
8.	Dr. B. Karunamoorthy	Associate Professor
9.	Dr.N.Vinoth Kumar	Associate Professor
10.	Dr. M. Nirmala	Assistant Professor III
11.	Dr. N. Prakash	Assistant Professor III
12.	Dr. T. Shanthi	Assistant Professor III
13.	Dr. S. Kaliappan	Assistant Professor III
14.	Mr. J. Ram Prabu	Assistant Professor II
15.	Mr. R. Suresh Kumar	Assistant Professor II
16.	Ms. R. S. Sandhya Devi	Assistant Professor II
17.	Ms. P. Maithili	Assistant Professor II
18.	Ms. G. Anushree	Assistant Professor II
19.	Ms. D. Sharmitha	Assistant Professor II
20.	Dr. T. Viswanathan	Assistant Professor II
21.	Mr. N.MohanaSundaram	Assistant Professor II
22.	Mr. M.Mathan Kumar	Assistant Professor II
23.	Mr. S.Arun Kumar	Assistant Professor II
24.	24. Mr. S.Surya Prakash Assistant Profess	



Experience the Joy of Learning After Class Hours The Value-Added Courses Jan '23 - June '23 ELECTRICAL SAFETY AND EQUIPMENT MAINTENANCE 20-02-2023 to 24-02-2023

Dr N PRAKASH/ AP III/EEE Mr S ARUNKUMAR/AP II/EEE

The Department of EEE, Kumaraguru College of Technology, Coimbatore has conducted a Value-Added Program on "Electrical Safety and Equipment Maintenance" exclusively for the II-year EEE students. The event was conducted from 20-02-2023 to 24-02-2023, in B Block Machines Lab II, from 05:00 PM – 06:30 PM (1 hr 30mns).

On Day 1, basics on Electrical Safety, Indian Electrical Safety Act and rules, types of electrical hazards and its effects were covered. On Day 2, Protection against Shock, Preventive Measures, Earthing and its types were discussed. On Day 3, Electrical fire and its hazards, first aid procedure were discussed. On Day 4, hands on session on insulation resistance measurement, tester usage, how to change the fuse wire, earth resistance measurement and safety tools usage were discussed. On last day, electrical power usage calculation and safety equipment's like MCB, relays were touched up. All the 5 days, the students were actively participated and interacted with us. They have risen lots of doubts in safety aspects and we clarified those doubts in the session.



______Institutions ______
The program was ended with Assessment Test on Electrical Safety and the feedback session.









Hands on Training of Power Converters for Electric Vehicle using MATLAB.

23.02.2023 and 26.02.2023

Dr. M. Nirmala & Team

This Value Added Programme on the Design of converters in Electric vehicles equips students with the relevant knowledge and skills they will need to kickstart a high-growth career in the EV industry. This program provides a platform for the students to discuss the selection of battery, motor, converter as well as practical challenges encountered adopted in Electric Vehicle Technology. The event is conducted on 23.2.23 to 26.2.23 in the department of Electrical and Electronics Engineering. Around 31 participants participated in this event. Resource Person: Dr. M. Nirmala, AP III/EEE, Mrs. P. Maithili, AP II/EEE, Mr. C. Veeramanikandan, Asso. Lead in innovation KCT research cell, AP/EEE. Session Details

- Introduction to Electric Vehicle Architecture
- Powertrain Components of Electric Vehicle
- Experiential learning on Vehicle dynamics
- Role of Power Converters
- Design of DC-DC Converters in MATLAB Simulink
- Visit to MEGATECH industry.







Hands-on Machine Learning for Beginners (Basic Concepts and Framework for Developing Applications)

17–18 March 2023, 9.00 am – 5.00 pm.

Targeted Audience: UG Engineering Students (Any Branch)

Dr.S.Kaliappan & R.S.Sandhya Devi

Machine Learning(ML), an application or a subset of Artificial Intelligence (AI)is one of the most adopted new-age technologies. The significance of ML and AI is felt in almost any domain and the program aims to provide exposure to ML and its concepts with hands-on. The program involves a judicious mix of participants of any engineering stream and accordingly both theory and practical sessions are planned.

The course contents include outline on Machine Learning, Artificial Intelligence, Image Processing, Introduction to Neural Networks, Learning in Neural Networks, CNN, Introduction to TensorFlow, Understanding Keras Layers, Creation of Custom Dataset with case studies and application development.





Hands on Training on 'Industrial Automation using PLC(Mitsubishi)-Step Towards Industry 4.0

19th and 20th May 2023.

Resource Person: Mr. T. Indira Pandiyan, Senior Application Engineer, JK Automation, Mitsubishi Electric Channel Partner, Chennai Ms.G. Anushree & Mr. N.Mohanasundaram

This course is intended to provide advanced Engineering aspects of Programmable Logic Controllers(PLC), Industry expectations. Students were introduced to another PLC module which covers beyond the syllabus frame.





The Institution of Engineers India (IEI) sponsored One Day Seminar on "Advancements on Research Trends & Challenges on Integration of EV to Grid and Renewable Sources" 7th February 2023





Faculty Corner Energy Audit conducted at Kongu Engineering College, Perundurai

Dr. P. Thirumoorthi, Professor/EEE is a member of the energy audit team conducted on February 18^{th} , 2023.







Industry Connect

L&T EduTech | Advanced Industry Powered Faculty Immersion Program

Dr. Mohanraj M ASP/EEE
Dr. Vinothkumar N ASP/EEE
Mrs. Sharmitha D AP/EEE
29th May 2023 to 3rd June 2023

Event Outcome:

- 1. Empowered faculty participants with unique skill sets and specialized knowledge that are directly applicable to the industry.
- 2. Preparing students to fit in jobs as per industrial need.







Expert Talk at Bharathiyar University, Coimbatore by Dr.P.Thirumoorthi



Institution's Innovation Council BHARATHIAR UNIVERSITY Coimbatore - 641046



Organizes

A special lecture on

"National Energy Conservation & Opportunities"

in commemoration of

National Energy Conservation Day (India)-14th Dec. 2022

Speaker: Prof. P.Thirumoorthi, Department of EEE, Kumaraguru College of

Technology, Coimbatore

Date : 21st Feb. 2023 (Tue) 11.00 AM

Venue : Seminar Hall, Department of Nanoscience & Technology, BU

All are welcome!

Members of BU-IIC

Dr.K.Ramachandran, NISP Coordinator

Faculties Invited as Resource Person

S.No.	FACULTY	ACTIVITY TYPE	Activity Title	Activity organised	Date
	NAME			by	
1			Energy	Dept. of Physics,	
	Dr P	IIC SPECIAL	Conservation	Bharathiar	21-02-
	Thirumoorthi	LECTURE	Opportunities	University	23
2	Dr.N.Vinoth		Clean Energy		
	kumar	Outreach	Transistion	KCLAS	15.03.23
3	Dr P	AU Nominee		Kongu Engg.	04.03.23
	Thirumoorthi	BOS	BoS EEE	College	
4			Recent Trents	Narasu's Sarathy	19.04.23
			in	Institute of	
			Transmission	Technology,Salem	
		Guest	and		
	Dr.M.Mohanraj	Lecture/Seminar	Distribution		



Community Reach Programs by our Faculties

"WASTE TO WEALTH": A part of 2022 IEEE HAC/SIGHT
Funded Project on "Bridging Digital Inequalities amongst the
Urban and Rural School Students."

28th February 2023

Dr. P. THIRUMOORTHI & TEAM

IEEE KCT SB were thrilled to host the 'Waste from Wealth' Workshop for Government Higher Secondary School students at Solasiramani, Namakkal as part of "Bridging Digital Inequalities amongst the Urban and Rural School Students" event, sponsored by IEEE HAC and IEEE SIGHT. A special thanks to our expert Resource Person, Mrs. Anik Niknao from Nilgiris, for sharing her valuable insights on Waste to Wealth transition and providing great experience to students. This Event provided a great exposure for the students of the school to convert wealth from waste materials.











Creating Awareness about Electrical Safety and Utilization of Solar Powered Home Appliances for Beginner 03-03-2023

Dr N PRAKASH/ AP III/EEE Mr. S ARUNKUMAR/AP II/EEE

The Department of EEE, Kumaraguru College of Technology, Coimbatore in association with Government Girls Higher Secondary School, Chinna Thadagam, Coimbatore has conducted an Outreach Program on "Creating Awareness about Electrical Safety and Utilization of Solar Powered Home Appliances for Beginners" exclusively for school students of VII to X standard. The event was conducted on 03-03-2023, in Government Girls Higher Secondary School, Chinna Thadagam, Coimbatore, from 02:30 PM – 04:30 PM (2 hrs). The program wasattended by about 76 school students.







Seminar on Commercialization of Patentable Technology Dr. K. Paramasivam & Team

30 March 2023 02.30 - 04.30pm



Resource Person Mr. R. Srinivasan Founder and Head IPR, 4A IP Solution, Delhi.

R. Srinivasan is an expert in IPR subject matter and worked for 700+clients in Pharma, Chemical and Biotech Companies from India, US, EU and Russia. He has substantial experience in drafting and filing Trademark, Copyright Applications, prosecuting Trademark Application & providing inputs on agreements relating to Licensing Agreements, IP Transfer and Commercialization. Has experience in working worldwide with professionals to start-ups to establish & safeguard their IP, Commercial & Digital rights. He has conducted various seminars and conferences across India and also a life member of NHRD and NASSCOM.









Workshop on Prior art search for Patentability Criteria Thursday, 13 April 2023 | 09.30 am - 04.30 pm ECE Seminar Hall, C Block (Ground Floor)

Dr. K. Paramasivam & Team

Resource Person

Mr ARUNKUMAR A

Managing Partner, iVyukthi Business Solutions LLP (iVBS), IP Management Strategies &Technology Transfer Consultants, Coimbatore.







Conference Presentation by Faculties

S.No.	FACULTY NAME	CONFERENCE NAME	ORGANISED BY	DATE	PAPER TITLE
	Dr R.Kavitha	INTERNATIONAL CONFERENCE ON ELECTRICAL COMPUTER AND COMMUNICATION	Vellalar college of Engineering	22.3.23	Line THD Minimization in multilevel inverter using particle swarm optimization
2	Dr M.Nirmala	INTERNATIONAL CONFERENCE ON ELECTRICAL ENERGY SYSTEMS (ICEES)	SSN College of Engineering, Chennai.	23.3.23	IOT based Battery Monitoring system for Solar PV FED DC-DC Converter
3	B.Karunamoorthy	NATIONAL LEVEL SMART ELECTRICAL ENERGY 2023	LOYOLA-ICAM	29-3-23	DC-DC Cuk Converter for E-Vehicle



Scopus Publication by Faculties

FACULTY NAME	CONFERENCE NAME	PUBLICATION MONTH
Dr.M.Nirmala, AP-III, EEE, Dr.G.Thenmozhi, ASP, AUTO	An investigation on the performance of permanent magnet brushless DC motor based on different materials.	JAN 2023
B.KARUNAMOORTHY	IoT based energy monitoring and energy theft detection, AIP PROCEEDING/2690/ /https:/-1/\$30.0002004512/doi.org/10.1063/5.0119807	MAR 2023
Dr.S.KALIAPPAN	Automatic Panel Board with Protection System in Agri-Irrigation / IEEE XPLORE / DOI: 10.1109/ICAIS56108.2023.10073710	APR 2023



STUDENT CORNER

Higher Studies

(2019-2023 passed outs)

The Department wishes the students for their next learning steps based on their domain interest. The following students have cleared the higher studies entrance exam as of June 2023. Expecting a few more students in this chain.

All the Best for your Great Learning!!!

S.No	Roll No.	Name	Exam Details/Score
1	18BEE076	Deepakraj S	IELTS – 6.5 (Test date – 29/04/23)
2	19BEE044	Padmaraja V	IELTS – 6.5 (Test date – 29/04/23)
3	19BEE044	Padmaraja V	CEETA (M.E/MTech) – 77.057 (April' 23)
4	19BEE063	Sharmila Devi M	TANCET 2023 (MBA) – 88.742 (April' 23)
5	19BEE109	Jude Rithik	TANCET 2023 (MBA) – 89.051 (April' 23)





EEE Students of Team Sea Sakthi Gearing up for Monaco Boat Challenge 2023 (3 – 8 July 2023)

Awaiting for the Proud Moment!!!



மொனாக்கோ ஆற்றல் படகு சவாலில் பங்கேற்கத் தேர்வு செய்யப்பட்டுள்ள இந்தியாவின் ஒரே அணியும், இந்தியாவின் முதல் ஹைட்ரஜனில் இயங்கும் படகை உள்நாட்டு உந்துவிசை அமைப்புடன் உருவாக்கியுள்ள கோயம்புத்தூர், குமரகுரு கல்வி நிறுவனத்தைச் சேர்ந்த டீம் சீ சக்தி (Team Sea Sakthi) என்ற மாணவர் குழுவினை ஊக்குவிக்கும் வகையில், இப்போட்டியில் கலந்து கொள்வதற்கான செலவுத் தொகையான ரூ. 65 இலட்சம் அரசின் சார்பில் உதவித் தொகையாக ரூ. 15 இலட்சத்திற்கான காசோலையினை மாண்புமிகு முதலமைச்சர் @mkstalin அவர்கள் வழங்கினார்.











NOTABLE DEPARTMENT ASSOCIATION EVENTS ORGANIZED

1	06-01-23	DEBATE - Is India ready for Electric vehicles".	·
2	31-01-23	Career in Defence by Rajiv Choudhry (Former INS officer)	Invincibility lies in the defence and the possibility of victory in the attack, Defence career guidance is such event that gave insights of the career in prestigious armed forces of India. We the department of EEE express our gratitude to Commodore Rajiv choudhry, Former Commanding officer INS Agrani, Former President SSB(navy) Coimbatore, Head of security and facilities, Kumaraguru Institutions for imparted his knowledge and gave a lecture about the chance of joining the armed forces to the young heads of our college and his lecture made us realize that success is the sum of small efforts, repeated day in and day out.
3	27-02-23 to 02-03-23	E Grid'23	E-grid is a four day conclave geared towards Electric mobility, starting from components right up until startup planning, creating a delicate balance between*Creation*, *Ideation* and *Production*. Come let's explore and learn about the ideas and strategies that will drive the EV sector to boom over the coming decade.
4	03-03-23	DECODE ELECTRICS	This event is for all young and aspiring engineers to showcase your electrical instincts. Assess your knowledge on electric circuit, components and machines. Join hands with us to win exciting prizes!



5	08-03-2023	FEMME VITALITY - A Health fair	Women are the epitome of courage and strength. On this Women's Day in 2023, we, the Department Association of EEE, organised a creative yet educational event called FEMME VITALITY- A HEALTH FAIR. We created awareness among all the faculty members and students about the women's health concerns, safety, and empowerment through posters. This health fair really filled the entrance to the b-block with kindness and goodwill.
6	18-03-23	Level up your Linkedin – webinar by Nandhini R (MTS)	"Level up your LinkedIn" organised by the Department Association of EEE to give students an insightful presentation. Ms. Nandhini R, MTS at Salesforce Hyderabad, and she is a YouTuber with 1.63 lakh subscribers, handled the session.
7	31-03-2023	EMERGIA Ep-1 *Opportunities in EEE" by Dr. Thirumoorthi (Professor/EEE)	Dr. Thirumoorthi, Professor of EEE, led an exceptional session on the diverse career paths available post EEE. The session proved to be an eye-opener for our students, providing valuable insights and illuminating options they may not have considered before. We hope our students will seize these opportunities with newfound confidence."
8	03-04-2023	FIND FIT FINISH - A new fun yet informative event.	"Find Fit finish" event conducted by the Department Association of EEE. This was organized to boost the spirits of students while enriching them with technical knowledge through fun activities. The participants were highly motivated and their fun-filled faces said it all.
9	08-04-2023	LLT Placement Prep Talk -1 Ep-2 "Bosch" BY Dhurga Sri (BOSCH)	LLT series Placement Prep Talk, where we will be having our final year student who is now successfully placed in BOSCH. Through this, you can get to know the valuable tips and tricks on how to enhance your career prospects and expand your knowledge base. Mark your calendars and join us for an informative session!
10	13-04-2023	VERSATILE YOURSELF - A webinar on career guidance -A webinar	This session is organised by the Department of EEE that would be handled by Mr.Vignesh Kumaresan-Director of Engineering, iCOVER Insure.



		session by Mr.Vignesh	This session will make you understand that being interdisciplinary would also be a right path
		Kumaresan(Icover)	for your career. It would give you insights on all other opportunities that you can utilize
			around you to make your life unique and better from others.
11	18-04-2023	LLT Placement Prep	LLT series *Placement Prep Talk 02*, which mainly focuses on cracking the *Soliton
		Talk 2.0 by Sadhana	Technologies'* interview. This session assures you to give the guidance required, the steps
		(Soliton Technologies)	and rounds involved in the interview process
12	02-05-2023	Reimagine the art of	"Reimagine the Art of Poster Making," that brought together participants to showcase their
		poster making.	creativity and ethical engineering qualities through poster designing.
13	08-05-23	Mime circuitrix	"An engaging tech-fuelled experience that'll elevate your fun and knowledge."
			Round 1: The evaluation will consist of a set of technical questions to be answered in a pen
			and paper format. The teams that demonstrate superior performance will be identified and
			invited to participate in Round 2.
14	16-05-2023	Unbuild IT	An opportunity to uncover the inner workings of Electric devices.
			This event would consist of 2 rounds:
			Round 1: Each team should disassemble the electric device that is given to you (Devices and
			tools would be provided)



GLIMPSE OF THE EVENTS

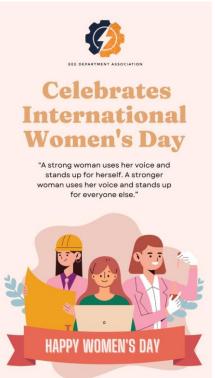




CONTACT: Vaanmathi R - 8883423796









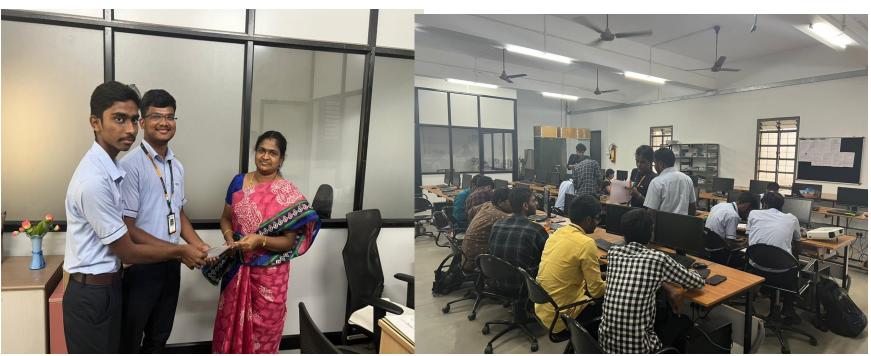


@kct_eee











FAREWELL TO 2019-2023 Batch

April 19, 2023

From the first day of college to understanding lectures, staying in hostels, everything became smoother because of them. The department has taught us how to cope with this new environment while we are away from our home. They have also taught us how to ease the struggle with our study, how to finish assignments on time. They have been our guardian angels all this time. They took us to doctors when we got sick. They cared for us. It is not easy to forget all the time we spent with them. No one knows where life will take us. We may meet one day again on the office premises or in some other way.







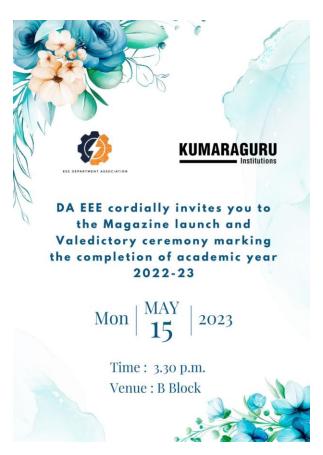


DEPARTMENT ASSOCIATION EEE VALEDICTORY FUNCTION May 15, 2023

The closing ceremony of the department DA activities of the AY 2022-2023 has seen an immense growth in identifying the potential skill of the student friends, guided them in developing the technical and non-technical skills and has imparted a team spirit bridging the gaps of learning.









Thank Note

Sincere & Special Thanks to our Dyanamic HoD for the guidance, Motivation and Support

Extremely Thankful to the Faculty Team for your Updates !!!

Best Wishes for all the Students for your Support!!!

Special Thanks to DA Student Team Members for your

update!!!

All the Best to TEAM SEA SAKTHI!!!

