

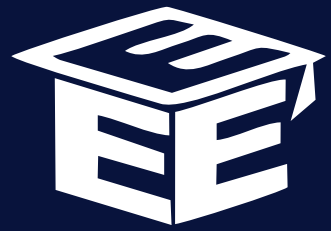


KCG

COLLEGE OF TECHNOLOGY

Affiliated to Anna University

AUTONOMOUS



Department of
Electrical and
Electronics Engineering

EnErgize

Volume - IV
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VISION

KCG College of Technology aspires to become a globally recognized centre of excellence for science, technology & engineering education, committed to quality teaching, learning and research while ensuring for every student a unique educational experience which will promote leadership, job creation, social commitment and service to nation building.

MISSION

- Disseminate knowledge in a rigorous and intellectually stimulating environment.
- Facilitate socially responsive research, innovation and entrepreneurship.
- Foster holistic development and professional competency.
- Nurture the virtue of service and an ethical value system in the young minds.

KCG College of Technology was founded in 1998 to fulfill the Founder-Chairman, Dr. KCG Verghese's vision of "To Make Every Man a Success and No Man a Failure". It is a Christian minority institution, affiliated to Anna University (Autonomous), Chennai and approved by AICTE, New Delhi.

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VISION

The Department of Electrical and Electronics Engineering aims to be a centre of excellence recognized for high quality teaching, learning and research, producing competent professionals to serve the nation.

MISSION

- Impart quality technical education in Electrical and Electronics Engineering domain
- Nurture industrial collaboration in research and development activities
- Maintain state-of-the-art facilities to provide opportunities for knowledge up-gradation
- Invoke the desire and ability of life-long learning in the students for a successful career

EDITOR'S DESK

Welcome to the first issue of EnErgizE, the official newsletter of the Department of Electrical and Electronics Engineering at KCG College of Technology. This publication reflects our department's milestones, from academic achievements to innovative research contributions. It highlights the dynamic and industrious spirit of our faculty and students as they contribute to the world of technology.

Chief Editor	Dr. T.Anuradha
Editor	Dr. R.Murugan
Faculty coordinator	Dr. B.BrindhaSakthi
Students representatives	1.A.Afreen Sulthana-II YEAR 2.Alwin Tennyson.K-II YEAR 3.Priyadarshini.J-II YEAR 4.Arjun.S-II YEAR 5.Ilakkiya.C.S- III YEAR 6.Snega.K - III YEAR 7.Suraj.B- III YEAR 8.Alen Thomas-III YEAR 9. Prem Kumar-IV YEAR 10. Ayush Pandey-IV YEAR 11. Kamaliga S- IV YEAR

RESEARCH ACTIVITIES

Faculty Research Publications



Dr. T. Anuradha

Global Identification Passport: A Unique Cloud based Passport Model published in IEEE Xplore on 23-23 January 2023.

An energy-efficient and reliable data gathering infrastructure using the internet of things and smart grids (Journal for Control, Measurement, Electronics, Computing and Communications-Automatika- Taylor and Francis, International, 24-05-23)

The State-of-the-art Energy Management Strategy in Hybrid Electric Vehicles for Real-time Optimization (IEEE Xplore, International, 01-06-2023)

Optimized Hybrid CNN-LSTM Based Islanding Detection of Solar-Wind Power System (Electric Power Components and Systems, International, 13-06-2023)

Ms. B Brindha Sakthi

A Wireless Power Transfer (WPT) System for Series – Series Compensation topology in Electric Vehicle Battery Charging Applications (IEEE Xplore, International, 23-05-2023)



Mr. Balaji S

COMSOL FEA Modeling of Square and Circular coil for Inductive Power Transfer in Electric Vehicle Systems (IEEE Xplore, International, 15-05-2023)

EVENTS

Conferences, Seminars & Workshops

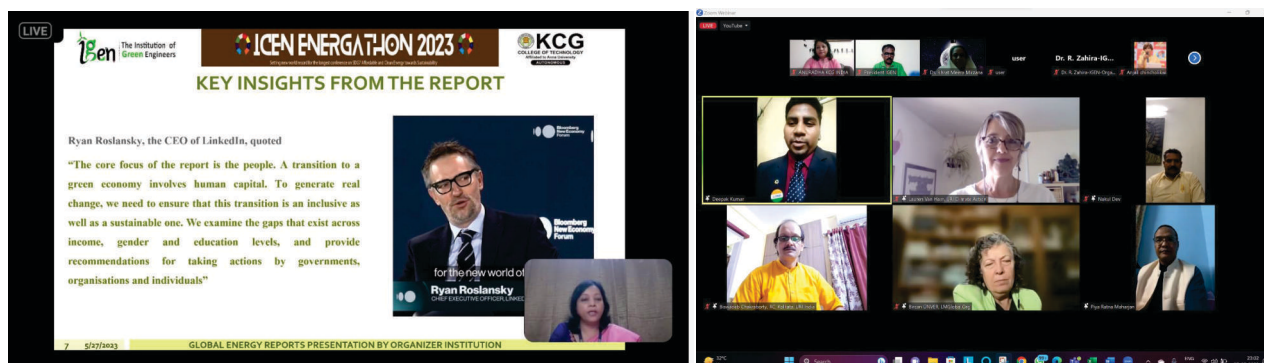
ETAP for Electrical Engineers Workshop

A specialized workshop on ETAP, a leading electrical engineering software, was held on June 24, 2023, with 15 participants. Industry experts from ELENTech provided hands-on training, equipping students with the latest tools and techniques used in electrical system design and analysis. This focused workshop provided valuable practical experience with this powerful software.

A poster for the ETAP for Electrical Engineers Workshop. The poster features a blue background with a grid pattern and a large 'E' shape. Text on the poster includes: 'CoE in Substation Automation & Smart Grid', 'Department of Electrical and Electronics Engineering', 'In Association with ELENTech ENGINEERING SERVICES (P) LTD.,', 'Elentech Service to the Satisfaction', 'Organizes Parallel Workshop Session on ETAP for Electrical Engineers', 'During 2nd International Conference on Intergration of Advanced Technologies for Industry 4.0', 'Registration Fees: Rs. 500', 'Topics: Load Flow Analysis, Short circuit Analysis, Relay co-ordination', 'Resource Persons: Industry Experts from ELENTech', 'Registration link: https://forms.gle/JHd7CHDMotkKLhun9', and '24th June 2023 09:30 AM to 02:00 PM DST - FIST Smart Room'.

IGEN Energathon-2023 Seminar

On June 27, 2023, the department, in collaboration with the Institution of Green Engineers, hosted the iGEN Energathon-2023 seminar. The event drew 100 participants eager to learn about the latest trends and innovations in the renewable energy sector. Dr. Ramesh, a renowned expert in the field, delivered an insightful session, sharing his knowledge and vision for a sustainable energy future.



Go Solar

A workshop titled "Go Solar" was held on January 7, 2023, with 50 participants in attendance. The event featured Dr. K. Karthikeyan and Ms. M. Ramya as the expert resource persons.



KEP on MEP for Electrical Engineers

A Knowledge Enhancement Program (KEP) focused on MEP (Mechanical, Electrical, and Plumbing) for Electrical Engineers was held on February 18, 2023. The program featured Mr. Abutheheer S, Mr. A. Imran Sheriff, and Mr. Deepak S as resource persons and was attended by 30 participants.

Two Day VAP on ARDUINO and ITS APPLICATION



A two-day Virtual Academic Program (VAP) focused on "Arduino and Its Applications" was conducted on February 4th and 18th, 2023. The program featured Dr. K. Karthikeyan, Ms. Lavanya, and Ms. Ramya M as resource persons and saw participation from 90 attendees.

INDUSTRIAL VISIT

These industrial visits provided the students with valuable opportunities to gain practical insights and exposure to real-world industrial operations and technologies. The visits were organized across various sectors, including power, manufacturing, and renewable energy, enriching the students' learning experience.

Rajshree Sugar Industries, Gingee



37 2nd year EEE students visited Rajshree Sugar Industries in Gingee on February 24, 2023. This industrial visit provided a valuable opportunity to learn about the operational aspects of a sugar manufacturing plant. Students gained firsthand knowledge of the processes involved in cane crushing, sugar extraction, and the innovative use of bagasse for power generation. The visit also highlighted the integration of electrical and instrumentation systems within the sugar industry, offering practical context to their academic studies.

Kamatchi Steel Industries, Gummidipoondi

28 third-year EEE students visited Kamatchi Steel Industries in Gummidipoondi on March 14, 2023. This industrial visit provided a valuable opportunity to witness the various stages of steel manufacturing, from raw material handling to melting, rolling, and finishing. The students gained practical insights into the crucial role of electrical and electronic systems in automating and controlling the steel production line.



STUDENT ACHIEVEMENTS

Diya Agarwal (EEE/IV year)

- Won All India Rank - 1st place & Tamilnadu - 1st place in Inferno Team FMAE FFS 2023 held at Kumaraguru College on 06.02.2023.

Mohan P. S (EEE/III year)

- Won Third Place for Anna University Zonals in Cricket held at Anna University on 07.02.2023.

Snega V (EEE/ IV Year):

- Virtusa Women's Scholarship 2023 - Won Cash Amount of Rs. 50,000/-

Rahul G (EEE/ III Year):

- National Level Technical Symposium STROM23 - First Prize



Arjun S (EEE/ III Year):

- Knowledge Quiz Series on Electric Vehicles-VI - Participation
- SIH 2023-Hardware edition - 1st prize



INDUSTRY INTERACTION

S. No.	Name of the Faculty	Date	Name & Address of the Organization / Industry/ Venue	Purpose
1	Mr. S. Balaji Ms. Lavanya	21.01.2023	Chennai Trade Centre	Renewable Energy Expo-5th Edition
2	Dr. T. Anuradha Dr. K. Karthikeyan	01.03.2023	INEL POWER SYSTEM ENGINEERS (P) LTD.	Discussion of VAP and Training Programmes on Power System Protection
3	Mr. S. Balaji	03.03.2023	Siemens Gamesa	IIT PALS Industrial Visit
4	Ms. Jitha Varghese Ms. Ramya Ms. Brindha Sakthi	04.03.2023	Brakes India	Seminar on "Latest trends in Automobile from Technology Perspective"
5	Dr. T. Anuradha Ms. A. V. Suganya Ms. Ramya M Ms. Brindha Sakthi Ms. Jitha Varghese Ms. Lavanya M	07.03.2023	Aspire For her	Expert talk on Financial Literacy