

CIRCUITRY

N E W S L E T T E R

ELECTRICAL & ELECTRONICS ENGINEERING



August - September 2022

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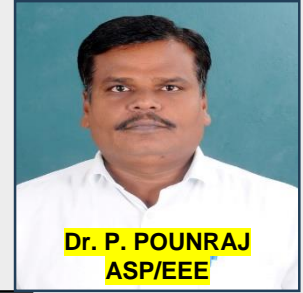
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VOLUME
NO. 3
(Issue 4)

CREATIVE DESK

Advisory Board



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CIRCUITRY CHRONICLES

NEWSLETTER

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

About the Department

The Department of Electrical and Electronics was established in the year 2008 with the aim of combining modern teaching methods with inter-disciplinary knowledge, human values and professional ethics. The department offers a unique blend of theory and practice. It provides a quality learning environment, in terms of state-of-the-art facilities, sharing and widening of knowledge through MoU with relevant industries and interacting with experts from academia and industry. The department is well equipped with state-of-the-art laboratories such as the Electrical Machines Lab, Electric Circuits Lab, Control Systems Lab, Measurement and Instrumentation Lab, Engineering Practices Lab, Power Electronics Lab, Power System Simulation Lab and Electric Drives and Control Lab. To improve practical and simulation skills, MATLAB Software with all tool boxes has been provided. Power World Simulator, MI Power, PSpice and MultiSim software programmes have been provided to improve the designing ability of the students.

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CIRCUITRY CHRONICLES

NEWSLETTER

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VISION

- To create a thriving community where enduring student relationships flourish, fostering a culture of innovative idea development, socially responsible, and ethically driven engineers in the electrical industry.

MISSION

- To nurture students, enabling them to effectively confront professional challenges and emerge as outstanding engineers and technocrats.
- To provide a holistic and comprehensive education that ensures total quality, encompassing broad exposure and value additions.
- To engage in research within the realm of Electrical and Electronics Engineering, addressing the needs of the industry, scientific community, and society at large.

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Programme Name: Student Orientation Programme

Date: 10-08-2022

Speaker: Mr. N. Vijayasarithi, AP/EEE

Class & No. of Participants: III Year - IV Year & 52 students

Venue: G Block Seminar Hall

Description:

As part of the orientation, the Department of Electrical and Electronics Engineering organized a **'Holistic Education'** for Third and Final Year EEE Students on 10-08-2022. Mr. N. Vijayasarithi, HOD/EEE welcomed all the students and faculty members of EEE department. The speaker delivered information to the students regarding the college's mission and vision, Disciplinary rules and regulations to be followed in the college, the subjects and faculty for the academic year 2022–2023, Department plans, and Placement training programmes for students in their final year. Apart from this, he also shared his domain knowledge on goal setting and how to set short-term and long-term goals and achieve them, future opportunities for electrical engineers, guidelines for higher studies. The entire session was interactive & very useful for the students.

Event Photos:



Programme Name: Industrial Training

Date: 08-08-2022 to 16-08-2022

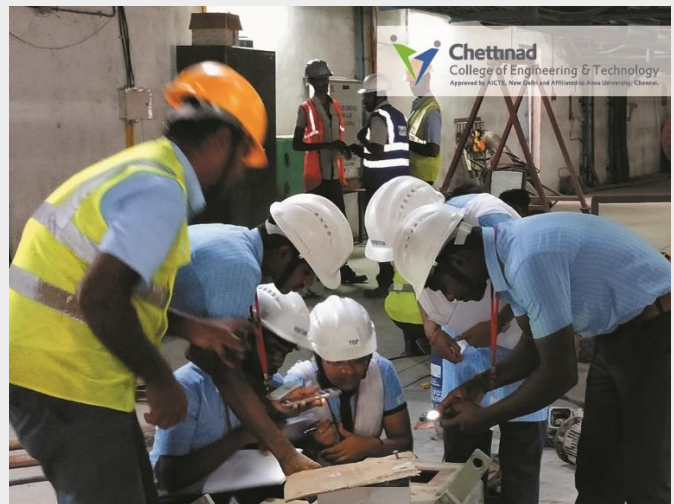
Class & No. of Participants: III Year & 5 students

Venue: Chettinad Cement Corporation Limited, Karikkali Plant, Dindigul

Description:

Our 3rd Electrical and Electronics Engineering students are undergoing Industrial Training at Chettinad Cement Corporation Karikkali Plant, Dindigul from 08-10-2022 to 16-08-2022. This Industrial training includes the practical training session related to electrical power handling on heavy electrical equipment, controlling techniques used in cement manufacturing, Operation of electronic devices in cement factory, the movement of giant motors, arrangement of electrical disconnect switches, circuit breakers and safety electrical equipment in various section units and various controllers used to regulate power flow, temperature, pressure level, and many other industrial process variables. Through this Industrial Training students gained first-hand knowledge of the various electrical/electronic controllers and operation of modern heavy machinery at a large cement manufacturing plant. The skilled instructors from this factory guide the students every day. This Industrial Training helped students become technologically proficient professionals for electrical MNCs to meet the demands of technical experts.

Event Photos:





Programme Name: Two days Workshop on “Real Time Applications of IoT”

Date: 22-08-2022 to 23-08-2022

External Trainer Name: Mr. M. Vignesh, Senior Technical Engineer, LiveWire India

Class & No. of Participants: III Year & 56 students

Venue: Chettinad Cement Corporation Limited, Karikkali Plant, Dindigul

Description:

Chettinad College of Engineering and Technology organized a two days workshop entitled “Real-Time Applications of IoT” for our EEE students from 22nd August 2022 to 23rd August 2022. This workshop was handled by external trainer Mr. M. Vignesh, Senior Technical Engineer, LiveWire India. The trainer initiated the session with the fundamentals of Internet of Things (IoT) and outlined the process of interfacing the Arduino controller with real time applications such as power saving module, LED blinking, Traffic light controller, Servo motor position, Real time temperature monitoring and Industrial robotics. The students were given hands-on training on interfacing the controller with the help of online simulator “<https://www.tinkercad.com>”. The trainer gave a practical demonstration session of NodeMCU module with wifi 802.11n driver for home automation using smart phones. Totally 146 students attended this workshop.

Event Photos:



Programme Name: Movie Time

Date: 27-08-2022

Class & No. of Participants: II Year - IV Year & 71 students

Venue: G Block Seminar Hall

Description:

On 27-08-2022, the Department of Electrical and Electronics Engineering screened a film "The Pursuit of Happiness" for II, III, and IV year B.E-EEE students. As everyone shall have beautiful memories of their college days, especially when spent time together watching movies, we have made this arrangement. This movie is based on a true story about a man named Christopher Gardner. The main themes of this film are survival, determination, and never give up attitude. One of the fundamental themes in this film is determination: you can accomplish anything you need if you invest your time effort and refuse to surrender even when life hits you hard. Finally, Ms. P. Gayathiri, IV-EEE shared her movie's impact. She has shared with us the biggest lesson to take away from this inspirational movie. "The Pursuit of Happiness" can be summarised as, just having a dream is not enough, but also you need the courage and resilience to pursue it. It was such an enjoyable movie. All the students got inspired by good messages, presented in the movie.

Event Photos:



Programme Name: Engineers Day Celebration'2022

Date: 08-09-2022

Contest Name: Techno Mocker

Class & No. of Participants: II Year - IV Year & 38 students

Venue: G Block Seminar Hall

Description:

On behalf of the enrichment committee, the Department of Electrical and Electronics Engineering organized a Techno Mocker Events for the National Engineers Day Celebration on 08-09-2022. Mr. M. Vasanthprakash, AP/EEE coordinated the competition. Totally 38 students from II, III and IV year EEE students participated in Round I. The first round was conducted in written form. Thirty questions were asked, and those who scored the highest marks were selected for the second round. Round 2 was conducted digitally. Six students were selected for round 2. Students were allotted 30 seconds to answer each question in round 2. The students were awarded 10 points for every correct answer. The students showcased their brilliance by rapidly answering the questions. The 1st prize was awarded to Ms. T. Priyadharshini, IIIrd year EEE.

Event Photos:



Programme Name: Engineers Day Celebration'2022

Date: 08-09-2022

Contest Name: Coding Contest

Class & No. of Participants: II Year - IV Year & 25 students

Venue: G Block Seminar Hall

Description:

On behalf of Engineers Day, the Department of Electrical and Electronics Engineering hosted a “Coding- Contest” on 6th September, 2022 to all EEE students. The main objective of this event was to improve students’ problem-solving skills relevant to software professions. The competition was conducted in two rounds. First round was objective type questions related to MATLAB, Python Coding. Then for the second round, eight students were short listed and they participated as four batches. Finally, the winners were shortlisted on time, based on simulation results taken in the given domain.

Event Photos:



Programme Name: Contest on “Hybrid Vehicles”

Date: 13-09-2022

Contest Name: Paper Presentation

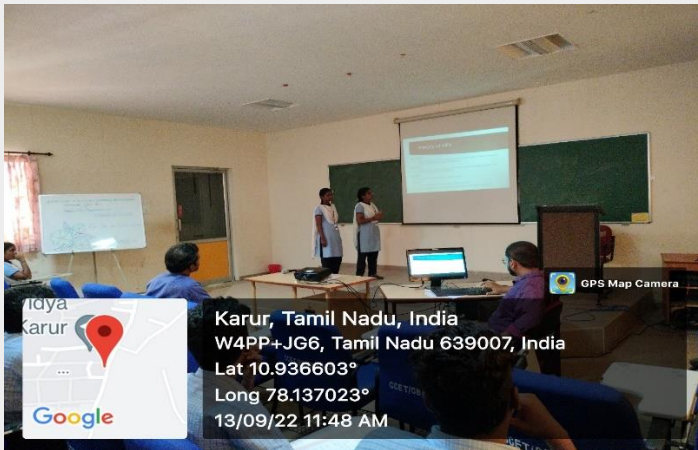
Class & No. of Participants: II Year - IV Year & 28 students

Venue: G Block Seminar Hall

Description:

On behalf of enrichment committee, the Department of Electrical and Electronics Engineering organized a technical paper presentation competition on September 13, 2022, themed "Hybrid vehicles". Students actively participated in the presentation, which helped them to improve their technical and presentation skills. The students are evaluated by Mr. P.Selvan and Mr. S.T.P.Senthilkumar.

Event Photos:



Programme Name: Technical Contest

Date: 12-09-2022

Contest Name: Artificial Intelligence Programming

Class & No. of Participants: II Year - IV Year & 35 students

Venue: G Block Computer Lab

Description:

The Department of Electrical and Electronics Engineering organized an interdepartmental competition on September 12, 2022, called "Artificial Intelligence Programming." Students actively participated in the competition, which helped them learn the fundamentals of programming for artificial intelligence (AI) and how to connect software and hardware. The projects given to the students are evaluated by Dr. T. Gobinath, AP/CSE and Dr. M. Kumar, HoD/ECE. Being a new programming challenge for electrical students, we hear that they are learning more about program modules, how to fix problems that arise during program execution, and how to connect electrical circuits with AI programming. The development of advanced projects focused on industrial applications is better served by contests.

Event Photos:



Programme Name: Energy Audit

Date: 19-09-2022 to 23-09-2022

Coordinator: 1. Mr. N. Vijayasarithi, AP/EEE, 2. Mr. N. Vijayasarithi, AP/EEE

Class & No. of Participants: IV Year & 5 students

Venue: Government Hospital, Kulithalai

Description:

The Energy Audit at the Government hospital in Kulithalai was successfully conducted by Mr. N. Vijayasarithi, Project Head; Mr. M. Vasanthprakash, Project Coordinator; K. Boopathi, Lab Instructor and project members from final-year EEE—Gayathiri, Bharath S, Yuvaraj, Sathasivam V, Devendran H, and Shobana Reni D—from 19-09-2022 to 23-09-2022.

Evaluating energy consumption is the first step engineers take when trying to reduce energy consumption, and the major goal of the energy audit is to gather and evaluate data, calculate the amount of energy consumption, and implement workable and accepted remedies.

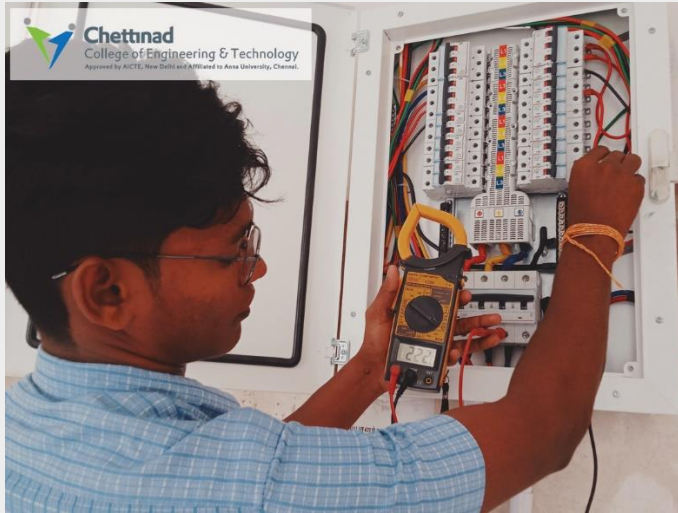
So, students measured the medical facility's electrical equipment power rating and estimated how much energy was utilised by each piece of equipment, which will show the energy consumption that could benefit from conservation or improved efficiency.

As per the Specific Energy Consumption (SEC) consideration, students calculated the hospital SEC, which was taken as reference for comparison which was calculated to be 186 kWh/day. Energy Conservation Measures (ECM) with and without investment were recommended for potential energy savings for the hospital.

Energy savings could be achieved by implementing the given proposals with around Rs 90,425 per annum. Finally, the energy audit report was submitted to the Chief Medical Officer and students received certificates and appreciation.

Mr. N. Vijayasarithi, HOD/EEE, thanked all of the students who took part in the energy audit.

Event Photos:





INSTITUTION INNOVATION COUNCIL

Chettinad Group

The Chettinad Group has over 90 years of experience facilitating a wide range of educational and service institutions successfully in Tamil Nadu. The group is currently responsible for 22 private and government-aided schools, Polytechnic Medical, Dentistry, Pharmaceutical, Engineering, Law and Architecture colleges.



LIFE AT ChettinadTech



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