CO-CURRICULAR CLUB

GREEN ENERGY CLUB



SCRATCHPAD

Venue: Electrical Labs

Date: From 14/11/24 - 22/11/24

Time: 2:00 PM-5:00 PM

Faculty Co-ordinators: Mr. Vinod Kumar S, Senior Assistant Professor

Student Coordinators: Srinivas Abhinay G, K Jagan

ROLE IN CLUB PRESIDENT/VICEPRESIDENT/SECRETARY/TREASURER/BOARD MEMBER

Total Number of Internal Participants: 40+

<u>Targeted Audience</u>: Students from all Departments

Description of the Event:

From November 14th to 22nd, 2024, an insightful series of events was organized, focusing on various aspects of electrical engineering, 3D design, and renewable energy. Here's a detailed report on the sessions:

Day 1: Voltage Source & Voltage Divider (Thursday, 14th November 2024, 2:00 PM - 5:00 PM) The opening session introduced participants to the fundamentals of voltage sources and voltage dividers. Through practical applications, attendees learned how to design simple yet crucial circuits for electronic projects. The session aimed to familiarize participants with the basic building blocks of circuits and demonstrate real-life applications in electrical and electronic devices. Participants left with the ability to analyze and create simple circuits using voltage sources and dividers.

Day 2: VLSI Voyage; Switchgear & Relays (Friday, 15th November 2024, 3:30 PM - 6:00 PM) This day featured two sessions:

- Session 2(A) 3:30 PM 4:30 PM: Participants explored VLSI technology, understanding the process of integrating millions of transistors on a single chip, fundamental to modern microchips used in smartphones and supercomputers.
- Session 2(B) 5:00 PM 6:00 PM: The focus shifted to switchgear and relays, essential for controlling and protecting electrical circuits in residential and industrial setups.

The objective was to introduce principles of microchip design and large-scale electrical systems, emphasizing the importance of protective devices in circuit design. Participants gained foundational knowledge of advanced electronics and electrical systems used in the industry.

Day 3: 3D Modelling & Rendering (Monday, 18th November 2024, 2:00 PM - 5:00 PM) This session was designed to enhance participants' creativity and technical design skills. Attendees learned to use industry-standard software to create and render detailed 3D models. The workshop emphasized precision, aesthetics, and functionality, teaching the fundamentals of 3D design and exploring its real-world applications in engineering, architecture, and product design. By the end of the session, attendees were capable of creating realistic and functional 3D models.

Day 4: 3D Printing & Prototyping (Tuesday, 19th November 2024, 2:00 PM - 5:00 PM) Participants were introduced to the workflow of 3D printing, from preparing the design to final prototyping. The session highlighted the role of prototyping in accelerating innovation and refining product development. Attendees gained hands-on experience in converting 3D models into tangible objects, learning the operational principles of 3D printers and the advantages of rapid prototyping in innovation.

Day 5: Battery Pack Building (Wednesday, 20th November 2024, 2:00 PM - 5:00 PM) This session focused on renewable energy and sustainable technologies. Participants learned to assemble battery packs and understand their working principles. The session covered the importance of efficient energy storage for electric vehicles, renewable energy systems, and portable devices. Attendees left equipped with practical skills to design and assemble battery packs, fostering innovation in green energy solutions.

Day 6: Competition (Friday, 22nd November 2024, 2:00 PM - 5:00 PM) The final session provided a platform for participants to showcase their knowledge and skills through project presentations, design challenges, and practical problem-solving. Teams or individuals competed and demonstrated their creativity, technical expertise, and feasibility of their projects. The event fostered teamwork, problem-solving skills, and real-world application of the concepts learned during the program. Participants experienced the thrill of applying their skills under competitive conditions, preparing them for professional challenges.

Overall, this series of events was a comprehensive learning journey, providing participants with hands-on experience and reinforcing the college's commitment to fostering innovation, sustainability, and practical application of knowledg











