



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
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School of Electrical and Communication Department of Electrical and Electronics Engineering

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Founders



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B.E. (Elec), B.E. (Mech), M.S. (Auto), D.Sc.,
Founder President & Chancellor



Dr. Sagunthala Rangarajan
M.B.B.S.,
Foundress President



LEADERSHIP



Dr. Rangarajan Mahalakshmi Kishore
Chairperson & Managing Trustee

I am delighted to see the Department of Electrical and Electronics Engineering bring out this vibrant edition of News Bite. This newsletter reflects the academic excellence, research endeavours, and innovative spirit that define our university. As technology rapidly evolves, I encourage everyone to continuously push boundaries, cultivate a mindset of lifelong learning, and apply technical knowledge to solve real-world challenges. I congratulate the editorial team and the entire EEE department for their dedicated efforts in showcasing our collective achievements and vision.

Wishing you all continued success and growth!



LEADERSHIP



Prof. Dr. S. Salivahanan
Vice Chancellor

It gives me immense pride to present the latest edition of News Bite, showcasing the exceptional academic and research milestones of the EEE Department. In a rapidly evolving technological landscape, our commitment continues to center on cultivating critical thinking, research excellence, and sustainable innovation. I extend my heartiest congratulations to the faculty, students, and editorial team for their stellar contributions in bringing this publication to life



Prof. Dr. E. Kannan
Registrar

I warmly congratulate the EEE Department on launching this insightful edition of News Bite. This platform beautifully captures the dynamic activities, student achievements and administrative excellence of the department. I wish the EEE team continued success in inspiring our academic community through such meaningful initiatives.



LEADERSHIP



Dr. V. Jayasankar
Prof. & Dean-SoEC

It is a moment of great pride as the EEE Department releases this new edition of News Bite, capturing our proudest academic and research accomplishments. Driven by a passion for continuous advancement, we focus on empowering inquisitive minds and championing sustainable innovation. I commend the faculty, students, and editorial committee for their outstanding work in assembling this publication.



Dr. P. Chandrasekar
Professor & HoD

I take great pride in sharing another vibrant edition of News Bite, reflecting our department's ongoing pursuit of academic rigor and research excellence. As technology continues to transform our world, we remain dedicated to inspiring critical inquiry and pioneering sustainable engineering solutions. My sincere congratulations go out to our dedicated faculty, talented students, and the editorial team for their creative effort and commitment.

VISION OF THE DEPARTMENT

To provide intellectual curiosity in the field of Electrical and Electronics engineering that produces skilled interdisciplinary engineers to serve the society

MISSION OF THE DEPARTMENT

- M1: To inculcate knowledge among the students through comprehensive curriculum.**
- M2: To enrich the academic experience in terms of flexibility, teamwork, design skills, practice and industrial trainings.**
- M3: To produce competent graduates suitable for a successful career in Industry and Research.**

PROGRAMME EDUCATIONAL OBJECTIVE

- PEO1: Design and analyse electrical and electronic systems by applying the knowledge of mathematics and engineering.**
- PEO2: Provide practical solution to multidisciplinary societal problems through innovative ideas.**
- PEO3: Secure positions and continue as valued, creative and proficient employees in a wide variety of fields and industries for a rewarding career.**

PROGRAMME SPECIFIC OUTCOME

- PSO1: Apply fundamental of mathematics, physical sciences and Electrical & Electronics engineering to analyze and solve complex real-world problems.**
- PSO2: Design, develop and implement Electrical, Electronics and Allied engineering systems to meet the demands of industry and suggest solutions for social needs.**



Faculty Development Programme on “Smart Grid Simulation”

The Department of Electrical and Electronics Engineering (EEE) organised a Faculty Development Programme on “Smart Grid Simulation” on December 2024. The programme aimed to enhance faculty members’ knowledge and practical skills in smart grid technologies, simulation tools, and emerging power system applications. The sessions provided insights into smart grid modelling, analysis, and the integration of renewable energy sources.

Impact of the program

The programme enhanced faculty members’ knowledge of smart grid technologies and modern power system applications. It improved their understanding of simulation tools for smart grid modelling and analysis. The FDP created awareness of renewable energy integration and intelligent power systems. It strengthened the participants’ ability to analyse and address challenges in modern power networks. The programme encouraged the integration of advanced techniques into teaching and research activities.



Event benefits

- Enhanced knowledge of smart grid technologies and modern power system concepts. Gained insights into the latest developments in intelligent electricity networks.
- Improved proficiency in smart grid simulation tools and techniques. Developed skills in modelling, analysing, and simulating power system operations.
- Understood renewable energy integration into smart grids. Learned about the challenges and solutions associated with integrating renewable energy sources.
- Strengthened teaching and research capabilities. Acquired knowledge to incorporate smart grid concepts into academic activities and research projects.



Hands-on workshop on DIY series Transformer Making

The Department of Electrical and Electronics Engineering (EEE) organised a hands-on workshop on DIY Series Transformer Making. The workshop provided participants with practical exposure to the fundamentals of transformer design and construction. Participants gained valuable experience in winding, core assembly, insulation, and testing techniques. The programme focused on bridging the gap between theoretical concepts and practical applications. It enhanced the technical skills and understanding of students through active learning and hands-on experience.

Impact of the program

The workshop enhanced students' practical knowledge of transformer design and construction. It improved their hands-on skills in winding, core assembly, insulation, and testing techniques. The programme strengthened their understanding of transformer working principles and applications. It bridged the gap between theoretical knowledge and practical engineering experience. It encouraged students to develop technical competencies and confidence in electrical equipment fabrication..



Event benefits

- 1. Practical Knowledge of Transformer Design
- Gained hands-on experience in understanding transformer design principles and construction methods.
- 2. Winding and Core Assembly Skills
- Developed practical skills in transformer winding, core assembly, and component arrangement.
- 3. Understanding of Insulation and Testing
- Learned the importance of insulation techniques and testing procedures for safe transformer operation.
- 4. Application of Theoretical Concepts
- Connected classroom knowledge with practical applications through hands-on transformer fabrication.
- 5. Enhanced Technical Competency
- Improved problem-solving abilities, technical confidence, and skills related to electrical equipment manufacturing.

Seminar On “Youth Leadership Essentials”

About the event

The Department organised an SPDC-AICTE sponsored seminar on “Youth Leadership Essentials” on 22 July 2022. The seminar focused on developing leadership qualities and essential skills among young students. It provided valuable insights into effective communication, decision-making, and team management. The programme encouraged students to build confidence and take initiative in their academic and professional lives.



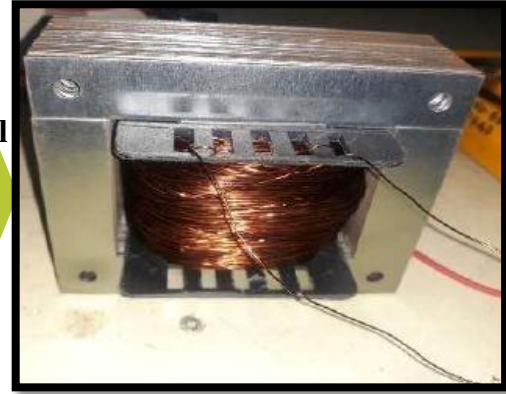
Outcome

The Seminar enhanced students' leadership qualities and self-confidence. It improved their understanding of effective communication and decision-making skills. The programme encouraged teamwork, collaboration, and responsibility among participants. It motivated students to take initiative and actively participate in academic and extracurricular activities. The session inspired students to develop leadership abilities for their future professional careers.

Benefits

The Seminar helped students develop essential leadership qualities and build self-confidence. It improved their communication, interpersonal, and decision-making skills. The programme promoted teamwork, collaboration, and effective coordination among participants. It encouraged students to take initiative and accept leadership responsibilities. The session created awareness of effective team management and problem-solving strategies. It motivated students to apply leadership skills in their academic and personal lives. Overall, the webinar inspired students to become responsible, confident, and effective future leaders.

The Department offered value-added skill course as voltage stabilizer fabrication to students to enhance their technical knowledge and practical competencies. These courses provided additional industry-relevant skills, improving students' employability and preparing them for future career opportunities .



The Department offered a value-added skill course on SMPS Design and Development to enhance students' technical knowledge and practical skills. The course equipped students with industry-relevant competencies, improved their employability, and prepared them for future career opportunities.



The Department organized industry expert courses to bridge the gap between academic learning and industry requirements. These courses provided students with valuable insights into current technologies, industry trends, and professional practices. Experts shared their practical knowledge and real-world experiences to enhance students' technical skills and competencies. The initiative improved students' industry readiness, employability, and preparedness for future career opportunities.

AUCKAM Tech. Pvt. Ltd.

Expert: Mr. A. Balasuresh

Topic: PCB Design and Assembly



National Institute of Wind Energy (NIWE)

Expert: Dr. P. Kanagavel

Topic: Wind and Solar Power

P.V.V.N. Satyanarayana participated in the Project Expo, Technical Symposium, organized by SIMATS Engineering at the state level. He also participated in the Circuit Debugging event at Nakshatra '22, organized by S.A. Engineering College at the national level on 14.09.2022. Congratulations to him on his active participation and dedication to enhancing his technical knowledge

STUDENT ACHIEVEMENTS:

Pranav Kumar Rowlo secured First Place in the Circuit Debugging event at Nakshatra '22, organized by S.A. Engineering College at the national level on 14.09.2022. Department congratulates for his success.

Thaneeru Rohith Varun participated in the national-level Circuit Debugging event at Nakshatra '22, organized by S.A. Engineering College on 14.09.2022. He also participated in a state-level Master Class on Electric Vehicle Design, organized by Pantech eLearning Pvt. Ltd., Chennai, from 20.06.2022 to 19.07.2022. Congratulations to him on his active participation and commitment to developing his technical skills and knowledge!. **Kambamvenkata Sai Kumar Reddy** participated in the Project Display and Circuit Debugging events at the national-level Nakshatra '22, organized by S.A. Engineering College on 14.09.2022.

FACULTY ACHIEVEMENTS

Faculty members of the department have actively contributed to academic innovation by publishing textbooks in emerging areas of technology. **Dr. P. Chandrasekhar** has published two books, demonstrating his expertise and excellence in the EEE domain. His publications serve as valuable learning resources for students and contribute to the advancement of technical education.

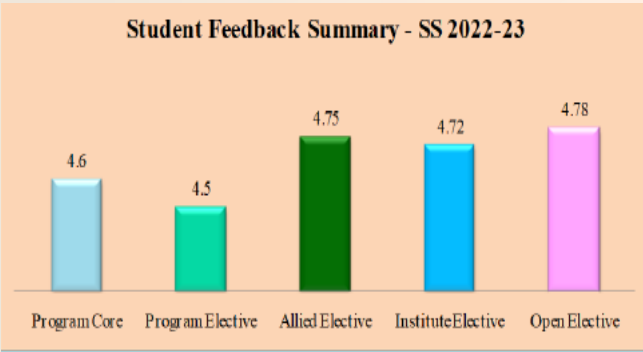
Title of the textbook	Year	Publisher
Latent Heat Solar Energy Storage	AUG, 2022	Lap Lambert Academic Publishing
Fabrication of Biopolymer Rechargeable Coincell Batteries	NOV, 2022	Lap Lambert Academic Publishing

Faculty members of the department have actively contributed to innovation and research by filing and publishing several patents in emerging technology.

Name	Title of the patent	Patent No
Dr.P.K. Dhal	Laplace transform in solving partial differential equation in the second derivative and its application	2022 2106 81
	Early warning optical sensor system for inflow organic matter breach in large scale irrigation and water treatment systems method	2022 4103 5917
Dr.K.K arthikumar	Non-contact hot water dispenser with solar panel	3715 60-001

STUDENT FEEDBACKS

The Department has received highly positive feedback from students across various categories. All the core and elective courses have secured an average feedback score of **more than 4 .5 out of 5**. These encouraging results highlight the Department’s commitment to continuous improvement and academic excellence.



EDITORIAL BOARD

FACULTY TEAM

Dr. P. Chandrasekar
Professor & HOD

STUDENTS TEAM

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