SRI VENKATESWARA COLLEGE OF ENGINEERING

ISSUE: 02

SCIENTIA

2024-25 EVEN SEMESTER NEWSLETTER

ELECTRICAL AND ELECTRONICS ENGINEERING

Nothing is too wonderful to be true, if it be consistent with the laws of nature.

Thank you for your Inspiration sir.

Let me define a leader

He was the pioneer who unlocked the mysteries of electricity and magnetism, laying the foundation of modern physics. With no formal education, his brilliance lit the path for generations of scientists.

-Michael Faraday

Department of Electrical and Electronics Engineering

Vision of the department

To prepare the learners globally competent, dynamic and multi talented young leaders with skill set & knowledge in Electrical and Electronics Engineering field with a focus on higher education, professional practice, research and technical consultancy competence ethical concern.

Mission of the department

- To prepare the learners professionally deft and intellectually adept in the field of Electrical and Electronics Engineering with an excellent infrastructure, core values and qualified & experienced teaching faculty.
- To inculcates kill, knowledge and behavior to cater the dynamic requirements in the field of Electrical and Electronics Engineering.
- To motivate and prepare the learners for career guidance, placements and higher education with a focus on MoUs with premier institutes and industries.

Program Educational Objectives (PEOs)

- PEO1: Solve challenging technological issues in the field of Electrical and Electronics Engineering for the betterment of the living standards of the society as valuable and productive engineers.
- PEO2: Improve the efficiency and effectiveness of the existing methodologies by adapting out-of-the-box rationalized thinking.
- PEO3: Function ethically and communicate professionally as a team member within multidisciplinary teams.
- PEO4: Continue the process of lifelong learning to cater the dynamically changing requirements in the field of Electrical and Electronics Engineering.

Program Specific Outcomes (PSOs)

- PSO1: Design and develop innovative projects using the domain knowledge of Control Systems, Power electronics, Electrical Machines, Microprocessors and Microcontrollers.
- PSO2: Learn the constantly varying technological developments in their problem solving process.

Dept. of EEE

Message from HOD

It gives me immense pleasure to extend warm greetings to all readers of our EEE Department Newsletter. This publication reflects the creativity, knowledge, and collaborative spirit of our students and faculty. It serves as a platform to showcase the academic achievements, technical innovations, research contributions, and extracurricular talents nurtured within our department.

The field of Electrical and Electronics Engineering continues to evolve rapidly, integrating cutting-edge technologies such as AI, IoT, electric mobility, renewable energy, and smart systems. At our department, we are committed to empowering students with strong fundamentals, practical skills, and a mindset of innovation to thrive in this dynamic landscape.

I would like to congratulate the editorial team and contributors for their efforts in bringing out this issue. I encourage all students to participate actively in academic and co-curricular pursuits, and to make the most of every opportunity to grow intellectually and professionally.

Let this newsletter be a source of inspiration and a testimony to our collective progress.

Dr. V. Lakshmi Devi

HOD, EEE

Dear Readers,

With great pride and excitement, we present to you the latest edition of the EEE Department Newsletter. This issue is a reflection of the vibrant academic and creative spirit that thrives within our department. It brings together a diverse collection of articles, achievements, technical insights, innovations, and student contributions that highlight the dynamic environment we are proud to be part of.

Our goal through this newsletter is to inform, inspire, and ignite curiosity among students, faculty, and readers beyond our department. From research updates and industry trends to student projects and departmental milestones, every page captures a piece of our collective journey.

We extend our heartfelt thanks to the students, faculty members, and contributors who made this edition possible. Your enthusiasm, support, and commitment are the driving forces behind this publication.

We hope this newsletter not only serves as a source of information but also encourages continued excellence, collaboration, and creativity across our EEE community.

Happy Reading!

Editorial Board

T. Swetha (IV EEE) G. Himabindu (IV EEE)

Faculty Advisor

Dr. J.A. Baskar, Professor, Dept. of EEE

Result Analysis

IV-I Results [2021-25 Batch]	
Number of Students Registered	134
Number of Students cleared all Subjects	117
Pass Percentage	87.31

S.No.	Roll Number	Name of the Student	Percentage
1	22BF5A0244	TALLAPUREDDY SWETHA	95.62
2	22BF5A0218	GABBI HIMA BINDU	93.82
3	22BF5A0235	NANABALA KUMAR RAJA	92.92
4	21BF1A0219	GANJI RUSHITHA	92.70
5	22BF5A0247	THUMMALURU SHASI VARDHAN REDDY	92.36

III-I Results [2022-26 Batch]	
Number of Students Registered	277
Number of Students cleared all Subjects	229
Pass Percentage	82.67

S.No.	Roll Number	Name of the Student	Percentage
1	23BFA02L39	PAIYYAVULA MANOJ	95.59
2	23BFA02L65	VARA PAVAN KALYAN	94.80
3	23BFA02L04	APPAIAHGARI DHANUSH	94.51
4	23BFA02L06	BADURU CHURNIKA	93.82
5	23BFA02L14	DWARSALA SWETHA REDDY	93.73

II-I Results [2023-27 Batch]	
Number of Students Registered	277
Number of Students cleared all Subjects	195
Pass Percentage	70.39%

S.No.	Roll Number	Name of the Student	Percentage
1	23BFA02120	MANKU RAJESH	96.27
2	23BFA02006	ARREDDY DIVYA	94.70
3	23BFA02010	BADDEPUDI HIMA VANI SARMA	94.58
4	24BFA02L10	MADDIREDDY TEJASWINI	94.34
5	23BFA02183	P UMAMAHESWARI	94.10

Faculty Learning

Journal Publications

S. No	Name of the faculty	Title of the paper	Name of the Journal / Publisher	Month & Year
1	Dr. Kumar K Dr. V Lakshmi Devi	Design and evaluation of power converter for integration of lithium-ion battery and renewable sources	Results in Engineering	18-02-2025

Book Publications

S. No.	Author	Title of the Book	Publisher	Year of Publication
1	Dr.B Venkatesh Reddy	Advanced Control Strategies for Distributed Generation in Microgrids: Enhancing Efficiency, Reliability and Renewable Energy Integration	Routledge Taylor & Francis Group	May 2025
2	Dr. B Venkatesh Reddy	AI and Machine Learning for Energy Optimization	IGI Publications	April 2025

Patent Publications/Grants

S. No	Name of the Faculty	Title	Status	Date
1	Dr B Venkatesh Reddy	Advance IoT and Machine Learning Solutions for Sustainable Groundwater Management Using Fuzzy Integral N-Transforms	Published	10-1-2025
2	Yelamaneni Harikrishna	Sensor-Based Security Device Embedded with Cloud Connectivity	Granted	6-1-2025

Conference Publications

S. No.	Name of the faculty	Title of the paper	Name of the conference publisher	Month & Year
1	Dr. Shaik Rafi Kiran	A novel analysis of advanced solar diode models at different solar operational conditions	4th IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE-2025)	25th & 26th April, 2025
2	Dr. Shaik Rafi Kiran	Development of Polymer Fuel cell system with improved flower pollination optimization MPPT Controller	4th IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE-2025)	25th & 26th April, 2025
3	Dr P Suresh	Meteorological Parameter-Driven Solar Power Forecasting Using Deep Learning Ensemble Methods	SPRINGER CONFERENCE	08-03-2025
4	K Yamuna	Smart-grid optimized bidirectional EV charging: A hybrid metaheuristic approach	ICIDeA 2025	22-02-2025
5	Dr K Sudheer	Enhancing Power Quality in Solar Integrated Smart Grids for EV Systems through Smart Controller	ICIDeA 2025	22-02-2025
6	Dr K Sudheer	Sustainable Oceans	ACCESS 2025	22-02-2025
7	Dr P Suresh	Machine Learning Approaches for Process Automation: A Case Study Using Q-Learning and Supervised Learning	IEEE	20-01-2025

PLACEMENTS

S. No	Name of the student Placed	Enrollment no.	Name of the Employer	Appointment letter reference number with Date
1	AMMAPALLI DHRONIKA REDDY	20BF1A0204	[24]7.AI	SVCE/EEE/2024/[24]7.AI-7
2	KALLURU AVINASH	20BF1A0238	[24]7.AI	SVCE/EEE/2024/[24]7.AI-8
3	KAMATHAM CHIRANJEEVI	20BF1A0239	[24]7.AI	SVCE/EEE/2024/[24]7.AI-9
4	KARIMULA GAFOOR	20BF1A0241	[24]7.AI	SVCE/EEE/2024/[24]7.AI-10
5	KAYYURI SASIKUMAR	20BF1A0242	[24]7.AI	SVCE/EEE/2024/[24]7.AI-11
6	KONIDALA JASWANTH	20BF1A0244	[24]7.AI	SVCE/EEE/2024/[24]7.AI-12
7	KURUBA PRANATHI	20BF1A0246	[24]7.AI	SVCE/EEE/2024/[24]7.AI-13
8	M DINESH	20BF1A0249	[24]7.AI	SVCE/EEE/2024/[24]7.AI-14
9	POLISETTY MANASA	20BF1A0293	[24]7.AI	SVCE/EEE/2024/[24]7.AI-15
10	UPPARA AKHILA	20BF1A02B3	[24]7.AI	SVCE/EEE/2024/[24]7.AI-16
11	M.DINESH	20BF1A0249	[24]7.AI	SVCE/EEE/2024/[24]7.AI-17
12	YEDOTI SREE DEEPTHI	20BF1A02C3	[24]7.AI	SVCE/EEE/2024/[24]7.AI-18
13	MAGANI RUPA	20BF1A0274	[24]7.AI	SVCE/EEE/2024/[24]7.AI-19
14	LAKKIREDDY GEETHANJALI	20BF1A0247	[24]7.AI	SVCE/EEE/2024/[24]7.AI-20
15	GANTA POOJITHA	20BF1A0225	ACCENTURE	SVCE/EEE/2024/ACCT-50
16	KADAPANA KALYANI	20BF1A0236	ACCENTURE	SVCE/EEE/2024/ACCT-51
17	SOMISETTY SAI DEEKSHITHA	20BF1A0258	ACCENTURE	SVCE/EEE/2024/ACCT-52
18	SILAKONDA SAILAJA	20BF1A0260	ACCENTURE	SVCE/EEE/2024/ACCT-53
19	POLAMREDDY GNAPIKA	20BF1A0291	ACCENTURE	SVCE/EEE/2024/ACCT-54
20	RACHAMADUGU DEEKSHITHA	20BF1A0295	ACCENTURE	SVCE/EEE/2024/ACCT-55
21	VYASAVA PREETHI	20BF1A02C2	ACCENTURE	SVCE/EEE/2024/ACCT-56
22	MODEM OM SRIDHAR REDDY	20BF1A0250	Amara Raja	SVCE/EEE/2024/AMAR-1
23	RUDRARAJU SANJAY KUMAR RAJU	21BF5A0206	Amara Raja	SVCE/EEE/2024/AMAR-2

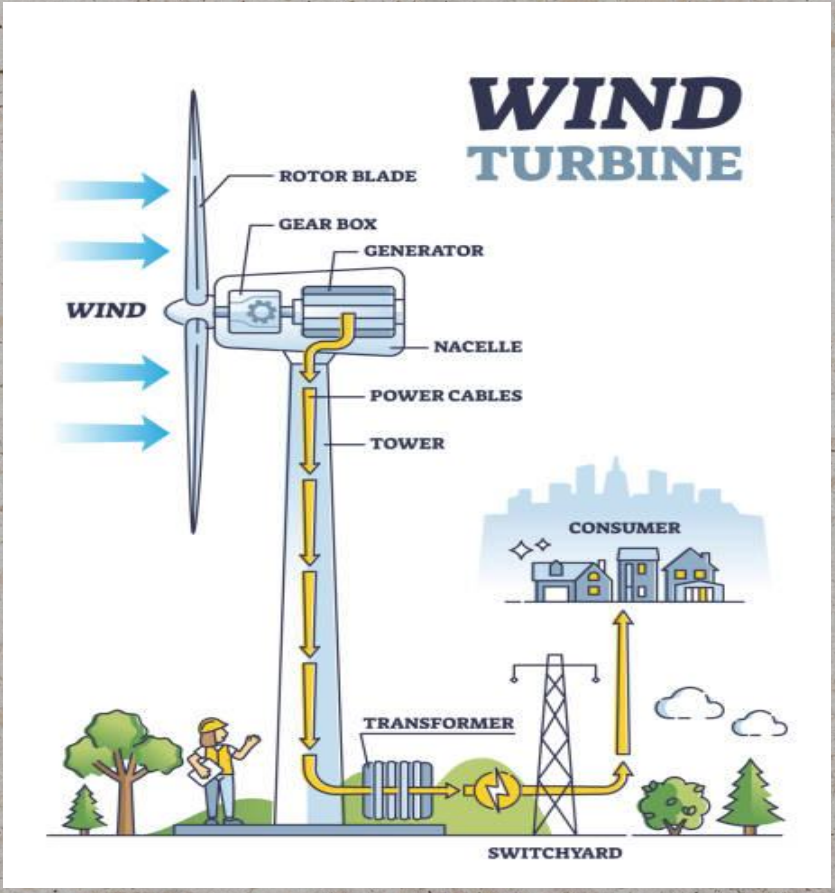
24	NARREDDY BHAVANA	21BF5A0213	Amara Raja	SVCE/EEE/2024/AMAR-3
25	BABU PAVAN RAHUL	20BF1A0263	APOLLO TYRES	SVCE/EEE/2024/APOLLO-1
26	EESHA SANJANA A	20BF1A0268	CAPGEMINI	SVCE/EEE/2024/CAPG-38
27	POTHINEEDI SARASWATHI	20BF1A0294	CAPGEMINI	SVCE/EEE/2024/CAPG-39
28	TIRUPATI PAVANI	20BF1A02B2	CAPGEMINI	SVCE/EEE/2024/CAPG-40
29	NELLORE BHANU SREE	21BF5A0214	CAPGEMINI	SVCE/EEE/2024/CAPG-41

Windmill Power

Windmill power refers to the generation of electricity using wind energy. A **wind turbine** (modern windmill) converts the **kinetic energy** of wind into **mechanical energy**, which is then converted into **electrical energy** using a generator.

Electricity Generation

- Wind speeds between 12–25 km/h are optimal.
- Each large wind turbine can generate 2–5 megawatts (MW).
- 1 MW can power about 1,000 homes per year.



Wind power is a clean, sustainable energy source that uses turbines to convert wind energy into electricity. With global push toward green energy, wind power plays a major role in reducing fossil fuel use and greenhouse gas emissions.