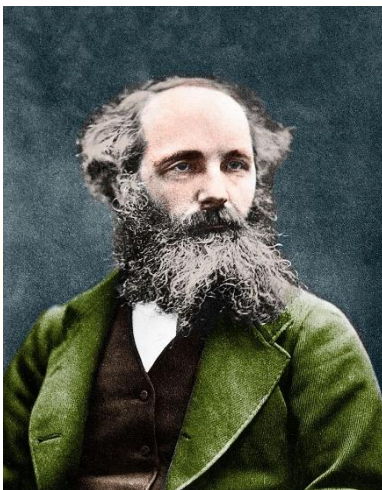


SCIENTIA

2024-25 ODD SEMESTER NEWSLETTER



ELECTRICAL AND ELECTRONICS ENGINEERING



The only laws of matter are those
which our minds must fabricate,
and the only laws of mind
are fabricated for it by matter.

Thank you for your Inspiration sir.

Let me define a leader

He was the scientific genius who unified electricity, magnetism, and light into a single theory—revolutionizing physics forever. His equations became the foundation upon which modern technology and Einstein's relativity were built.

-James Clerk Maxwell

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 skill, 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.

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-II Results [2020-24 Batch]

Number of Students Registered	139
Number of Students cleared all Subjects	138
Pass Percentage	99.28%

S. No.	Roll Number	Name of the Student	Percentage
1	20BF1A0217	CHITTULURI BINDU SREE	100
2	20BF1A0225	GANTA POOJITHA	100
3	20BF1A02C3	YEDOTI SREE DEEPTHI	100
4	21BF5A0213	NARREDDY BHAVANA	100
5	20BF1A0234	K PAVITHRA	99.5

III-II Results [2021-25 Batch]

Number of Students Registered	135
Number of Students cleared all Subjects	110
Pass Percentage	81.48%

S. No.	Roll Number	Name of the Student	Percentage
1	22BF5A0244	TALLAPUREDDY SWETHA	90.49
2	22BF5A0218	GABBI HIMA BINDU	89.71
3	22BF5A0233	MULE SIVA CHANDRIKA	87.94
4	22BF5A0247	T SHASI VARDHAN REDDY	87.84
5	22BF5A0235	NANABALA KUMAR RAJA	87.45

II-II Results[2022-26 Batch]

Number of Students Registered	280
Number of Students cleared all Subjects	
Pass Percentage	

S. No.	Roll Number	Name of the Student	Percentage
1	23BFA02L39	PAIYYAVULA MANOJ	92.60
2	23BFA02L04	APPAIAHGARI DHANUSH	91.73
3	23BFA02L06	BADURU CHURNIKA	91.73
4	23BFA02L65	VARA PAVAN KALYAN	91.44
5	23BFA02L14	D SWETHA REDDY	89.90



Faculty Learning

Faculty R&D Proposals

S. No	Name of the faculty	Project Title	Project Type	Funding Agency	Amount (Rs.)	Date
1	Dr. B Venkatesh Reddy Dr. Y V Krishna Reddy	International Conference on Sustainable Electrical Engineering and Intelligent Systems	SERB-Conference	DST	Rs. 2,00,000/-	31-12-2024
2	Dr. V Lakshmi Devi Dr. Kumar K	Seminar on Artificial Intelligence and Machine Learning Innovations in the Future of Electric Vehicle Design & Battery Management System	SERB-Seminar	DST	Rs. 2,00,000/-	19-11-2024
3	Dr. Kumar K Dr. V Lakshmi Devi	Online FDP on Transforming Electric Vehicle Design & Battery Management System with Artificial Intelligence and Machine Learning Techniques	ATAL-Online-Faculty Training Programme	ATAL	Rs. 1,00,000	26-09-2024
4	Dr. Shaik Rafi Kiran	IoT-Based Smart Energy System for EVS	Research Project	Council for Social Development	Rs. 1,00,000/-	24-07-2024
	Dr. R. Sireesha	Solar based wheel chair for disabled people	Research Project	Council for Social Development	Rs. 1,00,000/-	24-07-2024

Book Publications

S. No.	Author	Title of the Book	Publisher	Year of Publication
1	Dr. Kumar K Dr. V Lakshmi Devi	Applications of Machine Learning in Power Electronics for Integration of Renewable Energy Sources	Notion Press	04-11-2024
2	Dr. V Lakshmi Devi Dr. Kumar K	Battery Technology Handbook: Classification, Control, and System Integration	Notion Press	24-09-2024

Conference Publications

S. No.	Name of the faculty	Title of the paper	Name of the conference publisher	Month & Year
1	Dr. B. Venkatesh Reddy	Advanced Control Strategies for Distributed Generation in Microgrids: Enhancing Efficiency, Reliability, and Renewable Energy Integration	2nd International Conference on Intelligent and Sustainable Power and Energy Systems	13-12-2024 to 14-12-2024
2	K. Raju	Optimizing Solar Panel Cooling: A Smart Approach using Arduino and IoT Integration	E3S Web of Conferences	14-11-2024
3	P. Suneetha	A Novel Modified Shuffled Frog Leaping Algorithm (MSFLA) MPPT Controller for Photovoltaic Systems	2024 Third International Conference on Trends in Electrical, Electronics, and Computer Engineering (TEECCON)	07-11-2024 to 08-11-2024

Journal Publications

S. No	Name of the faculty	Title of the paper	Name of the Journal / Publisher	Month & Year
1	Dr. Y V Krishna Reddy	Starfish Optimization Algorithm for Economic Emission Dispatch with Chance Constraints and Wind Power Integration	Journal of Information Systems Engineering and Management	25-12-2024
2	Dr. Shaik Rafi Kiran	A Universal Source DC–DC Boost Converter for PEMFC-Fed EV Systems With Optimization-Based MPPT Controller	International Transactions on Electrical Energy Systems (Wiley)	25-10-2024
3	Dr. Shaik Rafi Kiran	A novel advanced hybrid fuzzy MPPT controllers for renewable energy systems	Scientific Reports (www.nature.com/scientificreports)	10-09-2024
4	Dr. Kumar K Dr.V Lakshmi Devi	Evaluation and deployment of a unified MPPT controller for hybrid Luo converter in combined PV and wind energy systems	Scientific Reports	09-09-2024
5	Dr. Y V Krishna Reddy	Economic Load Dispatch of Thermal-Solar-Wind System using Modified Grey Wolf Optimization Technique	International Journal of Electrical and Electronics Research	10-08-2024

Patent Publications/Grants

S. No	Name of the Faculty	Title	Status	Date
1	G. Dilli Babu Dr. J.A. Baskar Nanda Kumar Enjeti	Energy Storage Solutions For Efficient Management of Fast Ev Charging Stations	Published	29-11-2024
2	Dr B Venkatesh Reddy	Integrated AI and IoT Driven System for Smart Environment Control and Energy Optimisation in Public Infrastructure	Published	29-11-2024
3	Dr. Y Venkata Krishna Reddy G. Dilli Babu B. Sreenivas Reddy	Eco-Friendly Solar-Powered Electric Vehicles: A Sustainable Transportation Solution	Published	29-11-2024
4	Dr. Shaik Rafi Kiran	Advanced Power Electronics for Renewable Energy Integration	Granted	25-10-2024
5	Mr. K. Raju	Real-Time Battery Discharge Prediction for Electric Vehicles Using Machine Learning Algorithms	Published	25-10-2024
6	Dr. V Lakshmi Devi Dr. Kumar K	IoT-Enabled Battery Unit With Smart Battery Management And Display	Granted	08-10-2024
7	Mr. K. Raju	Quantum Computing System for Achieving United Nations Sustainable Development Goals Through Advanced Simulation And Optimization	Published	20-09-2024
8	Dr. Kumar K Dr. V Lakshmi Devi Kuruva Raju Y Hari Krishna	Controlled Charging Hub for USB Devices in Electrical Switchboard	Published	02-08-2024
9	Dr. P Suresh E Nanda Kumar B Sreenivas Reddy K Yamuna	Multi-Purpose Self-Controlled Vehicle	Granted	13-06-2024
10	Mr. G. Dillibabu	Real-Time Student and Employee Attendance Tracking using Facial Recognition and Internet of Things	Published	29-03-2024

PLACEMENTS

S.N o	Name of the student Placed	Enrollment no.	Name of the Employer	Appointment letter reference number
1	K MEGANA	20BF1A0232	Delphi-TVS Technologies	SVCE/EEE/2024/DT
2	K NITHYA	20BF1A0233	Delphi-TVS Technologies	SVCE/EEE/2024/DT
3	MIDDE NITHIN	20BF1A0280	Delphi-TVS Technologies	SVCE/EEE/2024/DT
4	PALAGIRI MANASA	20BF1A0287	Delphi-TVS Technologies	SVCE/EEE/2024/DT
5	S AMHUSSAIN	20BF1A0296	Delphi-TVS Technologies	SVCE/EEE/2024/DT
6	TENEPALLI MAHESH SAI	20BF1A02A	Delphi-TVS Technologies	SVCE/EEE/2024/DT
7	PULLAGURA JASWANTH	20BF1A0255	Efftronics	SVCE/EEE/2024/EFF
8	ETIPAKULA CHENCHAIAH	20BF1A0269	Efftronics	SVCE/EEE/2024/EFF
9	MULLAGURI REDDY	20BF1A0282	Efftronics	SVCE/EEE/2024/EFF
10	VALLEPALLI	20BF1A02B	Efftronics	SVCE/EEE/2024/EFF
11	VANIPENTA	20BF1A02B	Efftronics	SVCE/EEE/2024/EFF
12	VENKATA RANGA SAI	20BF1A02C	Efftronics	SVCE/EEE/2024/EFF
13	VANKAM SANKAR	21BF5A0215	Efftronics	SVCE/EEE/2024/EFF
14	MATTEDDU ASRUTHA	20BF1A0279	Glow Touch Technologies	SVCE/EEE/2024/GL
15	G THOYAJA DEEPTHI	21BF5A0211	Glow Touch Technologies	SVCE/EEE/2024/GL
16	KANNA AKHILA	20BF1A0240	GURUKUL ACADEMY	SVCE/EEE/2024/GU
17	ELLURU SIVA KUMAR	21BF5A0201	IMEG	SVCE/EEE/2024/IM
18	AVULA JAYAKOUSHIK	21BF5A0209	IMEG	SVCE/EEE/2024/IM
19	BANDARI CHIRANJEEVI	20BF1A0207	KodNest	SVCE/EEE/2024/KD
20	BODUGU GURU CHARAN	20BF1A0210	KodNest	SVCE/EEE/2024/KD
21	CHENNAM MALATHI	20BF1A0214	KodNest	SVCE/EEE/2024/KD
22	GANGAPURAM CHARAN	20BF1A0224	KodNest	SVCE/EEE/2024/KD
23	GURRAM GEETHA	20BF1A0229	KodNest	SVCE/EEE/2024/KD

24	NAINARU DEEPIKA	20BF1A0284	KodNest	SVCE/EEE/2024/KD
25	SEELAM LOKESH	20BF1A02A	KodNest	SVCE/EEE/2024/KD
26	CHAPATI CHARITHA	20BF1A0213	Mitsuba India Private	SVCE/EEE/2024/MI
27	ERASAPPAGARI GANGA	20BF1A0222	Mitsuba India Private	SVCE/EEE/2024/MI
28	MOPURI VENKATA HARI	20BF1A02C	Mitsuba India Private	SVCE/EEE/2024/MI
29	K PAVITHRA	20BF1A0234	Qspiders	SVCE/EEE/2024/QP
30	VADDE HARSHVARDHAN	20BF1A02B	Qspiders	SVCE/EEE/2024/QP
31	CHITTULURI BINDU SREE	20BF1A0217	Renault Nissan Tech	SVCE/EEE/2024/RE
32	P SAI GAYATHRI	20BF1A0286	Renault Nissan Tech	SVCE/EEE/2024/RE
33	AMBUR PUNEETH	20BF1A0203	SUTHERLAND	SVCE/EEE/2024/SU
34	BANDI TEJA SREE	20BF1A0208	SUTHERLAND	SVCE/EEE/2024/SU
35	DHARA SUNIL	20BF1A0220	SUTHERLAND	SVCE/EEE/2024/SU
36	K R MOUNIKA	20BF1A0235	SUTHERLAND	SVCE/EEE/2024/SU
37	LINGAMDINNE MADHU	20BF1A0248	SUTHERLAND	SVCE/EEE/2024/SU
38	ARAVETI NAGA MONIKA	20BF1A0262	SUTHERLAND	SVCE/EEE/2024/SU
39	BERI MOUNIKA	20BF1A0264	SUTHERLAND	SVCE/EEE/2024/SU
40	MAMILLA MADHU	20BF1A0275	SUTHERLAND	SVCE/EEE/2024/SU
41	SYED SANA FATHIMA	20BF1A02A	SUTHERLAND	SVCE/EEE/2024/SU
42	VUDAYAGIRI LIKITHA	20BF1A02C	SUTHERLAND	SVCE/EEE/2024/SU
43	YEDOTI SREE DEEPTHI	20BF1A02C	SUTHERLAND	SVCE/EEE/2024/SU
44	KONUDHULA LIKHITHA	21BF5A0202	SUTHERLAND	SVCE/EEE/2024/SU
45	DEGALA LIKITHA	20BF1A0219	ULEARN	SVCE/EEE/2024/UL
46	VELOORU AMULYA	20BF1A02B	ULEARN	SVCE/EEE/2024/UL
47	CHINTHAMAKULA GURU	20BF1A0216	ZF Rane	SVCE/EEE/2024/ZF
48	THUMMALA LOKESH	20BF1A02A	ZF Rane	SVCE/EEE/2024/ZF

Student's Achievement

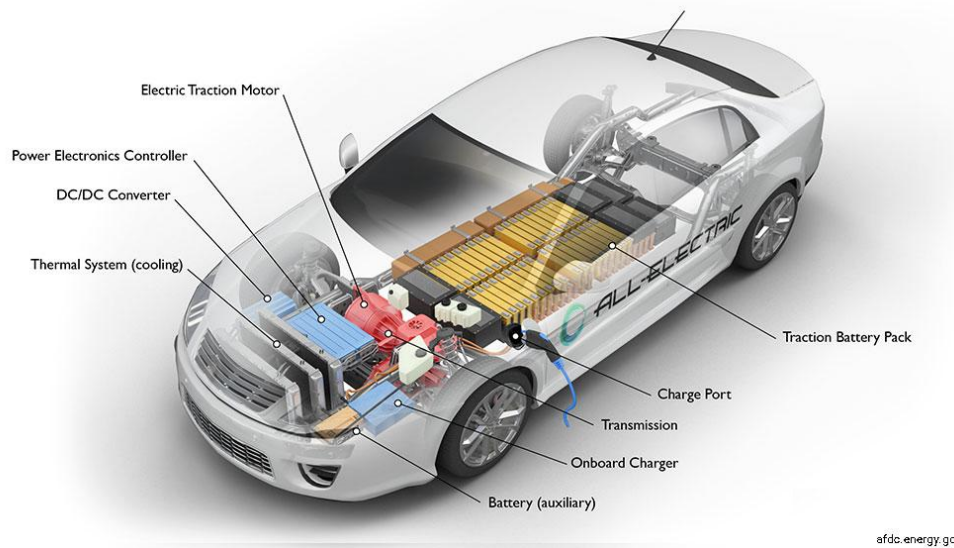
S.No	Name of the student	Event	organized by	Date	Prize (I/II/III)/
1	C.Sruthi	Innospark	IISc Bangalore	08-11-2024	I
2	Arigela Nandini	Poster presentation	Siddharth Institute of Engineering& Technology(Autonomous) , Puttur	04-10-2024	II
3	Chapati Charitha	Poster presentation	Siddharth Institute of Engineering& Technology(Autonomous) , Puttur	04-10-2024	II
4	Chennam Malathi	Paper presentation	Siddharth Institute of Engineering& Technology(Autonomous) , Puttur	04-10-2024	II
5	Chilamandala Sai	Paper presentation	Siddharth Institute of Engineering& Technology(Autonomous) , Puttur	04-10-2024	II
6	Endluru Swetha	Code quiz	Siddharth Institute of Engineering& Technology(Autonomous) , Puttur	04-10-2024	II
7	K R Mounika	Essay Writing	Siddharth Institute of Engineering& Technology (Autonomous), Puttur	04-10-2024	II
8	M Hemanth Kumar	Space Quiz (World Space Week)	Satish Dhawan Space Centre, ISRO	04-10-2024	III

Electric Vehicle

An **Electric Vehicle (EV)** is a type of vehicle that uses **electric motors** powered by **rechargeable batteries**, instead of traditional **petrol or diesel engines**.



All-Electric Vehicle



afdc.energy.gov

Scientific Principle behind EVs

- **Energy Conversion:** EVs convert chemical energy (battery) → electrical energy → mechanical energy (motion).
- **Regenerative Braking:** Converts kinetic energy back into electrical energy, improving efficiency.

Electric Vehicles are the future of transportation, offering clean, efficient, and cost-effective mobility. With advancements in battery tech, charging networks, and government support, EVs are becoming accessible and essential for a sustainable world.