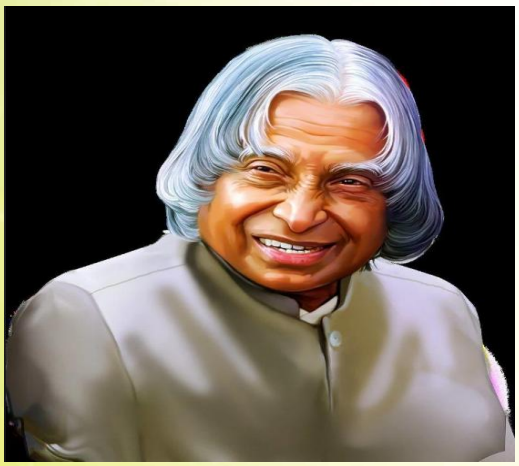
SRI VENKATESWARA COLLEGE OF ENGINEERING

ISSUE: 02

SCIENTIA

2022-23 EVEN SEMESTER NEWSLETTER

ELECTRICAL AND ELECTRONICS ENGINEERING



Peace be amplified
World be rectified
No resistance can drop our potential we step up. We transform
Faith is like electricity you can't see but you can see the light

Let me define a leader

He must have vision and passion and not be afraid of any problem. Instead he should know how to defeat it. Most importantly, he must work with integrity.

Dr. A P J Abdul Kalam

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.

Message

- Many dreams
- Many ideas to implement
- Many thoughts
- Fear about future

We, SV College of Engineering provide you the platform to go with.

We give wings; let's fly together for the bright future of yours.

Welcome to world of dreams. Let us help you to achieve your dreams.

Have a good stay in the campus.

Dept. of EEE

Message from HOD

It gives me immense pleasure to present this issue of our Department of Electrical and Electronics Engineering Newsletter, which reflects the vibrant energy, achievements, and aspirations of our department. This newsletter is not merely a compilation of events; it is a living document that captures the dedication of our students, the commitment of our faculty, and the continued support of our alumni and well-wishers.
This newsletter is a platform that not only celebrates these achievements but also serves as a source of inspiration for the future. It reminds us that education is not confined to classrooms—it is an ongoing journey of curiosity, exploration, and application.

To the students, I wish to convey that this is the time to dream big, work hard, and embrace challenges with courage. Technology will keep advancing, but it is your creativity, adaptability, and values that will define your success as engineers and as responsible global citizens. Remember that knowledge is powerful only when applied with ethics and purpose.

I extend my sincere appreciation to the editorial board for their efforts in compiling this newsletter and to every contributor whose work enriches its pages. My heartfelt gratitude also goes to the faculty, staff, students, alumni, and parents whose collective efforts sustain the growth and glory of the Department of EEE.

With best wishes for continued progress and success,

Dr. V. Lakshmi Devi

HOD, EEE

Dear Readers,

The Department of EEE has always been a place where innovation meets dedication. From emerging technologies in renewable energy, power systems, and electric vehicles to student projects, workshops, and research initiatives, every achievement featured here speaks of the passion to learn, explore, and excel.

We, the editorial board, take this opportunity to extend our gratitude to the Head of the Department, faculty members, and students for their constant support and valuable contributions. Special appreciation goes to all those who submitted articles, reports, and creative works that enrich this publication.

Editorial Board

B.Ramya- IV-EEE, T.Vikram- IV-EEE

Faculty Advisor

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

Result Analysis

IV-I Results [2019-23 Batch]	
Number Of Students Registered	191
Number Of Students Cleared All Subjects	125
Pass Percentage	65.44%

S.No.	Roll Number	Name Of The Student	Percentage
1	19BF1A0212	Baduru Ramya	84.4
2	19BF1A0214	Bandi Raj Krishna Reddy	84
3	19BF1A02E7	Tpu Vikram Kumar	83.33
4	19BF1A0201	A Jyotheeswar Reddy	82.93
5	19BF1A0222	Bukkarayasamudram Jaya Keerthana	82.00

III-I Results [2020-24 Batch]	
Number Of Students Registered	139
Number Of Students Cleared All Subjects	109
Pass Percentage	78.42%

S.No.	Roll Number	Name Of The Student	Percentage
1	20BF1A0225	Ganta Poojitha	96.33
2	20BF1A0240	Kanna Akhila	93.57
3	20BF1A0217	Chittuluri Bindu Sree	93.27
4	20BF1A0251	Nambi Lohitha	92.76
5	20BF1A0234	K Pavithra	92.45

II-I Results [2021-25 Batch]	
Number Of Students Registered	139
Number Of Students Cleared All Subjects	105
Pass Percentage	75.53%

S.No.	Roll Number	Name Of The Student	Percentage
1	22BF5A0244	Tallapureddy Swetha	96.63
2	22BF5A0218	Gabbi Hima Bindu	95.10
3	22BF5A0247	Thummaluru Shasi Vardhan Reddy	94.80
4	22BF5A0233	Mule Siva Chandrika	94.59
5	22BF5A0214	Molakala Venkata Siva	94.18

Faculty Learning

Journal Publications

S. No	Name of the faculty	Title of the paper	Name of the Journal / Publisher	Month & Year	Indexing
1	Dr. V Lakshmi Devi	An Enhanced Z-Source Switched MLI Capacitor for Integrated Micro-Grid with Advanced Switching Pattern Scheme	Engineering, Technology & Applied Science Research	Aug 2022	SCI
2	Dr. V Lakshmi Devi and Dr. Kumar K	Performance and Reliability Analysis of Double Boost Converter-fed Renewable PV System	Journal of Engineering	30-3-2023	SCI
3	Dr. Shaik Rafi Kiran	Design of high voltage gain convertere for fuel cell based EV application with hybrid optimization MPPT controllers	Material Today Proceedings	March 2023	SCI
4	Dr. Shaik Rafi Kiran	Design of GWO based fuzzy MPPT controller for fuel cell fed EV application with high voltage gain DC-DC converter	Material Today Proceedings	March 2023	SCI
5	G. Gowthami , NM Girish Kumar, Dr. Sudheer Kasa, Dr. V. Lakshmi Devi	Mitigation of Power Quality Issues in a Distribution System using PSO tuned Shunt Active Power Filter	International Journal of All Research Education and Scientific Methods	Dec-22	UGC
6	K. Pavan Kumar, K.Yamuna, P. Vinod Kumar, Dr. Sudheer Kasa	Power Quality Improvement in a Wind Energy integrated Three Phase AC System using NN-UPQC Control Strategy	International Journal of All Research Education and Scientific Methods	Dec-22	UGC
7	R. Sai Kiran, Y.V. Krishna Reddy, Dr. Sudheer Kasa	Power Loss Reduction in Distribution System by Network Reconfiguration Using MPSO Algorithm	International Journal of All Research Education and Scientific Methods	Dec-22	UGC
8	Pasala Pavan Kumar, K. Raju, Dr.V. Lakshmi Devi, Dr. Sudheer Kasa	Decentralized Load Frequency Control with Wind and Solar PV Generations	International Journal of All Research Education and Scientific Methods	Dec-22	UGC
9	S.Thulasiram, Y. Hari Krishna, Dr.V. Lakshmi Devi, Dr. P Suresh	Fuzzy based Energy Management Control Strategy for Hybrid Energy Resources in a Microgrid System	International Journal of All Research Education and Scientific Methods	Dec-22	UGC
10	Sk Naveed Ahmed, Dr. P. Suresh, Dr. K. Sudheer	Smart Load Scheduling Strategy Utilizing Optimal Charging of EVs in Power Grids	International Journal of All Research Education and Scientific Methods	Dec-22	UGC

PATENT PUBLICATIONS

S. No	Name of the Faculty	Title	Status	Date
1	Dr. Kumar K Dr. V. Lakshmi Devi	Multi-Input Matrix Converter for Hybrid Solar and Wind System with Ex-OR Gate Logic	Published	25-11-2022
2	Dr. P.Suresh Dr. Shaik Rafi Kiran Mr. E.Nanda Kumar Ms. K.Yamuna Mr. B.Sreenivas Reddy Mrs. R.Sireesha Dr. K.Sudheer	Smart Garbage Segregator And Energy Generator	Published	05-08-2023

FACULTY R&D PROPOSALS

S.No	Name of the faculty	Project Title	Project Type	Funding Agency	Amount (Rs.)	Date
1	Dr.Y.V.Krishna Reddy	Energy Monitoring and Load Controlling by IOT	Research	Council for Social Development	Rs. 1,00,000/-	27-07-2022
2	Dr.K.Sudheer	IOT - Based mobile application for monitoring hydroponic vertical farming	Research	Council for Social Development	Rs. 1,00,000/-	27-07-2022
3	Dr.V.Lakshmi Devi Dr.Kumar K	A Novel Design of Multi-Input Converter with Advanced Controller for Hybridization of Solar and Wind Energy Systems	Research	SERB-POWER	Rs. 29,96,125/-	29-09-2022
4	Dr. Kumar K Dr.V.Lakshmi Devi	A Novel High Gain Power Converter Design for Fuel Cell Fed Hybrid Electric Vehicles	Research	SERB-SURE	Rs. 29,07,714/-	16-09-2022
5	Dr.V.Lakshmi Devi	Role of Yoga and Meditation in transforming the	Research	Scienceand Heritage Research	Rs. 34,04,850/-	31-03-2023

		lifestyle of academicians in Andhra Pradesh		Initiative (SHRI)		
6	Dr K Sudheer	Fostering Agro-Health Innovation amp up skilling center for youth and rural under privileged villagers	Research	DST-SEED	Rs. 38,65,000/-	31-10-2022

BOOK PUBLICATIONS

S. No.	Author	Title of the Book	Publisher	Year of Publication
1	Kumar K, V Lakshmi Devi, Ramji Tiwari, Avagaddi Prasad and Hanumantha Reddy Gali	Chapter Name: Analysis of Fuel Cell Fed BLDC Motor Drive with Double Boost Converter for Electric Vehicle Application Book title: Smart Grids with Renewable Energy Systems, Electric Vehicles and Energy Storage Systems	CRC Press, Taylor & Francis Group, U.K.,	October, 2022. DOI https://doi.org/10.1201/9781003311195

CONFERENCE PUBLICATIONS

S. No	Name of the faculty	Title of the paper	Name of the conference publisher	Month & Year
1	K Yamuna, Dr.K Sudheer, Dr.P Suresh and Dr. YV Krishna Reddy	Ant Lion optimization based AGC in deregulated electrical system	ICRP-2023	March 2023

PLACEMENTS

S.No	Name of the student Placed	Enrollment No.	Name of the Employer	Appointment letter reference number with Date

1	Gundala Pavithra	18BF1A0234	Focus Edumatics	SVCE/EEE/2022/FOCUS-69
2	Kalahastri Balaji	18BF1A0241	Focus Edumatics	SVCE/EEE/2022/FOCUS-70
3	K Krishna Sowgandhika	18BF1A0243	Focus Edumatics	SVCE/EEE/2022/FOCUS-71
4	Podutur Sashank Reddy	18BF1A0281	Focus Edumatics	SVCE/EEE/2022/FOCUS-72
5	V Naveen Kumar	18BF1A02A5	Focus Edumatics	SVCE/EEE/2022/FOCUS-73
6	Boyanagari Krishna Shree Sai	18BF1A0216	Infosys	SVCE/EEE/2022/INFS-17
7	Jadapalli Pallavi	18BF1A0237	Infosys	SVCE/EEE/2022/INFS-18
8	T G Divyasai	18BF1A0297	Infosys	SVCE/EEE/2022/INFS-19
9	Kuchi Sravani	19BF5A0209	Infosys	SVCE/EEE/2022/INFS-20
10	Dadu Supraja	19BF5A0213	Infosys	SVCE/EEE/2022/INFS-21
11	Avula Poorna Chend	18BF1A0208	Infosys	SVCE/EEE/2022/INFS-17
12	Kumpati Jagadish	18BF1A0250	Mphasis	SVCE/EEE/2022/MPHAS-7
13	Shaik Suheb	18BF1A0293	Mphasis	SVCE/EEE/2022/MPHAS-8
14	Giddaluru Sai Kumar	19BF5A0220	Mphasis	SVCE/EEE/2022/MPHAS-9
15	Singam Pavan Kumar Reddy	18BF1A0294	Qspider	SVCE/EEE/2022/QSPID-2
16	Komme Revanth Sai	19BF5A0229	Qspider	SVCE/EEE/2022/QSPID-3
17	Dommaraju Radhika	18BF1A0226	Qspider	SVCE/EEE/2022/QSPID-4
18	Kavali Sai Kumar	18BF1A0246	Qspider	SVCE/EEE/2022/QSPID-5
19	Murasa Lokeswar	18BF1A0257	Qspider	SVCE/EEE/2022/QSPID-6
20	C Ashok Gajapathi Raju	18BF1A0259	Qspider	SVCE/EEE/2022/QSPID-7
21	Peddi Bharath Kumar	18BF1A0279	Qspider	SVCE/EEE/2022/QSPID-8
22	S Sreekanth	18BF1A0288	Qspider	SVCE/EEE/2022/QSPID-9
23	Shaik Javeed	18BF1A0292	Qspider	SVCE/EEE/2022/QSPID-10
24	Thalati Pothula Venkatesh	18BF1A0298	Qspider	SVCE/EEE/2022/QSPID-11
25	Arimbakam Silpa	19BF5A0201	Qspider	SVCE/EEE/2022/QSPID-12
26	B Jagadeesh Kumar Reddy	19BF5A0205	Qspider	SVCE/EEE/2022/QSPID-13

27	Derangula Ganesh	19BF5A0215	Qspider	SVCE/EEE/2022/QSPID-14
28	Gaddam Govardhan	19BF5A0218	Qspider	SVCE/EEE/2022/QSPID-15
29	K V Jeevan Kumar	19BF5A0224	Qspider	SVCE/EEE/2022/QSPID-16
30	Telagalapalli Vikas Kumar	19BF5A0253	Qspider	SVCE/EEE/2022/QSPID-17
31	Thopolla Arun Kumar	19BF5A0256	Qspider	SVCE/EEE/2022/QSPID-18
32	Aumbarapu Asha	18BF1A0207	TCS	SVCE/EEE/2022/TCS-37
33	Bethu Sai Manasa	18BF1A0214	TCS	SVCE/EEE/2022/TCS-38
34	Jogi Theertha Kumar	18BF1A0238	TCS	SVCE/EEE/2022/TCS-39
35	Kakarla Vemsagar	18BF1A0240	TCS	SVCE/EEE/2022/TCS-40
36	Medidaraju Kesava Datta	18BF1A0254	TCS	SVCE/EEE/2022/TCS-41
37	N Bhaskar Reddy	18BF1A0270	TCS	SVCE/EEE/2022/TCS-42
38	Duddukuru Samba Siva Rao	19BF5A0216	TCS	SVCE/EEE/2022/TCS-43
39	Amilineni Hemika	18BF1A0201	WIPRO	SVCE/EEE/2022/WIPRO-55
40	Ammapalli Poojith Gupta	18BF1A0202	WIPRO	SVCE/EEE/2022/WIPRO-56
41	Amuri Vaishnavi	18BF1A0203	WIPRO	SVCE/EEE/2022/WIPRO-57
42	Batreddy Tanmai Sowkhya	18BF1A0213	WIPRO	SVCE/EEE/2022/WIPRO-58
43	C Durga Prasad Reddy	18BF1A0217	WIPRO	SVCE/EEE/2022/WIPRO-59
44	Csandeep Kumar Reddy	18BF1A0220	WIPRO	SVCE/EEE/2022/WIPRO-60
45	D Indhumathi	18BF1A0223	WIPRO	SVCE/EEE/2022/WIPRO-61
46	Dudala Praveen	18BF1A0227	WIPRO	SVCE/EEE/2022/WIPRO-62
47	G Yogesh	18BF1A0230	WIPRO	SVCE/EEE/2022/WIPRO-63
48	Gaddam Sonali	18BF1A0231	WIPRO	SVCE/EEE/2022/WIPRO-64
49	Gottam Sonia	18BF1A0233	WIPRO	SVCE/EEE/2022/WIPRO-65
50	J Udipikrishnaprasad	18BF1A0236	WIPRO	SVCE/EEE/2022/WIPRO-66
51	Kondreddy Divya Sree	18BF1A0247	WIPRO	SVCE/EEE/2022/WIPRO-67
52	T Venkata Siva Prasad Reddy	18BF1A0299	WIPRO	SVCE/EEE/2022/WIPRO-68

53	Tirupathi Muni Sreeram	18BF1A02A3	WIPRO	SVCE/EEE/2022/WIPRO-69
54	Tirupati Shakthi Chaithanya	18BF1A02A4	WIPRO	SVCE/EEE/2022/WIPRO-70
55	Veena Mahathi	18BF1A02A6	WIPRO	SVCE/EEE/2022/WIPRO-71
56	Yarava Sai Prajwal	18BF1A02A9	WIPRO	SVCE/EEE/2022/WIPRO-72
57	Benguluru Raj Kumar	19BF5A0206	WIPRO	SVCE/EEE/2022/WIPRO-73
58	Dama Pavani Sai	19BF5A0214	WIPRO	SVCE/EEE/2022/WIPRO-74
59	Kakarla Ramya	19BF5A0225	WIPRO	SVCE/EEE/2022/WIPRO-75
60	Gatti Gani	19BF5A0226	WIPRO	SVCE/EEE/2022/WIPRO-76
61	K Nagarjuna Reddy	19BF5A0228	WIPRO	SVCE/EEE/2022/WIPRO-77
62	Rai Moses	19BF5A0243	WIPRO	SVCE/EEE/2022/WIPRO-78
63	Shaik Haji Gouse	19BF5A0248	WIPRO	SVCE/EEE/2022/WIPRO-79
64	Varthu Vasu	19BF5A0249	WIPRO	SVCE/EEE/2022/WIPRO-80
65	Devineni Sahithi	18BF1A0225	ZENSAR	SVCE/EEE/2022/ZENS-14
66	Navulla Mahesh	19BF5A0239	ZENSAR	SVCE/EEE/2022/ZENS-15
67	Thalapula Mahendra	19BF5A0254	ZENSAR	SVCE/EEE/2022/ZENS-16

STUDENTS ACHIEVEMEMTS

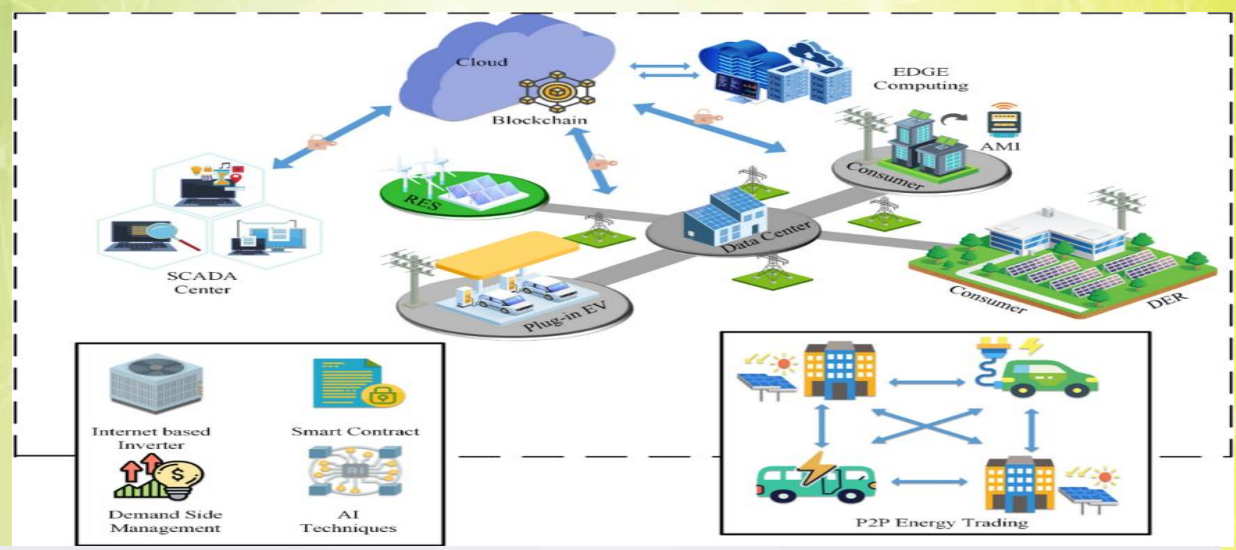
S.No	Name of the student	Event	Organized by	Date	Prize (I/II/III)/ Awards
1	K.Om Prakash	Smart India Hackathon- 2022	Ministry of Education Government of India	25-08-2022 to 26-08-2022	I
2	K.Akhila	SEA INDIA-FIESTA 2K22	SVCE	02-07-2022	I
3	A. Dhronika Reddy	ECLECTICA-2K22	MITS	03-06-2022	II
4	G.Poojitha	ECLECTICA-2K22	MITS	03-06-2022	II
5	C.Malathi	ECLECTICA-2K22	MITS	03-06-2022	III

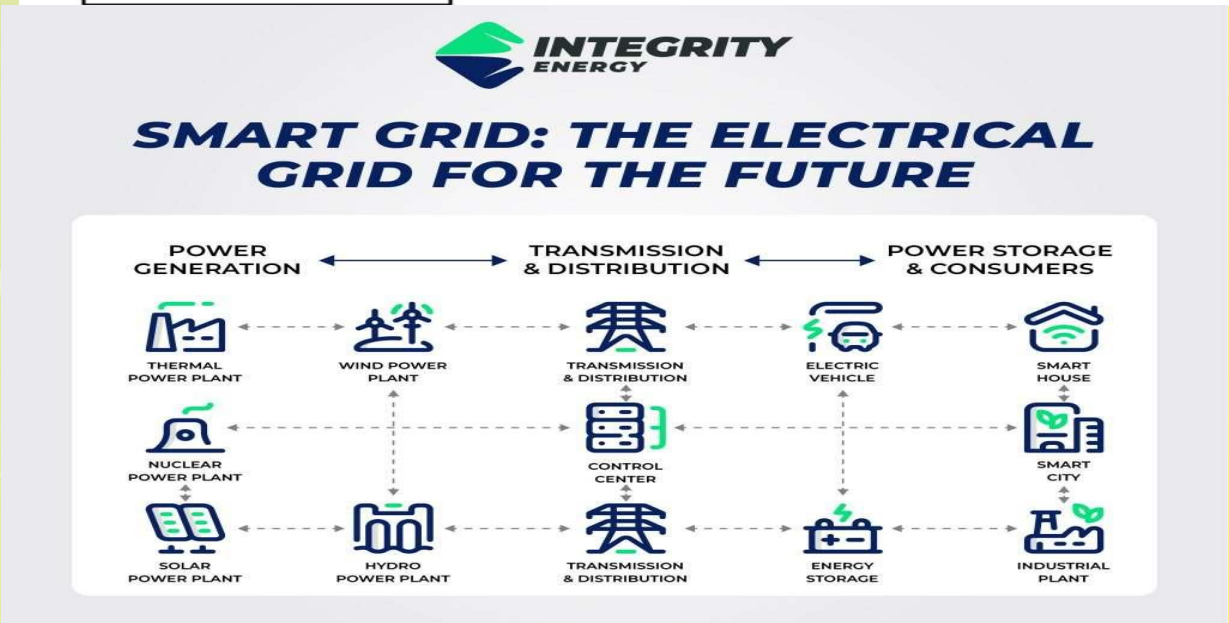
STUDENT PARTICIPATIONS

S.No	Name of the student	Event	Organized by	Date

1	K.Akhila	SEA INDIA-FIESTA 2K22	SVCE	02-07-2022
2	A. Dhronika Reddy	ECLECTICA-2K22	MITS	03-06-2022
3	G.Poojitha	ECLECTICA-2K22	MITS	03-06-2022
4	K Megana	Techno Quiz (AMPLE-2023)	SVCE	18-4-2023
5	K Nithya	Techno Quiz (AMPLE-2023)	SVCE	18-4-2023
6	K PAVITHRA	Poster Presentation (AMPLE-2023)	SVCE	18-4-2023
7	Pullagura Jaswanth Yadav	Code Quiz (AMPLE-2023)	SVCE	18-4-2023

Smart Grids





A **Smart Grid** is an **advanced electricity network** that uses **digital technology**, **sensors**, and **automation** to monitor and manage the flow of electricity **more efficiently, reliably, and sustainably** than traditional power

A **smart grid** is a modernized electrical grid that uses **communication and control technologies** to detect and respond to local changes in usage, generation, and other conditions in real time.

🔋 Smart Grids and Renewable Energy

Smart grids make it easier to:

- Integrate variable sources like **solar and wind**.
- Store energy using **batteries**.
- Redirect excess energy to where it's needed most.
- Enable **net metering**, where users can sell back excess energy.

Smart grids are a **crucial step toward a clean, efficient, and reliable energy future**. By combining modern technology with electricity networks, smart grids help **empower consumers**, **reduce carbon emissions**, and **maximize the use of renewable energy**.