

SCIENTIA

2021-22 EVEN SEMESTER NEWS LETTER



ELECTRICAL AND ELECTRONICS ENGINEERING



**The thoughts of
Electrical Engineer**

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. APJ 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 inculcate 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

I welcome all the students of the department of Electrical and Electronics Engineering. The objective of department is to prepare students for successful career in industry, research and academics to meet the needs of growing technology.

We provide opportunity for students to work as members of a team on multidisciplinary projects. The department provides students with sound foundation in the mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyze engineering problems and to prepare them for higher studies as well as research. We are committed to providing not only the technical education to our students but also the leadership qualities through which they can create employment to others.

The department has a team of highly experienced and motivated faculty members who are in the process of turning the young minds to make them globally competitive. Innovation methods of teaching and learning process are adopted to achieve learning abilities through practice, exposure and motivation. Department has an excellent infrastructure and computing facilities and provides a conducive environment to promote academic and research excellence. Above all, the entire teaching fraternity of the Department of Electrical and Electronics Engineering look forward to the holistic growth of the department and they aim at doing something extraordinarily remarkable in the academic arena of Electrical.

Students of our department have bagged prizes in academics as well in co-curricular activities. Students showcase their talent in various sports and intercollegiate technical events. Our graduates are working in multinational companies.

I congratulate the team of faculty members and the students for their brilliant and original efforts.

Dr. K. Sudheer
HOD, EEE

Dear readers,

Schools have reopened, the working-class has adapted to work from home, MBA and Engineering colleges are contemplating ways of bringing students back to campus. It's officially the new normal.

Four years eight semesters of learning is normal college life for most engineering students across the world. However, the Electrical and Electronics department, SVCE Tirupati can't be summed up the same. Innovation and creativity with countless times of breakthroughs and sleepless nights are what make the graduates of SVCE, Tirupati. This comes purely from the research based learning in the campus.

To spread this knowledge that we gain, we the content and design team of EEE association proudly present to you Scientia, the intra-college news letter of Electrical and Electronics, SVCE Tirupati.

Happy reading.....

Editorial Board

JYOTHEESWAR REDDY (IV EEE)

BANDA SREEDEEPTHI (IV EEE)

Faculty advisor

P.VINOD KUMAR, Associate Professor, Dept. of EEE

Result Analysis

IV-I Results [2018-22 Batch]					
Number of Students Registered	171	S.No.	Roll Number	Name of the Student	Percentage
Number of Students cleared all Subjects	117	1	18BF1A0285	R BHAVYA CHOWDARY	90.13
Pass Percentage	68.42	2	19BF5A0214	DAMA PAVANI SAI	88.50
		3	18BF1A0203	AMURI VAISHNAVI	86.88
		4	18BF1A0273	NARREDDY SAINI	85.38
		5	18BF1A02A4	T SHAKTHI CHAITHANYA	84.38

III-I Results [2019-23 Batch]					
Number of Students Registered	193	S.No.	Roll Number	Name of the Student	Percentage
Number of Students cleared all Subjects	116	1	19BF1A0214	BANDI RAJ KRISHNA REDDY	90.92
Pass Percentage	60.10	2	19BF1A0226	C SRIYA	88.47
		3	19BF1A0222	B JAYA KEERTHANA	87.55
		4	19BF1A0212	BADURU RAMYA	87.24
		5	19BF1A0230	C LOHITHA REDDY	87.04

II-I Results [2020-24 Batch]					
Number of Students Registered	140	S.No.	Roll Number	Name of the Student	Percentage
Number of Students cleared all Subjects	121	1	20BF1A0251	NAMBI LOHITHA	99.27
Pass Percentage	86.43	2	20BF1A0225	GANTA POOJITHA	98.13
		3	20BF1A0234	K PAVITHRA	98.02
		4	21BF5A0203	KOPPU REDDY PRASANNA	97.92
		5	20BF1A0240	KANNA AKHILA	97.60

I-I Results [2021-25 Batch]					
Number of Students Registered	96	S.No.	Roll Number	Name of the Student	Percentage
Number of Students cleared all Subjects	58	1	21BF1A0202	ADAM ABITHA	92.77
Pass Percentage	60.42	2	21BF1A0295	YAIKUNTAM VARALAKSHMI	92.55
		3	21BF1A0281	RANGALA MANASWINI	92.13
		4	21BF1A0287	SHAIK KHAJA KARISHMA	91.81
		5	21BF1A0266	N MADHULATHA	91.60

FACULTY RESEARCH CONTRIBUTION

S. No.	Author(s)	Paper Title	Journal/Conference
1	A Sudhakar	Maximum exploitation of electric vehicle storage in smart micro grids with stochastic renewable sources	Journal of Energy Storage
2	Dr. Kumar K	Quadratic boost converter for wind energy conversion system using back propagation neural network maximum power point tracking	Int. J. Energy Technology and Policy
3	VenkatasupuraVemulapati	Performance enhancement of a high-speed railway supply system with multi module converter: a laboratory prototype model for Indian railways	Indonesian Journal of Electrical Engineering and Computer Science
4	Sudheer, K., Suresh Penagaluru,, Prabakaran, N.	Mitigation of Voltage Disturbances in Photovoltaic Fed Grid System Using Cascaded Soft Computing Controller	Lecture Notes in Electrical Engineering
5	K. Roopa Raj, Dr. Kumar K, Dr. KasaSudheer	Analysis of Power Quality Improvement in the Grid Connected Renewable Energy based System with UPQC Control Strategies	International Journal of Research in Engineering and Science (IJRES)
6	K. Kumar, V. L. Devi, A. Prasad, R. Sarjila and J. B. Edward	Interpretation of PMSG Based Wind System with High Gain Converters and MPPT Controllers	2021 Innovations in Power and Advanced Computing Technologies (i-PACT)
7	Y V Krishna Reddy; P Vinod Kumar	Economic dispatch solutions with piecewise quadratic cost functions using Spotted hyena Optimizer	2021 IEEE Madras Section Conference (MASCON)
8	Dr. Kumar K, Dr. V Lakshmi Devi	Design of Solar Powered Smart Water Pump for Moisture Controller in Agriculture Sector	ICAMIS 2022 virtual conference to be held at MLR Institute of Technology, Hyderabad

Any one who stops learning is old, whether at twenty or eighty. Anyone who keeps learning stays young. The greatest thing in life is to keep your mind young.

- Henry Ford

FACULTY RESEARCH CONTRIBUTION

PATENTS				
S.No.	Inventor(s)	Title	Institute/Agency	Status/Date
1	Mr. V V Supura Dr. N Visali Dr. Y N Vijaykumar Dr. Shaik Rafi Kiran Mrs. P. Suneetha Mr. Dandu Srinivas Dr. V Sekhar Mr. P VenkataVaraprasad Dr. Avagaddi Prasad Dr. K. Harshavardhana Reddy Dr. Kumar K	Droop Characteristics Based Power Supply for Electric Traction System	Indian 202141040185 A	17-09-2021

BOOKS PUBLISHED				
S.No.	Author(s)	Title	Publisher	ISSN/ISBN No.
1	Dr.RajaReddy.D, R.Sireesha, Dr.V.Lakshmi Devi	Constant Load and Constant power operation based standalone photovoltaic system	AkiNil Publications	ISBN: 978-93-90846-55-9, DOI: https://doi.org/10.22271/ed.book.1220 2021

Thanks to all the teaching and non-teaching staff for supporting directly and indirectly for providing opportunities and guidance to get jobs. You have given a walk on red carpet for our future steps. We remember you teachers for spending your valuable time for teaching, training, motivating, inspiring and what not. It means a lot to us. We promise you that we continue the same will in our life. We make you proud. Thank you for everything that we had in the campus....

- Sakthi Chaitanya (2018-22 batch)

Placements

Our motto: Education for better society

S.No	Roll.No	Name of the Student	Name of the Company
1	18BF1A0201	AMILINENI HEMIKA	WIPRO
2	18BF1A0202	AMMAPALLI POOJITH GUPTA	WIPRO
3	18BF1A0203	AMURI VAISHNAVI	WIPRO
4	18BF1A0213	BATREDDY TANMAI SOWKHYA	WIPRO
5	18BF1A0217	C DURGA PRASAD REDDY	WIPRO
6	18BF1A0220	CHINTAM SANDEEP KUMAR REDDY	WIPRO
7	18BF1A0223	D INDHUMATHI	WIPRO
8	18BF1A0227	DUDALA PRAVEEN	WIPRO
9	18BF1A0230	G YOGESH	WIPRO
10	18BF1A0233	GOTTAM SONIA	WIPRO
11	18BF1A0236	J UDIPIKRISHNAPRASAD	WIPRO
12	18BF1A0247	KONDREDDY DIVYA SREE	WIPRO
13	18BF1A0299	THAVVA VENKATA SIVA PRASAD REDDY	WIPRO
14	18BF1A02A3	TIRUPATHI MUNI SREERAM	WIPRO
15	18BF1A02A4	TIRUPATI SHAKTHI CHAITHANYA	WIPRO
16	18BF1A02A6	VEENA MAHATHI	WIPRO
17	18BF1A02A9	YARAVA SAI PRAJWAL	WIPRO
18	19BF5A0206	BENGULURU RAJ KUMAR	WIPRO
19	19BF5A0214	DAMA PAVANI SAI	WIPRO
20	19BF5A0225	KAKARLA RAMYA	WIPRO
21	19BF5A0226	GATTI GANI	WIPRO
22	19BF5A0243	RAI MOSES	WIPRO
23	19BF5A0248	SHAIK HAJI GOUSE	WIPRO
24	19BF5A0249	VARTHU VASU	WIPRO
25	19BF5A0228	KATIKAREDDY NAGARJUNA REDDY	WIPRO
26	18BF1A0204	ANNAPUREDDY VIRUPAKSHA REDDY	WIPRO
27	18BF1A0226	DOMMARAJU RADIKA	WIPRO
28	18BF1A0234	GUNDALA PAVITRA	WIPRO

Placements

Our motto: Education for better society

S.No	Roll.No	Name of the Student	Name of the Company
29	18BF1A0259	CHITTETI ASHOK GAJAPATHI RAJU	WIPRO
30	19BF5A0217	GADDAM BHAGYALAKSHMI	WIPRO
31	19BF5A0234	MALLELLA KARTHIK	WIPRO
32	18BF1A0210	BANDA SREDEEPTHI	Capgemini
33	18BF1A0215	BOLLOJI SRINIVAS	Capgemini
34	18BF1A0262	LANKIPALLI SUDHAKAR PRADEEP	Capgemini
35	18BF1A0282	PULA YASWANTH	Capgemini
36	18BF1A0285	RALLAPALLI BHAVYA CHOWDARY	Capgemini
37	18BF1A0295	SIRIGIRI JASWANTH	Capgemini
38	19BF5A0208	BHEEMISETTY RAGHU RAM	Capgemini
39	19BF5A0211	CHALLA MANOJ KUMAR REDDY	Capgemini
40	19BF5A0223	IKUTTI VISHNUVANDANA	Capgemini
41	19BF5A0233	M V SUNIL KUMAR	Capgemini
42	19BF5A0246	SANGIREDDY NAGESWARI	Capgemini
43	19BF5A0257	VEMURU JAYAPRAKASH	Capgemini
44	18BF1A0212	BANDI JYOTHEESWAR REDDY	Cognizant
45	18BF1A0218	C VITESH	Cognizant
46	18BF1A0248	KORIVI PRATHYUSH KUMAR	Cognizant
47	18BF1A0264	GADA GANESH	Cognizant
48	18BF1A0265	MATAM MAHESH SWAMY	Cognizant
49	18BF1A0266	GRANDHI NAVEEN KUMAR	Cognizant
50	18BF1A0271	NARA ROOPA SRI	Cognizant
51	18BF1A0273	NARREDDY SAINI	Cognizant
52	18BF1A0275	NULETI BHARGAV	Cognizant
53	18BF1A0278	PANDEETI MANOJ KUMAR	Cognizant
54	18BF1A0283	PULLAGURA LALU PRASAD YADAV	Cognizant
55	18BF1A02A2	THOKANCHI BALACHANDU	Cognizant
56	18BF1A02A7	YADDALAPURI VISHNU VARDHAN	Cognizant
57	19BF5A0219	GAVIREDDY VAMSIDHAR REDDY	Cognizant
58	19BF5A0236	MUTHUKURU GANESH	Cognizant
59	19BF5A0238	NARMA MUNI KUMAR REDDY	Cognizant
60	19BF5A0240	ORUGANTI JYOTHIRMAI	Cognizant
61	19BF5A0235	SALAVEDI MOHAN	Cognizant
62	19BF5A0245	SALAVADI MOHAN VAMSI	Cognizant
63	19BF5A0237	TOKALA KIRAN	Cognizant
64	18BF1A0241	KALAHASTRI BALAJI	Cognizant
65	18BF1A0281	PODUTUR SASHANK REDDY	Cognizant
66	19BF5A0201	ARIMBAKAM SILPA	Cognizant

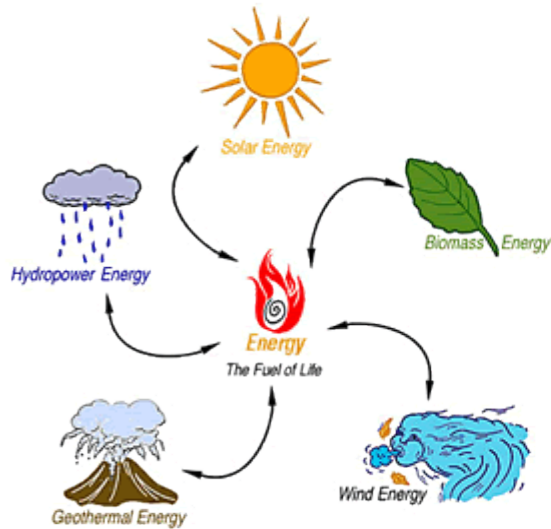
Student Achievements

Sl. No.	Roll number	Name of the Student	Event	Organized By	Date	Prizes (I/II/III)/ Awards
1	19BF1A0237	E Dinesh	Mekeathon 2.0	JNTUA, Anathapuramu	02-10-2021	Secured 1st prize
2	18BF1A0265	Matam Mahesh swamy	Mekeathon 2.0	JNTUA, Anathapuramu	02-10-2021	Secured 1st prize
3	19BF1A0228	C. Harika	Electric Mantra E-Project Expo 2021	Annamacharya Institute of Technology and Sciences, Rajampet	17-07-2021	Received 2nd Prize in Project Expo
4	19BF1A0254	K Anudeep	Electric Mantra E-Project Expo 2021	Annamacharya Institute of Technology and Sciences, Rajampet	17-07-2021	Received 2nd Prize in Project Expo
5	19BF1A02C1	P.D.Reshma	Dhaanishyam-2021,Quiz	Dhaanish Ahmed Institute of Technology, Coimbatore	13-10-2021	Secured 1st prize
6	19BF1A0202	A. Raju	Dhaanishyam-2021,Quiz	Dhaanish Ahmed Institute of Technology, Coimbatore	13-10-2021	Secured 1st prize
7	19BF1A0202	A. Raju	Paper Presentation	Loyola Institute of Technology, Chennai	21-06-2021	Secured 1st Prize
8	20BF5A0217	S.Gayathri	Paper Presentation	Loyola Institute of Technology, Chennai	21-06-2021	Secured 1st Prize
9	20BF1A0204	A. Dhronika Reddy	Paper Presentation	Loyola Institute of Technology, Chennai	21-06-2021	Secured 1st Prize

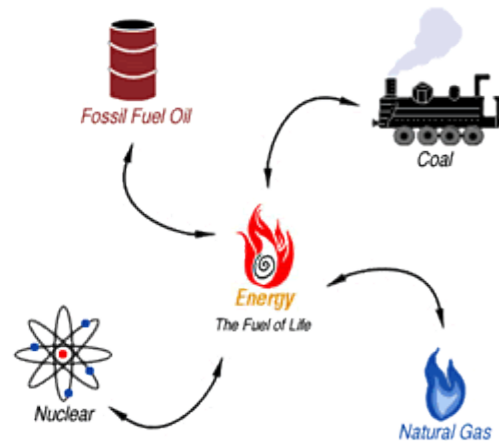
Student Participations

S. No.	Roll number	Name of the Student	Event	Organized By	Date
1	18BF1A0212	B. Jyotheeswar Reddy	E-Quiz -2021	K.S.Rangasamy College of Technology , TamilNadu	20-07-2021
2	19BF1A0202	A. Raju	E-Quiz -2021	K.S.Rangasamy College of Technology , TamilNadu	20-07-2021
3	19BF1A0228	C. Harika	Quiz -2021	K.S.Rangasamy college of Technology, TamilNadu	20-07-2021
4	19BF1A0261	K.Charan Kumar	E-Quiz -2021	K.S.Rangasamy college of Technology, TamilNadu	20-07-2021
5	19BF1A0254	K Anudeep	Paper Presentation-2021	Saveetha College Engineering,Chennai	21-06-2021
6	20BF5A0225	T.Likitha	Paper Presentation-2021	Saveetha College Engineering,Chennai	21-06-2021
7	20BF5A0226	U. Ram varun Reddy	Paper Presentation-2021	Saveetha College Engineering,Chennai	21-06-2021
8	19BF1A0202	A. Raju	Paper Presentation-2022	Saveetha College Engineering,Chennai	21-06-2021
9	20BF5A0215	S. Mansoor Basha	Paper Presentation	Saveetha College Engineering,Chennai	21-06-2021
10	19BF1A02E2	Sowmya Shree S	Paper Presentation-2021	Saveetha College Engineering,Chennai	21-06-2021
11	19BF1A0279	K. Thanuja	E Paper Presentation	SRM Institute Of Science and Technology,Ramapuram	30-10-2021
12	19BF1A0262	K. Bhanu Prakash	E Paper Presentation	SRM Institute Of Science and Technology,Ramapuram	30-10-2021
13	19BF1A0253	J. Siva Sai	E Paper Presentation	SRM Institute Of Science and Technology,Ramapuram	30-10-2021
14	20BF5A0223	Y.Siva	E Paper Presentation	SRM Institute Of Science and Technology,	30-10-2021
15	19BF1A02E4	S. Lakshmi Priya	Tornados Quiz	FIITJEE, Chennai	11-12-2021
16	19BF1A02C8	S. Fathima Mobin	Tornados Quiz	FIITJEE, Chennai	11-12-2021
17	19BF1A02G2	V. Akhila	Tornados Quiz	FIITJEE, Chennai	11-12-2021
18	19BF1A0222	B. Jaya Keerthana	Quiz	Dhaanish Ahmed Institute Of Technology, Coimbatore	13-10-2021
19	19BF1A0272	K. Vidhya Chowdary	Quiz	Dhaanish Ahmed Institute Of Technology, Coimbatore	13-10-2021

Renewable Energy

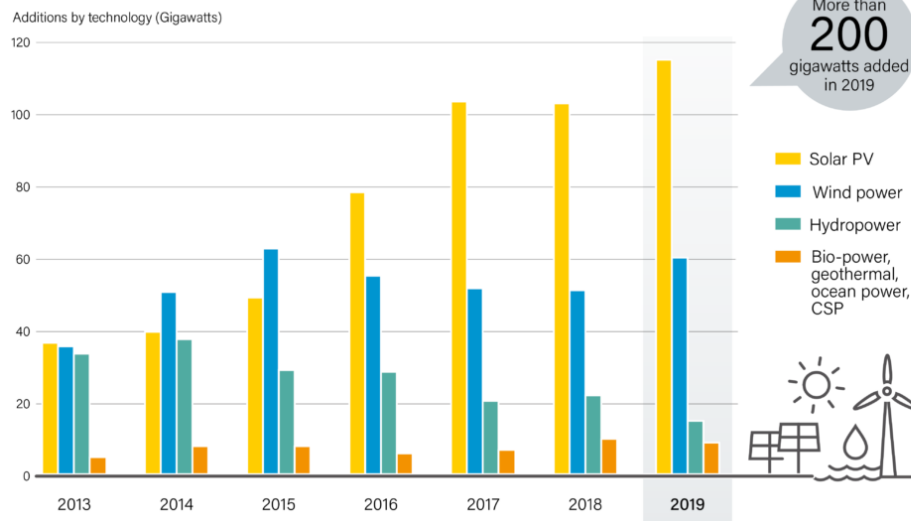


Non-Renewable Energy



What is renewable energy?

Annual Additions of Renewable Power Capacity, by Technology and Total, 2013-2019



Renewable energy is energy derived from natural resources that replenish themselves in less than a human lifetime without depleting the planet's resources. These resources – such as sunlight, wind, rain, tides, waves, biomass and thermal energy stored in the earth's crust – are available in one form or another nearly everywhere. They are virtually inexhaustible. And, what is even more important, they cause little climate or environmental damage.

Fossil fuels such as oil, coal, and natural gas on the contrary are available in finite quantities only. As we keep extracting them, they will run out sooner or later. Although produced in natural processes, fossil fuels do not replenish as quickly as we humans use them.

Key benefits of renewable energy for people and the planet

Renewable energy emits no or low greenhouse gases. That's good for the climate.

Renewable energy emits no or low air pollutants. That's better for our health.

Renewable energy comes with low costs. That's good for keeping energy prices at affordable levels.

Renewable energy makes the energy system resilient. That's important to prevent power shortages.

Renewable energy is accessible to all. That's good for development.

Renewable energy is secure. That's good for stability.

Save Fuel : Save Energy

- Editorial Board