

SCIENTIA

2020-21 ODD SEMESTER NEWS LETTER



ELECTRICAL AND ELECTRONICS ENGINEERING

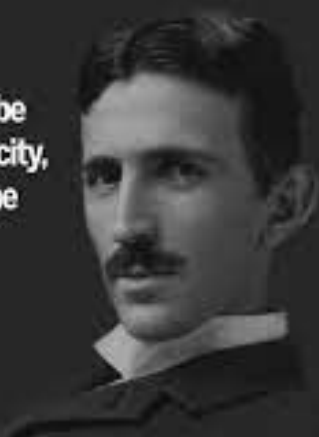


Nuclear Energy

If your hate could be
turned into electricity,
it would light up the
whole world.



Nikola Tesla
www.gutenberg.org/files/10246/10246-h/10246-h.htm



Talent is like electricity.
We don't understand
electricity. We use it.

Maya Angelou

"He Who is Not Courageous Enough to Take Risks Will Accomplish Nothing in Life"

-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

P AARATHI SARANYA (IV EEE)

THOTAPALLI PAVITHRA (IV EEE)

Faculty advisor

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

Result Analysis

IV-II Results [2016-20 Batch]

Number of Students Registered	142
Number of Students cleared all Subjects	117
Pass Percentage	82.39

S.No.	Roll Number	Name of the Student	Percentage
1	16BF1A0290	SHAIK NAZMA	92.40
2	16BF1A0236	JONNA POOJA	92.20
3	17BF5A0218	K VISHNUVARDHAN REDDY	92.00
4	16BF1A0237	K HEMANTHKUMAR	91.60
5	17BF5A0227	THOTA GIREESH	91.00

III-II Results [2017-21 Batch]

Number of Students Registered	210
Number of Students cleared all Subjects	169
Pass Percentage	84.08

S.No.	Roll Number	Name of the Student	Percentage
1	17BF1A02C9	THOTAPALLI PAVITHRA	98.07
2	17BF1A02D1	V KUSUMA	93.01
3	17BF1A0262	KOTILINGALU LAVANYA	92.17
4	17BF1A0273	T SAI SHILPA AASHLESH	91.57
5	17BF1A0299	P AARATHI SARANYA	91.33

II-II Results [2018-22 Batch]

Number of Students Registered	171
Number of Students cleared all Subjects	130
Pass Percentage	76.02

S.No.	Roll Number	Name of the Student	Percentage
1	18BF1A0285	R BHAVYA CHOWDARY	91.22
2	18BF1A0210	BANDA SREDEEPTHI	88.11
3	18BF1A0207	AUMBARAPU ASHA	87.78
4	18BF1A0273	NARREDDY SAINI	87.33
5	18BF1A02A4	T SHAKTHI CHAITHANYA	86.67

I-II Results [2019-23 Batch]

Number of Students Registered	169
Number of Students cleared all Subjects	68
Pass Percentage	40.24

S.No.	Roll Number	Name of the Student	Percentage
1	19BF1A02D2	SUPRAJA	94.42
2	19BF1A02E7	VIKRAM	94.42
3	19BF1A0212	RAMYA	93.02
4	19BF1A0230	LOHITHA	92.56
5	19BF1A0240	THANUJA	92.56



FACULTY RESEARCH CONTRIBUTION

S.No	Author(s)	Paper Title	Jour/Conf.
1	Dr.K.Kumar	Performance Evaluation of Photo Voltaic System with Quadratic Boost Converter Employing with MPPT Control Algorithms	International Journal of Renewable Energy Research
2	Kasa Sudheer Ch. Lenin Babu , G. Purushotham , P Suresh	Voltage Disturbance Mitigation in Distribution System Using FM-DQ control based DVR	International Journal of Advanced Science and Technology
3	Dr. V. Lakshmi Devi	A Comparative and Novel Solution for unit Commitment Problem using Hybridized bat Search Approach technique for 10-unit System	Journal of critical Reviews
4	R.Sireesha	Optimal design of Reliable Multi Micro Grid based Distribution Systems	Solid state Technology
5	M. Nagaiah	Comparative Analysis of Output Power of PV/Wind Hybrid Boost Converter System with PI, PI with Fuzzy, FLC and ANFIS based MPPT Techniques	International Journal on Emerging Technologies
6	R. Sireesha, C. Srinivasa Rao, M. Vijaya Kumar	Optimal design of Reliable Multi Micro Grid based Distribution Systems	Solid State Technology
7	Suresh Penagaluru	Mitigation of voltage disturbances in pv interconnected grid using anfis based dynamic voltage restorer	International Journal of Advanced Science and Technology
8	SudheerKasa, T Naveen	Design and Performance Analysis of an Adaptive Current Source Driver Scheme for Power Factor Correction Converters	International Journal of Information and Computational Science
9	Kasa. Sudheer, P. Yamuna	A Novel Voltage Unbalance Compensation Control Strategy for DG Interfaced Converters in an Islanded Microgrid	International Journal of Information and Computational Science
10	P.Vinod Kumar	An Advanced power control strategy and optimization of large scale grid connected photovoltaic systems in the smart grid	DogoRangsang Research Journal

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

S.No	Author(s)	Paper Title	Jour/Conf.
11	B.BanuSuriya, K.Yamuna	Impact of various load models on DG Placement and sizing using Backtracking search Algorithm	Alochana Chakra Journal
12	T Naveen, Kumar K	Performance Analysis of On-Grid Hybrid Solar and Wind Energy System with ANFIS Based OASC and MAF Controllers	Journal of Information and Computational Science
13	Kullu Himabindu, Kumar K	ANFIS Based Repetitive Controller with Reduced Switch Seven Level Cascaded Inverter for a Solar PV and Battery Energy Storage	Journal of Information and Computational Science
14	AjjiSrinivasulu, R Sireesha, Suresh Penagaluru	Design And Analysis Of A Dual Voltage Source Inverter For Enhancement of Power Quality In A Micro Grid System	Journal of Information and Computational Science
15	P.Suneetha	Power Quality Improvement in Wind Unit fed Three phase system using NN- UPQC Control Strategy	Journal of Information and Computational Science
16	Dr. V Lakshmi Devi	An Improved Control Strategy for Dynamic Voltage Restorer For Mitigating Power Quality Problems in Electrical Distribution Systems	Journal of Information and Computational Science
17	AJJI SRINIVASULU, R SIREESHA, SURESH PENAGALURU	Design And Analysis of a Dual Voltage Source Inverter for Enhancement of Power Quality in a Micro Grid System	Journal of Information and Computational Science
18	A.SUDHAKAR	Cooperative control and advanced Management of distributed generators in a Smart grid	The International journal of analytical and experimental modal analysis
19	V Vsupura	Railway Power Supply system using Modular Multilevel Converter with Droop Characteristics	4th International Conference on Electronics , Communication and Aerospace Technology (ICECA), IEEE Conference
20	Venkatasupuravemulapati	Droop Characteristics based High Speed Traction Power Supply system using Modular Multilevel Converter	2020 4th International Conference on Trends in Electronics and Informatics (ICOEI)
21	KasaSudheer, K Hemanth Kumar, N Puneethkumar, K VishnuVardhan Reddy	Iot based intelligent smart controller for electric vehicles	2020 6th International Conference on Advanced Computing and Communication Systems (ICACCS)
22	Babu, C., Kumar, D. D., Kumar, K., Reddy, K. J., & Sudha, R.	Power Monitoring and Control System for Medium Voltage Smart Grid Using IoT	IOP Conference Series: Materials Science and Engineering

FACULTY RESEARCH CONTRIBUTION

PATENTS PUBLISHED				
S.No.	Author(s)	Title	Publisher	ISSN/ISBN No.
1	Dr. Kumar K, Dr. V. Lakshmi Devi, Mrs. R. Sireesha, Mr. N.M. Girish Kumar, Mrs. B. Banusuriya, Mrs. P. Suneetha, Mr. Y V Krishna Reddy, Mr. Gowtham Chendra	Household Water Usage Auditing, Assessment Report and Scheduling	Indian 202141001828 A	22-01-2021
2	Dr. Raja Reddy. Duvvuru, R. Sireesha, Dr. Luke John Baktha Singh Imma- raju, Dr. Bolla Madhusudhana Reddy, Palleti Venkata Kusuma, M. Manikumar Reddy, Kameswara Vasishta Kumar Kavuturu, Dr. V. Lakshmi Devi, Dr. Varaprasad Janamala, Dr. Koritala Chandra Sekhar	Compact Washing Machine	Indian 339783-001	26-02-2021
3	K.Vishnu Vardhan Reddy, K.Hemanth Kumar, N.Puneeth Kumar, Dr. K. Sudheer, P.Suresh, Dr. D Srinivasulu Reddy, Dr.N.Sudhakar Reddy	Intelligent Range Estimator and Crash Detector for Electric Vehi- cles	Indian 202141002284 A	22-01-2021

BOOKS PUBLISHED				
S.No.	Author(s)	Title	Publisher	ISSN/ISBN No.
1	T Naveen, Kumar K	Performance Analysis of On-Grid Hy- brid Solar and Wind Energy System	LAP LAMBERT Academic Publish- ing	ISBN: 978-620-3- 41091-4 January, 2021
2	K Himabindhu, Kumar K	Analysis of Reduced Switch Seven Level Cascaded Inverter for PV Sys- tem	LAP LAMBERT Academic Publish- ing	ISBN: 978- 620-3- 46289-0 January, 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....

- M. Mahesh Swamy (2018-22 batch)

Placements

Our motto: Education for better society

S.No	ROLL.NO	NAME OF THE STUDENT	MNC
1	16BF1A0203	ALWAR OMKAR	TCS
2	16BF1A0210	AVVARU YASASWINI	TCS
3	16BF1A0211	B CHARANKUMAR	TCS
4	16BF1A0214	BANDARU DHEERAJ	TCS
5	16BF1A0261	SUCHARITHA KOPPOLU	TCS
6	16BF1A02A8	VEDAPALLI VISHNUVARDHAN	TCS
7	16BF1A02A9	V PRASANNA SAINADH	TCS
8	16BF1A02B3	YELLOLLA OM PRAKASH	TCS
9	17BF5A0203	D VIJAY KUMAR REDDY	TCS
10	17BF5A0205	KANAPARTHI HARI	TCS
11	17BF5A0206	ANGAJALA RAMESH	TCS
12	17BF5A0216	BUDUSU NAGARAJ	TCS
13	17BF5A0218	K VISHNUVARDHAN REDDY	TCS
14	17BF5A0226	VENKAMARDI VIJAY	TCS

Student Achievements

Sl. No.	Roll number	Name of the Student	Event	Organized By	Date	Prizes (I/II/III)/ Awards
1	20BF5A0208	K Sunil Kumar	Avishkar-2021	Srirama Engineering College, Tirupati	09-03-2021	I Prize Quiz
2	19BF1A0236	D.K. Varshini	Avishkar-2021	Srirama Engineering College, Tirupati	09-03-2021	I Prize Quiz
3	19BF1A0279	S.Thanuja	Avishkar-2021	Srirama Engineering College, Tirupati	09-03-2021	I Prize Quiz
4	18BF1A0212	B. Jyotheeswar Reddy	National Level Quiz	Sreenidhi Institute of Science and Technology, Hyderabad	07-07-2020	Secured 3rd Prize
5	18BF1A0254	M. Kesava Datta	National Level Quiz	Sreenidhi Institute of Science and Technology, Hyderabad	07-07-2020	Secured 3rd Prize
6	18BF1A0271	M. Roopa Sri	National Level Quiz	Sreenidhi Institute of Science and Technology, Hyderabad	07-07-2020	Secured 3rd Prize

Student Participations

S. No.	Roll number	Name of the Student	Event	Organized By	Date	Participants
1	19BF1A02E7	T.Vikram Kumar	English Quiz Series - 1 (2020)	G.Pulla Reddy Engineering College , Kurnool	13-08-2020	Participated in E-Quiz on Vocabulary
2	19BF1A0228	C.Harika	English Quiz Series - 1 (2020)	G.Pulla Reddy Engineering College , Kurnool	13-08-2020	Participated in E-Quiz on Vocabulary
3	19BF1A0253	J. Siva Sai	Sankalpa-2020	Siddhartha Educational Academy, Chittoor	21-12-2020	Participated in Expo
4	19BF1A0237	E. Dinesh	Sankalpa-2020	Siddhartha Educational Academy, Chittoor	21-12-2020	Participated in Expo
5	19BF1A0241	E. Sumanth	Sankalpa-2020	Siddhartha Educational Academy, Chittoor	21-12-2020	Participated in Expo
6	17BF1A0221	C Hemadri	Techno Cultural Fest-2020	MITs Madanapalle	17-12-2020	Participated
7	17BF1A0262	K Lavanya	Techno Cultural Fest-2020	MITs Madanapalle	17-12-2020	Participated
8	17BF1A0239	U Bandhavya	Techno Cultural Fest-2020	MITs Madanapalle	17-12-2020	Participated

Editorial Board

P AARATHI SARANYA (IV EEE)

THOTAPALLI PAVITHRA (IV EEE)

Faculty advisor

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



What is renewable energy?

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