

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

## IMPRESSIONS



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**DEPARTMENT NEWS LETTER | 2020-21**

# IMPRESSIONS

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### ABOUT

#### THE DEPARTMENT OF EEE

Electrical & Electronics Engineering arena stands tall at the front facet of the newest technology. Moving beyond wires and circuits, the discipline now is taking giant strides as it percolated into cutting-edge technologies. The Department adopted the following approaches for enhancing learning experiences among the students, Self-Learning, Participative Learning, and Problem Solving Methodologies. The Department is recognized as Research centre by the affiliating university. The average age and experience of the faculty of EEE department is quite significant. The faculty retention ratio of the department is also quite significant.

### QUALITY POLICY

Sree Vidyanikethan Engineering College strives to establish a system of quality assurance to continuously address, monitor and evaluate the quality of education offered to students, thus promoting effective teaching processes for the benefit of students and making the College a Centre of Excellence for Engineering and Technological studies.

### VISION:

- ❖ To become the nation's premiere Centre of excellence in electrical engineering through teaching, training, research and innovation to create competent engineering professionals with values and ethics.

### MISSION:

- ❖ Imparting Knowledge through implementing modern curriculum, academic flexibility and learner centric teaching methods in Electrical Engineering.
- ❖ Inspiring students for aptitude to research and innovation by exposing them to industry and societal needs to create solutions for contemporary problems.
- ❖ Honing technical and soft skills for enhanced learning outcomes and employability of students with diverse background through comprehensive training methodologies.
- ❖ Inculcate values and ethics among students for a holistic engineering professional practice.

### PROGRAM SPECIFIC OUTCOMES

On successful completion of the program, engineering graduates will be able to

- PSO1. Plan to conserve and harness electrical energy using electrical and electronic systems for sustainability.
- PSO2 Use domain specific tools to analyze, design and develop electrical and electronic systems for feasible operation and control of Electrical and Electronic Systems.
- PSO3 Develop operating strategies for utilization of energy and application of Electrical and Electronics systems in relevance to industry and society.

**SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)**

## PHILOSOPHY

- ❖ To train and enable the students holistically to provide effective solutions for the problems in the field of electrical engineering that are useful to the society involving ethics and morals.

## BEST PRACTICES

- ❖ Conducting Skill development programs for improving placement rate and making students industry ready.
- ❖ Conducting Add-on courses to bridge the gap between industry and academia.
- ❖ Encouraging the students to carryout diversified and real time valued projects as solution to the industrial, day-to-day problems as a part of their academic curriculum.
- ❖ Uplifting the academically weaker students by conducting Remedial and Reinforcement Classes.
- ❖ Performing Annual Energy Audit to monitor the energy consumption and demand of the Institution and propose energy conservation measures if required.
- ❖ Performing energy audit in the nearby villages and propose energy conservation measures.
- ❖ Conducting Technical Talks on Recent Trends in Electrical Engineering helps in updating the core knowledge and enhancing the academic standards among the Faculty and Students.
- ❖ Peer Training to students.
- ❖ Innovative Talks and Idea Presentation by the Students.

## DEPARTMENT INITIATIONS

A Solar PV Systems Lab with a state-of-infrastructure was established to impart training and internship programmes in the area of Renewable Energy in the Month of May 2021.

Science Technology & Innovation (STI) Hub activities were commenced from 01<sup>st</sup> April 2021 with a motto to improve the socio-economic conditions of concern population specified, through interventions in food processing and post-harvest technologies by promoting research, development & adaptation of appropriate and relevant technologies.

## TEACHING & LEARNING

The advanced learners were encouraged to undertake mini projects, literature collection on advanced areas and seminars in the respective engineering domain.

Make-up classes were conducted for Lateral Entry Students to cope up with the regular syllabus.

To make students to understand the industrial practices and technology, an Add-on course titled “Basic Electrical Application design using Arduino –Phase 01” was conducted during 10<sup>th</sup> to 15<sup>th</sup> August 2020, and a total number of 25 students were benefited.

Total 18 Students undergone Internship training in various reputed Industries like M/s. Wiley - Mthree Internship in Service Desk; M/s. Cognizant Technology Solutions India Pvt. Ltd., M/s. Pantech Prolab Pvt Ltd, Chennai and APTRANSCO, Yerraguntla, Kadapa.

Total 129 Students were placed in various reputed organizations like CTS, INFOSIS, WIPRO, Hyundai Mobis, TCS Hyderabad, HEXWAREHOUSE, Wiley next, Prolifics, HCL and True equations Pvt.Ltd through On-Campus and Off Campus Placements.

During AY: 2020-21, upon their choice of interest the members of Faculty attended 248 versatile events organized virtually by several prestigious institutions.

## RESEARCH

In its stride of enhancing its potential in the spectrum of academics, research is being promoted and carried out within the department.

Widespread of research is being carried in the areas of Power Quality Improvement, High Voltage Engineering, Control Systems, Renewable Energy & Grid Integration, Energy Storage, FACTS, Embedded Systems, IoTs, Online Condition Monitoring of Electrical Apparatus, Special Purpose Machineries, etc.

Dr. T. Devarju, Professor; Dr. M S Sujatha, Professor; Dr. G H Harikrishnan, Associate Professor and Mr. K. Leleedhar Rao, Assistant Professor received a Financial Assistance of Rs. 3.61 Crores from the Science for Equity Empowerment and Development Division, Department of Science and Technology, Ministry of Science and Technology, Govt. of India for the Science & Technology Project titled "Science Technology and Innovation (STI) Hub in Chandragiri Mandal, Chittoor District, Andhra Pradesh State for the Socioeconomic Development of Scheduled Caste SC and Scheduled Tribe ST Communities.

- ❖ Total 24 research papers were published in the reputed journals including SCI, SCOPUS and WOS.
- ❖ Total 8 book chapters were published by reputed publishers like Springer.
- ❖ Total 21 research findings were presented in various reputed international conferences.
- ❖ Total 01 Research Projects worth Rs.32.80 Lakhs was submitted to SERB to grab financial assistance.

## ICECCES-2020

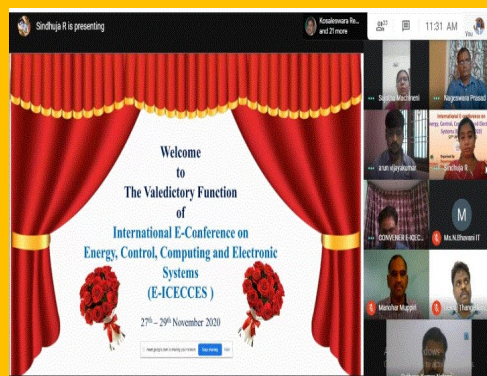
A Three day International E-Conference on "Energy, Control, Computing and Electronic Systems (ICECCES-2020)" was held from 27<sup>th</sup> to 29<sup>th</sup> November 2020.

It served as the multi-disciplinary platform for exchanging innovative ideas and thoughts on the Energy, Control, Computing and Electronic Systems and their applications to the society. Based on the conference theme, 50 papers were shortlisted from the total count of 150 papers from different countries like India, Bangladesh, Morrisia, China etc.. This scientific meeting had 2 technical talks and 7 technical sessions where 50 research papers were presented.

### ICECCES- 2020 SNAPS



Participants



Conference Chair Dr. MS Sujatha delivering Closing remarks

Dr. Suresh Babu Daram, Associate Professor received "Best Paper Award" with Cash prize of Rs. 3000/- at An E-Techno Symposium on Reaching The Heights of Technology Trends conducted by M/s. Hetarthi:PGF on 17.07.2020.

## RECOGNITIONS

- ❖ Dr. M. S. Sujatha, Professor obtained "Certificate of Recognition" and stood at 6<sup>th</sup> Place for sharing idea "Creation of Integrated Platform for different sources of health data" at Idea Sharing Competition of International Covid 19 Congress (ICC 2020) held on 10.08.2020.
- ❖ Mr. K. Leleedhar Rao, Assistant Professor received "Certificate of Appreciation" from Water Resources Department, Government of Andhra Pradesh for outstanding contribution and valuable role in "Designing and developing a remote control system for operation of spill way and scour sluice gates". A sub work of Govt. of A.P prestigious project. Construction of a new reservoir across Kundu river to a capacity of 0.80 TMC near Jaladarasi Village, Kurnool(dt) on 01.03.2021.
- ❖ Dr. Suresh Babu Daram, Associate Professor received Distinguished Associate Professor Award for distinguished Contribution in the field of Education from International Education Summit & Award (IESA)-2020 on 20.12.2020.
- ❖ Dr. M. S. Sujatha, Professor obtained letter of Appreciation for Outstanding Contribution in Reviewing the papers for International Conference on Emerging Technologies in Electrical Engineering (ICETEE-2020) on 01.08.2020.

## PATENTS

- Mr. K. Leleedhar Rao, Assistant Professor and Dr. T. Devaraju, Professor filed a patent application for their invention titled "Transportable Solar based Sugar Cane Juice Preheating System for Jaggery Making" and the patent was published by the official journal of the patent office on 13.05.2021.
- Dr. NMG Kumar, Professor filed a patent application for his invention titled "Multi Sage Blade Rotor for Horizontal Axis Wind Turbine" and the later was published on 19.05.2021.

## CONSULTANCY

- Dr. NMG Kumar, Professor executed a consultancy project titled "Resource estimation and Design of 1MWp Grid connected Solar PV system (Rs. 0.50 Lakhs) for M/s. Sai Balaji Agro Foods, Kanchipuram.
- Mr. K. Leleedhar Rao, Assistant Professor executed a consultancy project titled "Remote Control System for operation of Spillway, Head Sluice and Scour sluice Gates- Design and Development of System ( Rs. 1.00 Lakhs) for M/s. Adesh Electricals, Proddatur.

Total five members of Faculty received Incentives from Sree Vidyanikethan Educational Trust, Tirupati for publishing outstanding papers in reputed journals on 19.05.2021.

## EXPERT LECTURES

To strengthen the culture of learning among the students and members of faculty on main streaming crosscutting issues which are beneficial to the society and the environment a Three day Virtual Expert-Lecture Series (ELS) on “Main Streaming Cross-Cutting Issues: Environment and Society” was organized during 11th to 13th August 2020. Under this title the following series of lectures were organized.

- ❖ Adaptive policy making for sustainable livelihood on 11.08.2020 by Dr. C. Narayana Swamy, Principal, MJP AP BC WR Institutions, Ananthapuramu.
- ❖ The impact of energy efficiency on the environment, on 12.08.2020 and Disaster management on 13.08.2020 by S. Perichiyappan, Chartered Engineer, CEQC Chennai and former Senior Section Engineer, Integral Coach Factory, Indian Railways, Chennai.

A 3-Day Online Guided free workshop on “Pranayama, Meditation & Asana” was organized under NSS, IEEE-WIE Affinity Group and Women Empowerment Cell in association with Art of Living Organization on 28.05.2021 virtually.

Major Events organized under ISTE Student Chapter & IEEE Student Branch :

- ❖ Expert Lecture on “Deep Learning In Visual Recognition” by Dr. Jayakumar Singaram, a founding member of Rinanu Semiconductor LLP, PiiTech Systems, and Member of Epigon Media Technologies, PiiTech Systems and GPTL on 02.07.2020.
- ❖ Lecture on “Deployment of smart grid into power systems and its challenges” by Mr. P. Seshasai Kumar, Research Staff at Nanyang Technology University and Research Engineer at Rolls-Royce-Aerospace Singapore on 09.10.2020.
- ❖ Lecture on “Power electronics for renewable energy applications” by Dr. B Chandra Sekhar, Technical lead Automotive division, TCS Limited, Bangalore on 19.06.2021.

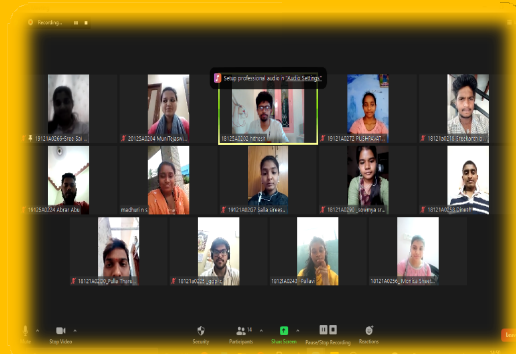
## STUDENT'S CORNER

### ETA

Under the department's student body Electrical Technical Association (ETA), various events viz., Puzzles, Coder challenges, General quiz, Pencil sketch, Seminar, Paper presentation, Rangoli, Debate, Group discussion, Singing, Creative writing, Technical quiz, Poster making, Logo quiz were conducted to enhance the interpersonal and intrapersonal skills of students.



Debate



Virtual Singing



Rangoli

During the AY: 2020-21 total 803 students participated in 15 events conducted under ETA