

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

IMPRESSIONS



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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. New PG programme M.Tech. (PED) was started from the AY 2017-2018. Department is recognized as Research center 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:

- ❖ Department of Electrical Engineering strives to create human resources in Electrical Engineering to contribute to the nation development and improve the quality of life.
- ❖ 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

B. Tech

- PS01. Demonstrate knowledge of Electrical and Electronic circuits, Electrical Machines, Power Systems, Control Systems, and Power Electronics for solving problems in electrical and electronics
- PS02 Analyze, design, test and maintain electrical systems to meet the specific needs of the Industry and society.
- PS03 Conduct investigations to address complex engineering problems in the areas of Electrical Machines, Power Systems, Control Systems and Power Electronics.
- PS04 Apply appropriate techniques, resources and modern tools to provide solutions for problems related to electrical and electronics engineering.

M. Tech (EPS)

- PS01. Demonstrate specialized knowledge in Electrical power systems, its operation and control with an ability to combine existing and recent practices.
- PS02 Analyze and solve complex problems to obtain optimal solution in power system operation and control to meet the needs of industry and society.
- PS03 Demonstrate research competence in power system to design innovative products and provide services in the field of electrical power systems and related areas.
- PS04. Apply modern tools, techniques and resources to provide solutions to complex engineering problems related to electrical power systems.

M. Tech (PED)

- PS01 Demonstrate specialized knowledge in the operation and control of Power Electronic converters & Drives with an ability to combine existing and recent practices.
- PS02 Analyze and solve complex problems in the field of Power Electronics & Drives to meet the needs of industry and society.
- PS03 Demonstrate research competence in the field of Power Electronics & Drives to develop innovative products to meet the industrial needs.
- PS04 Apply modern tools, latest technologies and resources to provide solutions to complex engineering problems related to Power Electronics & Drives.

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.

Ms. Peddakotla Bhargavi (Roll No. 13121A02B9) and Mr. Vankadoth Paramesh Naik (Roll No. 13121A02G9) received Pratibha Awards from the Govt. of AP for the Graduation Year 2017.

DEPARTMENT INITIATIONS

Applied Renewable Energy Research Lab was established to create a basement, research friendly environment and activate the research skills among the faculty and PG/PhD Scholars. Dr. M. S. Sujatha, Professor was appointed as the Coordinator for the said Research Centre.



TEACHING & LEARNING

To make students to understand the industrial practices and technology, the following Add-on courses were conducted, and a total number of 216 students were benefited.

- Lab View Basics for Electrical Engineering during 10th to 15th July 2017.
- PLC Programming & Its Applications during 7th to 12th August 2017.
- Arduino Based programming and Circuit design during 25th Oct 2017 to 2nd Nov 2017.
- Basic Application design Using Arduino during 5th to 10th Feb 2018.
- Basic Electrical Application Design using Lab View during 5th to 10th March 2018.

Through Diagnostic Test, Formative Test and Internal-Exam, 235 no. of weak and slow learners were identified and by conducting remedial and reinforcement classes, their pass percentage has been improved by 95 %.

By conducting placement training program, placement rate has been improved by 12.91%.

Total 232 Students undergone Internship training in various reputed Industries like RTPP, BHEL, ECIL, BOSCH, VTPP, VIZAG STEEL PLANT, etc.

Total 128 Students were placed in various reputed organizations like CTS, INFOSIS, WIPRO, ADP, DST and SONATA through On-Campus and Off Campus Placements.

Mr. V. Naveen Subramanyam (Roll No.:13121A02G6) Received ISTE- Late ValluripalliNageswara Rao State Award for an **Ideal Student of Talent and Excellence** from Engineering Colleges in A.P & T.S, Sponsored by VNR VignanaJyothi Institute of Engineering and Technology, Hyderabad on 29th Dec. 2017.

RESEARCH

In its stride of enhancing its potential in the spectrum of academics, research is being promoted and carried out within the department. **Applied Renewable Energy Research Lab** was established to create a basement, research friendly environment and activate the research skills among the faculty and PG/PhD Scholars.

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. Nageswara Prasad, Received "Letter of Appreciation" from Sri Venkatesa Perumal College of Engineering & Technology (Autonomous), Puttur for his active contribution and valuable suggestions stated to accomplish and enhance the curriculum for better quality of education, in its Academic Council Meeting held on 6th August, 2018.



Mr. I. Kumara Swamy, Assistant Professor received, Excellent Young Researcher Award'18" by the International Journal for Research under Literal Access, in recognition for his outstanding work and achievements in the field of Research and Co-curriculum on 15th August, 2018 at Breeze residency, Trichy.

By using Biological Inspired Algorithms, Maximum Power Point Tracking of PV System under Partial Shaded Conditions has been achieved by low cost PIC microcontroller board.

Mr. D.
JagadeeshAssistant

- ❖ Total 31 research papers were published in the reputed journals including SCI, SCOPUS and WOS.
- ❖ Total 2 Members of Faculty received letter of appreciation for their valuable contribution and dedicated service in the peer review of manuscripts submitted to various national and international journals.
- ❖ Total 4 Members of Faculty were invited as Speakers and Session Chairs for various National & International Conferences, Symposiums and Technical committee members.

EXPERT LECTURES

Series of Guest & Expert lectures were organized to explore the knowledge acquired through academic courses by interaction with industry experts. These sessions provide platform to students to express their ideas and view and get benefitted to relate theoretical with practical inputs of field. Series of such session pour an extra enthusiasm to student to give practical approach to their study.

Mr. Ravisekhar Kalepu, CEO and Mr. S. Varma, CTO of M/s. AUZA TECHNOLOGY, Hyderabad delivered a Guest Lecture on "Applications of Internet of Things (IoT)" on 18th Aug, 2017.



Mr. M. P Venkata Kiran Kumar, Registered Patent Agent & Executive Officer – IPR, APTDC, CII, Hyderabad delivered A Guest Lecture on "Awareness on Intellectual Property Rights (IPR)" on 16th Sep, 2017.



Prof. V.S.S Kumar, Vice-Chancellor from JNTUK, Kakinada delivered an expert lecture on "Entrepreneurship development" on 9th Aug, 2017.

INDUSTRIAL VISITS

Industrial visit is considered as an important part of an academic curriculum to provide an exposure to students about practical working environment and also to correlate the theoretical conception with practicing techniques. Conducting such visits provides students a good opportunity to gain full awareness about industrial practices and an excellent opportunity to interact with practicing engineers.



Total 31 members of PG Students and Faculty visited 765kV Power Grid, at Orvakal, Kurnool(D), A.P on 28th June 2017.



Total 108 members of students and Faculty visited Rayalaseema Thermal Power Plant, Muddanur, Kadapa (D), A.P. on 17th March, 2018.



Total 54 members of students and Faculty visited Sri Damodaram Sanjeevaiah Thermal Power Plant, Nelatur, Nellore (D), A.P. on 9th April, 2018.

During the AY: 2017-18, Total 9 Industrial Visits were conducted.

OUTREACH ACTIVITIES

Pradhan Mantri Kaushal Vikas Yojna for Technical Institutions (PMKVY-TI) scheme is being implemented with a vision to create skilled manpower to drive the flagship schemes of Government (Make in India, Digital India and Unnat Bharat). In support to these schemes, Sree Vidyanikethan Engineering College has been selected as one of the Institutes under PMKVY under AICTE for imparting engineering technical skills training for free of cost.

Solar PV Installer-Electrical is one of the specializations of Green Jobs Sector. Department of EEE is taking over the responsibility in giving the Training under mentorship of Skill Council for Green Jobs and NSDC. Total 21 unemployed youth were successfully trained under this scheme.

Assistant Electrician is one of the specializations of Construction Sector. Department of EEE is taking over the responsibility in giving the Training under mentorship of Construction Skill Development Council of India (CSDI) and NSDC. Total 24 unemployed youth were successfully trained under this scheme.

Trainee Solar PV Installers-Electrical



Trainee Assistant Electricians



SOCIAL - SERVICE

Social Service or Social Work is the work done by individuals for the benefit of the society. It is aimed to promote social transformation or a development in the society. As students are future of our country, they should know how to interact socially, how to understand other people's problems and how to work for the social betterment of the society. This leads to mutual benefit for both society and students.



MAJOR EVENTS

- Tree Plantation & Environmental Issues
- Blood Donation Camp
- Health Camps
- Swachh Pakhwad
- Hygiene & Cleanliness



During the AY: 2017-18, Total 9 events were conducted.

STUDENTS CORNER

ELECTRICAL TECHNICAL ASSOCIATION

Under the department's student body Electrical Technical Association (ETA), various events viz., Career development programs, Seminars, Quiz, Industrial visits, Paper contests, Group discussions, Guest lectures, Career guidance sessions and Games were conducted to enhance the interpersonal and intrapersonal skills of students.



General Quiz



MOCK Interview



Debate



Technical Paper Presentation

During the AY: 2017-18, Total 16 events were conducted under ETA.

Prototype Exhibits in Science Exhibitions



JNTUA Tech Fest, 2018