



# Department Magazine

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## Department of Electrical and Electronics Engineering

## **VISION statement of EEE department**

To be the premier electrical engineering department in imparting quality education, research and consultancy

## **MISSION statement of EEE department**

Provide comprehensive and value based engineering education to meet the needs of society

Establish centers of excellence in collaboration with industry and academia to train students towards emerging technologies

Promote research and consultancy activities in core domain to solve real-world problems

Impart and develop technology entrepreneurship skills among students

**Short Range Goals:**

- To train students as competent Electrical and Electronics Engineers to meet the requirements of industries.
- To strive for further improvement in academic performance of students and improve placement of students.
- To inculcate human values and leadership qualities in the students.
  
- To enhance interaction with industries by introducing bridge courses on areas relevant to industries.
- To strengthen the alumni linkage for mutual benefit.
  
- To update the knowledge of the faculty in emerging areas.
- To motivate the faculty to undertake research work.
- To depute the faculty and students for inplant training to industries during vacation.
- To train the supporting technical staff.

**Long Range Goals:**

- To achieve excellence in undergraduate education.
- To promote research activities in the areas of non-conventional energy generation and power systems.
- To have atleast 50% of faculty with doctoral degree in diverse areas.
  
- To train the students of the Department of Electrical and Electronics Engineering to become quality engineers, with adequate stress being on their personality development, paper presentation in seminars, group discussions etc.
  
- To have research centre facilities in the department.

# B.Tech (EEE)

## Program Educational Objectives (PEOs)

### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

To achieve the **Program Educational Objectives**, students in Electrical and Electronics Engineering will have:

- I. To acquire thorough knowledge of mathematical and physical sciences and to be in a position either independently or collectively to interpret, analyze, formulate and solve Electrical and Electronics Engineering problems.
- II. To be adequately equipped through classroom instruction and laboratory experiments to visualize and tackle any engineering problem requiring professional expertise of Electrical and Electronics Engineering like design, modeling, simulation and development of a product from concept to prototype.
- III. To build teamwork skills and ability to communicate and deal with people in different professional, ethical, social and economical contexts.
- IV. To create the requisite academic ambience that nurtures the student ability to cope up with situations that emerges in the professional context with confidence through lifelong learning.
- V. To inculcate necessary aptitude and ability to pursue higher education at Master and Doctoral level in order to expand and fulfill the needs of higher education and to meet the needs of the industry.

## Programme Outcomes (POs)

### PROGRAM OUTCOMES

**Engineering Graduates will have ability to:**

1. Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex electrical & electronics engineering problems.
2. Identify, formulate, review research literature, and analyze complex electrical & electronics engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design solutions for complex electrical & electronics engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex electrical & electronics engineering activities with an understanding of the limitations.
6. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional electrical & electronics engineering practice.
7. Understand the impact of the professional electrical & electronics engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the electrical & electronics engineering practice.
9. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. Communicate effectively on complex electrical & electronics engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Demonstrate knowledge and understanding of the electrical & electronics engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## **M.Tech (Power Engineering and Energy Systems - PEES)**

### **PEOs (for PEES)**

**Within 4 – 5 years of graduation, our students will**

- I. Have ability to work in realistic industrial environment and meet the modern engineering practices**

- II. Meet the challenges of today's clean energy sector and contribute to the social concerns
- III. Demonstrate effective communication skills, professional and ethical attitude
- IV. Ability to learn from situations that emerge in the professional contexts in his/her life

### Programme Outcomes -POs (for PEES)

a.	Design renewable energy systems to protect environment and ecosystems.
b.	Demonstrate the knowledge of modern engineering practices.
c.	Ability to use current techniques to sort out power quality problems in the presence of Distributed Generation.
d.	Ability to indentify thrust area of research, design and implementation of topology of energy systems to meet the industrial and social needs.
e.	Develop an attitude to learn with self motivation.
f.	Ability to select and adopt ethical engineer's practices.
g.	Ability to communicate effectively and professionally.

**FACULTY PAPER PUBLICATIONS:**

1. M.Praveen kumar Published a paper on A New current sharing technique on a general case of paralleled DC-DC Boost Converters in the journal international Journal of Research (IJR) of Vol. 3 Issue 12 on Aug 16<sup>th</sup> 2016.
2. Vedik Basetti, Ashwani Kumar Chandel ,Subrahmanyam KBVSR submitted paper entitled "Power System Static State Estimation using JADE-Adaptive Differential Evolution Technique" to soft computing Journal(Springer) in September,2016.
3. B.Vedik, K.B.V.S.R.Subrahmanyam submitted paper entitled "Power System Harmonic State Estimation Using Differential Evolution Algorithm" in the conference "International Conference on Smart Electric Grid" to be organized by KLU, Vijayawada in DEC, 2016.

**SEMINARS/WORKSHOPS ATTENDED BY FACULTY:**

- 1) A. JayaPrakash attended a Two-day workshop on Power Quality- Harmonic Analysis in Power Systems conducted by EE dept. of University College of Engineering under TEQUIP-II on 19<sup>th</sup> & 20<sup>th</sup> of Sept. 2016.
- 2) A.Rajamalliah attended a One day Faculty Knowledge program conducted by Indian Business School at Hotel Suprabha, Warangal on 09-08- 2016.

**SEMINARS/ Workshops conducted by Faculty:**

Name of the programme	Title of the Programme	Date of conduction	No. of participants	Sponsored body/institute
Technical Fest	Electrosparx'16	29-09-2016	300	SREC
One day Workshop	Hands on Experience on NI LabVIEW for the Lab Applications in Electrical Engineering	02-10-2016	'21	SREC
Two day STTP	NI LabVIEW and its Applications	16 <sup>th</sup> & 17 <sup>th</sup> Sept. 2016	25	SREC
One day Workshop	Matlab and its Applications	27-08-2016	25	SREC

The National level Technical Fest "Technotrendz 2k16 "is a huge stride put forwarded is an innovative platform for upcoming engineers to present their ideas and technical skills by active participation in various events in Electrosparx,2k16 organised by EEED . The objective of this technical festival is to bring the students of various streams from different institutes on common platform to interact and share their innovative ideas, knowledge and to highlight new concepts in new technologies.

Different events like electrofun, PPT, Technical Quiz etc were conducted and students from different colleges have participated in this programme. Some of the glimpses are shown here.

### **Electrofun**







**Technical**



**Quiz**

**PPT**

**Students Activities/Events****M.TECH STUDENTS PAPER PUBLICATIONS:**

1. K.Gowthami Published a paper on A New current sharing technique on a general case of parallel DC-DC Boost Converters in the journal international Journal of Research (IJR) of Vol. 3 Issue 12 on Aug 16<sup>th</sup> 2016.

**Students' Achievements:****Placements:**

S.No	Name of the Student	Roll No.	Company
1	C. Rohini reddy	13K41A0216	Tech. Mahindra
2	M.Srinivas reddy	13K41A0241	Tech. Mahindra
3	P. .Mounika Lakshmi	13K41A0253	Tech. Mahindra
4	R. Ruchitha rao	13K41A0279	Cap Gemini
5	G. Vamshitha	13K41A0295	Cap Gemini
6	C. Rajesh	13K41A0286	Cap Gemini
7	T. Sandeep	13K41A02D5	Cap Gemini
8	A. Haripriya	13K41A0206	Cap Gemini
9	P. Sravya	13K41A0248	Cap Gemini

**INDUSTRIAL VISITS:**

. The IIPC Cell has conducted Industrial visit to “ELECTRIC LOCO SHED” KAZIPET. WARANGAL ON 3<sup>rd</sup> August 2016 for IV Year(A) Students From Electrical and Electronics Engineering Department, SR Engineering College. Mr.M.Praveen kumar, Assistant Prof, K.Sathyavani, Assistant Professor & K. Sravani, Asst.Prof. accompanied 30 students during the visit.



The IIPC Cell has conducted Industrial visit to “DISTRIBUTION SUB STATION 33/11KV .MULUGU ROAD, 29<sup>th</sup> July 2016 From Electrical and Electronics Engineering Department, SR Engineering College. Mr.M.Praveen Kumar,Assistant Prof, D.RajababuAssistant Proff, K. Sravani & Assisatant Professor accompanied 40 students during the visit



**Guest Lectures Conducted by the Department:**

- 1) The **IIPC & ISTE** Cell has conducted third guest lecture on “**MEASURING INSTRUMENTS & DISTRIBUTION TRANSFORMERS**”, **23<sup>th</sup> JULY 2016** at **SR Engineering College** in faraday hall, **EEE** .Resource person- **Mr HARJI JATOTH, ADE, NPTI . Warangal.**
- 2) The **IIPC & ISTE** Cell has conducted INTRACTION on “**HIGHER EDUCATION SYSTEM**” on , **6<sup>th</sup> AUGUST 2016** to **B.Tech III YEAR (A&B)** students at **SR Engineering College** in faraday hall, **EEE**. Resource person- **Mr M. SRAVAN KUMAR , Masters in Wichita State University, Specialization in power systems**

**Extra Curricular Activities**

**Department Magazine Committee:**

Mr. K.V.B.S.R Subhramanyam	-----Chief Editor
A,Jayaprakash	-----Editor
B.Vedik	-----Member
G.Rajamallaih	-----Member