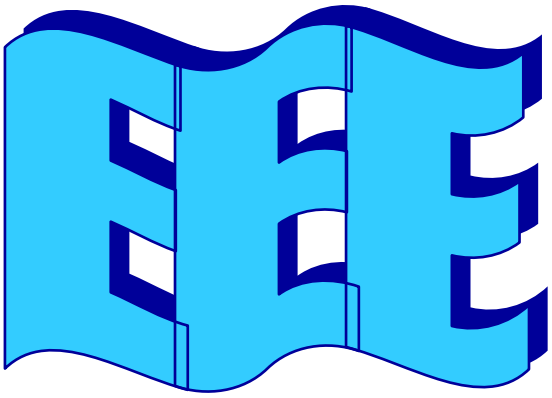

Department Magazine

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)

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)

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.

M.Tech (Power Electronics - PE)

PEOs (for PE)

Within 4 – 5 years of graduation, our students will

I. **Design and develop innovative products and services in the field of Power Electronics**
II. **Demonstrate effective communication skills, profession and ethical attitude**
III. **Ability to learn from situations that emerge in the professional contexts in his/her life**

Programme Outcomes - POs (for POWER ELECTRONICS)

a. Simulate and experiment in the field of power electronics using modern tools.
b. Ability to select and adopt ethical engineering practices
c. Demonstrate their role as engineers or entrepreneurs and contribute to the society
d. Develop an attitude to learn with self motivation
e. Ability to carry out research in the emerging areas of Power Electronics
f. Ability to communicate effectively and professionally

FACULTY PAPER PUBLICATIONS:

S. No	Author (s)	Title	International Journal	Vol	No	Month & Year	Page.No	ISSN / ISBN/ DOI
1	BANDELA DEVIPRIYA ,D. RAJABABU	Imrpovement on voltage unbalance using SFCL in Power Feed Network with Electric Railway System	Research in Eletrical Power Engineering			30-Dec-15	327-343	
2	R Rajendraprasad, D Rajababu, KBVSR Subramanyam	THD Analysis of One-Cycle and PWM Contolled Active Power Filters	Science Engineering and Advance Technology	4	55	1-Dec-15	11732-11738	2319-8885
3	AP Kavith, N Lokesh	A New 3-Phase Single-Stage AC-DC Converter for Power Factor Correction	Research in Power Electronics			30-Dec-15	327-343	
4	D Haritha, B Satyavani	A New Efficient ZCS-PWM Full-Bridge DC-DC Converter using Simple Active and Passive Auxiliary Circuits	Research in Power Electronics			30-Dec-15	327-343	
5	P Srinivas Yadav, Y Manju Sree	Isolated Wind Power Generation Employing PMSG with V-f Contoller	Research in Eletrical, Electronics and Instrumentation Engg.	4	11	Nov-15	9360-9368	2320-3765
6	S Valupadasu, N Lokesh	Voltage and Current Control of Quasi-Z-Source Inverter for Distributed Generation Applications	Research in Power Electronics			30-Oct-15	327-343	
7	B Kalyani, B.Satyavani	Simulation and Performance Analysis of a High Voltage Gain DC-DC Converter Integrating Coupled- Inductor and Diode-Capavitor Techniques	Research in Power Electronics			30-Oct-15	327-343	

8	Ayesha Samreen, M.M.Irfan	Single-Phase Inverters with Cllosed -Loop Control of DC-DC Dual-Actice-Bridge Converters	Research in Power Electronics			30-Oct-15	327-343	
9	B Rajitha, P Soumya	Power Quality Improvement of a Grid Connected Wind Energy System Using STATCOM	Wind Energy			30-Oct-15	327-343	
10	B Mamatha, M Ramesh	Harmonic Filtering and Power Factor Improvement of Grid-Coneected DG Units	Research in Power Electronics			15-Sep-15	327-343	
11	V.Sujitha, B.Subhaash	Voltage-Frequency Controlling for an Isolated Wind Energy Conversion System for Three-Phase Four Wire Loads by using Adaline based Control Technique	Advanced Research and Innovative Ideas in Education	1	5	2015	9-Jan	2395-4396
12	M.Chinmai, K.B.V.S.R. Subrahmanyam	Reduced Rating Dynamic Voltage Restorer Controlling eith Energy Optimized	Advanced Research and Innovative Ideas in Education	1	5	2015	897-903	2395-4396
13	D.Laxmirajam,M.M.Irfan	A Novel High Step-up Interleaved Conerter with Votage Multiplier Module for Renewable Energy System	Renewable Energy			October, 2015	816-824	
14	Donakonda Benny, KBVSR Subramanyam	Power Quality Improvement of a Grid Connected Wind Energy System Using STATCOM-Control	Advanced Research and Innovative Ideas in Education	1	4	2015	315-323	2395-4395
15	T.Sindhuja, D.Rajababu	PV System Modelling and Simuation using Fly BasedMicroinverter	Advanced Research and Innovative Ideas in Education	1	5	2015	545-555	2395-4396
16	N.Vyshnavi, KBVSR Subramanyam	Model Reference Adaptive Control for Maximum Power Point Tracking in PV Systems	Computer Science and Electronics Engineering.	1	5	2015	556-568	2395-4396

17	P.Murali, B.Satyavani	Reduction of THD using CUK conerter for adjustable speed PMBLDCM drie	Advanced Research and Innovative Ideas in Education	1	5	2015	403-413	2395-4396
18	A.Shiva Kama Sundari, D.Rajababu	Two Layer Constant Power Control of DFIG wind Turbines with Supercapacitor Energy Storage	Advanced Research and Innovative Ideas in Education	1	4	2015	159-168	2395-4396
19	A.Sharth Kumar, A.V.V.Sudhakar	Operation and Control Strategies foe a Grid Integrated PV-FC Hybrid Power System	Advanced Research and Innovative Ideas in Education	1	4	2015	150-158	2395-4396
20	D.Srikanth, V.Sreepriya	Enhancement of Power Quality by using Shunt Hybrid Power Filter with TCR	Science Engineering and Advance Technology	2	12	2015		2321-6905
21	AVV Sudhakar, Chandram Karri, Jaya Laxmi A	Bidding strategy in deregulated power market using Differential Evolution algorithm	Journal of Power and Energy Engineering	3		Nov-15	-	
22	P. Agaiah, A.V.V.Sudhakar	Improved Boost Chopper Converter For Ac Photovoltaic Module Application	Research in Eletrical, Electronics and Instrumentation Engg.	4	11	Nov-15		2370-3765
23	Ashok Marri, Sreepriaya Challa	Voltage and Power factor Control in Distribution System using D-STATCOM	Journal of Electrical Power Enginering			Oct-15	816-824	
24	Bela Sindhuja and M.M.Irfan	A Novel Three-Phase Buck–Boost AC–DC Converter with PFC Technique	IOJETR	2	1	Dec-15	Pg. 1003-1011.	
25	Thakur Balaji Singh, Pothupogu Sowmya	High Conversion Ratio Bidirectional Dc-Dc Converter with Coupled Inductor	Journal of Research in Power Electronics			Oct-15	327-343	

26	AVV Sudhakar, Chandram Karri, Jaya Laxmi A	A hybrid LR-Secant method- Invasive Weed Optimization for Profit Based Unit Commitment	Power and Energy Conversion	**Accepted for publication**		2015	-	

Department Magazine Committee:

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