PRAGATI ENGINEERING COLLEGE

ELECTRICAL TIMES

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

<u>ABOUT THE DEPARTMENT:</u>

he Electrical and Electronics Engineering Department of Pragati Engineering College is fully Equipped with state of art laboratories' and its faculties consists of highly experienced professors, well qualified associate professors and dynamic assistant professors with commitment to give the young minds the very best they deserve.

Vision of the Institute:

"To emerge as a Premier Institution for Technical Education in the Country through Academic Excellence and to be recognized as a Centre for Excellence in Research & Development, catering to the needs of our Country."

Mission of the Institute:

"To realize a strong Institution by consistently maintaining State-of-art-infrastructure and building a cohesive, World Class Team and provide need based Technical Education, Research and Development through enhanced Industry Interaction."

Vision of the Department:

"To excel in Engineering Education and Research, inculcating professional and social ethics among the students through academic excellence in the field of Electrical & Electronics Engineering."

Mission of the Department:

M1: To impart quality Technical Education with better infrastructure for students to make them globally competent and technically strong.

M2: To collaborate with industries and academic institutions to enhance creativity and innovation with professional and ethical values.

M3: To motivate faculty and students to do impactful research on societal needs and to build team work among them.

Program Educational Objectives (PEOs):

PEO1

To produce graduates with a strong foundation in the Basic Sciences, Mathematics, Computing and core knowledge in Electrical and Electronics Engineering through high quality Technical Education.

PEO2

To prepare graduates for successful and productive engineering careers, with emphasis on technical competency and with an attention to serve the needs of core and associated sectors by developing novel products and solutions for the real-time problems in a socio-economic way.

PEO3

To inculcate ethical attitude, honing effective communication skills and managerial skills to work in a multidisciplinary environment as a technocrat/administrator/entrepreneur and to acquire the knowledge for pursuing advanced degrees in Engineering, Science, Management, Research and Development.

Program Outcomes (POs):

1. Engineering Knowledge: Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Problem Analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of Mathematics, Natural Sciences, and Engineering Sciences.

3. Design/Development of Solutions: Design solutions for complex 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. Conduct Investigations of Complex Problems: 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. Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex 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. Project Management and Finance: Demonstrate knowledge and understanding of the 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. Life-long Learning: 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.

Program Specific Outcomes (PSOs)

Engineering Students will be able to:

PSO1: Apply the concepts of Power Systems, Power Electronics and utilization of Renewable Energy in implementation of interdisciplinary projects.

PSO2: Acquire the knowledge of Electrical and Electronics Engineering to participate in national and international competitive examinations for successful higher studies and employment.

ABOUT THE ELECTRICAL ASSOCIATION:

ssociation of ISTE is organizing national level technical event "EXULT". The national level technical symposium has events like paper presentations, quiz competitions, project model displays and poster presentations from various engineering colleges. We have been organizing "EXULT" from last decades. Eminent personalities from various colleges and Universities are invited to act as Judges and made it a grand success.

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The main aim of this symposium is to highlight the current status and emerging trends of technology in various topics towards the betterment of industrial research and IT fields. It will be a great opportunity for students to exchange their experiences through innovative ideas and make them acquired with latest technological trends.

LIST OF FACULTY MEMBERS:

1.	Dr. A.Kailasa Rao (Director)	B.Tech(Hons), M.Tech, Ph.D,FIE
2.	Dr. K.Sathyanarayana (H.O.D)	M.Tech, Ph.D, MIE, MIEEE, MISTE, C Eng
3.	Dr.G.Madhu Sudhana Rao	Ph.D
4.	Dr. M.P. Naga Raju	Ph.D
5.	Mr. G.Naresh	M.Tech (Ph.D), MIEEE, MISTE
6.	Mr.A.Ramesh	M.Tech
7.	Mr.B.Ramesh	M.Tech
8.	Mr.Y.Satya Prasanth	M.Tech
9.	Mrs. D. Sowmya	B.Tech., M.S.
10.	Mr. P. Anantha Chaitanya	M.Tech
11.	Ms.T.Pravillaka	M.Tech
12.	Mr.Y.Yesu Dasu	M.Tech
13.	Mr.K.V.Eswawa Rao	M.Tech
14.	Mr.M.Ramesh Gandhi	M.Tech
15.	Ms.K.Deepthi	M.Tech
16.	Ms.B.Ramya	M.Tech
17.	Ms.V.Vysali	M.Tech
18.	Ms. P.V.S. Ramya	M.Tech
19.	Mr.P.A.V.Krishna Mohan	M.Tech
20.	Mr.P.Prasad	M.Tech
21.	Ms. R. Jaya Chandra	B.Tech

Achievements of EEE Department:

Sri. G. Naresh, Assoc Prof. of EEE Department, has been awarded with BEST TEACHER AWARD by JNTUK, KAKINADA on the Occasion of "5th Formation Day of JNTUK- Best University Teachers" Organized by JNTUK on 14.11.2013.



Workshops attended by faculty members:

- Sri. M. Balaji, Asst. Prof. of EEE Dept, has attended a Five Day National Level Workshop on "Power Electronic Applications Using MATLAB." organized by NIT, Warangal during 14th – 18th October 2013.
- Sri. G. Naresh, Assoc. Prof. of EEE Dept, has attended a Two Week Faculty Development Program (FDP) on "Neural Networks, Fuzzy Systems & their applications to Electrical

Engineering" organized by Gayatri Vidya Parishad College of Engineering(Autonomous) during 4th -6th November 2013.

Faculty Publications :

- 1. Sri. B. Narendra, **Sri. G. Naresh**, Sri. V. Satyanarayana, "Sliding mode control of wide input and wide output DC-DC Boost Converter" in International Journal of Scientific & Engineering Research (IJSER), Volume 4,Issue 12, December 2013, pp no. 260-266.
- 2. Sri. Y. Satya Prasanth & Sri. M. Balaji, "Control Methodology for Peak demand through multi source environment at demand side" in International Organization of Scientific Research (IOSR), Volume 8, Nov-Dec2013, Issue 3.
- 3. Sri. S. M. Shariff, Sri. A. Ramesh & Sri. P. Anantha Chaitanya, "Mitigation of Voltage Sag and Harmonics in Distribution System using IUPQC" in International Journal of Advances in Science and Technology(IJAST), Volume 7, No.6, December 2013, pp no. 104-114.
- 4. **Ms. Ch. V. V. Manga Lakshmi, Sri. B. Ramesh & Dr. K. Satyanarayana**, "Performance Analysis of Eleven Level Asymmetrical Multi String Multi Level Inverter fed Three Phase Induction Motor Drive" in International Journal of Advances in Science and Technology (IJAST), Volume 7, No.6, December 2013. Issue, pp no. 37-46.
- Sri. B. Anjaneyulu, Dr. K. Satyanarayana & Sri. R. J. J. Dhanamjaya, "Performance Analysis of Five Level Neutral Clamped Inverter fed Field Oriented Controlled Induction Motor Drive" in International Journal of Advances in Science and Technology(IJAST) Volume 6, No.3. October Issue, pp no. 09-19.
- Dr. K. Satyanarayana, Sri. B. Anjaneyulu, & Sri. K. Sivaprasad, "Performance Analysis of Multi Level Inverter fed Vector controlled Induction Motor Drive for Low Speed Operations" accepted for publication in International Journal of Power Electronics & Drive Systems (IJPEDS), Volume 4, No.1. March 2014.

FACULTY DEVELOPMENT PROGRAMME:

1. Department of Electrical and Electronics Engineering organized a Faculty Development Programme on "Indian Power Distribution Sector, New Challenges and Opportunities" on 10.10.2013 by the Resource person Dr. Tripta thakur, Assitant Professor, Department of Electrical Engineering, National Institute of Technology, Manit-Bhopal under IUCEE webinar programme.



GUEST LECTURES CONDUCTED BY EEE DEPARTMENT UNDER IEEE **STUDENT BRANCH:**

1. Department of Electrical and Electronics Engineering organized an Add-on Course Module as a six day Programme on every Monday starting from 04-11-2013 to 09-12-2013 on the topic "Advances in Power Electronics based Industrial Drives" for III & IV EEE students by the Resource person Prof. K. Gopakumar, Department of Electrical Engineering, IISc, Bangalore on NPTEL video lectures.





Students' Participation in various activities:

1. G. Sai (13A35A0205), student of II year EEE-A, has participated in kabbadi under JNTUK, in South India University Tournament, held at Acharya Nagarjuna University, Guntur.

Students selected in TATA consultancy services



K. Revathi (10A31A0206)



K.Divya Bharathi (10A31A0207)

M. Trimurthulu

(10A31A0242)



K. Srilakshmi (10A31A0208)



M. V. Santosh Kumar

(10A31A0244)



P. L. N. S. Bhavva (10A31A0213)



T. Sai Prasanna Kumar (10A31A0256)





Events Organised by the department:

1. Engineers Day function is organized on 15.09.2013 on account of Sir Mokshagundam Visveswaraya Birthday celebrations.





2. II EEE (2012-16 batch) students organized fresher's function on 18.11.2013 to welcome their juniors into the Pragati family.





3. The IEEE student branch has celebrated "**National Education Day**" on 11.11.2013 on account of the Birth Anniversary of **Sri Maulana Abul Kalam Azad**, great freedom fighter, eminent educationist and the first Union Minister of Education.





EDITORIAL BOARD COMMITTE:

<u>Staff</u>

- 1. Dr. K. Sathyanarayana, H.O.D-E.E.E
- 2. Ms. Ch. M. Lakshmi, Assistant Professsor

Students:

K. Veerraju (IV EEE - 236) I. Hanuma Hanish(III EEE-231) S.Geetha Vardhini(III EEE-215)