



Department of Electrical and Electronics Engineering
Priyadarshini Engineering College, Vaniyambadi-635751.



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Mysterious Transients

S U R P L U S E L E C T R I C I T Y

ABOUT THE INSTITUTE

Priyadarshini Engineering College, the flagship of Jai Barath Charitable Trust, was established in 1995 at Vaniyambadi in Vellore District of Tamil Nadu. The college has been approved by All India Council for Technical Education, New Delhi & affiliated to Anna University, Chennai. Priyadarshini Engineering College situated in the rural area of Vaniyambadi, Vellore District is committed to the vision of developing itself into a multi-campus, Inter-disciplinary Institution of Excellence through symbiotic efforts and innovative practices of management and faculty to provide the student with an ambient academic environment, ideal for the pursuit of knowledge and development carrier.

VISION OF THE INSTITUTE

To inculcate in the young rural minds the aptitude to compete with the quality technocrats.

MISSION OF THE INSTITUTE

- *To instill technical skills to compete in the sustainable world.*
- *To impart holistic value based technical education.*
- *To intensify research and development (r & d) activities in technological development.*
- *To imbibe core values of love for motherland performance of duty, compassion, tolerance, honesty and integrity.*

MOTTO

Perseverance, Endurance, Commitment

“கற்றலும், கற்றவை கேட்டலும், கேட்டதன்கண் நின்றலும்”

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S U R P I U S E L E C T R I C I T Y



HOD MESSAGE

I am extremely happy to be associated with the students who have opted the core and oldest branch of engineering that is electrical engineering with the application of electronics for controlling electrical devices ,the course has been renamed as electrical and electronics engineering. The department believes in the multidimensional growth of all students. Keeping the above idea in mind the department encourages students to participate in extra and co-curricular activities, sports, cultural fest and paper presentation on technical subject's seminars etc... Industrial visits regular internships which assist the student in smooth transition from academic life to work life is regular feature of our department.

I wish the students make best use of the ambience and work towards achieving excellence in the chosen field.

VISION OF THE DEPARTMENT:

To produce eminent electrical engineer specifically from rural background.

MISSION OF THE DEPARTMENT:

- *Infuse moral ethics and good virtues to the students.*
- *Providing good technical knowledge for innovative research and development.*
- *Making them excellent in extracurricular activities.*

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S I R P I I S E L E C T R I C I T Y

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)**PEO 1: Core Competence**

Graduates excel in analyzing, designing, simulating and testing of all electrical and electronics systems.

PEO2: Societal Requirements

Graduates are successful in giving solutions for real time problems to cater to the industrial and societal requirements.

PEO3:Lifelong Learning

Graduates can adapt to lifelong learning to enhance their technical skills.

PEO 4: Leadership Qualities

Graduates exhibit their leadership qualities in a multidisciplinary field.

PROGRAMME OUTCOMES (POS)**PO1: Engineering Knowledge:**

Understand and apply basic concepts of Mathematics, Physics, Chemistry and Engineering.

PO2: Problem Analysis:

Understand and analyze circuit theory, electromagnetic theory, control theory and apply them to electrical engineering applications.

PO3: Design & Development of Solutions:

Analyze and design the electrical and electronics components and to apply in solid state drives and power systems.

PO4: Investigation of Complex problems:

Conduct investigation in complex problems of power system operation, stability, control and protection.

PO5: Modern Tool Usage:

Use contemporary computing tools and techniques in Electrical Engineering applications.

PO6: Engineer and Society:

Handle engineering aspects of electrical energy, utilization and the impact of engineering solutions to the societal needs.

PO7: Environment & Sustainability:

Acquire knowledge of contemporary issues to sustain the ever changing environment.

PO8: Ethics:

Apply the ethical principles to their profession and social issues.

PO9: Individual & Team Work:

Perform individually and in a group to accomplish a common goal.

PO10: Communication:

Effectively communicate and present technological developments.

PO11: Lifelong Learning:

Gain self- confidence to engage in lifelong learning.

PO12: Project Management & Finance:

ABOUT THE DEPARTMENT:

Our degree programmes aim to educate engineers to a standard which will enable them to provide a substantial and lasting contribution to the profession of electrical and electronics engineering. A further aim is to produce graduates with the ability to continue with their own personal development beyond graduation.

It is an objective of the degree programme to provide students with the necessary technical competence, tools and personal skills that will enable them to continue to develop their understanding, expertise and professionalism as they progress through their career.

The aims and objectives of the degree programmes are met by providing a progressive education in the field of electrical and electronic engineering. Though lectures, laboratory work, project work and tutorial activities appear in all stages of the courses, the emphasis changes as the student matures. Directed support, through the personal and course tutor system, is given in early studies, with the emphasis on project work, student independence and decision making growing throughout the course.

**Infrastructure**

The Department has well-equipped laboratories for Digital Simulation, Power Electronics, Electrical Machines, Control and Instrumentation, Circuit Devices and Measurements and an Electrical Workshop to cater to the needs of the age.

The Power Electronics laboratory is equipped with state-of-the-art drives based on direct torque control for both AC and DC motors and interfaced with computers supported by requisite hardware and software.

Welcome to the Department of Electrical Engineering

In the Electrical Engineering Department, we aim to produce graduates who are innovative and capable of becoming the leaders in their fields. Our students are given an excellent foundation in the principles of electrical engineering. From this base, they develop the ability to conceptualize, and to analyze and solve problems.

Why consider electrical engineering?

Electrotechnologies make a profound impact on us as individuals and as a society. These technologies revolutionize the way we live; they shift our cultures, our economies and our development. New forms of technology, which were once unimaginable, and achieve what once seemed impossible, are emerging every day

Our department's research projects cover a wide range of subjects, including the investigation of novel computer systems, the simulation of electricity markets, the use of computer control and instrumentation to optimize process performance, ecologically sustainable power generation, radar sensors and telecommunications. We focus on working closely with industry so that the department remains at the forefront of electrical engineering trends worldwide.

Guest Lecture Program/Invited Talk Programs

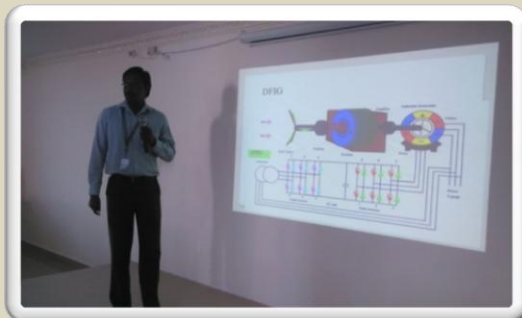
Guest Lecture Programme – 2015

The EEE Department organized a knowledge sharing opportunity for the students of Electrical Engineering. Ms.M.Sanathi, A.E, Vaniyambadi has been invited as the guest lecturer to share her insights on the uses of **“Transformer Maintenance and its relevance to Modern Engineering Life”** on 7th February 2015

In today’s race, we witness rapidly obsoleting technologies due to the fast development in concepts and ideas of doing projects in power Electronics. A guest lecture was conducted by Mr.P.Ramesh , M.Tech.,Principal /KET Polytechnic to update the students of EEE on 7th March, 2015.

The EEE Department organized a great knowledge sharing session as they invited

Mr.G.Balasundaram, Asso.Prof/EEE, SVCET, Chitoor to deliver a lecture on **“Renewable Energy Source”** ON 18TH APRIL 2015



Mr.M.C.Annamalai, A.P/EEE, Priyadarshini Engineering College, Vaniyambadi, delivered a Seminar on **“Power Electronics for Renewable Energy Source”** ON 28th march 2015

STUDENT ACHIVEMENTS:

- *Ms.Sankari Devi*, PG Student presented a paper entitled “**STATCOM based novel control strategy for a variable speed wind turbine with an IPM synchronous generator**” at **INTERNATIONAL CONFERENCE MULTICON’15** held on 29th& 30th April 2015 organized by Muthuyammal Engineering College, Rasipuram
- *Ms.B.Mahalakshmi*, PG Student presented a paper entitled “**Wind Solar Hybrid based Power transfer control of AC/DC Micro Grid using HCC method**” at International Conference (ICETET’2015) held on 27th March 2015 organized by Nehru Institute Engineering and Technology, Coimbatore.
- *Ms.V.Thendral*, PG Student presented a paper entitled “**Power Quality Improvement in Grid connected Microgrid**” at “**Recent Trends and Innovation in Engineering and Technology**” conducted by Coimbatore Institute of Engineering & Technology on Feb 2015.
- *Mr.S.Sathish*, PG Student presented a paper entitled “**Load Pattern Analysis of Large Electricity Customers using Adaline based Clustering**” at National conference in “**Smart Grid and Renewable Energy Resources**” conducted by College of Engineering Guindy on March 2015.

STAFF ACHIVEMENTS

S.NO.	NAME OF THE FACULTY	TITLE	JOURNAL/CONFERENCE
1	Dr.R.Thilepa	Power Quality Improvement by Voltage Control using DSTATCOM in MATLAB	APRN Journal of Engineering and Applied Sciences Volume 10, Issue 6, ISSN 1819-6608
		Power Quality Improvement by Voltage Control using DSTATCOM in MATLAB	International Conference Multicon’15
		Image Processing in defect detection with microcontrollers	National Conference on Recent trends in Power Electronics and Power system
		Artificial Neural Network using Image Processing in Fabric Defect Detection	International Conference On ICAAET-2015
2	Mrs.N.Jayanthi	Surge Technique Based Fast Fault Line-Section Location For Distribution System Using DWT	IJMSET Volume2, Issue2, Feb-2015, ISSN:2349-3755
		Power Quality Improvement By Voltage Control Using D-STATCOM	National Conference On Recent Trends and Innovation In Engineering and Technology
		Surge Technique Based Fast Fault Line-Section Location For Distribution System Using DWT	National Conference On ETCPST’15
3	Mrs.C.Bhuvaneshwari	Real Time Performance Analysis	IJAER Issue 30,Pg No:22671-

		<i>of 15KW Solar PV Plant</i>	23075
		<i>Adaptive Fuzzy Control Of Reduced Rating DVR with a Bess</i>	<i>National Conference Innovations In Science, Engineering and Technology</i>
		<i>Adaptive Fuzzy Control Of Reduced Rating DVR with a Bess</i>	<i>International Conference ICCCEM 2k15</i>
		<i>Adaptive Fuzzy Control Of Reduced Rating DVR with a Bess</i>	<i>IJASET Volume1,Issue3 PP74-81</i>
4	<i>Mrs.R.Rajeswari</i>	<i>Real Time Performance Analysis of 15KW Solar PV Plant</i>	<i>IJAER Issue 30,Pg No:22671-23075</i>
		<i>Optimal deviation based Genetic algorithm for multi-objective secured unit commitment</i>	<i>National Conference on Recent trends in Power Electronics and Power system</i>
5	<i>Mrs.K.Malarkodi</i>	<i>Smart power grid using bi-directional DC-DC Converter with voltage source converter</i>	<i>National Conference On Innovations In Science, Engineering and Technology</i>
		<i>An Islanding Detection Through Wavelet Lifting Scheme Based Dual Frequency Harmonic Current Injection</i>	<i>International Conference On Contemporary Challenges In Engineering and Management</i>
6	<i>Mr. V.Karthikeyan</i>	<i>Virtual impedance method to reduce the critical clearing time for Harmonics Elimination</i>	<i>International Conference Multicon'15</i>
		<i>A Novel wideband Line model for AC Transmission using Bessel</i>	<i>International Conference Multicon'15</i>
7	<i>Mr. V.Viji</i>	<i>Simulation and implementation of brushless DC motor using voltage source inverter with PIC16F877A</i>	<i>(International journal of applied Engineering Research, ISSN 0973-4562 Volume No. 55(2015)</i>
		<i>Control of variable speed Induction machine wind generation system using fuzzy logic controller</i>	<i>National Conference on Emerging Trends in Electronics, Communication & Information Technology</i>
		<i>Harmonic reduction in three phase voltage source inverter by 150 degree conduction</i>	<i>National Conference ICET2K15</i>
		<i>Simulation and implementation of brushless DC motor using voltage source inverter with PIC16F877A</i>	<i>International Conference On ICAAET-2015</i>
8	<i>Mr.C.Kalaiarasan</i>	<i>Power oscillation using annealing algorithm for multi machine and</i>	<i>IJARTET Volume2,Issue1,Mar 2015</i>

		<i>bus systems under warms</i>	<i>ISSN(Print):2394-3777</i>
		<i>Wind solar hybrid based power transfer control AC/DC micro grid using HCC method</i>	<i>International Conference on Emerging trends in Engineering technology</i>
		<i>Power oscillation using annealing algorithm for multi machine and bus systems under warms</i>	<i>International Conference On ICRTECCT-2015</i>
9	<i>Mr.S.Nirmalrajan</i>	<i>Hysteresis current control based grid connected PV system by using BI-Directional DC-DC Converter</i>	<i>Journal of Thermal Engineering & Applications Volume2, Issue 1, ISSN2349-8994</i>
10	<i>Mr.K.Sathishkumar</i>	<i>Comparative Study of Power Sharing Performance in Micro-grid under Two Different Platforms-PSCAD/EMTDC and MATLAB/SIMULINK Imposer System</i>	<i>Maxwell Research Journal of Applied Science & Engineering Volume 7. Issue No. 20PP 4370-4378 , ISSN 2040-7459</i>
		<i>Load Pattern Analysis of Large Electricity Customers using Adaline based Clustering</i>	<i>National Conference NCSGRES 15</i>
		<i>Power Quality Enhancement in Grid connected Microgrid while supplying Non-linear loads</i>	<i>International Journal for Research in Applied Science & Engineering Technology Volume 3 Issue IV ISSN 2321-9653</i>
11	<i>Mr.M.C.Annamalai</i>	<i>Statcom based novel control strategy for a variable speed wind turbine with an IPM Synchronous generator</i>	<i>International Conference Multicon'15</i>

STAFF ACHIVEMENTS

<i>Faculty Name</i>	<i>Event</i>	<i>Topic</i>	<i>Venue & Date</i>
<i>Dr.R.Thilepa</i>	<i>Technical Chair</i>	<i>National Conference on Innovations in Science Engineering and Technology</i>	<i>Podigai College of Engineering and Technology on 27.3.2015&28.3.2015</i>
<i>Mr.A.Ashokkumar</i>	<i>Guest Lecture</i>	<i>Linear Integrated Circuits</i>	<i>K.E.T Polytechnic College on 5.3.2015</i>
<i>Mr.C.Kalaiyaran</i>	<i>Guest Lecture</i>	<i>Electrical Transmission and Distribution</i>	<i>K.E.T Polytechnic College on 29.1.2015</i>
<i>Mr.M.C.Annamalai</i>	<i>Guest Lecture</i>	<i>Microcontroller Application</i>	<i>K.E.T Polytechnic College on 3.4.2015</i>
	<i>Judge</i>	<i>Project Explanation</i>	<i>K.E.T Polytechnic College on 16.4.2015</i>

Mr.M.Selvaperumal	Guest Lecture	Project Explanation	K.E.T Polytechnic College on 9.1.2015
Mr.S.NirmalRajan	Judge	National Level Paper Presentation	Sri Krishna College of Engineering on 13.3.2015
Mr.K.Sathish Kumar	Judge	Power System Tools in MATLAB	OXFORD College of Engineering on 5.3.2015
Mr.V.Karthikeyan	Guest Lecture	Clipper and Clapper	K.E.T Polytechnic College on 13.2.2015
Mr.P.Elumalai	Guest Lecture	Electronic Circuits	Imayam Arts & Science College on 5.6.2015
Mr.V.Viji	Guest Lecture	Energy Meter	K.E.T Polytechnic College on 20.2.2015
Mrs.C.Bhuvaneswari	Guest Lecture	Renewable Energy Resources	PKKPC on 29.6.2015
Mrs.K.Malarkodi	Guest Lecture	PSPICE	Imayam Arts & Science College on 14.2.2015
Mrs.N.Jayanthi	Guest Lecture	Economic Dispatch Unit Commitment	PKKPC on 11.6.2015
Mrs.R.Rajeswari	Guest Lecture	Control System and its Applications	PKKPC on 29.6.2015

IN-PLANT TRAINING

The following Students went for the in-plant training

S.No.	Name of the Students	Name of the Company	Training Date
1	M.Nithya.EEE III Year	Substation 230//110KV SS Vinnamangalam,Ambur.	29.12.2014 to 02.01.2015
2	M.A.Mohammed tahir. EEE III Year	Substation 110//33-11KV SS Tirupattur.	09.06.2015to 13.06.2015
3	R.Shyam sundar EEE III Year	Substation 110//33-11KV SS Tirupattur.	
4	S.Gowthaman.EEE III Year	Substation 230 KV SS Vinnamangalam,Ambur.	
5	A.Vinoth kumar.EEE III Year	Substation 230 KV SS Vinnamangalam,Ambur.	
6	B.Y.Adnan.EEE III Year	Substation 230 KV SS Vinnamangalam,Ambur.	15.06.2015to 19.06.2015
7	R.K.Faran Ashmal.EEE III Year	Substation 230 KV SS Vinnamangalam,Ambur.	
8	V.Mahammed Tahir.EEE III Year	Substation 230 KV SS Vinnamangalam,Ambur.	
9	V.A.Azhar viqar.EEE III Year	Substation 230 KV SS Vinnamangalam,Ambur.	

NATIONAL CONFERENCE



NATIONAL CONFERENCE

The Department organized two days National conference on Recent innovations in Engineering Management Technology and Applications"RIEMTA-2015" on 25th& 26th March 2015.

PLACEMENT ACTIVITIES

Placement programme is being conducted by the professional trainers. Mr.K.C.Veeramani, Education minister issued the placement order to the Students.

Ms.R.DIVYA, Ms A.AMUTHA M. P.SOWNDARYA Final year students are placed as a software Engineer in Redwan Technology .

Ms.P.K NAGEENA SUMAN Final year student placed as a Technical Support Engineer in POLARIES.

Ms MARTINA RUBAVATHY Final year student placed as a Software Engineer in FOUR BRAIN TECHNOLOGY.

Mr.B.NAVEEN KUMAR Final year student placed as a Technical Support Engineer MAX IT.

Mr.LALITH KUMAR, Ms.KANIMOZHI AND Ms.DHARNI PRIYA Final year student placed as a Finance and Marketing Analyst in POLARIES





INNOVATIVE PROJECT:

*final year students
Mr.M.BHUVANESHRAJ ,Mr.MAGESH ,
Mr.ARUN & Mr.P.JEGAN has done a
project on Solar tricycle for handicapped
person under the guidance of HOD
Mrs.N.JAYANTHI and
Mr.C.KALAIARASAN AP/EEE.*



Graduation Day

2010-2014 batch young graduates got their degree in 16th graduation day on 17th May 2015 with a guests Priyadarshini Engineering College of Dr.G.Sekaran Ph.D., Chief Scientist, CLRI Chennai and Hon'ble Justice Mr.V.Rangasamy, Former justice of Madras High court and Administrator of Jai Barath Charitable Trust.