PRIYADARSHINI ENGINEERING COLLEGE

(Approved by AICTE, New Delhi & Permanently Affiliated to Anna University, Chennai)

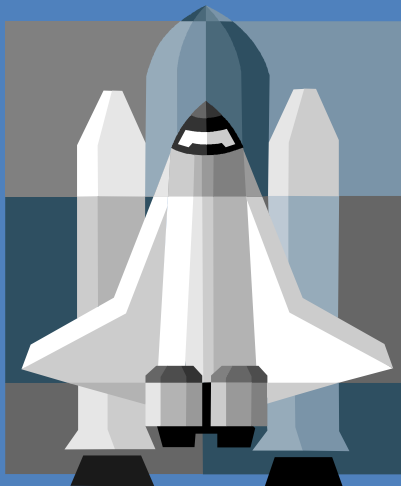# *Department of Electronics and Communication Engineering*

NEWS LETTER

| VOLUME 7 | ISSUE 2 | JAN-JUNE | 2019 |

VANIYAMBADI-635 751

ABOUT THE COLLEGE

Moved by the sad plight of affairs which was prevailing among the rural based population of Vaniyambadi and nearby Village who were quite unaware of the technological explosion that was taking place in India, the philanthropist of Vaniyambadi and nearby villages came together and established Jai Barath Charitable Trust in the year 1994 and started Priyadarshini Engineering College in the year 1995 under its banner with their sumptuous contributions.

With the sole aim that the accomplishment of the Vision and Mission of the Trust does not get shattered, the matter was referred to the Honorable High Court of Madras for scheming. The Honorable High Court of Madras appointed Retired Justice V.Rengasamy as the Receiver of the Trust in the year 2004 which appointment was confirmed by the Honorable Supreme Court of India, New Delhi. Right from that time Honorable Justice V.Rengasamy with his efficient leadership, guidance and impeccable integrity is administering Priyadarshini Engineering College faithfully following the Vision and Mission of Jai Barath Charitable Trust in letter and spirit and has raised the college to greater heights. Mission He took initiative to establish palatial buildings and labs in the college. He made it a point to fully equip the labs with the necessary software and our labs are deficient free as per the AICTE and Anna University norms. He introduced B.E (Civil) in Undergraduate Course and M.E (Power Systems) and M.E (Engineering Designs) in Postgraduate course. He continues to administer the institution with full zeal and zest till date.
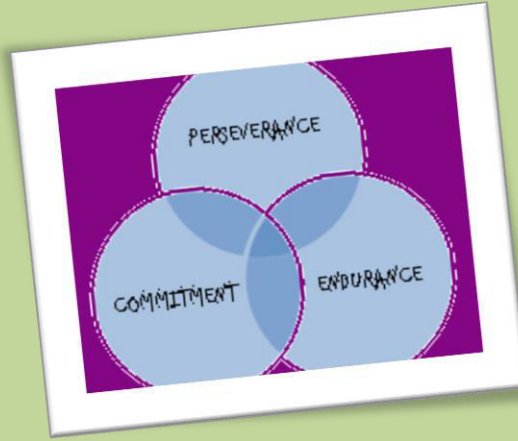
VISION OF THE COLLEGE

To Inculcate In the Young Rural Minds the Aptitude to Compete With the Quality Technocrats

MISSION OF THE COLLEGE

- ❖ To instill technical skills to compete for a sustainable world
- ❖ To impart holistic value based technical education
- ❖ To intensify international research and development (R & D) cooperation in technological development
- ❖ To imbibe core values of love for motherland, performance of duty, compassion, tolerance, honesty and integrity

COLLEGE MOTTO

"கற்றலும், கற்றவை கேட்டலும், கேட்டதன்கண் நிற்றலும்"

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering was started in PEC in the year 1995 with the intake of 60 students with the objective of imparting quality education in the field of Electronics and Communication and the intake was increased to 120 in the year 2013. The department started M.E.Communication System in the year 2014 with an intake of 24 students. At present, the department is offering an undergraduate course in Electronics and Communication Engineering and one post graduate course in Communication Systems. The department has well-equipped laboratories with the facility of working in various areas like Integrated circuits, Microprocessor and Microcontrollers with interfaces, Microwave and optical communication, Digital signal processing and VLSI etc. The department has dynamic and committed faculty members who have published and presented papers in various Journals, National and international conferences in the area of speech processing, image processing, wireless communication networks and neural networks. Original MATLAB 7.0 with signal processing tool box, ORCAD PSPICE 10.1 version, XILINX 9.1 version is added to the department to bring multi faceted knowledge among students in the ECE discipline. The department in association with student professional bodies like IETE,ISTE, ICTACT has organized several workshops, conferences and other technical events.

The ultimate aim of the department is to foster the technical skills in the field of Electronics and Communication that will help the students to practically express their findings as products conducive to the society.

VISION OF THE DEPARTMENT

To develop high quality, technically competent and socially responsible Engineers in the field of communication from rural background.

MISSION OF THE DEPARTMENT

1. To imbibe technical skills among graduates relevant to the area of electronics and communication engineering field.
2. Making our students technologically superior and ethically strong.
3. To instill skills among students to meet the industrial requirement

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S)

Program Educational Objectives (PEOs) are Broad Statements that describe what Graduates are expected to attain within a few years of Graduation. Program Educational Objectives are based on the needs of the program's Constituencies.

OBJECTIVES OF THE PROGRAM

PEO1: *Core Competence*

Graduates Excel In analyzing, designing, simulating and testing of all Electronics and Communication Engineering.

PEO2: *Breadth*

Graduates exhibit their multidisciplinary skills to integrate Contemporary knowledge.

PEO3: *Life Long Learning*

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

PEO4: *Professionalism*

Graduates excel in their professional careers as Engineers, consultants and entrepreneurs.

PROGRAMME OUTCOMES (PO'S)

Programme outcomes are narrower statements that describe what students are expected to know and be able to do upon the graduation. They are formed in line withthe graduate attributes of NBA. These relate to the skills, knowledge, attitudes, values and behavior outcomes that students acquire through the programme.

Graduates will have ability to:

Programme Outcome 1 (Engineering Knowledge):

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

Programme Outcome 2 (Problem Analysis):

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

Programme Outcome 3 (Design & Development of Solutions):

Analyze and design the electronic components and to apply in analog and digital communication systems.

Programme Outcome 4 (Investigation of Complex Problem):

Analyze and design the electronic components and to apply in analog and digital communication systems.

Programme Outcome 5 (Modern Tools Usage):

Use contemporary computing tools and techniques in electronics and communication Engineering applications.

Programme Outcome 6 (Engineer and Society):

Handle engineering aspects of modern electronics and communication technology, utilization and the impact of engineering solutions to the

Societal needs.

Programme Outcome 7 (Environment & Sustainability):

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

Programme Outcome 8 (Ethics):

Apply the ethical principles to their profession and social issues.

Programme Outcome 9 (Individual & Team work):

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

Programme Outcome 10 (Communication):

Effectively communicate and present technological developments.

Programme Outcome 11 (Lifelong Learning):

Gain self-confidence to engage in lifelong learning.

Programme Outcome 12 (Project management & Finance):

Plan and manage a project in a cost effective manner.

FROM THE EDITORS DESK

Dear Readers,

Hearty welcome to the launched ECE Department's Seventh issue of the news letter for the academic year 2018-2019.

The objectives of the news letter is to mainly focus on the

- Achievements of the Students and faculty members from the ECE department in Curricular, Co-Curricular and Extra –curricular Activities.
- The Recent Trends in the area of Electronics and Communication Engineering and related areas.

I congratulate all my team members for their constant efforts in launching this News Letter. We are very Grateful to our Management and Principal for their Support and Encouragement.

Editor-in-chief, Dept News Letter

EDITORIAL BOARD:

Mrs. M.Umadevi,   *L.Punith*
Professor & Head, Dept of ECE   *Final Year ECE*
Editor –in-chief, Dept News Letter

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Assistant Professor/ECE   *Final Year ECE*

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Assistant Professor/ECE   *Third Year ECE*

Mr.P.Arunkumar   *S.Abdulraheem*
Assistant Professor/ECE   *Second Year ECE*

ADMINISTRATOR'S MESSAGE

India has the world's largest population. It is not enough to only foster cognitive intelligence among the youth. The youth requires a mutual faculty endowed with multi dimensional intelligence. What are the objectives that the youth should work towards? These cannot be purely materialistic, materialistic Programme alone does not guarantee national security. What is essential is the character or integrity of the country's citizens. A national policy for integrating spiritual values and organization leadership can be achieved through measures by which we can create a modern Mindset among the youth. This will not only motivate them to acquire technical cognitive competence but also develop their emotional,, moral , social, spiritual, environmental and innovational intelligence. This will make them more patriotic self-reliant individuals of high character, possessing a social conscience. Such an army of evolved youth will be the asset of the nation

PRINCIPAL'S MESSAGE

I am happy to meet all of you through this News Letter and I thank all the staff who strived to give professional education in a new perspective manner and achieve perfection in all the fields. The main reason for our tremendous performance in various activities is the involvement of the faculty members who motivated students whole heartedly to participate in the seminars, industrial visit, inter activity session and other extracurricular activities to inculcate in them sound moral values, strong personality and eagerness to work in the society. Because of these efforts we have been successful in moulding the personality of our students and imbibe in them moral values and the spirit to team work. As a result 328 of our students leaving the institution in the year 2015 got placed in reputed and renowned firms. I wish this solidarity continues for successive years and we would be proud to release many more news letter like this, highlighting our achievements. I have no doubts in near future PEC will be termed as one of the leading technical institutions in our district.

The Department of Electronics & Communication Engineering (ECE) has consistently maintained an exemplary academic record. The greatest asset of the department is its highly motivated and learned faculty. The available diversity of expertise of the faculty with the support of the other staff prepares the students to work in global multicultural environment. The graduates of the Electronics & Communication Stream have been selected by some of the world's leading corporations & as well as by most of the leading Indian counter parts.

We hope that we will continue to deliver our best to serve the society and mankind. It is also expected and that our students will continue to pass-on the skills which they have developed during their stay at this department to whole of the world for a better society. We will be happy to receive your suggestions for further improvement and development of our department.

Conference/workshop/seminar/FDP attended by faculty members:

1. Dr.M.Umadevi, Dr.S.Srinivasalu " Integrated GPS and Sensor Network for better Tsunami prediction model using WAP" published in Journal of Advanced Research on Dynamical and Control system (SCOPUS SJR) No 13, Special issue, PP 446-452,ISSN 1943-023X : 2018.

2. Dr.M.Umadevi, A.Mahesh " Detection of Natural disaster from the acoustic signal generated by the aquatic species using DBN algorithm through underwater communication" published in internaltional journal of engineering and technology (SCOPUS) No 7, PP 735-738 , e-ISSN 0975-4024, 2018.

3. Mr. Karthik. S, Assistant Professor got mentor certificate award from SMART India hackathon 2019 – Grand finale software edition @ 2 & 3 March 2019..

4. Mr. R.Selvarasan, Assistant Professor presented a paper titled with "CBTC Systems through Enhanced Frame Structure" in 5th National Conference - RIETMA 2019 on 15th March 2019.

5. Mrs. Elavarasi R, ASP, presented a paper titled with "IOT based based vehicle pollution detection using AWS " in 5th National Conference - RIETMA 2019 on 15th March 2019.

6. Mr. Karthik. S, Assistant Professor presented a paper titled with "Gesture Based Home Automation Zigbee Enabled" in 5th National Conference - RIETMA 2019 on 15th March 2019.

7. Mr. K. Sridhar, Assistant Professor presented a paper titled with "IOT based water level and quality monitoring system in overhead tanks " in 5th National Conference - RIETMA 2019 on 15th March 2019.

8. Mrs. Gayathri. S, Assistant Professor presented a paper titled with "LI-FI Based Accident Avoidance and Rescue" in 5th National Conference - RIETMA 2019 on 15th March 2019.

9. Mrs. Gayathri. S, Assistant Professor presented a paper titled with "Distribution of RHW Messages under Fading and Shadowing in VANETs." in 5th National Conference - RIETMA 2019 on 15th March 2019.

10. Mr. Subramani. G, Associate Professor presented a paper titled with "All Intelligent Security System for Women" in 5th National Conference - RIETMA 2019 on 15th March 2019.

11. Mr. R.Selvarasan, Assistant Professor presented a paper titled with "Speaking Bus Stop Reminder Using Arduino" in 5th National Conference - RIETMA 2019 on 15th March 2019.

12. Mr. K. Sridhar, Assistant Professor presented a paper titled with "Real Time Crop Health Monitoring in Agriculture and Rural Development " in 5th National Conference - RIETMA 2019 on 15th March 2019.

13. Ms. S.Senthamizhlselvi, Assistant Professor presented a paper titled with "An GSM Based Door Opening for enhancing the Security in Banking" in 5th National Conference - RIETMA 2019 on 15th March 2019.

14. Ms. S.Senthamizhlselvi, Assistant Professor presented a paper titled with "Design and Implementation of Mobile Phone Detection Using IOT System" in 5th National Conference - RIETMA 2019 on 15th March 2019.

15. Mrs. Elavarasi R, Assistant Professor presented a paper titled with "IoT based vehicle pollution detection using AWS" in 5th National Conference - RIETMA 2019 on 15th March 2019.

16. Mrs. Elavarasi R, ASP, participated in one day orientation program – " Paradigm shift in Quality of higher eductation organized by Islamiaya college on 31st March 2019.

17. Mr. R.Selvarasan, Assistant Professor attended course coordinator's workshop on SCILAB conducted by IIT Bombay through IIT Remote centers on 16.04.2019 at PEC,Vaniyambadi

18. Mr. Subramani. G, Associate Professor attended workshop on "SCILAB" conducted by IIT Bombay through IIT Remote center on 04.05.2019 at our IIT remote center.

19. Ms. S.Senthamizhlselvi, Assistant Professor attended workshop on "SCILAB" conducted by IIT Bombay through IIT Remote center on 04.05.2019 at our IIT remote center.

20. Mr. K. Sridhar, Associate Professor attended workshop on "SCILAB" conducted by IIT Bombay through IIT Remote center on 04.05.2019 at our IIT remote center.

21. Mrs. Gayathri. S, Assistant Professor attended workshop on "SCILAB" conducted by IIT Bombay through IIT Remote center on 04.05.2019 at our IIT remote center

HACKATHON 2019

Third Year ECE students participated and were runner up in SMART India hackathon 2019 – Grand finale software edition on 2nd & 3rd March 2019."

5TH NATIONAL CONFERENCE

PROCEEDINGS RELEASE

Honoring session CHAIR

MR.S.ELANGO,ASST.PROF, DEPT OF ECE, BIT, COIMBATORE

KEYNOTE ADDRESS

PAPER PRESENTATION

5th National Conference on Recent Innovations in Engineering, Technology, Management and Applications-2019 15th March 2019, The Session Chair of the Conference was Mr.S.ELANGO, Assistant Professor, Department of ECE, BIT, Coimbatore