

PRIYADARSHINI ENGINEERING COLLEGE

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

*Department of Electronics
and Communication
Engineering*
NEWS LETTER



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ABOUT THE COLLEGE

Moved by the sad plight of affairs which was prevailing among the rural based population of Vaniyambadi and nearby Villages 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 Pariyadarshini 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 Pariyadarshini 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. 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.

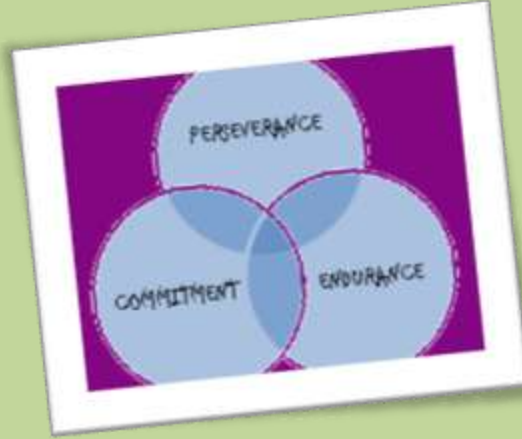
VISION OF THE COLLEGE

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 நின்றலும்"

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 with the 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 newly launched ECE Department's Second issue of the news letter for the academic year 2017-2018.

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,
Professor & Head, Dept of ECE
Editor -in-chief, Dept News Letter

M.Sangavi
Final Year ECE

Mr.G.Subramani,
Associate Professor/ECE

R.Poojalakshmi
Final Year ECE

Mr.R.Selvarasan,
Associate Professor/ECE

A.D.Sanjeevi
Third Year ECE

Mr.S.karthik,
Assistant Professor/ECE

M.Santhosh kumar
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.

HOD MESSAGE



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.

Department Activities

S.No	Name of the Events	Date	Resource Persons
1	IETE Sponsored One Day Workshop on "CISCO NETWORKING"	02/04/2018	Mr.C.KUMAR , M.E (PhD), Assistant Professor /ECE Ganadipatgy Tulsi's Jain Engineering College, Vellore.
2	4 th National Conference "Recent Innovation in Engineering Technology, Management and Applications" (RIETMA-2K18)	06/04/2018	Dr.G.SURESH , M.E., PhD Professor & Head, Department of ECE, C. Abdul Hakeem College of Engineering & Technology, Melvisharam, Vellore.
3	Summer Course On Trends In Electronics & Communication Engineering	07 /05/2018 to 11 /05/2018	ECE Dept Faculties PEC
4	Value Added Course on LOGICSIM, SCILAB, NASAM, CODE COMPOSER STUDIO	11/06/2018 To 14/06/2018	ECE Dept Faculties PEC

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

- Dr.M.Umadevi, Professor Published a paper Titled “Distributed scheduling for spectrum sensing in cognitive Radio networks in Annexure-1 Journal Revista De La Facultad de Agronomia De la Universidad DEL ZULIA,P-ISSN-0378-7818,PP(146-165)
- Dr.M.Umadevi, Professor presented a paper titled with “RF Energy Harvesting Using RECTENNA” in 4th National Conference - RIETMA 2018 on 6th April 2018.
- Dr.M.Umadevi Professor Participated in Training Programme on “Academic Leadership” from 22nd Jan to 25th Jan 2018 at IslamiahCollege,Vaniyambadi
- Mr.R.Selvarasan.Asso.Prof has published a paper in the International Journal of Applied Theoretical Science and Technology “IOT Based Smart Bin Monitoring Using Sensor And GSM For Smart Cities” Volume 06, Issue 7, pp1332-1335, April 2018
- Mr.G.Subramani Asso. Prof has published a paper in the International Journal of Applied Theoretical Science and Technology “IOT Based Smart Bin Monitoring Using Sensor And GSM For Smart Cities” Volume 06, Issue 7, pp1332-1335, April 2018
- Mr.R.Selvarasan.Asso.Prof has published a paper in the International Journal of Applied Theoretical Science and Technology “Vehicle Pollution Detection And Monitoring Control System” Volume 06, Issue 10, pp1422-1447, May 2018
- Mr.G.Subramani.Asso.Prof has published a paper in the International Journal of Applied Theoretical Science and Technology “Vehicle Pollution Detection And Monitoring Control

System” Volume 06, Issue 10, pp1422-1447, May 2018

- Mr.P.Arunkumar. has published a paper in the journal of Shanlax International Journal of Management “Investigating the impact of work stress on employee behavior in leather industry” Vol.5, Special Issue 3, April 2018, Page 36-40
- Ms.R.Elavarasi, Asso.Professor presented a paper titled “MATLAB Based vehicle identification system using OCR based number plate reading” in international Conference on EECCMC-2018 at Priyadarshini Engineering College.
- Ms.R.Elavarasi, Asso.Professor presented a paper titled “Integrative detection of open drainage overflow and current leakage” in international Conference on EECCMC-2018 at Priyadarshini Engineering College.
- Mr.P.Arunkumar, Asst.Professor presented a paper titled “VLSI soft fuzzy logic based security verification for AMI” in international Conference on EECCMC-2018 at Priyadarshini Engineering College.
- Mr.P.Arunkumar, Asst.Professor presented a paper titled “Harmonic reduction fuzzy logic based load fc for hybrid power generation” in international Conference on EECCMC-2018 at Priyadarshini Engineering College.
- Ms.S.Senthamizhlselvi, AP/ECE , presented a paper titled with “Image Enhancement using Morphological Reconstruction” in 4th National Conference RIETMA 2018 on 6th April 2018.
- Mr.P.Arunkumar, Asst.Professor presented a paper titled “Fuzzy logic based LF controller for hybrid power generation” in 4th National Conference RIETMA on 6th April 2018

- Mr.R.Selvarasan, Associate Professor presented a paper titled with “IOT Based Smart Bin Monitoring Using Sensor and GSM for Smart Cities” in 4th National Conference - RIETMA on 6th April 2018.
- Mr.S.Karthik AP, presented a paper titled with “Helmet for Wireless Authentication and Alcohol Sensing” in 4th National Conference - RIETMA 2018 on 6th April 2018.
- Mr.P.Arunkumar, Asst.Professor presented a paper titled “Investigating the impact of work stress on employee behavior in leather industry” in 4th National Conference RIETMA on 6th April 2018.
- Ms.S.Senthamizhselvi, AP Presented a paper titled with “Resource Allocation and Scheduling in Cognitive Radio Networks with Enhanced Encryption in 5 G HETNETS” in 4th National Conference -RIETMA 2018 on 6th April 2018.
- Mr.K.Sridhar, AP Presented a paper titled with “Human and Animal Intrusion Detection System Using PIR Sensor ” in 4th National Conference -RIETMA 2018 on 6th April 2018.
- Ms.S.Senthamizhselvi, AP Presented a paper titled with “Smart Border Alert System for Fisherman Using GPS and GSM” in 4th National Conference -RIETMA 2018 on 6th April 2018.
- Ms.R.Elavarasi, ASP Presented a paper titled with “MATLAB Based Vehicle Identification system Using OCR Based Number Plate reading” in 4th National Conference RIETMA on 6th April 2018.
- Mr.G.Subramani,ASP Presented a paper titled with “Vehicle Pollution Detection and Monitoring Control System” in 4th National Conference RIETMA on 6th April 2018.
- Mr.T.Vignesh, AP presented a paper titled with “Internet of Things Based Smart Assistant in Human Health Care” in 4th National Conference RIETMA on 6th April 2018.
- Mr.S.Karthik AP presented a paper titled with “An Intelligence Ambulance Car Which Control the Traffic Light and Density Based Automatic Control System” in 4th National Conference RIETMA on 6th April 2018.
- Ms.S.Gayathri, ASP presented a paper titled with “Designing and Implementation of IOT Based Control of Pick and Place Robot” in 4th National Conference RIETMA on 6th April 2018.
- Ms.R.Elavarasi, ASP presented a paper titled with “Integrative detection of open drainage garbage and drainage overflow and current leakage” in 4th National Conference RIETMA on 6th April 2018.
- Mr.P.Arunkumar, Asst.Professor presented a paper titled “Analysis of PUF Based Hardware Security for Reconfigurable Devices” in Inter national Conference ICCTEEE-2018 at Karpagam College of Engineering.
- Mr.P.Arunkumar, Asst.Professor presented a paper titled “IoT based reconfigurable RTOS for mining monitoring and predictive maintenances” in Inter national Conference ICCTEEE-2018 at Karpagam College of Engineering.
- Mr.P.Arunkumar, Asst.Professor presented a paper titled “IOT based Health monitoring for solving Decision making problem using fuzzy soft set” in National Conference on Mathematical Sciences and its Applications at Tiruvallur University College of Arts and Science, Tirupattur
- Mr.T.Vignesh AP, presented a paper titled with “An ARDUINO based accident prevention and identification system for vehicles” in 4th National Conference RIETMA

on 6th April 2018.

➤ Ms. S.Senthazhlselvi, AP presented a paper titled with “Improving Smart Home Security Using IOT” in 4th National Conference RIETMA on 6th April 2018.

➤ Mr.K.Sridhar, Assit Professor presented a paper titled with “Security Device to prevent woman violence” in 4th National Conference RIETMA on 6th April 2018.

➤ Mr.R.Selvarasan, Asso.Professor has attended 2 day FDP on Stress Management organized by ICT Academy from 31st may to 1st june 2018 at Priyadarshini Engineering College.

➤ Mr.G.Subramani, Asso.Professor has attended 2 day FDP on Stress Management organized by ICT Academy from 31st may to 1st june 2018 at Priyadarshini Engineering College

➤ Mr.P.Arunkumar, Asst.Professor has attended 2 day FDP on Stress Management organized by ICT Academy from 31st may to 1st june 2018 at Priyadarshini Engineering College

➤ Mr.P.Arunkumar, Asst.Professor has attended one day Workshop on Teaching through the creative mindset online workshop organized by Education Closet from 31st may to 22nd Jan 2018

➤ Mr.P.Arunkumar, Asst.Professor has attended one day Workshop on GST in 90 minutes organized by ICT Academy from 14th Feb 2018

➤ Department faculty members attended one day Workshop on “Challenges in Engineering Research and publications” held on 11/05/2018 at Priyadarshini Engineering College.

➤ Department faculty members attended one day FDP on “Role of Mentoring in Higher Education – A Need for 21st Century” held on 21/5/2018 at Priyadarshini Engineering College.

➤ Department faculty members attended one day Workshop on “How to convert Idea into IPR” held on 15/06/2018 at Priyadarshini Engineering College.

➤ Department faculty members acted as Session chair in the IEEE Sponsored

International conference on EECCMC-2018 organized by Priyadarshini Engineering college ,during 28th & 29th Jan 2018.

Conference/workshop/seminar attended by Students:

➤ Third year Student Punith.L Participated in IGNITE-2K18 and won 1st Prize in spell Bee event, held on 31st Jan 2018 at Islamiah College, Vaniyambadi

➤ Third year Student Sanjeevi.A.D Participated in IGNITE-2K18 and won 1st Prize in the Treasure Hunt event, held on 31st Jan 2018 at Islamiah College, Vaniyambadi.

➤ Third year Student Avinash.V Participated in IGNITE-2K18 and won 3rd Prize in the Photography event, held on 31st Jan 2018 at Islamiah College, Vaniyambadi.

➤ Third year Students Punith.L, Avinash.V, Sanjeevi.A.D, Ashok.M are Participated in 3 Day Workshop on Arduinosat conducted by Hyoristic Innovations as a part of Kurukshetra-2018. Held from 1st to 3rd Feb 2018 at CEG, Anna University.

➤ Second year Student M.Aathif Participated in Drawing competition and won 1st Prize on 3rd Feb 2018 at S.R.M University Chennai.

➤ Second year Student Shabaz Khan.A Participated in IGNITE-2K18 and won 2nd Prize in Tongue Twister, held on 31st Jan 2018 at Islamiah College, Vaniyambadi.

➤ Department Students attended IETE sponsored one day Workshop on “CISCO Networking” held on 02/04/2018 at Priyadarshini Engineering College.

➤ Third Year students attended Four days Value Added course on “LOGICSIM, SCILAB, NASAM, CODE COMPOSER STUDIO” held from 11/06/2018 to 14/06/2018 at Priyadarshini Engineering College.

- Final Year students, V.Bhavani, V.Shalini, K.Kiruthiga, presented a paper titled with “IOT Based Smart Bin Monitoring Using Sensor and GSM for Smart Cities” in 4th National Conference -RIETMA 2018 on 6th April 2018.
- Final Year students, Pavithra.J , Kayalvizhi.M, Sangavi, presented a paper titled with “RF Energy Harvesting Using RECTENNA” in 4th National Conference -RIETMA 2018 on 6th April 2018.
- Final Year students, Nivethitha.A.S, PoojaLakshmi.R, presented a paper titled with “Helmet for Wireless Authentication and Alcohol Sensing” in 4th National Conference -RIETMA 2018 on 6th April 2018.
- S.TamilElakkiya, PG Student, Presented a paper titled with “Resource Allocation and Scheduling in Cognitive Radio Networks with Enhanced Encryption in 5 G HETNETS” in 4th National Conference -RIETMA 2018 on 6th April 2018.
- Final Year students, R.Anbarasan, J.Karthick, G.Vinoth, presented a paper titled with “Human and Animal Intrusion Detection System Using PIR Sensor ” in 4th National Conference -RIETMA 2018 on 6th April 2018
- Final Year students, M.Premalatha, S.Aswini, K.Rajeshwari presented a paper titled with “Smart Border Alert System for Fisherman Using GPS and GSM” in 4th National Conference -RIETMA 2018 on 6th April 2018.
- Final Year students, Vinitha.K, Indhumathi.J, Meena.B presented a paper titled with “MATLAB Based Vehicle Identification system Using OCR Based Number Plate reading” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students, B.Nevetha, M.Jothi , S.Priya presented a paper titled with “Vehicle Pollution Detection and Monitoring Control System” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students, V.Vaishnavi, K.Pavithra presented a paper titled with “Internet Of Things Based Smart Assistant In Human Health Care” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students, S.T MD FalahKabeer, S.K Barkathullah, S.A. Faizan, N.Vignesh presented a paper titled with “An Intelligence Ambulance Car Which Control the Traffic Light and Density Based Automatic Control System” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students, P. Revathi, J. Pavithra, T. Geethapriya presented a paper titled with “Designing and Implementation of IOT Based Control of Pick and Place Robot” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students Archana.A,Sandhiya.D,Pavithra.P presented a paper titled with “Integrative detection of open drainage garbage and drainage overflow and current leakage” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students S.Gopi, K.Arunkumar,M.Vijaykumar presented a paper titled with “An ARDUINO based accident prevention and identification system for vehicles” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students V.Nalini, D.Santhiya presented a paper titled with “Improving Smart Home Security Using IOT” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students A.Ajay, K.Ajithkumar, V.Viveganandhan presented a paper titled with “Optimization of SDR for MANET Environment” in 4th National Conference RIETMA on 6th April 2018.
- Final Year students T.Sughasini, G.Srimathi, S.Bhuvaneshwari presented a paper titled with “Security Device to prevent woman violence” in 4th National Conference RIETMA on 6th April 2018.

In plant Training

- Third year students have undergone training in Basic Network Fundamentals and routing held at RDS IT SOLUTIONS, Vellore, from 18th to 20th June 2018.
- Second year students have undergone In plant training at MASK INFOTECH, Melvisharam, Vellore, from 11th to 13th June 2018.
- M.Santhosh Kumar Second year student has undergone Inplant training at TRANSPACE TECHNOLOGIES, Bangalore. From 4th to 22nd June 2018.

WORKSHOP



Workshop ON “CISCO NETWORKING” on 02nd April 2018. Resource Person was **Mr.C.KUMAR, M.E (PhD) AP/ECE, GANADIPATGY TULSI’S JAIN ENGINEERING COLLEGE, VELLORE** (PEC Alumnus/ECE/2001-2005Batch)

4TH NATIONAL CONFERENCE



4th National Conference on Recent Innovations in Engineering, Technology, Management and Applications-2018 06th April 2018, The Session Chair of the Conference was **Dr.G.SURESH, M.E., PhD Professor & Head, Department of ECE, C. Abdul Hakeem College of Engineering & Technology, Melvisharam, (PEC Alumnus/ECE/1996-2000Batch)**

SUMMER COURSE



Five days summer course for Diploma students on Trends in Electronics & Communication Engineering
Held from 07 /05/2018 to 11 /05/2018.

VALUE ADDED COURSE



Four Days Value added course for third Year students on open source software- LOGIC SIM, SCILAB, NASM,
CODE COMPOSER STUDIO, held from 11/06/2018 to 14/06/2018.