

PANIMALAR INSTITUTE OF TECHNOLOGY

Semesterly Newsletter

JAN 15



ECE TALK

Department of ECE

by Dr.M.P.Chitra

I am glad to know that Panimalr institute of technology is planning to publish bi-annual Newsletter from this academic year. The Newsletter will highlight the academic and other activities of the College which is fast developing into one of the best technical institutions in Tamil Nadu. I congratulate the faculty and students for their efforts to achieve excellence and wish them all the best for the future.

EDITORIAL COMMITTEE

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P a t r o n

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E x e c u t i v e E d i t o r

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A s s i s t a n t P r o f e s s o r

VISION & MISSION

VISION

Imparting quality education to compete with global standards and evolve as a centre of excellence in Electronics and Communication Engineering with social commitment.

MISSION

- M1:** To adopt effective teaching methods in order to maximize knowledge dissemination for students.
- M2:** To have adequate mechanisms to enhance the understanding and implementation of theoretical concepts in practical scenarios.
- M3:** To provide state-of-the-art infrastructure and facilities to the students and faculty members by creating a conducive ambience for excellence in engineering education.
- M4:** To produce Electronics and Communication Engineering graduates with good ethical skills and managerial skills to blossom as successful professionals and entrepreneurs.
- M5:** To promote Industry Institute interaction in Electronics and Communication Engineering department for the students to involve in research activities.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO1:** To analyze and design appropriate Electronics and Communication systems to provide solutions that are technically advanced, economically feasible and socially acceptable.
- PEO2:** To produce Electronics and Communication Engineering graduates with sufficient breadth in Electronics and its related fields enabling to work in multidisciplinary environments.
- PEO3:** To excel in professional career and higher education by acquiring knowledge in the area of Electronics and Communication Engineering.
- PEO4:** To produce graduates with a professional outlook who can communicate effectively and interact responsibly in their profession.
- PEO5:** To pursue lifelong learning by adapting present and future trends to render service to the society.

PROGRAM OUTCOMES (POs)

On completion of the B.E (ECE) degree the Electronics and Communication graduates will be able to:

- PO1:** Apply knowledge of mathematics, science and Electronics and Communication Engineering fundamentals on the solutions of complex engineering problems. **(Engineering knowledge)**
- PO2:** Identify, formulate and analyze complex Electronics and Communication Engineering problems. **(Problem analysis)**
- PO3:** Design solutions for complex problems and design systems or processes for a specific need with real time constraints. **(Design / Development of solutions)**
- PO4:** Conduct experiments as well as design, analysis and acquire results for complex Electronics and Communication problems. **(Conduct investigations of complex problems)**
- PO5:** Select and apply proper techniques and modern engineering tools which are relevant to Electronics and Communication Engineering applications. **(Modern tool usage)**
- PO6:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and consequent responsibilities relevant to the professional engineering practice. **(The engineer and society)**
- PO7:** Examine the impact of engineering solutions in social and environmental context and apply knowledge for continuous development. **(Environment and sustainability)**
- PO8:** Develop consciousness of professional and ethical responsibilities in the field of Electronics and Communication Engineering. **(Ethics)**
- PO9:** Apply skill to function as an individual and as a member or a leader in a multidisciplinary team. **(Individual and team work)**
- PO10:** Communicate effectively on complex Electronics and Communication 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. **(Communication)**
- PO11:** Manage Projects and finance in multidisciplinary environment as a member or leader in a team using engineering and management principles. **(Project management and finance)**
- PO12:** Recognize the need to engage in lifelong learning. **(Life-long learning)**

PROGRAM SPECIFIC OUTCOMES (PSOs):

- PSO1:** An ability to apply creativity in design and development of electronic circuits, equipment, components and systems. (**Hardware designing skill**)
- PSO2:** An ability to apply contextual knowledge of microprocessor, micro controller, DSP processor and software tools in embedded systems. (**Skill on Software and Hardware Interfacing**)
- PSO3:** An ability to comprehend the knowledge of wired, wireless communication networks in telecommunication industries. (**Knowledge on Communication Systems**)

GUEST LECTURE



GUEST LECTURE ON EMBEDDED COMPUTING SYSTEMS

The Department of ECE , Panimalar Institute of Technology in association with ACM, IEEE-SB, IEEE-RSA, IEEE-CS has conducted a guest lecture on Embedded Computing Systems on December 15, 2014 which was delivered by Dr. Lakshmi Narasimhan , Professor , Computer Science Department , East Carolina University, USA.

“ELECTROMAGNETIC INTERFERENCE AND CONTROLLING TECHNIQUES”

Department of Electronics and Communication Engineering of Panimalar Institute of Technology organized a Guest Lecture on “ELECTROMAGNETIC INTERFERENCE AND CONTROLLING TECHNIQUES” was organized during 12th Sep 2014.

Dr. S. Sathyamurthy, Retd. DRDO Scientist, Chennai conducted the course. He has explained about basics of EMI and EMC, mitigation techniques, PCB layout design. All the participants gained the knowledge in EMI/EMC and the important design and considerations in the area of EMC. It was a learning and interactive session for the students where he answered all the queries put up by the students to their full satisfaction.

GUEST LECTURE ON “SOLAR PANEL”

Department of Electronics and Communication Engineering of Panimalar Institute of Technology organized a Guest Lecture on “Solar Panel” was organized during 10th Oct 2014.

Mr. Vishwa Ramanathaswamy, Director, Solar Steinbeis Research Centre, Chennai conducted the course.



Professor **Dr. Lakshmi Narasimhan** first enquired students regarding various real time applications of embedded systems before proceeding with Embedded Computing Systems. During his expert lecture he shared about the advantage of using electronic toothbrush operated with small motor. Then he discussed about the various applications of the embedded systems in which a brief explanation on its applications in automobile industry was explained.

Seminar on Entrepreneurship - September 10, 2014.
A Group Discussion & Extempore on Entrepreneurship have been conducted by IIT-Bombay & IEEE -PIT SBoN September 5, 2014.



GUEST LECTURE ON “ADAPTIVE FILTER AND ITS APPLICATIONS”

Department of ECE of Panimalar Institute of Technology organized a Guest Lecture on “ADAPTIVE FILTER AND ITS APPLICATIONS” was organized during 27th July 2014. Mr. Senthil, Director, Jasmine Infotech, Chennai conducted the course. The course focused on the basics of ADAPTIVE FILTER AND ITS APPLICATIONS. All the participants learnt about the numerous applications and huge possibilities in the field of ADAPTIVE FILTER AND ITS APPLICATIONS

GUEST LECTURE ON “MODERN DIGITAL COMMUNICATION SYSTEMS” 12TH AUG 2014

Department of ECE of Panimalar Institute of Technology organized a **Guest Lecture** on “**MODERN DIGITAL COMMUNICATION SYSTEMS**” was organized during 12th Aug 2014.

G.T.Bharathy, Assistant Professor S.G, Jerusalem College of Engineering, Chennai conducted course. The course focused on the basics of MODERN DIGITAL COMMUNICATION SYSTEMS as well as some of the applications of it.

GUEST LECTURE ON “SIGNAL ANALYSIS USING MATLAB”

Department of Electronics and Communication Engineering of Panimalar Institute of Technology organized a Guest Lecture on “Signal Analysis Using Matlab” was organized during 14th Aug 2014. **Mr. Mr. R.Karthikeyan**, Assistant Professor ECE, AVIT, Chennai conducted the course.

FACULTY DEVELOPMENT PROGRAM

The Department of Electronics and Communication Engineering, Panimalar Institute of Technology in association with PIT- IEEE Communication Society- SB chapter organized a Faculty Development Program on “**Recent Trends in Wireless Communication Technologies**” by **Er. S. Balaji**, Sr. Engineer, BSNL, Chennai during November 6-7, 2014.

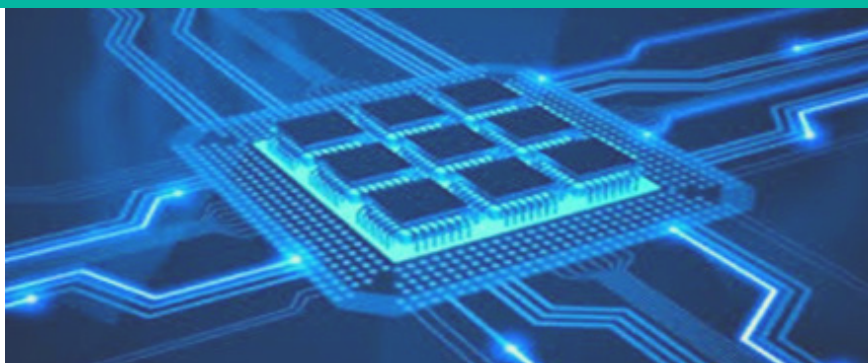
Faculty Development Program on “**EC 6402 - Communication Theory**” organized by the department from 04.12.2014 to 12.12.2014

FUNDED PROJECTS

A KhadarShareef, J Ranjith Kumar, C Arvind, P Vivek Anand as Won Third prize and funded with Rs 11000 /- in All IEEE Region 10 Young Engineers' Humanitarian Challenge 2014 for their project titled Accident Prevention Using Intelligent Breaking System



WORKSHOP



Workshop on "Embedded System" was conducted by Department of ECE in association with IEEE student branch and EPR labs, Chennai for third year ECE students during 23.7.2014 - 25.07.2014.

Department of ECE in association with PIT IEEE SB, IETE-ISF & ISTE conducted the Workshop on "PCB DESIGN" for second Year ECE students from 7th to 11th July 2014 in ECE lab Block

Workshop on "Basic Electronics" have been organized for II year ECE students from July 31 to August 5, 2014. Mr. Rajamanikam, from Shri Gemni Kits & Spare,

Workshop on Recent Trends in Wireless Communication Technologies was conducted by Department of ECE in association with IEEE student branch and EPR labs, Chennai for final year ECE students by Er. S. Balaji, Sr. Engineer, BSNL, Chennai during 29.9.2014 - 30.09.2014.

Workshop on is "Design of Multi-Vibrator using Logic Gates". was conducted by ECE department association IEEE-SB, IETE-ISF & ISTE Conducted a two days workshop on 16th & 17th September 2014 for II year students in ECE Lab Block. Mr. Mr.D.Arul Kumar/Assistant Professor- Grade 1, Faculty of ECE conducted the workshop

SHORT TERM COURSE

Short term course on "LABVIEW & ITS APPLICATION" was conducted from 07.07.2014 -11.07.2014 for third year students of ECE Department.

Short term course on "IMAGE PROCESSING & ITS APPLICATIONS" was conducted from 11.08.14 -18.08.2014 for final year students of ECE Department.



A Quiz contest on Entrepreneurship - September 8, 2014.

A Quiz conteste on Entrepreneurship have been conducted by IIT-Bombay & IEEE -PIT SB on September 8, 2014.



STUDENT PUBLICATION IN NATIONAL CONFERENCE

11 students were published the paper in national conference at various college



INAUGURATION OF IEEE-COMMUNICATIONS SOCIETY STUDENT BRANCH CHAPTER



Inauguration Of Ieee-Communications Society Student Branch Chapter

1. Inauguration of IEEE-Communications Society Student Branch Chapter -PIT was held on the 06th of November 2014 at the Conference Hall, Panimalar Institute of Technology by **Er. S. Balaji**, Sr. Engineer, BSNL, Chennai

2 Inauguration Of Ieee Signal Processing, Robotics & Automation Society – Sb

Inaugural function of IEEE Signal Processing & Robotics and Automation Society – SB PIT was held on December 15, 2014 at the Conference Hall, Panimalar Institute of Technology by **Mr.C.Sakthi Kumar**, Director Panimalar Institute of Technology & **Dr. Lakshmi Narasimhan**, Professor Computer Science Department, East Carolina University, USA . He is invited through ACM Distinguished Speaker Program.



STUDENT ACHIEVEMENTS

Our Department students Secured **Fourth place** in the **National Entrepreneurship Challenge (NEC)** launched by IIT-B on September 2014 .

ICT TALK

PIT - IEEE Communication Society have organized “**ICT TALK**” for Faculty members of ECE department on 20th October 2014.

PITCHING WORKSHOP

IEEE –SB in association with Department of ECE conducted a pitching workshop for the young interested person who longs to be an entrepreneur



STUDENT ACTIVITIES



CAMPAIGN ON HUMAN RIGHTS

IEEE –SB & Entrepreneurship Development Cell of Panimalar Institute of Technology in Collaboration with [NGO NALVIDHAIGAL](#) organized a Campaign on Human Rights on International Human Rights day DEC 10, 2014. All IEEE students actively participated and insisted the Rights of Human. Mr.VIVEKANAND, IEEE –SB Vice Chair Headed the Rally

A CLEAN INDIA CAMPAIGN ON ENTREPRENEURSHIP – OCTOBER 20, 2014

As a part of SWACHH BHARAT campaign, which was initiated by our Honorable [Prime Minister Mr.Narendra Modi](#), our college conducted 'Clean India Campaign' under the guidance of our [Director Mr.C.Sakthi Kumar](#) on October 20, 2014.



INDUSTRIAL VISIT

II,III & IV year Students of ECE have gone to industrial visit at various places

1. Ennore Thermal Power Station
2. Sriperumbudur Thermal Power Station
3. All India Radio, Pondicherry
4. NLC, Neyveli
5. Sambandam Spinning Mills, Salem
6. All India radio, Avadi
7. Chennai Port Trust

INPLANT TRAINING

II,III & IV year Students of ECE have gone to inplant training at various companies

1. Aargee Equipments Ltd
2. UNIQ Technologies
3. Code Bind Technologies
4. BSNL-Eetp - Platinum (Employability Enhancement Training)
5. Kaashiv Infotech
6. Techno Crat
7. HCL
8. Prasar Bharati-Doordarshan Kendra
9. All India Radio-Tiruchirappalli
10. Hindustan Automation Solutions
11. Ministry Of Defence

1. Maheswari S. and Jayanthi T. (Aug 2014), "High Directivity Microstrip Coupler with Asymmetric Structure," Frequenz, Vol.68, No.9-10, pp.421-426, ISSN (Online) 2191-6349, ISSN (Print) 0016-1136.
2. S. Sathya Priya, Dr. N.R. Alamelu (2014) "Singular value Decomposition method for Estimating Impulse Response of UWB Channel", National Journal of Technology (PSG Tech Vol.10, No.2, pp-15-22), ISSN - 0973- 1334.
3. S. Mageshwari, T. Jayanthi (2014) "High directivity Microstrip coupler using variable width structure" IOSR Journal for Electronics and communication Engineering vol.9 issue 4 pp24-28, ISSN 2278-8735.
4. Maheswari S. and Jayanthi T. (2014), "Microstrip Coupler with High Isolation," International Journal of Electronics and Communication Engineering, ISSN 0974-2166, Vol. 7, No. 2, pp 105-110, 2014.
5. V. Sridevi, T. Jayanthi (2014), "Minimization of CNTFET Ternary Combinational Circuits Using Negation of Literals Technique," Arabian journal for Science and Engineering Jun-2014; Vol.39, No.6, pp:4875-4890. (DOI:10.1007/s13369-014-1147-y) ISSN: 1319-8025

CONFERENCE PUBLICATIONS

1. T. Jayanthi, D. Preetha, (2014) "Analysis of different types of coupling for micro strip ring resonator" IEEE International Conference on science, Engineering and Management Research (ICSESMAR2014), 978-1-4-4799-7613-3/14, Vel Tech university, November 27, 2014. [http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=7043561&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%2F7043561&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%2F7043561](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=7043561&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%2F7043561&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%2F7043561&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%2F7043561)
2. Beulah Jackson, T. Jayanthi, (2014), "Comprehensive analysis of miniaturization of loop resonator for dielectric measurement" Proceedings of eleventh IRF International conference, South Asian Research Centre, Chennai Chapter, pp66-69, August 17, 2014, Doi: http://iraj.in/up_proc/pdf/99-140844730066-69.pdf
3. **M.P. Chitra**, M. Prem Kumar, S. Sathya Priya, D. Kalaiarasi, (2014) "Estimation of Wireless Channel in Cognitive Radio", Proceedings of **National Conference** on Emerging Trends in Networking, Automation and Control Technologies "ENACT 2014, Sathyabama University, pp.8, December 4-5, 2014.
4. **M. Arun**, R. Vinniya, D. Vijaya Lakshmi, (2014) "Sensor less Illumination Control For Attendance Power Control" **International Conference** on Process Instrumentation Technologies and Soft Computing '14 held, Thangavelu Engineering College, Chennai, August 20, 2014.

STAFF ACHIEVEMENTS

I  **Dr. M.P. Chitra**, HOD/ECE Appointed as zonal coordinator for zonal round at Panimalar Institute of Technology of RoboTryst-2014 organized by Robosapiens technologies Pvt. Ltd. In association with Tyrst-2014 IIT Delhi.

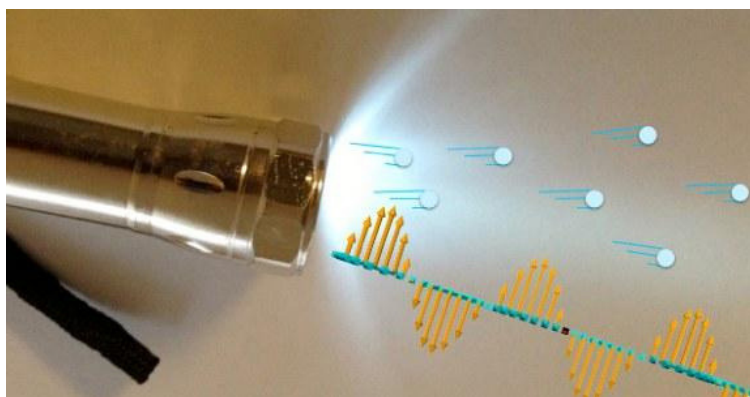
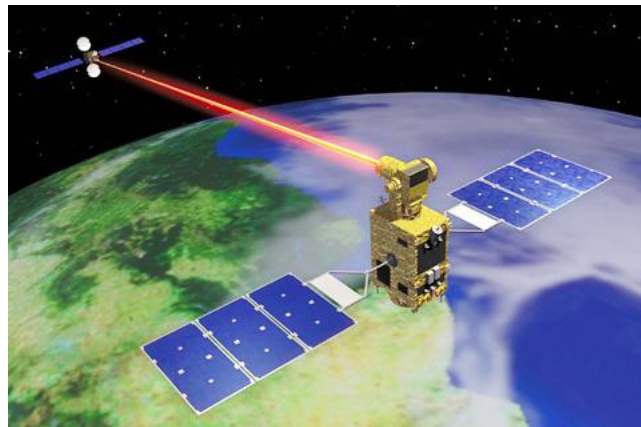
2. **Dr. M.P. Chitra**, HOD/ECE has been invited to **REVIEW** the project at IEEE Student project funding for the academic year 2014-2015 at IEEE Madras section.

STAFF ACHIEVEMENTS

Dr. T. Jayanthi, Principal, **Dr. M.P. Chitra**, HOD/ECE, **Dr. M. Prem Kumar**, Professor ECE, **Mr. S. Ganesh**, Associate Professor ECE & **Mr. M. Arun**, Assistant Professor ECE served as Mentor for Entrepreneurship Development Cell of PIT that secured **Third place** in the National Entrepreneurship Challenge (NEC) launched by IIT-B on September 2014.

seminar on “Recent Advances in Optical Fiber Communication”

Department of ECE Panimalar Institute of Technology in association with PIT IEEE SB, IETE-ISF, ISTE organized a Seminar on “Recent Advances in Optical Fiber Communication” on 18th August 2014. Dr.P.Kannan, HOD, Department of ECE, Panimalar Engineering College, Chennai conducted the course.



Seminar on Transmission Lines & EM Waves

Department of ECE Panimalar Institute of Technology in association with PIT IEEE SB, IETE-ISF, ISTE organized a Seminar on “Transmission Lines & EM Waves” on 30th September 2014.

SEMINAR ON RFID

Department of ECE in association with IEEE SB, IETE-ISF, ISTE & IEEE of Panimalar Institute of Technology organized a seminar on RFID for final Year ECE students on 9th October 2014.

PRIZES & AWARDS- NATIONAL LEVEL INTER INSTITUTE EVENTS

S.No	Date	Name of the Student	Name of the Event	Title	Institute / Organisation	Prize / Award Won
1	20.09.2014	Antony Verronica M	Symposium	Circuitrix	Srinivasa Institute of Technology	III Prize
2	23.08.2014	C.Sindhuja	Symposium	Paper Presentation	Sairam Institute of Technology	II Prize
3		B.Sharmila				
4	02.08.2014	Mohammed Burhanuddin Dadri	Science For The Society 2014	Project Display	IIT Madras	Appreciation
5	14.07.2014	Kameshwaran	Symposium	Paper Presentation	R.M.D Engineering college	III Prize

CASH AWARD

I YEAR / II SEMESTER BATCH (2013-2017)

S.NO	NAME	GPA	RANK	CASH PRIZE
1.	PRIYA THARSSHINI.S	9.42	I	25,000
2.	INDIRA.E	9.38	II	15,000
3.	JOSEPHINE LILY.J	9.25	III	10,000

II YEAR / IV SEMESTER BATCH (2012-2016)

S.NO	NAME	GPA	RANK	CASH PRIZE
1.	LOKESH.D	9.50	I	25,000
2.	SARASWATHY.V	9.46	II	15,000
3.	VINNIYA.R	9.36	III	10,000

III YEAR / VI SEMESTER BATCH (2011-2015)

S.NO	NAME	GPA	RANK	CASH PRIZE
1.	KHADAR SHAREEFA	9.04	I	25,000
2.	DIVYA Y KUMAR	9.00	II	15,000
3.	SHIRLYMINI.J	8.96	III	10,000

FACULTY CASH AWARD RECEIVED FOR PRODUCING ABOVE 90% RESULT

Sl. No	Academic Year	Staff Name	Year	Sem	Dept.	Subject	Percentage
2	2013-2014	Dr.M.P.Chitra	III	VI	ECE	Computer Networks	90.85
3	2013-2014	Mr.N.Jeya Kannan	III	VI	ECE	Principles of Management	94.77
4	2013-2014	Mrs.Selva Agnes	III	VI	IT	Embedded Systems	94.81
5	2013-2014	J.Navarajan	IV	VIII	ECE	Embedded and Real Time Systems	95
6	2013-2014	R.Suganthi	IV	VIII	ECE	Wireless Networks	95
7	2013-2014	D.Kalaingarasi	IV	VIII	ECE	Embedded and Real Time Systems	95
8	2013-2014	S.Ganesh	IV	VIII	ECE	Wireless Networks	95