

2014
December
Volume 4
Issue 2

ECE NEWS



Department of Electronics & Communication Engineering
Jyothi Engineering College, Cheruthuruthy, Thrissur - 679531

Vision

Create eminent and ethical leaders in the field of Electronics and Communication through quality professional education to excel in academia and industry.

Mission

- Provide theoretical and practical knowledge through quality education and life skills training to make competent graduates with social commitment.
- To impart entrepreneurial orientation and research motivation among the students through knowledge transfer with industrial, academic & research institutions.

DEPARTMENT ACTIVITIES & ACHIEVEMENTS

❖ ECSA ACTIVITIES

ECSA Activities for the academic year 2014-2015 was inaugurated by Fr. Jos Punnoliparambil, Executive Manager on 21/08/2014. Mr. Dilin Anand, Senior Asst. Editor, Electronics For You Magazine delivered a technical talk on “Three things Every ECE Engineer should Know: Makers, Internet of Things & Big-Data”.



Mr. Dilin Anand (Senior Asst. Editor, Electronics For You Magazine) presenting his Technical Talk

❖ AEISA ACTIVITIES

Applied Electronics & Instrumentation Students' Association (AEISA) for the academic year 2014-15 was inaugurated on 04/09/2014. The Chief Guest was Mr. Louis P. J., Sr. Manager, Utility, Indian Rare Earth Limited, Aluva. A talk on 'Instrumentation & PLC' was delivered by the Chief Guest as a part of the inauguration.



Chief Guest Mr. Louis P. J., (Sr. Manager, Utility, Indian Rare Earth Limited, Aluva) delivering the inaugural address

❖ NEW STAFF APPOINTMENTS

1. Mr. Jobin Varghese rejoined the Faculty of Dept. of ECE as Asst. Professor on 01/08/2014 after successfully completing M.Tech Course in Tele Communication Engineering from Mar Baselios College of Engineering and Technology (MBCET), Thiruvananthapuram, Kerala.
2. Mr. Rijo P C joined the Faculty of Dept. of ECE as Asst. Professor on 25/08/2014.



Mr. Jobin
Varghese



Mr. Rijo P C

❖ PROFESSIONAL CLUB ACTIVITIES

'ROBINO –Robotics workshop using Arduino' Sponsored by ISTE Student Chapter JECC

A two day workshop titled '*ROBINO - Workshop on Robotics using Arduino Platform*' – Sponsored by ISTE Student Chapter, JECC was organized on 16/10/2014 and 17/10/2014. 43 Students from the Dept. of ECE and Dept. of IT participated in the Workshop. Mr. Jinesh K J, Asst. Professor handled all the sessions of the Workshop.



Mr. Jinesh K J, Asst. Prof., Dept. of ECE assisting the students in implementing the robotic design during the Workshop



Students participants attending the Workshop









Students involved in implementing the Robot design during the workshop



Dr. Jose P Therattil, HOD, ECE presenting the memento to Mr. Jinesh K J, Asst. Prof., Dept. of ECE

❖ PLACEMENT INFOSYS

Following 9 students of 2011-15 ECE Batch have achieved placement in Infosys Ltd during the on-campus recruitment process held on 01/10/2014.

					
Ms. Anusha K B	Ms. Grace Mary C Anto	Ms. Mannya Elizabeth Chandy	Mr. Mathew J Kodenkandath	Ms. Mubeena K	Ms. Nithara Radhakrishnan

		
Mr. Roshin C Jackson	Ms. Simi Simon P	Ms. Thasneem V A

FEDERAL BANK

Following 6 students of 2010-14 ECE Batch have achieved placement in Federal Bank Ltd during the recruitment process held on 30/10/2014 and 01/11/2014.

					
Mr. Jan Win Sunny	Mr. Joe Neelankavil	Ms. Neshma A N	Ms. Nivia George	Ms. Rose Mary John	Ms. Shinu Shoby

❖ FAREWELL TO MS. DHANYA NAIR (Instructor, Dept. of ECE)

A farewell ceremony was organized by the Dept. of ECE to wish farewell to Ms. Dhanya Nair on 14/11/2014. Ms. Dhanya Nair served as Instructor, in the Dept. of ECE for 7 years. Rev. Fr. Jose Punnolipparambil, Executive Manager, Dr. K K Babu, Principal, Er. Thomas Mathew, Administrator, Er. Bobby Peter, Asst. Administrator graced the function with their presence. Dr. Jose P Therattil welcomed the gathering. Management representatives, Dr. Jose P Therattil (HOD), Ms. Sindhu S (Asst. Professor) and Ms. Eleesa Davi, (Instructor) wished their farewell to Ms. Dhanya Nair. Rev. Fr. Jose Punnolipparambil, Exec. Manager presented the memento.

	
Dr. Jose P Therattil, HOD, ECE addressing the gathering	Rev. Fr. Jose Punnolipparambil, Exec. Manager presenting the memento to Ms. Dhanya Nair

STAFF ACTIVITIES & ACHIEVEMENTS

❖ PAPER PUBLICATION

1. Mr. Jinesh K J, Asst. Prof., presented a paper titled "*Smart Public Transport System*" along with Ms. Rosemary John, Ms. AncyDevassy, Mr. Alwyn Antony, Mr. Joe Neelankavil, Ms. Finky Francis of 2010-14 ECE Batch in the International Conference on Embedded Systems (ICES) 2014, held at Amrita School of Engineering, Coimbatore on 05/07/2014
2. Mr. Jinesh K J, Asst. Prof., presented a paper titled "*Advanced License Plate Recognition System for Car Parking*" along with Ms. Judith Sen, Ms. Fincy Jose, Ms. AncyAnto, Ms. Anumary M V, Ms. Daine Michael of 2010-14 ECE Batch in the International Conference on Embedded Systems ICES 2014, held at Amrita School of Engineering, Coimbatore on 05/07/2014.
3. Ms. Anjitha V, Asst. Prof., along with Ms. Anphy Jose, Ms. Deepa Merlin Dixon, Ms. Naiji Joseph & Ms. Silpa George E of 2010-2014 ECE Batch presented a paper titled "*Performance Enhancement of Edge Detection Operators*" in the International Conference on Embedded Systems ICES 2014, held at Amrita School of Engineering, Coimbatore on 05/07/2014
4. Ms. Bindhu K Rajan presented a paper titled "*Fusion Iris & Fingerprint Biometrics for Gender Classification using Neutral Network*" at the 2nd International Conference on Current Trends in Engineering & Technology ICCTET 2014 organized by and held at Akshaya College of Engineering and Technology, Kinathukadavu, Coimbatore, on 08/07/2014.
5. Mr. Jobin Varghese, Asst. Prof., presented a paper titled "*Performance Evaluation of SMAC and TDMA protocols over varying traffic density in Wireless Sensor Networks*" in the International Conference on Computer and Communication, held at University Visvesvaraya College of Engineering, Bangalore on 23/08/2014.
6. Ms. Anjitha V, Asst. Professor along with Ms. Anphy Jose, Ms. Deepa Merlin Dixon K, Ms. Naiji Joseph, Ms. Silpa George E (2010-14 ECE Batch) published a paper titled "*Performance Study of Edge Detection Operators*" in the Proceedings of International Conference on Embedded Systems (ICES-2014), IEEE
7. Mr. Jinesh K J, Asst. Professor along with Ms. Rose Mary John, Ms. Finky Francis, Mr. Joe Neelankavil, Mr. Alwyn Antony, Ms. Ancy Devassy (2010-14 ECE Batch) published a paper titled "*Smart Public Transport System*" in the proceedings of the International Conference on Embedded Systems (ICES-2014), IEEE
8. Mr. Abin Johns Raju, Asst. Prof., along with Ms. Lakshmi R, Ms. Tilty Tony, Ms. Vineetha Wilson, Ms. Nella V Francis & Ms. Theresa Jones of 2009-2013 ECE Batch published a paper titled "*An analytical approach to the performance of Low Density Parity Check Codes*" in the Proceedings of 2013 International Conference on Advanced Computing and Communication Systems (ICACCS), IEEE
9. Mr. Abin Johns Raju, Asst. Prof., along with Ms. Lakshmi R, Ms. Tilty Tony, Ms. Vineetha Wilson, Ms. Nella V Francis & Ms. Theresa Jones of 2009-2013 ECE Batch presented a paper titled "*A Comparative Study of LDPC Codes & Convolutional Codes in WiMedia PHY*" in the proceedings of IEEE International Conference of Advanced Computing & Communication Systems (ICACCS), IEEE
10. Mr. Jobin Varghese, Asst. Professor presented a paper titled "*Optimized Area Architecture for the Demodulation of Digital Frequency Modulated Audio Signals using FPGA*", in the International Conference on Signal and Speech Processing-ELSEVIER held at TKM Engineering College, Kollam on 21/08/2014.
11. Mr. Jobin Varghese, Asst. Professor presented a paper titled "*Performance Analysis of SMAC and TDMA protocols under Varying Traffic Density over Wireless Sensor Networks*", in the International Multi Conference on Innovations in Engineering and Technology - ELSEVIER held at VVIT, Bangalore on 22/08/2014.
12. Mr. Jobin Varghese, Asst. Professor presented a paper titled "*Dynamic Duty-Cycled MAC for Wireless Sensor Networks with Energy Harvesters*", in The International Conference on Circuits, Communication, Control and Computing (I4C 2014)-IEEE, held at M.S Ramaiah Institute of Technology, Bangalore on 21/11/2014 and 22/11/2014.



Ms. Anjitha V



Mr. Jinesh K J



Mr. Abin Johns Raju



Mr. Jobin Varghese

❖ SEMINARS / WORKSHOPS CONDUCTED BY FACULTY

1. Mr. Jinesh K Jose, Asst. Professor, Dept. of ECE handled all the sessions of ‘*ROBINO - Workshop on Robotics using Arduino Platform*’ – Sponsored by ISTE Student Chapter, organized by the Dept. of ECE, JECC on 16/10/2014 and 17/10/2014. 43 Students from the Dept. of ECE and Dept. of IT participated in the Workshop.

2. Mr. Rijo P C, Asst. Professor, Dept. of ECE conducted a seminar on “*Performance Analysis of FinFET using High-K Dielectric*” organized by ISTE Chapter, JECC on 07/11/2014.



Mr. Jinesh K J



Mr. Rijo P C

❖ PARTICIPATION IN FDPs / SEMINARS / WORKSHOPS

1. Mr. Dipin Krishnan R attended an FDP on “*Estimation and Coding for Multimedia Processing*” from 30/06/2014 to 05/07/2014 at NIT, Calicut.

2. Ms. Krishnapriya S, Asst. Prof., attended an FDP on “*Electromagnetics in VLSI*” from 16/06/2014 to 21/06/2014 at NIT, Calicut.

3. Mr. Abin Johns Raju, Asst. Prof., attended an FDP on Early Career Development sponsored by IEEE at MES Engineering College, Kuttipuram from 09/06/2014 to 13/06/2014

4. Mr. Vivek Lukose, Mr. Jobin Varghese, Mr. Rijo P C, Ms. Ambily Francis, Ms. Drisya M K, and Ms. Nyni K A have participated in the Faculty Development Programme on “*Concepts Coaching*”, conducted by ICT Academy of Kerala from 12/11/2014 to 14/11/2014 at JECC.

5. Mr. Ponmani Raja M, Asst. Professor participated in the Short Term QIP Sponsored Course on “*RF Circuits and Systems for Industrial Applications*” organized by the Department of Electrical Engineering, IIT Kanpur from 18/09/2014 to 22/09/2014.

STUDENTS' ACTIVITIES AND ACHIEVEMENTS

❖ UNIVERSITY RESULT

1. 2010-14 Batch ECE secured the first position in 8th Semester B.Tech Examination (April 2014) Results with a pass percentage of 96.72%. The Toppers are:

- | | | |
|------|-------------------------|--------------------|
| I. | Ms. Naiji Joseph | - 9.09 SGPA |
| II. | Ms. Sneha Jose | - 8.98 SGPA |
| III. | Ms. Nivia George | - 8.91 SGPA |



Ms. Naiji Joseph



Ms. Sneha Jose

Ms. Nivia
George

2. 2011-15 Batch ECE secured the **3rd** position in 5th Semester B.Tech Examination (May 2013) Results with a pass percentage of 81.97%. The Toppers are:

- I. **Mr. Sebastian Joseph** - 8.71 SGPA
- II. Ms. NitharaRadhakrishnan - 8.30 SGPA
- III. Ms. Pooja Varma - 8.18 SGPA

Mr. Sebastian
JosephMs.
NitharaRadhakri
shnanMs. Pooja
Varma

3. 2012-16 Batch ECE secured a pass percentage of 77.78% in the 3rd Semester B.Tech Examination (May 2013). The Toppers are:

- I. **Ms. GiltaBabu** - 8.89 SGPA
- II. Ms. Lincy Vincent - 8.23 SGPA
- III. Ms. Fatima Thasneem - 8.21 SGPA



Ms. GiltaBabu

Ms. Lincy
VincentMs. Fatima
Thasneem

STUDENTS' PROJECT PROPOSALS SELECTED FOR FUNDING AND PARTICIPATION IN "YUVA MASTER MIND-2015" COMPETITION

Project proposal titled '*Eyeball Controlled Wheelchair using Raspberry Pi with Home Automation*' by Ms. Anna Joby Manjila, Ms. Jisna Shajan, Ms. Livy Varghese, Ms. Melinda Sunny, Ms. Nivya M S (2011-2015 ECE Batch) under the guidance of Mr. Jinesh K J, Asst. Professor, Dept. of ECE is selected for funding to participate in the "Yuva Master Mind 2015" contest for innovative projects organized by Malayala Manorama News group, Kottayam.

❖ PARTICIPATION IN INTER COLLEGE EVENTS

1. 7 students from 2011-15 Batch participated in the Workshop on "Verilog Programming" held during EXCIEN 2k14 - IEEE Kochi hub meet held at Viswajyothi College of Engineering and Technology, Vazhakulam held 21/06/2014 and 22/06/2014.

2. Mr. John Paul V & Mr. Razil Ahmed F A of 2011-15 Batch participated in the Start-Up 2020 hands-on entrepreneurial skills enhancement workshop organized by NASSCOM-India in Association with Thrissur Development Authority and Entrepreneurship Development Cell, Government Engineering College, Thrissur during 22/08/2014 to 24/08/2014.
3. Mr. Geo Papachan, Mr. Joe Abraham and Ms. SnehaPauly of 2012-16 Batch attended in the IEEE SAC Sponsored Workshop on “*Star Innovator*” held at Reva Institute of Technology and Management, Yelahanka, Bengaluru on 22/08/2014 and 23/08/2014. They were selected for 6 week online internship on “Robotics” from 25/08/2014 to 03/10/2014.
4. Mr. Abin Anto K and Mr. Sebastian Joseph (2011-15 ECE Batch) won the second price in the event ‘*KARMAJWALA - Circuit Designing and Debugging Contest*’ conducted as a part of the National Tech Fest GAMAYA 2k14 on 19/09/2014 to 21/09/2014 by NSS College of Engineering, Palakkad, Kerala.
5. Mr. Bobby Jose (2014-18 ECE-A Batch) won the 1st Prize for his project “*Bluetooth based Wireless Controlled Robot using Smartphone*” in the Project Expo conducted as a part of NIRMAAN ‘2014 Tech Fest organized by the Dept. of Civil Engineering, CUSAT, Kochin on 17/10/2014 and 18/10/2014
6. Mr. Joseph Jeevan (2014-18 ECE-A Batch) won the 1st Prize in Circuit Designing and Debugging Contest conducted as a part of PALMARIUS 2014 - Tech Fest organized by Sahrdaya College of Engineering and Technology, Kodakara, Thrissur on 13/10/2014 and 14/10/2014



Mr. Abin Anto K



Mr. Sebastian Joseph



Mr. Bobby Jose



Mr. Joseph Jeevan

❖ INDUSTRIAL VISITS / EDUCATION TOUR

33 Students from 2011-2015 AEI Batch visited Hindustan Aeronautical Limited, Bangalore as a part of their 7 Days Educational Tour to Hyderabad and Bangalore between 05/10/2014 & 12/10/2014 along with Mr. Vivek Lukose, Asst. Professor, Ms. Alice Paul K, Asst. Professor and two parents.



Students of 2011-15 AEI Batch along with Mr. Vivek Lukose, Asst. Professor during the Education Tour

❖ SOCIAL SERVICE ACTIVITIES

Students from S5 AEI (2012-2016 AEI Batch) visited ‘St. Christina’s Old Age Home’, Pullazhi, Thrissur, as a part of Compulsory Social Service along with Ms. Neethu Rose Thomas, Asst. Professor on 02/10/2014.



Students of 2011-15 AEI Batch along with Ms. Neethu Rose Thomas in front of St. Christina’s Old Age Home, Pullazhi, Thrissur.

Programme Educational Objectives (PEOs)

- I. Graduates shall have fundamental and advanced knowledge in electronics and communication engineering along with knowledge in mathematics, science and computing and get employed in national or international organizations or government agencies.
- II. Graduates shall have ability in analyzing, designing and creating innovative solutions which lead to a lifelong learning process or higher qualification, making them experts in their profession thus helping to solve electronics & communication engineering and social problems.
- III. Graduates shall have good organizing capability, presentation skills, communicating ability, leadership, team work and ethical practices.

Programme Outcomes (POs)

The Program Outcomes of Under-Graduate programs in Electronics & Communication Engineering are:

Students will have

- (a) Ability to apply knowledge of mathematics, science and engineering in the field of Electronics & Communication engineering.
- (b) Ability to design and conduct experiments, analyze and interpret data and results in Electronics & Communication engineering.
- (c) Ability to design Electronics & Communication systems, components, or processes to meet the desired needs within realistic constraints such as health and safety, manufacturability and sustainability with economic, environmental, social, political and ethical considerations.
- (d) Ability to work individually as well as in multidisciplinary teams as a member or as a leader to accomplish the common goal.
- (e) Ability to identify, analyze, formulate, and solve engineering problems
- (f) Knowledge of professional and ethical responsibility.
- (g) Ability to communicate effectively in both verbal and written form in any area of their field to the industry, and society.
- (h) Broad knowledge necessary to understand the impact of engineering solutions on individuals, organizations and society.
- (i) Ability to engage in life-long learning to update their knowledge to keep pace with changes caused by dynamic nature of engineering field.
- (j) Awareness of the contemporary issues that help to integrate advanced and sustainable solutions in the user environment.
- (k) Ability to use the techniques, skills, and modern engineering tools, software and equipment necessary for designing, developing electronic systems.