

2016  
DECEMBER

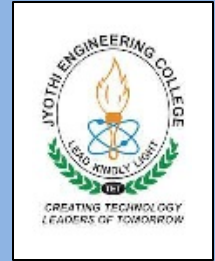
# ECE NEWS

Volume 7

Department of Electronics & Communication Engineering

Issue 2

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

- Department conducted two day workshop as a faculty development programme on “Simulation using NS3” faculty on 15/12/2016 & 16/12/2016. Mr. Pradeep Kumar T. S, Asst. Director, Academic Staff College, MOODLE Administrator at VIT Chennai was the resource person for the programme.

### ❖ ECSA ACTIVITIES

- ECSA in association with IETE conducted Valence `16 Mini project expo for S7 students (2013-2017 batches) on 8<sup>th</sup> July 2016 in the labs of ECE department. The mini projects completed by present S7 students were exhibited and presented in this project expo. Following teams won the first three position: First Position: Mr. Josy Joseph, Ms. Jasna T, Mr. Athul C N, Ms. Anjali M (Railwaycross Collision avoidance System). Second Position: Mr. Sandeep C M, Ms. Shruti S Nair, Ms. Vindhuja M V, Ms. Sandra PS (Intelligent Alarm). Third Position: Mr. Rahul M, Mr Vishnu EK, Mr. Manoj A (New And Fast Track Of Data - Visible Light Communication)
- ECSA inauguration: Electronics and Communication Students Association was inaugurated on 21/10/2016 by Mr. Christo George (Managing Director, Hykon Industries, Thrissur). Chief Guest gave a motivational talk for students.

### ❖ PLACEMENTS

- Mr. Ajay Roy & Ms. Desmin Dennis of S8 ECE got placed in Federal Bank through campus recruitment drive.
- Following students of S7 ECE A got placed in IBS Technologies Ltd through the campus placement drive held at Sahrdaya Engineering College, Thrissur on 15/11/2016
  - Anagha S
  - Blessy C Simon
  - Juliya Sunny

- Ms. Anitha P of S7 ECE A got placed in Poornam Infovision through the campus placement drive held at Vidya Academy of Science & Technology, Thrissur on 16/11/2016.
- Following students of S7 ECE got placed in SLK Software Services Pvt. Ltd. through the campus placement drive held at Vidya Academy of Science & Technology, Thrissur on 03/11/2016 & 4/11/2016
  - Ananya Sasikumar
  - Juliya Sunny
  - Jithin C J
  - Sudeepa S Nair
- Following students of S7 ECE got placed in Sutherland Global Services Ltd through the campus placement drive held at JECC on 24/11/2016 Anagha , Sukanya, Jishnu T. B, Shruthi S Nair, Shruthi S Nair

### STAFF ACTIVITIES & ACHIEVEMENTS

- Ms. Sindhu. S has been awarded the TIER 3 Performer award, JECC for the performance in the academic year 2016-17.
- Ms. Sindhu S presented the following papers in the 2016 IEEE International Conference on Power Electronic Drives and Energy Systems, organized by the IEEE PEDES2016 Conference Organizing Committee, hosted by Mar Baselios College of Engineering & Technology, Thiruvananthapuram from 14/12/2016 to 17/12/2016.
  - Implementation of photovoltaic integrated Unified Power Conditioner for Power Quality Enhancement
  - Photovoltaic based Adaptive Shunt Hybrid Filter for Power Quality Enhancement
- Mr. Jinesh K J attended KTU organized talk and discussion on Design Project” at SCMS Engg college Kalamassery.
- Department Advisory Committee meeting was held on 01/08/2016.
- Ms. Bindhu K Rajan, along with Anjali K U, Athiramol K Thampi, Athira Vijayaraman, Franiya Francis, Jeffy James published a paper titled "*Real Time Nonintrusive Monitoring and Detection of Eye Blinking in view of Accident Prevention due to Drowsiness* ," in IEEE Xplore Digital 2016.
- As part of NAAC External Audit, department audit visit and verification was conducted on 29/08/16 to 31/09/16.
- The paper titled "*Implementation of Photovoltaic Integrated Unified Power Conditioner for Power Quality Enhancement*" by Ms. Sindhu S has been provisionally accepted for presentation at the 2016 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), to be held during 14-17 December 2016 in Trivandrum, Kerala, India.
- Department conducted one week *On- Job Training Programme* for VHSE students of Sarvodayam VHSS Aryampadam from 22/11/2016 to 28/11/2016. The internship team consisted of 30 students accompanied by two teachers. Mr. Jinesh K J, Assistant Professor, ECE

Dept., handled the sessions for the programme.

- Prof. Dr. V P Mohandas gave an expert talk on “Research- stray thoughts” at the FDP on “How to write research paper” organized by Computer Engineering Students Association and R&D Cell of JECC on 10/11/2016
- Mr. Dipinkrishnan R and Mr. Abin Johns Raju attended 27<sup>th</sup> Annual State Convention of ISTE Kerala Section held at M-DIT College of Engineering, Ulliyeri, Calicut on 19/11/2016.
- The following staff members attended five days FDP on “Essential Mathematics for Engineers” organized by APJ Abdul Kalam Technological University and ICT Academy of Kerala at Vidya Academy of Science & Technology, Thrissur from 29/11/2016 to 03/12/2016.
  - Ms. Ambily Francis
  - Ms. Anjitha V
  - Ms. Asha John
  - Ms. Nyni K A
  - Ms. Roshni Rajan
  - Mr. Abin Johns Raju
- The following staff members attended an FDP on “How to write a Research Paper” organized by Computer Engineering Students Association and R&D Cell of JECC on 10/11/2016.
  - Ms. Ambily Francis
  - Ms. Anna Johnson
  - Ms. Anjitha V
  - Ms. Alice Paul
  - Ms. Nyni K A
  - Ms. Drisya M K
  - Mr. Dipinkrishnan R
  - Ms. Shaicy P Shaji
- Ms. Shiny M I went as external examiner for M.Tech Viva Voce at Malabar College of Engineering & Technology, Desamangalam on 5/11/2016
- Ms. Sindhu S and Ms. Anjitha V went as external examiners for M.Tech Viva Voce at NCERC Pampady, Thiruvilwamala on 22/11/2016
- Ms. Drisya M K and Mr. Jinesh K J went as external examiners for M.Tech Viva Voce at NCERC Pampady, Thiruvilwamala on 30/11/2016.
- Ms. Rinu Jose relieved from duty for pursuing MBA from University of Canada, on 16/12/2016.
- Ms. Bindhu K Rajan conducted workshop for faculty of JECC on “Prezi – Online Power Point Presentation Tool” under the ISTE Faculty Chapter on 09/12/2016.
- Mr. Jinesh K J, Asst. Professor, attended 22 days Pre-Fab training at Fab-Lab, Technopark, Trivandrum from 01/12/2016 to 22/12/2016.
- Ms. Shiny M I attended 5 days course on “Internet of Things Security: Issues, Innovations

*and Interplays*” jointly organized by Dept. of Computer Science & Engineering IIT Patna, MHRD and Global Initiative of Academic Networks (GIAN) from 12/12/2016 to 14/12/2016.

- All staff members of ECE Department attended two day workshop on “Simulation using NS3” conducted at JECC on 15/12/16 & 16/12/16.
- Paper titled “*Braille Code Conversion to Voice in Malayalam*”, by Ms. Bindhu K Rajan & Ms. Anjitha V has been accepted for presentation at 6<sup>th</sup> IEEE International Conference on Communication and Signal Processing (ICCSP '17) to be held at Adiparasakthi College of Engineering, Melmaruvathur, Tamil Nadu on 06/04/2017 to 08/04/2017.
- The following staff members attended two days FDP on “*Mathematics*” organized by Basic Science and Humanities Department, JECC on 13/12/16 & 14/12/16.
  - Ms. Nyni K A
  - Ms. Asha John
  - Ms. Drisya M K
  - Ms. Ambily Francis
  - Ms. Bindhu K Rajan
  - Ms. Alice K Paul
  - Ms. Roshni Rajan
  - Ms. Anjitha V
  - Ms. Anna Johnson
- Ms. Anjitha V went for KTU Observer duty at Malabar College of Engineering & Technology, Desamangalam on 05/09/2016.
- All staff members attended ICT training on “Teacher Leader Skills” at JECC on 23/07/2016.
- Mr. Jinesh K J attended *I2P Workshop* at FISAT, Angamaly on 05/10/2016-07/10/2016 & 21/10/16- 22/10/16.
- Mr. Jinesh K J, Ms. Bindhu K Rajan & Ms. Anjitha V conducted workshop for S5 ECE students on “*SciLab*” on 20/10/2016 & 21/10/2016.
- Ms. Alice K Paul went as external examiner for conducting Fourth semester lab examination at Focus Institute of Science and Technology, Poomala on 12/07/2016.
- Ms. Sindhu S and Ms. Asha John went as external examiner for conducting Fourth semester lab examination at Nehru College of Engineering & Research Centre, Pambady from 13/07/2016 to 15/07/2016
- Ms. Ambily Francis went as external examiner for conducting Fourth semester lab examination at Vidya Academy of Science & Technology on 18/07/2016, 19/07/2016 & 25/07/2016.
- Ms. Nyni K A went as external examiner for Fourth semester lab examination at Thejus Engineering College, Vellarakadu from 11/07/2016 to 13/07/2016
- Ms. Alice K Paul went as external examiner for Fourth semester lab examination at Thejus Engineering College, Vellarakad from 25/07/2016 to 27/07/2016.

## STUDENT ACTIVITIES &amp; ACHIEVEMENTS

- Mr. Naveen K and Mr. Sankalp O R secured the 2<sup>nd</sup> prize in startup I<sup>3</sup> program held at UKM College, Kollam.
- Ms. Sophy Shaju and Ms. Varadha N secured the 1<sup>st</sup> prize in startup I<sup>3</sup> program held at Mets Engineering College, Mala
- Ms. Aswathy Anil of S7 ECEA along Steffy Akkara (S7 EEE), Manasa Madhu (S7 EEE), Sona S (S7 CSE), Amrutha V V (S7 CE) won the first prize in Startup i<sup>3</sup> competition & workshop held on 19,20,21 July 2016 at Al-Ameen Engineering College, Shornur sponsored by Kerala Startup Mission (KSUM ) in association with Openfuel.org. The workshop aims building up a Entrepreneurial skills among the Student Community and to bring out the 3 stages of Ideation, Innovation & Incubation.
- Mr. Sharon Shaji P and Ms. Rose D Pynadath of S5 ECB along with Mr. Allen Antony (CSE), Mr. Aathmaj(CSE), and Mr. Akhil(ME) secured fourth prize in the event “ Techathlon 2016” organized by ICT Academy of Kerala held at Technopark Trivandrum from 10/11/2016 to 12/11/2016
- Mr. Bobby Jose of S5 ECA along with Ms. Geethanjali(EEE), Ms. Reva Raveendran(EEE), Mr. Lipin(CSE), and Mr. Leon(CSE) secured third prize in the event “ Techathlon 2016” organized by ICT Academy of Kerala held at Technopark Trivandrum from 10/11/2016 to 12/11/2016.
- Ms. Aswathi Krishnan of S7 ECE A got the ISTE Kerala Section best student award for the year 2015-16. The award was presented at 27<sup>th</sup> Annual State Convention of ISTE Kerala Section held at M-DIT College of Engineering, Ulleryi, Calicut on 19/11/2016.
- The following two students group achieved a special mention in 48 Hours Hackathon event, AGORA’16, organized by Department of Mechanical Engineering, JECC in Association with AMES, IEDC, SME & Kerala Startup mission on 23/09/2016 - 24/09/2016.
  - Vishnu Chandran, Rose D Pynadath, Sharon Shaji, Toms Vincent (S5 ECB)
  - Thejus Tony, Sooraj O R, Varadha N, Sankalp O R, Sophy Shaju (S3 ECB)
- S3 ECE students attended the Anti Ragging & Legal Awareness Classes on 19/08/2016.
- The following student of S5 ECE participated in KOCHI HUB MEETING 2K16, an event organized for engineering students under Kochi Sub section, IEEE on 26/08/2016 to 28/08/2016 at Mar Athanasius College of Engineering Kothamangalam.

Anugraha Joseph, Bobby Jose, Gokul P, Hashim T Abubeckar (S5 ECA), Revathy R, Siji John, Reshma R, Rose D Pynadath, Sumana M, Nivin Sunny (S5 ECB)

#### ❖ PAPER PUBLICATIONS

- Paper titled “Automation of 11 kv substation using raspberry pi” by Richu Varghese, Sai Krishnan S, Swayambu T A, Thasneem P, Steve Thomas guided by Ms. Asha John
- Paper titled “Design And Implementation of RF Controlled Miniature Fan” by Juliya Sunny, Almaria Thomas K, Jyothish P M, Jayaprakash P R guided by Ms. Sindhu S.

- Paper titled “*Wireless Health Monitoring System For Detection Of ECG, EMG AND EEG*”, by Linson K Vincent, Lisiya Varghese , Liya V.L, Neethu Johny A, Yesudas C .V guided by Ms. Nyni K A
- Paper titled “*Low cost Android Spectrum Analyzer using RTL-SDR Dongle*”, by Jinto Jose, Rinsa Edison, Safa Sherin, Swetha T M and Varadha C guided by Mr. Dipinkrishnan R
- The paper titled “*Multitasking EMG controlled robotic arm*”, by Reshma Roy, Neema Mohan, Reynosh Sunny, Shani Cherian, Sreejith Narayanan guided by Ms. Ambily Francis.
- The paper titled “*Virtual Keyboard*”, by Tressa Francis, Maritta Simon, Vishnu Babu K, Leo Pius, Vineeth Francis guided by Ms. Shaicy P Shaji.
- Paper titled “*WSN Based Industrial Parameter Monitoring Using Smart Watch*” by Sandeep C.M., Sandra P.S., Vivek Nair, Vindhuja M.V and Shruti S. Nair, under the guidance of Mr. Ponmani Raja
- Ms. Sumana Moothedath of S5 ECE B attended IEEE organized Technical Event “*Impulse 2*” at FISAT, Kochi on 30/07/2016.

#### ❖ SKILL DEVELOPMENT TRAINING

- Ms. Anitha P participated in Startup i<sup>3</sup> competition & workshop held on 28,29,30 July 2016 at Vimal Jyothi Engineering College, Kannur, sponsored by Kerala Startup Mission (KSUM ) in association with Openfuel.org.
- Students of S7 ECE participated in ICT Training on “Career orientation” at JECC on 22/07/2016.
- S5 ECE A students attended workshop on “SciLab”, under ECSA in association with IETE professional club on 20/10/2016
- S5 ECE B students attended workshop on “SciLab”, under ECSA in association with IETE professional club on 21/10/2016

#### ❖ NSS ACTIVITIES

- 12 students from S3 ECE and students from S5 ECB participated in NSS Camp held at Govt. Girls High School Wadakkanchery from 09/09/2016 to 14/09/2016.
- As part of “Manaveeyam-2016”, 11 student members from S5 ECB & 29 student members from S3 ECE performed several awareness programmes including rallies and other cultural activities. Notices were prepared about “Energy Conservation & Awareness on Epidemic Diseases” and distributed.
- 4 Students from S3 EC A and 5 Students from S3 EC B visited Pope John Paul Peace Home, Athani as part of their social service activities on 25/09/2016.
- 42 Students of S5 ECE A visited Alvernia Boys Home Orphanage Peechi as part of their Compulsory Social Service activity on 13/08/2016.
- 29 Students of S5 ECE A Aruvi Home for mentally Retarded People, Koonamoochi, as part of their Compulsory Social Service activity on 20/08/2016.
- 38 Students of S5 ECE B Oldage Home Athani as part of their Compulsory Social Service activity on 20/08/2016

- As a representative of NSS UNIT 244, Shruthy Chandran and Sneha M K of S4 ECE B has attended a class on 'Gender Equality' at Government Engineering College, Kannur.
- As a part of NSS UNIT 591, Megha Thomas of S4 ECE B has attended a workshop as NSS Volunteer Secretary

#### ❖ INTERNSHIP/INDUSTRIAL VISITS/EDUCATION TOUR

- 63 Students of S7 ECE B accompanied by two staff members and parents conducted industrial visit to JVS Electronics Private Ltd, Bangalore and Electronics & Communication Section, Wonderla, Bangalore as part of their 7 days tour from 01/10/2016 to 07/10/2016
- 62 Students of S7 ECE A accompanied by two staff members and parents conducted industrial visit to Ostrich Mobility, Bangalore and Precision Components, Hyderabad as part of their 7 days tour from 19/09/2016-24/09/2016.

### 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 the dynamic nature of the engineering field.
- j. Awareness of contemporary issues that help to integrate advanced and sustainable solutions in the user environment.
- k. Ability to use techniques, skills, and modern engineering tools, software and equipment necessary for designing, developing electronic systems.