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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 in association with ISTE conducted one day workshop on “IOT and Lightweight Embedded Systems” for interested students of S7 ECE on 01/07/2017. Mr. Tom Varghese Konnikkara, Design Engineer, Mercedes Benz Pvt Ltd, India was the resource person.
- ASAP Programme Inauguration: Department of ECE is conducting two months skill development vacation course on “CCTV Installation Technician” for Higher Secondary Students. The programme was inaugurated by Sri. U. R. Pradeep, MLA on 05/04/2017 at JECC

❖ PLACEMENTS

- Mr. Ajay Roy & Ms. Desmin Dennis of S8 ECE got placed in Federal Bank through campus recruitment drive.
- Mr. Vishnu Chandran of S7 ECE B got placed in IBS Technologies through campus placement drive held at Rajagiri School of Engineering, Kochi on 27/10/2017.
- Mr. Ajay Roy and Mr. Reynosh Sunny of S8 ECE B got placed in Support Sages Business Solutions through on- campus placement drive held at Jyothi Engineering College.

STAFF ACTIVITIES & ACHIEVEMENTS

1. Ms. Shiny M I presented paper titled “LFSR based secured Scan testability technique” in the 7th International Conference on Advances in Computing & Communication, ICACC-2017 held at Rajagiri School of Engineering & Technology, Kochi during 22/08/2017 – 24/08/2017.
2. Mr. Jinesh K J and Dr. Suresh P attended two days laboratory course on “Power Electronics and Digital Signal Processing” at Sreepathy Institute of Management and Technology, Vavanoor on 10/08/17 & 11/08/17.
3. Mr. Jinesh K J, Asst. Professor, attended ASAP Programme coordinators meeting at ASAP Centre, Govt. of Kerala, Vazhuthacaud, Trivandrum on 28/02/2017.
4. Mr. Dipin Krishnan R went as observer for APJ Abdul Kalam Technological University Examinations at IES College of engineering, Chittilappilly on 25/02/2017.
5. Ms. Anjitha V presented a paper titled “Braille Code Conversion to Voice in Malayalam”, authored by Bindhu K Rajan & Anjitha V at the 6th IEEE International Conference on Communication and Signal Processing (ICCSP '17) held at Adiparasakthi College of Engineering, Melmaruvathur, Tamil Nadu from 06/04/2017 to 08/04/2017.
6. Ms. Neethu Rose Thomas attended two days FDP on “Reverse Engineering” organized by Dept. of Mechanical Engineering in association with ISTE & SAE India at JECC on 31/03/17 & 01/04/17.
7. Prof. Dr. Jose P Therattil, HOD, attended the syllabus review meeting organised by APJ Abdul Kalam Technological University at CET, Campus Thiruvananthapuram on 21/04/2017
8. Ms. Anjitha V went as external examiner for conducting University Lab Examination at Sreepathy Institute of Management and Technology, Vavanoor on 29/08/17.
9. Mr. Abin Johns Raju went as trainer for wireless communication wing of Kerala Police in police Academy, Thrissur during the month of May. Police academy has requested ECE department to collaborate with their training centre to train the communication wing.
10. The paper titled " A simple Analytical Organized Information of different RTOS used in Embedded System" by Ms. Nishamary P has been published in IOSR Journal Of Electrical and Electronics Engineering(IOSR-JEEE) -, Vol. 12, Issue 3, June 2017,pp 01-03.
11. Ms. Shiny M I presented paper titled “LFSR based secured Scan testability technique” in the 7th International Conference on Advances in Computing & Communication, ICACC-2017 held at Rajagiri School of Engineering & Technology, Kochi during 22/08/2017 – 24/08/2017.
12. The paper titled " FPGA Implementation of WG Stream Cipher" by Ms. Anna Johnson has been published in IJISSET - International Journal of Innovative Science, Engineering & Technology, Vol. 4 Issue 6, June 2017.

13. Ms. Bindhu K Rajan & Ms. Anjitha V, Asst. Professor, attended three days faculty development programme on “Advanced Topics in Signal and Image Processing” at Vidya Academy of Science and Technology Thrissur, from 29/11/17 to 01/12/17.
14. Mr. Abin Johns Raju & Mr. Dipinkrishnan R, Asst. Professor, attended one week faculty development programme on “Advanced Topics in Signal and Image Processing” at Government Engineering College, Kannur, from 27/11/17 to 01/12/17.

STUDENTS ACTIVITIES AND ACHIEVEMENTS

1. 58 Students of S5 ECE along with two faculty members conducted industrial visit to ACE Components as part of their three days educational tour to Mysore & Coorg from 12/8/17 to 14/08/17.
2. S7 ECE B secured third prize for Pookalam Competition held as part of Onam Celebration 2017 at JECC on 30/08/17 & 31/8/17.
3. Ms. Sophy Shaju along with Noel Vishnu K(CS) won second prize in “Excel Ibetos” last round held at Model Engineering College , Thrikkakara on 04-09-2017.
4. Mr. Marian Davis (S3 ECB) participated and reached Semi Final in KTU –E Zone Intercollege Table Tennis match held at GEC, Thrissur on 27/9/2017.
5. S7 ECE B secured third prize for Pookalam Competition held as part of Onam Celebration 2017 at JECC on 30/08/17 & 31/8/17.
6. Mr. Amal Unnikrishnan of S3 ECA participated in KTU –E Zone Intercollege Chess match held at Vidya Academy of Science and Technology, Thalakkottukara on 12/10/17 & 13/10/17.
7. Project work titled “KAVACH” by Mr. Thejus Tony, Ms. Varadha, Mr. Sooraj O R and Ms. Sophy Shaju of S4 ECE B, mentored by Mr. Jinesh K J and Mr. Abin Johns Raju, Asst. Professors, ECE, JECC, has been selected for presentation at Smart India Hackathon sponsored by MHRD, Govt. Of India at Government College of Engineering Pune on 31/03/17 to 02/04/17.
8. Sports-17
 - a. Disni Jose & Litty Jose of S4 ECE A secured 1st prize in 4*100 Relay race competition.
 - b. Jeeshma Mohan of S4 ECE A along with team mates secured 2nd prize in Basket Ball.

- c. Ashil Mathews and Aparna S of S2 ECE A secured 2nd prize in 4*100 Relay race competition.
 - d. Kavya of S2 ECE A secured 2nd prize in Discus Throw competition.
 - e. Ashila Mathews of S2 ECE A secured 2nd prize in Triple Jump competition
 - f. Ashila Mathews of S2 ECE A secured 3rd prize in long jump competition
 - g. Aparna S of S2 ECE A secured 3rd prize in 100m race.
 - h. Aparna S of S2 ECE A secured 3rd prize in 100m race.
9. 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.
10. As a part of NSS UNIT 591, Megha Thomas of S4 ECE B has attended a workshop as NSS Volunteer Secretary
11. Student Achievements in Tharang, Arts & Sports at JECC(Tharang’17)
- Pranav V , Shruthy Chandran, Palatty Jesvin Joseph of S4 ECE B along with Bernad Boban (CSE) , secured first prize in the event Techathon conducted by ECE Dept as part of Tharang 17.
 - Vyshak K, Sarath Sathyan, Rinny Babu, Sone Varghese & Nivin Sunny of S6 ECE B, secured first prize in the event Techhunt conducted by ECE Dept as part of Tharang 17.
 - Pravitha P and team of S4 ECE B, secured second prize in the event Techhunt conducted by ECE Dept as part of Tharang 17.
 - Siji John, Reshma R , Shine Ross and Sreevidya R of S6 ECE B secured third prize in the event Mission Impossible conducted by ECE Dept as part of Tharang 17.
 - Mr. Josy Joseph and Ms. Gopika Unnikrishnan of S8 ECE A secured first prize in paper presentation contest, Vibhavana as part of Tharang 17.
 - Ms. Sukanya P of S8 ECE B secured second prize in paper presentation contest, Vibhavana as part of Tharang 17.
 - Amal Unnikrishnan, Amal Prem, Akhila Krishnakumar and Anagha Rajeev of S2 ECE A won cash prize and certificate of appreciation for the project “Van de Graff Generator” exhibited in Science expo , as part of Srishti 17.
12. Ms. Ashila Mathews (S3 ECA) participated in KTU –E Zone Intercollege Badminton match held at Christ College of Engineering, Thrissur on 30/10/2017.

13. Arts Fest- Noopura’17

- a. **Disni Jose** of S4 ECE A secured 2nd prize in Sanskrit story writing competition.
- b. **Krishnapriya & K Chelsea Antony** of S4 ECE A secured 2nd prize in Margankali competition

- c. **Shruthy Chandran and team** of S4 ECE B secured the 1st position in thiruvathirakali competition.
- d. **Venkatesh K B and team** of S6 ECE B secured the 1st position in group dance competition for boys.
- e. **Maria Treasa and team** of S6 ECE B secured the 1st position in group dance competition for girls.
- f. **Merin Joshy and team** of S6 ECE A secured the 3rd position in group dance competition for girls.
- g. **Vishnu P G** of S4 ECE B secured 2nd prize in cartoon competition.
- h. **Vishnu P G** of S4 ECE B secured 1st prize in oil painting competition.
- i. **Pravitha P G** of S4 ECE B secured 1st prize in English Versification competition.
- j. **Swathi K S** of S4 ECE B secured 2nd prize in Malayalam Versification competition.
- k. **Saniya A S** of S4 ECE B secured 3rd prize in Malayalam Versification competition.
- l. **Nikeeta Saji** of S4 ECE B secured 3rd prize in Hindi Versification competition.
- m. **Sneha M K** of S4 ECE B secured 1st prize in Malayalam story writing competition.
- n. **Siji John** of S6 ECE B secured 1st prize in Hindi Versification.
- o. **Siji John** of S6 ECE B secured 1st prize in Hindi Elocution.
- p. **Siji John** of S6 ECE B secured 2nd prize in Hidi Story writing
- q. **Siji John** of S6 ECE B secured 3rd prize in Hindi Essay writing.
- r. **Siji John and Vinoy George** of S6 ECE B secured 2nd prize in Malayalam debate.
- s. **Avin Jose** of S6 ECE A secured 2nd prize in Photography competition.
- t. **Krishnapriya S** of S6 ECE A secured 3rd prize in Bharathanatyam competition
- u. **Angel Rose** of S6 ECE A secured 1st prize in Malayalam Essay writing competition.
- v. **Hashim T Abubeckar** of S6 ECE A secured 2nd prize in Pencil drawing competition.
- w. **Lakshmi P** of S2 ECE A secured 1st prize in Bharathanatyam competition.
- x. **Chinmayi** of S2 ECE A secured 2nd prize in Ganamela and Patritoic song competition.

14. The following students of S5 ECE participated in ROS Workshop conducted as part of “*TESSERACT 3.0 2017*” held at St. Joseph Engineering College, Pala from 13/10/2017 and 14/10/2017.

- 1) **Anand Balaram**
- 2) **Anjana K P**
- 3) **Nikeeta Saji**

- 4) **Bharathchandran**
- 5) **Chandini M S**

15. 14 students of S5 ECE participated in LED Making Workshop organized by IEEE-IEDC at Jyothi Engineering College, Cheruthuruthy on 07/10/2017.
16. Project work titled “*KAVACH*” by **Mr. Thejus Tony, Ms. Varadha, Mr. Sooraj O R and Ms. Sophy Shaju** of S4 ECE B, mentored by Mr. Jinesh K J and Mr. Abin Johns Raju, Asst. Professors, ECE, JECC, has been presented at All India Level Competition, Smart India Hackathon sponsored by Ministry of Electronics & Information Technology, Govt. Of India at Government College of Engineering Pune on 01/04/17 & 02/04/17.
17. The following students of S5 ECE participated in start up programme “BOOT CAMP” organized by IEDC at Jyothi Engineering College, Cheruthuruthy on 27/09/2017
 - 1) **Arya C**
 - 2) **Anjana K P**
 - 3) **Nikeeta Saji**
 - 4) **Aquila**
 - 5) **Nima Joshy**
 - 6) **Thejus Tony**
18. 9 students of S5 ECE participated in IDEA presentation organized by IEDC at Jyothi Engineering College, Cheruthuruthy on 07/10/2017
19. 30 Students of S7 ECA completed 15 days industrial training Course on Telecom Technology at BSNL, Thrissur from 06/06/2017 to 20/06/2017.
20. 41 Students of S7 ECB completed 5 days industrial training at Doordarsan Kendra, Thrissur from 05/06/2017 to 09/06/2017.
21. 10 Students of S7 ECE completed 5 days industrial training at Doordarsan Kendra, Thrissur from 06/06/2017 to 10/06/2017.
22. The following project papers has been selected for presentation at 4th IEEE International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS '17) to be held at Karpagam college of Engineering, Coimbatore on 17/03/2017 & 18/03/2017
 - The paper titled “*Smart Card Based Public Distribution System*”, by **Manoj A, Rahul M Jaypal, Raisy Raphi, Riya P Benny and Christy Paulson** guided by Mr. Rijo P C.
 - The paper titled “*Wireless Health Monitoring System for ECG, EMG and EEG Detection*”, by **Linson K Vincent, Lisiya Varghese, Liya V L, Neethu Johny, Yesudas C V** guided by Ms. Nyni K A.
 - The paper titled “*Portable Biometric attendance system with automatic*”

updatation”, by Maria Mathews, Niya C K, Reshma K, Sudeepa S Nair, Swathi K S guided by Mr. Jinesh K J.

- The paper titled “*Multitasking EMG controlled robotic arm*”, by Reshma Roy, Neema Mohan, Reynosh Sunny, Shani Cherian, Sreejith Narayanan guided by Ms. Ambily Francis.

23. The following project papers were presented at the IEEE International Conference on Circuit, Power and Computing Technologies (ICCPCT-2017) held at Baseliy Mathew II College of Engineering, Sasthancotta, Kollam district on 20/04/2017 & 21/04/2017.

- 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

- Paper titled “*Advance Sensing By Bio-Compatable Organic Field-Effect Transistor (OFET)*” by Ms. Aswathi Anil guided by Ms. Bindhu K Rajan

- Paper titled “*Text Recognition And Face Detection Aid For Visually Impaired Person Using Raspberry Pi*” by Ajay Roy, Almaria Thomas K, Ancy Thomas, Bincy Tharakan T, Dinesh C and Rajesh M guided by Ms. Bindhu K Rajan.

24. The following students of S7 ECE have been placed in Amazon Customer Service Ltd. Through Campus placement drive held at JECC on 16/11/2017.

1. Arjun K S
2. Anna Mirna M J
3. Lakshmiya P

4. Harsha R
5. Sumana Moothedath
6. Rufeena Garfin
7. Vinoy George
8. Nivin Sunny
9. Sharon Shaji
10. Revathy R K
11. Rose Sebi

25. Project proposal entitled '**Braille printer form scrap dotmatrix printer**' guided by Mr. Jinesh K J has been selected into final round of Manorama Yuva mastermind project competition

Team Members

1. Bernard Bobban S5 ME
2. Palatty Jesvin Joseph S5ECE
3. Pranav V S5ECE
4. Varadha S5ECE
5. Sruthy Chandran S5ECE

❖ **INTERNSHIP/INDUSTRIAL VISITS/EDUCATION TOUR**

- 1) 30 Students of S7 ECA completed 15 days industrial training Course on Telecom Technology at BSNL, Thrissur from 06/06/2017 to 20/06/2017.
- 2) 41 Students of S7 ECB completed 5 days industrial training at Doordarsan Kendra, Thrissur from 05/06/2017 to 09/06/2017.
- 3) 10 Students of S7 ECE completed 5 days industrial training at Doordarsan Kendra, Thrissur from 06/06/2017 to 10/06/2017.
- 4) 58 Students of S5 ECE along with two faculty members conducted industrial visit to ACE Components as part of their three days educational tour to Mysore & Coorg from 12/8/17 to 14/08/17.
- 5) 47 Students of S7 ECE A along with two faculty members conducted industrial visit to Intra Electronics Ltd. and L&T Infotech (LTI) as part of seven days industrial visit to Mumbai and Pune from 02/10/2017 to 08/10/2017.
- 6) 55 Students of S7 ECE B along with two faculty members conducted industrial visit to Saptarshi Electronics Ltd. as part of seven days industrial visit to Mumbai and Pune from 08/10/2017 to 14/10/2017.

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.