2020 DECEMBER VOLUME 14 ISSUE 1

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

• Conducted two-week AICTE Sponsored Faculty Development Programme on "Wireless Communication Networks & Signal Processing" on 4th December to 17th December 2019



- Ms. Bindhu K Rajan& Mr. Ponmani Raja M, Assistant Professor, Jyothi Engineering College, Cheruthuruthy organized a workshop on" Efficient Design and Manufacturing of Printed Circuit Boards using IPC standards" in association with IETE & ECSA, JECC on 15th to 17th Dec 2020.
- The Department of Electronics & Communication engineering in association with IETE & ECSA organized a webinar on "Design & Simulation of RF MEMS Resonator" on 27-06-2020.
- A webinar on "**Anatomy of Drones**" was conducted on 08-08-2020 in association with ISTE Student Chapter & ECSA.

- **Ms. Sindhu.S** completed her PhD defense at Amrita Vishwa Vidya Peetham on 21/10/2020.
- The Department of Electronics & Communication engineering in association with IEI (ECE) & ECSA is organized a webinar on "Antennas in Biomedical Applications & MIMO Technology" on 24-06-2020.





- A webinar on "Tips to Crack Campus Recruitment" was conducted on 27-07-2020 by Mr.
 Nandan S (Assistant Professor, LBS Institute of Technology for Women) organized in association with Institute of Engineers India (IEI) and Electronics & Communication Student Association (ECSA).
- A webinar on "Introduction to Image Processing" was conducted on 05-08-2020 by Mr. Nithin Thomas Abraham (Research Scholar, NIT Calicut), Organized in association with Indian Society for Technical Education (ISTE) Student Chapter and Electronics & Communication Engineering Students Association (ECSA)



- A webinar on "Civil service after B.Tech" was conducted on 25-07-2020, organized in Association with ISTE.
- A webinar on "The Past, Present, and Future of Clean Energy Technologies: A Computational Perspective" was conducted on 21-07-2020, organized in association with IEI (ECE) & ECSA.
- A webinar on "CRYPTOCURRENCY: Impact on world Economy" was conducted on 25-07-2020, organized in association with IETE and ECSA
- "52nd Engineer's Day Celebrations" was celebrated on 25th September 2019. A talk on "Engineering for Change" was delivered by Shri. V.G. Shankaranarayanan (Chairman, IE(I) Local Chapter, Thrissur). The programme organized in association with IEI (ECE).
- Dr. Jose P Therattil, Ms. Neethu Rose Thomas and Ms. Roshni Rajan K has been resource persons for the webinar series on "Sensors and Transducers" organized by Department of computer science, YuvaKshetra college.

STAFF ACTIVITIES & ACHIEVEMENTS

- **Fr. David Nettikkadan** completed his course work successfully with a **CGPA of 9.71** as part of part-time PhD at IIITK.
- Ms. Bindhu K Rajan, Assistant Professor, Jyothi Engineering College, Cheruthuruthy has participated in AICTE Training & Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 14/09/2020 to 18/09/2020 at Govt. Women's Polytechnic College Thrissur.
- **Bindhu K Rajan**, published a paper titled "Automated Feature Extraction of Hepatic US Image of Dog Using Image Processing", 2019 2nd IEEE International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT)
- Ms,Bindhu K Rajan, Assistant Professor, Jyothi Engineering College, Cheruthuruthy has participated in short term course on "Computational Methods in Signal Processing and Machine Learning" conducted as a part of quality improvement program, organized by the Department of Electrical Engineering, IIT Indore from 14th December, 2020 to 19th December, 2020
- Dr. Jose P Therattil, Ms. Neethu Rose Thomas and Ms. Roshni Rajan K has been resource persons for the webinar series on "Sensors and Transducers" organized by Department of computer science, YuvaKshetra college.
- Ms. Shaicy P Shaji has participated in AICTE sponsored Short Term Training Programme

(STTP) on "Trends and Technologies in Antenna Design and its Research Scopes", organised by Department of Electronics, TocH Institute of Science & Technology, Ernakulam from 14-09-2020 to 19-09-2020.

- **Dr. Anoop V** published Following SCI indexed papers
 - "Early detection of breast malignancy using wavelet features and optimized classifier"
 in International Journal of Imaging Systems and Technology WILEY 12/2020.
 - "Super-Resolution Based Automatic Diagnosis of Retinal Disease Detection for Clinical Applications" in Neural Processing Letters-Springer, 10/2020.
 - "CCGPA-MPPT: Cauchy preferential crossover-based global pollination algorithm for MPPT in photovoltaic system" Progress in Photovoltaics:
 Research and Applications WILEY: 11/2020
- **Dr. Anoop.V**, Assoc Professor, Dept. Of ECE Co-authored a Patent Publication titled 'Providing quick rural and remote nursing care for elderly people using location based medical record system'
- **Dr. Prajoon P** published following SCI indexed papers
 - "Optical Grating Techniques for MEMS based Spectrometer -A Review," in IEEE Sensors Journal,
 - "A Numerical Investigation of Heat Suppression in HEMT for Power Electronics Application", in Silicon.
 - "Impact of AlInN back-barrier over AlGaN/GaN MOS-HEMT with HfO2 dielectric using Cubic Spline Interpolation Technique" in IEEE Trans. Electron Devices.



- **Dr. Prajoon P** published following conference publications
 - "CSI based Analytical Model for evaluation of DC Characteristics in AlGaN/GaN/AlInN MOS-HEMT using high-k dielectrics", in 2020 4th International Conference on Electronics,
 Communication and Aerospace Technology (ICECA), Coimbatore, India,
 - o "Luminous power improvement in InGaN V-Shaped Quantum Well LED using CSG on SiC Substrate", IOP Conf. Series: Materials Science and Engineering 906 (2020).
- Ms. Roshini Rajan and Ms. Annie P. Joseph published a journal publication on "Domestic Language Accent Detector Using MFCC and GMM" in International Journal of Applied Engineering Research.

STUDENTS ACTIVITIES AND ACHIEVEMENTS

- Mubshira K M published a paper titled "A Comprehensive Study on Human Interaction with IoT Systems" International Research Journal of Engineering and Technology, Volume: 07 Issue: 05, May 2020.
- Thasneem V A published a paper titled "Different Sensors used for biochemical Detection", International Research Journal of Engineering& Technology June 2020
- Albin Freddy, Arun A S, Edwin John, Jibin Jaison of S6 ECE participated in YOUNG INNOVATION PROGRAMME 2019" at the state level competition at Trivandrum on 28/12/20
- Team comprising of Mr.Vishnu K, Mr. Sibin Krishna, Ms. Saranya, Ms. Safna, Mr. Naranayanan and Ms. Mary Jeethu moving on to the next round of Semi Finals of 2019 edition of India's premier innovation and design contest, the India Innovation Challenge Design Contest (IICDC)
- Mr. Akhil KJ has completed a course on AI for everyone arranged by Coursera on 3rd September 2020.
- Ms. Jelile Rosa Jose got World book of record while participating in the nation Building project-Kerala's largest career Guidance Digital conference held on 20September 2020 initiated by 3G Institute of research and policy studies, IIT Madras Research park
- **Jeena Jose,** S7 ECE attended following activities java tutorial course(sololearn), professional student summit, quiz on padma awards, decipher east quiz, quiz on covid-19, online covid-19 awareness quiz, programming for everybody(coursera), webinar on antennas in biomedical applications and mimo technology
- Mr. Rakesh R Nair has completed a workshop on Introduction to development organized by IEDC cell of Jyothi Engineering College In Association with CSI on 14th November 2020.
- Mr. Rakesh R Nair has completed a workshop on Introduction to web development building portfolio in just 60 minutes organized by Microsoft Student Ambassador on 14th November 2020.
- **Ms. Anusha CE** has completed a course on "Programming for everybody (getting started with python)" arranged by Coursera on 3rdDecember 2020.
- Mr. Amal S has completed an online course on "fundamentals of digital marketing" arranged by Google on 29/12/20.

TOPPERS

S3 ECE



1. Bijoy Joshy (8.96)



2. Anusha C E (8.56) S5ECE



3. Jibin N V (8.17)



1. Vrinda (8.7)



2. Mariya Shaji (8.46) S7ECE -A



3. Jeena Jose (8.43)



1. Julit Thomas (8.84)



2. Amal Unnikrishnan (8.66) S7 ECE -B



3.Akhila Krishnakumar (8.55)



1. Mubshira K M (9.73)



2. Mareena Mary Abraham (9.3)



3. Mary Jeethu A J (9.16)

S4 ECE



1. Bijoy Joshy (10)



2. Anusha C E (10)



3. Sona Roy (9.09)



4. Salini TM (9.09)



5. Reshmi B 9.09

S6 ECE



1. Jeena Jose (10)



2. Vrindha M K (9.91)



3. Mariya Shaji (9.61)

S8 ECE -A



1. Avin Kv (8.86)



2. Julit Thomas (8.84)



3. Amal Unnikrishnan (8.66)

S8 ECE -B







1. Mareena Mariya Abraham (9.46) 2. Mubshira K M (9.30)

3. Mary Jeethu A J (9.24)

PLACEMENTS

- Ms. Chinmayi of S8 ECE has been selected in Mindtree as software Engineer through campus placement.
- Mr Amal Unnikrishnan of S8 ECE received placement offer from VVDN Technologies as Engineer(trainee), Quest Global Pvt. Ltd and Wipro Ltd.
- Mr. Adrian, Ms. Catherine, Ms. Mareena Mariya Abraham, Ms. Nandhana K, Ms. Olivia **Nelson** have been selected by CSS Corp, to the post of Engineer - Trainee, in the pooled (off) campus recruitment held at Nehru Engineering College (NCERC) on 13th Nov. 2019.
- Ms. Nimisha Tony and Ms. Kavya Sunil of 8ECE has been selected in the final round of the pooled(off)campus recruitment conducted by Diya Software post of Associate Engineer on 24th January 2020 at Nehru Engineering College (NCERC)
- Ms. Archana Chandraprakash, Ms. Athira S, Ms. Catherine C Jejo received placement in Hexaware Technologies PVT. LTD.
- Ms. Ashila Mathews, Ms. SAthira S, Mr. Avin K V, Ms. Greeshma K, Ms. Lakshmi P, Mr. Muhammed Arshad, Ms. Nimisha Tony, Ms. Priya K, Ms. Roshni J Nair, received placement offer from Infosys
- Ms. Mary Jeethu A J, Mr. Vishnu K, Ms. Akhila Krishnakumar, Mr. Kavya Sunil, Ms. **Sreelakshmi R** received placement offer from Jobin & Jismi IT Services
- Ms. Catherine C Jejo, Mr. Mareena Mariya Abraham, Ms. Ashila Mathews, Ms. Roshni J Nair, Ms. Pooja P, Ms. Mary Jeethu A J, Ms. Radhika, Mr. Vishnu K received placement offer from UST Global

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

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 life long learning processor 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:

- 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.
