DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ECE NEWSLETTER
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Industry Driven Institute

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ABOUT THE DEPARTMENT

The department of Electronics and Communication Engineering came into existence in the year 2009. It offers a UG programme, B.E. in Electronics and Communication Engineering and a PG programme, M.E.in VLSI Design. The department has a team of committed faculty members who are well qualified and are backed by rich teaching/research/industry experience. The department addresses needs of growing aspirants and provides additional opportunities to younger generation to meet industrial scenario. The department has published 8 patents and filled 2 patents. The department has 10 curriculum based laboratories equipped with sophisticated software’s, Center of excellence in embedded systems and IoT, Design Spark PCB innovation lab sponsored by Telos Technologies and also associated with NVIDIA Deep Learning Institute (DLI) platform to train members in the field of Artificial Intelligence. The department has signed 4 MoU with leading industries.

VISION

To be a department of repute for learning and research with state-of-the-art facilities to enable the students to succeed in globally competitive environment.

MISSION

M1: To impart knowledge and skill based education with competent faculty striving for academic excellence.
M2: To instill research centers in the field, that industry needs, by collaborating with organizations of repute.
M3: To provide ethical and value based education by promoting activities addressing the societal needs and facilitates lifelong learning.

PROGRAMME EDUCATIONAL OBJECTIVES

PEO1: Graduates will possess an adequate knowledge and have successful technical career in Electronics and Communication Engineering or related fields.

PEO2: Graduates will possess leadership qualities and demonstrate professional and ethical values.

PEO3: Graduates will continue their life-long professional development through higher education or entrepreneurship.

PROGRAMME OUTCOMES

Engineering Graduates will be able to:

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex 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, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES

PSO 1: Graduates will be equipped with microcontroller based system design skills to work as design and verification engineers in the area of Embedded Systems Design.

PSO 2: Graduates will be able to apply engineering knowledge for the design and implementation of projects pertaining to VLSI Design, Image processing and Communication.
MESSAGE FROM HOD’S DESK

I am very happy that our Electronics & Communication Engineering department is releasing April- June issue of department letter. It is a platform to disseminate the activities performed by the students and faculty members of the department to all the members. The major strength of the department is a team of well qualified and dedicated faculties who are continuously supporting the students for their academic excellence. It is the time for us to work hard for getting good results in exams. We have arranged several industrial visits and workshops for our 2nd, 3rd and 4th year students in this semester to meet out the industry needs. Our post graduate program is also going on successfully. We have started an exclusive Project Innovation lab for UG students, the students are identified to develop a project to compete in outside events. The department has already submitted the compliance report to the NBA for accreditation. I hope the NBA committee will be visiting our department in the upcoming year. So let us work together for the achievement of this goal. I take this opportunity to congratulate our staff editors Mr. V. Chandran AP/ECE and Ms. R. Ashwatha AP/ECE for their great effort to make this newsletter as a reality. Also I invite the readers of ‘ECE department newsletter’ for their contribution and suggestions for the forthcoming issues.

PROGRAM ORGANISED

1) A guest lecture on “Nanotechnology and applications” was organized by the department of ECE on 15-07-2019. The chief guest for the program was Dr. Anil Kumar & Dr. Trivieni, Department of Chemistry, KPRIET.

2) An alumni guest lecture on “Opportunities in Core Industries” was organized by the department of ECE on 22-07-2019. The chief guest for the program was Mr. Dinesh Ponnusamy Founder & CEO, M/s Sai Incubation, Coimbatore.
3) An alumnini interaction on “Skill set demands in IT industries” was organized by the department of ECE on 22.07.19. The chief guest for the program was Mr.K.Muniyappan, storage quality engineer & intern -Cray super computers, Bangalore.

4) The department of ECE organized a guest Lecture on “Industrial Automation” on 06.07.2019. The chief guest for the program was Mr.R. Jagadish, Embedded Engineer, Prolific Systems & Technologies Pvt. Ltd., Coimbatore.

5) A donation camp by Thulir Club was organized on 20.07.2019 to 22.07.2019.
6) An alumini guest lecture on “Industrial Automation” was organized by the department of ECE on 20.07.2019. The chief guest for the program was Mr. V. Vignesh, Junior Embedded Software Engineer, CRI Pumps, Pvt. Ltd., Coimbatore.

7) A “Field visit to Hello FM 106.4” was organized by the department of ECE on 18.07.2019. The team of students met Mr. Kannan, RJ, Hello FM 106.4, Coimbatore.

8) A guest lecture on “Career opportunities in Core Engineering companies” was organized by the department of ECE on 12.07.2019. The chief guest for the program was Mr. Vivek Shenoy, Vice President, Tejas Networks, Bangalore.
9) An awareness program regarding “Comptia certification course” was organized by the department of ECE on 30.7.2019. The chief guest for the program Mr. Aravind, UTL Technologies, Bangalore.

10) An awareness program on “Competitive Exams” was organized by the department of ECE on 31.7.2019. The chief guest for the program Mr. Saravana Kumar, GATE Forum, Coimbatore.

11) An alumni guest lecture on “Aspire to Study Abroad” was organized by the department of ECE on 30.07.2019. The chief guest for the program was Mr. Joshigasanth, Master in Science and Technology (Electronic Embedded System) ESIGELEC, Rouen, France.

12) An alumni guest lecture on “Programming Skills for IT Industries” was organized by the department of ECE on 03.08.2019. The chief guest for the program was Mr. R. Jeevanantham, Senior Program Analyst, CTS, Coimbatore.
13) The department of ECE organized “Hands On Training in MATLAB” on 03.08.2019. Dr.B.Jaishankar & Mr.Santhanaraj, Associate Professor & Assistant Professor, department of ECE, KPRIET were the organizers.

14) A high level teaching talk on “Leveraging Computational Modelling & Simulation environments for teaching & Research” was organised on 08.08.2019. The chief guest for the program was Mr. Prasanth Rao, Lead of application engineering, Mathworks India.

15) An alumni guest lecture on “Making a successful career in corporate world” was organized by the department of ECE on 16.08.2019. The chief guest for the program was Ms.M.Sneha, Lead Engineer, Hcl Technologies.
16) An alumni guest lecture on “Industrial Embedded Systems” was organized by the department of ECE on 17.08.2019. The chief guest for the program was Mr.J.Nagarajan, Sai Incubation, Coimbatore.

17) An alumni guest lecture on “Project Mentorship” was organized by the department of ECE on 27.08.2019. The chief guest for the program was Mr.K.M.Ajay Krishnan, Software Developer, Flatirons solutions Pvt. Ltd, Chennai.

18) A special invited talk on “Data Analytics-An Industrial Perspective” was organized by the department of ECE on 22.8.19. The chief guest for the program was Ms.B.Monica, Data Analyst, Lenovo & Master Student at Singapore Management University, Singapore.

19) An alumni interaction on “Higher studies opportunities at Germany” was organized by the department of ECE on 22.8.19 (3.30pm to 4.00pm). The chief guest for the program was Mr.S.P.Suwin Kumar, Pursuing MBA at FHWS, Germany.
20) A workshop on “PMMMNMTT, MHRD, GoI funded One day Workshop on "Linux" was organized by the department of ECE on 23.08.2019 (9:30 am to 6:00 pm). The chief guest for the program was Prof. Kumar Appaiah & Prof. Kannan M Moudgalya, Professor, Department of Electrical Engineering, IIT Bombay & Professor, Department of Chemical Engineering, IIT Bombay.

21) A workshop on “One day Workshop on Introduction to Tensorflow” was organized by the department of ECE on 24-08-2019. The chief guest for the program was Mr. Navaneeth Mahalingam & M. Ramki, R&D Consultant, Google Developer Group & Academic Program Manager, Google Developer Group.

22) An guest lecture on “Guest Lecture on Entrepreneurship & Social Responsibility” was organized by the department of ECE on 30-08-2019. The chief guest for the program was Dr. Shyam Prasad Rajasekaran, Founder of TwirlTact Technology Solutions Pvt Ltd., Coimbatore.
23) An guest lecture on “Guest Lecture on Recent trends in PCB Technology & Its Job Opportunities” was organized by the department of ECE on 31.08.2019(10:30AM). The chief guest for the program was Mr. Prakash Subramaniam - Team Manager, Pactron India(P) Limited, Coimbatore.

24) An guest lecture on “Guest Lecture on Importance of EMI/EMC in system design” was organized by the department of ECE on 31.08.2019(1:30PM). The chief guest for the program was Dr. S. Ramprabhu, Associate Professor, SSN College of Engineering, Chennai.

25) Alumini Interaction on Challenges in Entrepreneurship
The department of ECE in association with IIPC/ECE has organized an alumni interaction on 05.09.2019(Thursday). Mr. T. Jagadesh Babu is a founder of Intrick Consulting Pvt. Ltd, Bangalore. Students were very interactive and enquired about the opportunities and funds provided by the
government for startups. He suggested the students to develop some new concepts and try to convert it into products from the college days itself, so that it might be helpful to become an entrepreneur. Also, he gave an overview about angle funding and patent filing.

26) Donation Camp by Rotract & Thulir Club of KPRIET on International Day Of Charity
Thulir and Rotract club together celebrates the International day of charity on Sep 5th 2019 at KPRIET. The donation camp was organized on the day of event and the items collected in the camp are donated to Universal peace foundation. This donation enlights the mind of young engineers to work together and serve for society.
27) **Two days Workshop on Advanced Deep Learning Algorithms.**
Department of ECE and KPR-Artificial Intelligence for Real time Applications Group (KPR-AIRAG) organized a two days national level workshop on “Advanced Deep Learning using NVIDIA DIGITS”. The sessions was handled by NVIDIA DLI certified instructors Dr.M.G.Sumithra, Prof & Head/ECE, Mr.V.Chandran/AP/ECE and Ms.M.Suriya/AP(Sr.G)/ECE.

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28) **Guest Lecture on Automotive Electronics**
The SIG group-Computational Imaging of ECE department has organized a guest lecture on “AUTOMOTIVE ELECTRONICS” on 07.09.2019 (Saturday). The resource person explored the developments in e-vehicles and autonomous vehicles.
29) **EXULT 2019- ECE Cultural Events**

The “EXULT 2K19” cultural fest was organized on 07.09.2019(Saturday) for the students of Electronics and Communication Engineering department from 03:30 p.m. to 04:45 p.m. in open air theatre (OAT). Dr. B. Jaishankar, AsP/ECE gave a special performance by singing a song which encourages the student to participate in all forthcoming rejuvenating activities. Participants were able to bring out their talent through this event.

30) **IETE TECH FEST- TECHXELLENCE 2019**

The department of ECE organized an IETE Tech fest -TECHXELLENCE 2019 on 14.09.2019 (Saturday).
31) **Awareness Program on First AID and AED**  
The awareness program was organized by THULIR and ROTRACT club of KPRIET. The resource persons were Doctors from Ganga Hospital, Coimbatore. Dr.Kannan Balaraman started the program by giving the various statistics on road accidents.

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32) **Webinar on VLSI Design using Verilog HDL**  
The Webinar on “VLSI Design using Verilog HDL” was conducted by Founder and CEO of Maven Silicon, Mr.P.R.Sivakumar on 12th Sept. 2019.

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33) **Awareness Program on Automotive Electronics & OBD**
   The department of ECE has organized a peer to peer session on Automotive Electronics and OBD by the third year students of ECE on 14.09.2019(Saturday). Mr. Vishnu.K (III year ECE C) and his team addressed the second and third students of ECE departments in KPR Kalaairangam. The student team is running successfully the *Karkakasadara and Narrator’s Point YouTube channels* on the automotive features adding to their credits.

34) **Executive program on Global Strategies to unlock the inner potential.**
   The department of Electronics & Communication Engineering in association with IIPC has organized an flagship EXECUTIVE PROGRAM for industry experts on ”Global strategies to Unlock Inner Potential” on 21.09.2019(Saturday). Dr. Gunasekaran N, Prof/HoD addressed the experts on the topic “Enjoy your life”.
   
   The noon session was delivered by Dr. Jaishankar B, AsP/ECE regarding the “Leadership quality”, this session involved sharing of lots of real-life experience of the speaker and made the session very informative and close to the audience.
FACULTY PARTICIPATION

1) Dr.B.Jaishankar(AP), Mr.M.Singaram(AP), Mr.N.SathishKumar(AP), Mr.T.Shanmugaraja(AP), Ms.M.Supriya(AP), Ms.M.Suriya(AP(Sr.GG)) attended a one day workshop on “Linux for Teachers” organized by IIT Bombay Remote Center of KPRIEnT on 23.08.2019.

2) Mr.G.K.Jakir Hussian, AP(SI.G) attended a one day workshop on PMMMNMTT, MHRD, GoI funded “Coordinators workshop on Linux” organized by Teaching Learning Center(ICT), IIT Bombay on 03.08.2019.