Chief Editor Message:

It gives me great pleasure to know that the next issue of newsletter is ready. I congratulate all those who have contributed in bringing out this issue. I take this opportunity to greet faculty, students, alumni and other stakeholders and hope the newsletter gives them a glimpse of activities the institute is venturing into. I congratulate the editorial board of the newsletter for their untiring efforts in collecting and compiling the data without which it would have not been possible to place this newsletter in your hands. In the present context where globalization has become a reality one needs to have autonomy with accountability. One need to develop the competence to make ethical and value based decisions. This demands two things (i) Quality of Teaching and (ii) Contribution towards generation of knowledge (Research). Let us take a resolution to fulfill this twin objective.

-Dr. K. Ashoka Reddy

Editor 's Message:

I congratulate the team as the next issue of "News Letter" of department of ECE is rolling by. They have taken great pains in bringing a shape to this News Letter. It is a rich source of information regarding various activities of the department and I wish the students will get benefitted by participating in great numbers. I congratulate all the students who got placed and wish good luck to all who will be facing the interviews. This newsletter displays the contributions by faculty & students and activities conducted in the Department during July2021 to Dec 2021 (Odd semester of AY 2022-23). I am happy to share that this semester department has witnessed three of the faculty have been awarded with PhD.

The experience of the faculty made it possible to conduct national and international FDPs with great support from industry experts and academic intellectuals from foreign Universities, IITs and NITs. I am also proud to inform that our students have made the ECEA activities more vibrant with hands-on sessions and training programmes. I would like to offer a word of thanks to our readers, our contributors, and our editorial board for their support of the journal and its mission: to improve the quality of technical education to the students. This newsletter will provide a glimpse of faculty and student achievements in oddsemester of academic year 2021-22.

-Dr. M. Raju

VISION OF THE DEPARTMENT

- Develop the department into a full-pledged center of learning in various fields of Electronic and Communication Engineering in pursuit of excellence in Education, Research, Entrepreneurship and Technological services to the society.

MISSION OF THE DEPARTMENT

- Imparting quality education to develop innovative and entrepreneurial professionals fit for the globally competitive environment .

- To nurture the students in the field of Electronics and Communication Engineering with an overall back-ground suitable for attaining a successful career in higher education, research and Industry.

Program Educational Objectives (PEOs) of the Department:

The PEO's of the B.Tech (Electronics and Communication Engineering) program are focused on making our graduates technologically superior and ethically strong

PEO-I: Building on fundamental knowledge, graduate should continue develop technical skills within and across disciplines in Electronics and Communication Engineering for productive and successful career maintaining professional ethics

PEO-II: Graduates should develop and exercise their capabilities to demonstrate their creativity in engineering practice and team work with increasing responsibility and leadership

"Determination is the power that sees us through all our frustration and obstacles. It helps in building our willpower which is the very basis of success."

PEO-III: Graduates should refine their knowledge and skills to attain professional competence through lifelong learning such as higher education, advanced degrees and professional activities.

Program Outcomes (POs) of the Department:

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

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineeringproblems 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 nd 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 societaland 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 diverseteams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineeringcommunity 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 andmanagement principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

FACULTY PUBLICATIONS

1. Kumar PS, Sakthivel VP, Raju M, Sathya PD. Brain tumor segmentation of the FLAIR MRI images using novel ResUnet. Biomedical Signal Processing and Control. 2023 Apr 1;82:104586.

2. Tara SK, Prashanth MS, Girija SP, Reddy GR. Design of human-computer interaction for handwriting character: A comprehensive review. InAIP Conference Proceedings 2023 May 24 (Vol. 2477, No. 1). AIP Publishing.

3. Chitti S, Kumar JT, Kumar VS. EEG signal feature selection algorithm and support vector machine model in patient's fatigue recognition. Arabian journal for science and engineering. 2023 Aug;48 (8):11135-41.

4. Yugander, P., Akshara, K., Zaheruddin, S., Suganthi, K., Jagannath, M. (2023). Noisy Brain MR Image Segmentation Using Modified Adaptively Regularized Kernel Fuzzy C-Means Clustering Algorithm. Proceedings of Third International Conference on Sustainable Expert Systems . Lecture Notes in Networks and Systems, vol. 587.

5. Soma, U. Investigating the Effects of Channel Length and High-K Dielectric Materials on the Performance of Double-Gate MOSFETs. Trans. Electr. Electron. Mater. 24, 285–294

"Creativity is the key to success in the future, and primary education is where teachers can bring creativity to children at that level"

6. Hu S, Sen SK, Ahmed MA, Srinivas A, Singh B, Babu DV. Orthogonal frequency multiplexing division based modulation recognition using deep belief network with tangent search optimization in wireless optic communication. Optical and Quantum Electronics. 2023 Sep;55(9):815.

7. Kiran S, Reddy GR, Girija SP, Venkatramulu S, Dorthi K. A Gradient Boosted Decision Tree with Binary Spotted Hyena Optimizer for cardiovascular disease detection and classification. Healthcare Analytics. 2023 Nov 1;3:100173.

8. Raju M, Melkeri VS, Sudheer P. Classification of Flower Images by usingTransfer Learning and Machine Learning Approach. NeuroQuantology. 2022;20(8):3445.

ECE ASSOCIATION DETAILS

Techno Gamerz. An event named Techno Gamerz was conducted during the association hour on February 2, 2023. The event TechnoGamerz was an interesting and interactive session with a theme of Twist your brains with logical tech games.The session enhanced technical skills and team building.

Feb Fest: Another interesting event was conducted on the theme of February Fest. This event was conducted on February 16, 2023. This is another cultural event that was initiated by ECEA. It was also a cultural event, where the students actively participated in the events, and it was a platform to enhance their skills. The students were encouraged by the faculty coordinators, Dr. K. Sowjanya, E. Sushmitha, S. Pradeep Kumar, and Dr. Abdul Muqueem, who graced the event and appreciated the participants and the student coordinators.

Open Mic: An event was organised with the intention of improving the communication skills of the students. It was conducted on February 23, 2023. In this event, the students are trained to share their views on the topic of What is Global Recession 2023? and its impact on India. Through this session, students gained knowledge about the recession and other measures to reduce its impact on India. This was an interesting interactive session where the students shared their ideas.

"Confidence and hard-work is the best medicine to kill the disease called failure. it will make you a successful person "

Newsletter

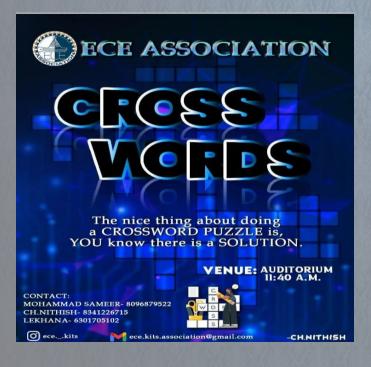**Cross Words:** Cross Words is a technical event that was organised with technical crossword questions. It was conducted on March 9, 2023. In this event, two teams are formed, with one team tasked with solving the down crossword and the other tasked with solving the up crossword. This event was intended to improve the technical skills and the answering ability.

Awareness program on "Study Abroad & Scholarships provided by Govt of India"
ECEA has come up with an awareness programme to guide the students on the scholarships for their abroad study plans. This event was conducted on April 6, 2023. It was an online Zoom session. This session was intended to acknowledge the students and guide them through the scholarships that are offered by the Government of India. This event helped the students plan their study abroad.

JAM-Just a Minute: Communication is the key to success. Not every individual that you meet in life will be good at communication. Anyone and everyone can deliver prepared speeches, but that is not how you should be judging an individual's communication skills. The real test lies in surprises. Today, the most trending communication gauge is the JAM session In the context of soft skills, ECEA has come up with a JAM session on May 1, 2023. In this session, students are instructed to speak or share views on the topic and speak about it for a few minutes. In this session, students shared their views, which enhanced their communication skills. Many of the topics chosen were burning topics, which also helped in gaining awareness of the issues that exist.