DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

NEWS LETTER

2023-24-Volume-1: Issue-2 December

VISION OF THE DEPARTMENT

To impart quality technical education in the field of Electronics and Communication Engineering in the young minds for serving the Society and Industry in a globally challenging environment

MISSION OF THE DEPARTMENT

To achieve the vision, the department will

•Impart quality education through state-of-the-art curriculum to meet global needs in Electronics and Communication Engineering field.
•Establish a conducive learning environment for continuous improvement to face the challenges in overall professional development.
•Instill competencies for working in interdisciplinary work culture
•Create desire for undertaking lifelong learning and entrepreneurship initiatives

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

Programme Educational Objectives (PEOs) are established through a consultation process. PEOs are broad statements that describe the career and professional accomplishments that the graduates should achieve three to five years after graduation. The Electronics and Communication Engineering programme graduates will

PEO1: Pursue their professional careers in Electronics and Communication Engineering and related fields by engaging in a global competitive landscape.

PEO2: Seek advanced education and actively enhance their professional skills.

PEO3: Effectively convey ideas and exhibit professionalism when collaborating within diverse teams.

PEO4: Exhibit good inter-personal skills and demonstrate concern for society and environment

PROGRAMME SPECIFIC OUTCOMES (PSOS)

On completion of the B.E (ECE) degree the Electronics and Communication graduates will be able to

PSO 1: Analyze and Design Electronic Systems for Signal Processing and Communication Applications.

PSO 2: Identify and Apply Engineering Tools for Design, Analysis, Synthesis and Validation of VLSI and Communication Systems.

PSO 3: Demonstrate the Conceptual Knowledge with Respect to Architecture, Design, Analysis and Deployment in Embedded Systems and Computer Networking.

CHIEF EDITORS

DR.K. TAMILARASI AP/ECE

MRS R. PUSHPAVATHI AP/ECE

MRS A. ANITHARANI AP/ECE

EDITORIAL STUDENT MEMBERS



S. SIVARANJANI II Year B.E.ECE

M. SOLOMONRAJA II Year B.E.ECE

ANANTH M II Year B.E.ECE

ACDEMIC ACTIVITIES

The Department of Electronics and Communication Engineering signed an **MoU** and organized an **Industrial Guest Lecture** on "Emerging Technologies in ECE – A Road Map for the Next Generation" on **03.10.2023**. The session was delivered by **Mr. M. Parthiban**, Additional Director, **Caliber Embedded Technologies India Pvt. Ltd.**, providing valuable insights into future trends in the ECE domain.

The Department of Electronics and Communication Engineering organized an **Academic Guest Lecture** on "The Future of Embedded Technology: AI, IoT, and Beyond" on **28.10.2023**. The session was delivered by **Dr. D. Sivaraj**, Associate Professor/ECE, **PSG College of Technology**, providing valuable insights into emerging trends in embedded systems.

The Department of Electronics and Communication Engineering organized an **Academic Guest Lecture** on "Process Control in Industries" on **18.11.2023**. The session was delivered by **Dr. K. S. Vairavel**, Associate Professor & Head of EIE, **Bannari Amman Institute of Technology**, focusing on advanced industrial control techniques and applications.

NON ACDEMIC ACTIVITIES

Sports Day was celebrated on **18.11.2023**, organized by the **Department of Electronics and Communication Engineering**. The event was coordinated by **Mrs. N. Nithya, AP/ECE**, and **Mr. N. Siva, AP/ECE**, to promote fitness, teamwork, and sportsmanship among students.

World Television Day was celebrated on **21.11.2023** with a special program highlighting the impact of television on communication and society. The event was coordinated by **Mr. V. Sakthivel** and **Mr. D. S. Mydheeshwaran**, Assistant Professors, **ECE Department**, to create awareness about the role of television in shaping global perspectives.

FACULTY ACHIVEMENTS

Mr. P. Saravanaprasad published a research paper titled "Advanced Lung Tumour Diagnosis Using a 3D Deep Neural Network-Based CAD System" in the journal **Biomedical Processing and Control (SCI)**.

Dr. S. Anbukaruppusamy published a research paper titled "Efficient Security Framework Against Sybil Attack in Mobile Adhoc Network Using EE-OLSR Protocol Scheme" in the journal **Wireless Networks (SCI)**.He also published another paper titled "Optimal Fuzzy-C-Means Clustering Algorithm for Reversible Mammogram Image Hiding Based on Computer Vision" in the journal **Environmental Protection and Ecology (SCOPUS)**.

Dr. C. Karthikeyini published a research paper titled "Comparative Analysis of Deep Learning in Detecting Cognitive Impairment Associated with Alzheimer's Disease" in the **International Journal of Intelligent Systems and Applications in Engineering (IJISAE), SCOPUS**.

Dr. Mohammed Yaseen published a paper titled "VLSI Design of Low-Power Edge AI Processors for IoT Devices" in the **ICTACT Journal on Microelectronics (SCOPUS)**.

Dr. R. Dinesh published a research paper titled "Enhancing Data Transmission Reliability in Cluttered Environment Using Adaptive Wireless Sensor" in **IEEE Xplorer (SCOPUS)**.

Dr. R. Dinesh, co-authored a book titled VLSI and Chip Design, published by **Charulatha Publications**, with **ISBN-13: 978-93-5577-767-6**.

Dr. R. Dinesh, co-authored a book titled CHAT GPT Prompt for Beginners, published by **Scientific International Publishing House**, with **ISBN: 978-93-5132-275-4**.

V. Arun Antony, co-authored a book titled VLSI and Chip Design, published by **Charulatha Publications**, with **ISBN-13: 978-93-5577-767-6**.

Mr. V. Arun Antony filed a patent titled Device to Predict Cardiovascular Attack with application number **397144001**, which was **published on 09.10.2023**.

STUDENTS ACHIEVEMENTS

Shivpujan Kumar, II year, won **First Prize** in a **Symposium** held on **07.10.2023** at **Vellar College of Engineering and Technology**

Visruth K, II year, won **First Prize** in a **Symposium** held on **07.10.2023** at **Vellar College of Engineering and Technology**.

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TECH BREAKTHROUGHS OF DECEMBER 2023

In December 2023, the technology world witnessed a surge of cutting-edge advancements. Tesla introduced the Optimus Gen 2 humanoid robot with enhanced mobility and lighter design. IBM unveiled groundbreaking quantum innovations, including chip-level connectivity improvements to bolster computational accuracy in fields such as protein modeling. Meta enhanced its AI capabilities with smart eyewear that can interpret objects and translate languages in real time. Intel launched Meteor Lake processors featuring powerful Arc graphics and open API support. Meanwhile, AI evolution accelerated with the rise of multimodal models and tools enabling text-to-video generation—heralding a new era of creative possibilities.