DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

NEWS LETTER

2023-24-Volume-2: Issue-2 June

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
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EDITORIAL STUDENT MEMBERS

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II Year B.E.ECE

M. SOLOMONRAJA
II Year B.E.ECE

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II Year B.E.ECE

ACDEMIC ACTIVITIES

An Academic Guest Lecture on "Spectral Imaging: Unveiling the Invisible with Remote Sensing" was delivered by **Dr. Aravinth, Associate Professor, Amirtha Vishwa Vidyapeetham University, Coimbatore**, on **16/04/2024**.

An Industry Guest Lecture on "Data Warehouse Project Management and Division in Indian IT Industry" was delivered by **Mr. S. Balamurugan, Project Manager, TCS, Coimbatore**, on **08/04/2024**.

An Industry Guest Lecture on "Crafting the Future: IoT Ideation and Startup Ecosystem Dynamics" was delivered by **Mrs. Sathya Raja, Product Development Specialist and Founder & CEO of Protowiz Private Limited**, on **02/04/2024**.

An Alumni Guest Lecture on "Electronic Control Unit in Car" was delivered by **R. Karthikeyan, System Engineer, BOSCH Global Software Technology, Coimbatore**, on **12/04/2024**.

An Alumni Guest Lecture on "Graphic Designing of Electronic Components Using DesignSpark" was delivered by **Kaviyanayagan J, Senior Graphic Designer, Outsource Info Tech**, on **15/04/2024**.

A Workshop on "Powering IoT Using Arduino and Raspberry Pi" was organized on **15/04/2024 and 16/04/2024**, coordinated by **Dr. G. Prakash, Professor/BME**, **Mr. N. Rajagopalakrishnan, AP/ECE**, and **Mr. V. Sakthivel, AP/ECE**.

FACULTY ACHIVEMENTS

Mrs. Pushpavathi, "**IoT-Based Smart Band for Doctor and Patient Communication Using Body Sensor**," published in **International Journal of Innovative Research in Computer and Communication Engineering**.

Dr. K. Tamilarasi, "**Water Data Communication IoT for Flood Management and Smart Alert to Rescue Team**," published in **Aegaeum Journal, Vol. 12, No. 4, pp. 23-30, June 2024**.

STUDENTS ACHIEVEMENTS

ARCHANAA M

- Won **I Prize** in a **Symposium** on **12/04/2024** at **Sri Shanmugha College of Engineering**.
- Won **I Prize** and **II Prize** in a **Symposium** on **22-23/04/2024** at **Erode Sengunthar Engineering College**.
- Won **I Prize** in a **Symposium** on **22-23/04/2024** at **Erode Sengunthar Engineering College**.

A. S. SUBHAPRATHA

Won **II Prize** in a **Symposium** on **22-23/04/2024** at **Erode Sengunthar Engineering College**.

TOP TECHNOLOGY INNOVATIONS – JUNE 2024

1. AI-Powered Scientific Discovery

Advancements in deep learning and generative models are transforming scientific research, facilitating groundbreaking discoveries in medicine and the understanding of the human body and mind.

2. Privacy-Enhancing Technologies

The use of synthetic data is protecting personal privacy while enabling safer global collaboration, especially in health research.

3. Reconfigurable Intelligent Surfaces (RIS)

These surfaces transform walls and other spaces into intelligent components for wireless communication, improving energy efficiency in networks.

4. High-Altitude Platform Stations (HAPS)

These stations extend mobile network access to remote regions, helping to close the global digital divide.

5. AI in Sports and Entertainment

The International Olympic Committee (IOC) outlined its vision for incorporating artificial intelligence (AI) into sports, enhancing talent identification, personalized training, fairer judging, efficient event organization, and immersive spectator experiences.

6. AI-Driven Mental Health Applications

Startups like TheraMe are leveraging AI to detect critical mental health needs, offering personalized support and interventions.

7. Advanced Robotics in Healthcare

Robotic systems are being increasingly integrated into healthcare settings, enhancing surgical precision and patient care.

8. AI-Powered Financial Advisory Tools

Platforms like Prospero.ai are utilizing AI to deliver personalized investment strategies, democratizing access to financial planning. (

9. Generative AI in Creative Industries

AI tools are transforming content creation, enabling the generation of music, art, and literature, thereby expanding creative possibilities.

10. Smart Wearables for Health Monitoring

Devices like the FLOWBIO hydration monitor are providing real-time health data, empowering users to manage their wellness proactively.