

# FOR THE FORWARD

DEPARTMENT OF ELECTRONICS AND  
COMMUNICATION ENGINEERING  
PRESENTS

VOLUME 3 | ISSUE 2  
MARCH 2025

WHERE CREATIVITY MEETS TECHNOLOGY

## VISION

- ◆ To produce professionally competent, ethically sound and socially responsible Electronics and Communication Engineers.

## MISSION

- ◆ Provide excellent infrastructure and lab facilities for quality education.
- ◆ Promote industry-academic interactions to keep up with technological advancements.
- ◆ Develop interpersonal skills and social responsibility among students through project-based and team-based learning.

## PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- ◆ Exemplify technical competence in designing, analyzing, testing and fabricating electronic circuits.
- ◆ Acquire leadership qualities, rapport, communication skills in the organization and adapt to changing professional and societal needs.
- ◆ Work effectively as individuals and as team members in multidisciplinary projects

## PROGRAM SPECIFIC OUTCOMES (PSOs)

- ◆ Define, design, implement, model, and test electronic circuits and systems that perform signal processing functions.
- ◆ Segregate and select appropriate technologies for implementation of a modern communication system.

## PROGRAM OUTCOMES (POs)

- ◆ **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- ◆ **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.
- ◆ **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.
- ◆ **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.
- ◆ **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.
- ◆ **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.
- ◆ **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.
- ◆ **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ◆ **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ◆ **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.
- ◆ **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.
- ◆ **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.

# EVENTS

## **EXPERT TALK ON INTRODUCTION TO 5G NR AND FEATURES OF 6G**

◆ The Departments of Electronics & Communication Engineering (ECE) and Computer Science & Engineering (CSE) jointly organized an expert talk on "Introduction to 5G NR and Features of 6G" in association with GEEKZONE and IMPULSE on November 1, 2024. Dr. J. William, Principal and Professor, Roever Engineering College, shared his expertise on 5G NR overview and 6G vision and features, followed by an interactive Q&A session.



## **UNVEILING INNOVATION: A DEEP DIVE INTO PATENT FILING PROCESS**

◆ The Department of Electronics and Communication Engineering (ECE) organized an expert talk on "Unveiling Innovation: A Deep Dive into Patent Filing Process" on February 17, 2025. Dr. N. S. Sreekanth, Associate Professor and Head of the Department (IT), Kannur University, delivered the session, sharing his expertise on the patent filing process, its procedures, challenges, and opportunities, while emphasizing its importance for innovators and startups, followed by an interactive Q&A session.



## **CHIP TALK: EXPERT TALK ON OPPORTUNITIES IN VLSI DESIGN**

◆ The Department of Electronics and Communication Engineering (ECE), in association with Impulse, the Electronics Department Association, organized an expert talk on "Opportunities in VLSI Design" on January 15, 2025. Ajith AS, Physical Design Engineer at Synapse Design, Quest Global, delivered the keynote address, sharing insights into career opportunities and advancements in VLSI design, followed by an engaging interactive session with the participants.



### 3-DAY FACULTY DEVELOPMENT PROGRAM (FDP) ON OUTCOME-BASED EDUCATION AND THE NBA ACCREDITATION PROCESS

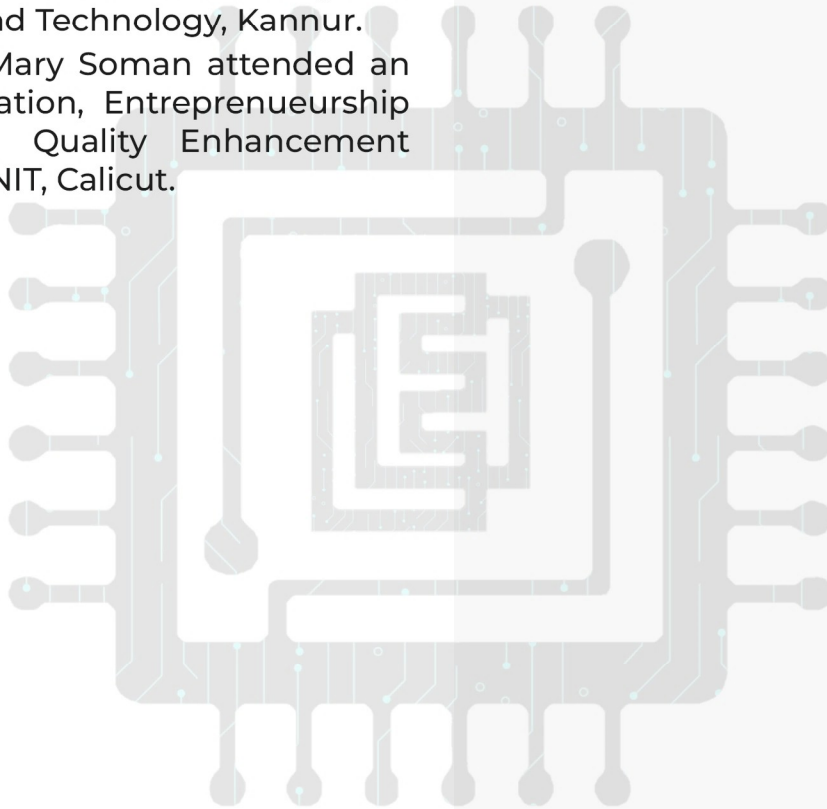
◆ The three-day Faculty Development Program (FDP) on Outcome-Based Education and the NBA Accreditation Process, jointly organized by the Departments of Computer Science and Engineering and Electronics and Communication Engineering, featured esteemed resource persons, including Dr. X Susan Christina, Professor and Principal at MAM College of Engineering and Technology, Tiruchirappalli; Dr. J William, Professor and Principal at Roever Engineering College, Tiruchirappalli; Dr. P Sooraj, Professor in the Department of Mechanical Engineering at Government College of Engineering Kannur; Dr. Shinu Mathew John, Principal at STM; and Dr. Anetha Mary Soman, Academic Coordinator at STM. The event was coordinated by Ms Arya C and Mrs Anjana K P.



# ACHIEVEMENTS

## STAFF ACHIEVEMENTS

- ◆ Mr. Nithin C, Dr. Anitha Mary Soman, Ms. Sreetha Sreedhar K, Ms. Athira V and Ms. Arya C attended an FDP on Outcome Based Education and NBA process conducted by St. Thomas College of Engineering and Technology, Kannur.
- ◆ Dr. Anitha Mary Soman attended an FDP on Innovation, Entrepreneurship and Research Quality Enhancement conducted by NIT, Calicut.



# IMPULSE

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## EDITORIAL TEAM

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