

RFSMARA S

## HOD DESK

#### Message from the Head of the Department

Department of Electrical and Electronics Engineering

Mar Baselios Christian College of Engineering and Technology, Peermade Dear Readers.

It gives me immense pleasure to extend my warm wishes to the editorial team of Lantern, our department's official newsletter. This vibrant initiative is more than just a periodical—it is a platform that reflects the dynamic spirit, intellectual curiosity, and academic commitment of the students and faculty of the Department of Electrical and Electronics Engineering. I wholeheartedly commend the efforts of the editorial team, whose dedication, creativity, and collaborative spirit have once again brought to life a publication that not only informs but also inspires. Over the past few years, our field has been witnessing a historic shift. The convergence of Artificial Intelligence (AI)

with Electrical and Electronics Engineering (EEE) is transforming conventional systems into smart, adaptive, and autonomous solutions. From energy to mobility, and from manufacturing to communication, AI is rapidly redefining engineering paradigms—and we, as a department, are proud to be aligning ourselves with this transformation. Al and the Evolution of Electrical Engineering

The traditional role of an electrical engineer—once primarily focused on circuits, machines, and control systems—has expanded dramatically. Al, with its ability to learn from data, make predictions, and automate decision-making, is bringing in capabilities that were once thought to be futuristic.

- In Smart Energy Systems, AI is facilitating efficient load forecasting, fault detection, renewable energy integration, and grid stability analysis. These capabilities are not only improving power reliability but also enabling a sustainable energy future.
- In Industrial Automation, AI is powering robotics, self-learning control systems, and smart manufacturing
  practices as part of the Industry 4.0 revolution. This enables faster production cycles, minimal downtime, and
  better resource optimization.
- In Transportation, Al-integrated electric vehicles (EVs), intelligent charging infrastructure, and smart traffic management systems are contributing to safer, cleaner, and more connected mobility ecosystems.
- In Healthcare and Signal Processing, deep learning models are being used in medical diagnostics, wearable technologies, and real-time monitoring devices—pushing the boundaries of what EEE graduates can contribute to society.

These examples reflect just a fragment of what lies ahead. The next generation of electrical engineers will not only need to understand the flow of electrons but also the flow of data. Hence, it is our academic responsibility to shape students into future-ready engineers who are as comfortable with neural networks as they are with Kirchhoff's laws. Empowering Our Students and Faculty

At our department, we are proactively taking steps to keep pace with these changes. We are:

- Redesigning our curriculum to integrate AI, machine learning, and data science applications in electrical systems.
  Encouraging interdisciplinary projects that blend electronics, coding, and AI to address real-world challenges.
- Organizing hands-on workshops, guest lectures, and industry interactions to expose our students to current tools.
- and technologies.
  - Promoting faculty development programs and research collaborations to foster continuous learning and innovation.
  - Supporting student-led initiatives like innovation clubs, project expos, and startup ideas that promote creative
    exploration beyond the classroom.

Our faculty have been actively contributing to academic growth by publishing papers, presenting in national and international conferences, and engaging in collaborative projects with institutions and industries. Looking Ahead

As we move forward, I envision our department as a centre of excellence that not only adapts to technological trends but also contributes meaningfully to their evolution. We are committed to nurturing a culture of curiosity, ethics, innovation, and social responsibility. I invite all students to take full advantage of the resources, mentorship, and opportunities offered here.

Let Lantern be a symbol of this journey-a beacon that highlights our accomplishments, aspirations, and shared vision. I once again congratulate the editorial team for capturing the pulse of our department through this inspiring edition. May this endeavor continue to grow, evolve, and illuminate the path for all stakeholders in the EEE community.

With warm regards,

Resmara S

Head of the Department

Department of Electrical and Electronics Engineering Resmara S

Associate Professor and Head

Electrical and Electronics Engineering Department

Mar Baselios Christian College of Engineering and Technology, Peermade (MBC)

### ABOUT THE DEPARTMENT

The B.Tech program Electrical and Electronics Engineering offer a unique mix of Electrical, Electronics, InstrumenIItation, Control Engineering and Computer related courses that enables the student to choose a professional career or pursue higher studies in any of these streams. The wide range of program and open elective subjects offered in the B.Tech program, cover a broad spectrum of the subject domain and enables the student to specialize in their areas of interest. The curriculum based on the credit scheme is periodically updated in consultation with the experts from industry and academia, to reflect the changes in the Electrical Engineering stream.

. The Electrical and Electronics Engineering has a team of committed and dedicated faculty, having a rich experillence in teaching and also aims to maximize the impact of teaching-learning process through the use of innovative methodologies. The Department of EEE having excellent infrastructural facilities state of the art laboratories and it is at par with Industrial need and standards. The faculty members of the Department are willing to take the responsibility of the student as a whole and help them to grow as better individuals. The students will definitely enjoy the good academic environment and the non-polluted atmosphere. Let us work together for the betterment of the Department

### MISSION

Impart fundamental concepts to each student to take up on challenging engineering problems.

Ensure effective learning through quality teaching and proper assessment to achieve the graduate attributes.

Establish state of the art support facilities to encourage research and to undertake innovative projects.

Enrich the students with strong interpersonal and managerial skills with professional ethics to meet any challenging situation.

### VISION

To emerge as a center of excellence bringing forth globally competent and socially committed Electrical and Electronics Engineers.







Department of Electrical and Electronics Engineering BI-ANNUAL DEPARTMENT CHRONICLE VOLUME-XII

# INDUSTRIAL VISIT





S6 EEE students (2022 Admission) had an insightful industrial visit to , gaining hands-on exposure to **STANELEC Pvt Ltd**, real-world electrical engineering applications. 4 A step closer to bridging theory with practice.

## **NEWLY JOINED FACULTY**



DR BINCY K JOSE Associate Professor EEE Dept

# **ORIENTATION PROGRAMS**









Department of Electrical and Electronics Engineering BI-ANNUAL DEPARTMENT CHRONICLE

**VOLUME-XII** 

## DEPARTMENT ASSOCIATION DAY





MAR. BASELIOS CHRISTIAN

EGOTETTA



MR. TONY M. KERRANCHIRA (EXECUTIVE ENGINEER ELECTRICAL DIVISION PEREMADE) MARCH 1 SATURDAY 10:30AM

VENUE: CIVIL BLOCK



MAR BASELIOS CHRISTIAN



ER. ARCHA G. RESILIENT & ADAPTIVE ELECTRICAL SYSTEM IN NET ZERO ENERGY BUILDINGS

> MARCH 1 SATURDAY 11:00AM

VENUE: CIVIL BLOCK

JOSEPH

> MBCCET PEERMADE HUTTIHANAM NUE OPEN AUDITORIUM

SPM MARCH.01

BRAND PARTNERS 75TEV&JOS T arcite







Department of Electrical and Electronics Engineering

BI-ANNUAL DEPARTMENT CHRONICLE

### VOLUME-XII



Throwback to our joyful 🔅 Women's Day Celebration 🌸 - honoring strength, beauty, and empowerment! Chief Guest: Annu John (Certified International Trainer, Chartered Accountant) Speaker: Santhi Remesh (Ward Member, Peermade Panchayat)

