

BASELIOS MATHEWS II COLLEGE OF ENGINEERING

JANUARY-APRIL 2022

A glimpse into the vibrant life at BASELIOS MATHEWS II COLLEGE OF ENGINEERING — featuring events, milestones, and student achievements.

Editorial Board

Prof. Dennise Mathew – Chief Editor Prof Jayakrishnan R – Staff Coordinator Shine Varghese Saju – Student Coordinator

ECHO.

Director's desk



Rev. Fr. Thomas Vargheese

This newsletter stands as a reflection of the vibrant academic spirit and tireless efforts of our BMCE family. The journey through the academic year 2024–2025 has been marked by remarkable achievements and unwavering commitment. I extend my heartfelt congratulations to all and urge everyone to continue striving for excellence.

Principal's message

Prof. Dr. L. Padma Suresh

The release of this newsletter marks a proud moment for BMCE. It beautifully captures the dedication and accomplishments of our students and staff. I extend my sincere congratulations to the editorial team for their exceptional work in bringing these stories to light.



From HOD's desk



Prof. Dennise Mathew

Mentoring students is a privilege I value deeply. Education is about more than academics—it's about curiosity, discipline, and purpose. We aim to instill the ability to solve problems, work collaboratively, and lead with empathy. With the right encouragement and opportunities, our students are equipped to succeed in dynamic environments. I believe they will shape their careers and communities with confidence and compassion.

Vision of the Department

To be recognized and respected as he best premier institution producing computer professionals

To create an energetic environment where ethics and morals are maintained & pay attention to edify the students to build value.

To enhance the placement of our students by fostering a better fit between their career goals, imbibing start-up ideas for entrepreneurship, and securing meaningful employment opportunities.

Mission of the Department

To establish and manage a professional institution, which promotes academic excellence in students for meeting the ever-growing Information Technology demands.

To give a right understanding and to imbibe into the minds of the students a deep sense of morality and ethical standards so as to develop potential personalities

To provide best infrastructural facilities, principle-centered education and competent faculty in the Institution

To bestow special attention in molding the character of the students, enabling them to become responsible citizens.





The Department of Computer Science and Engineering at Baselios Mathews II College of Engineering, established in 2002, offers a B-Tech program with an intake of 120 students, plus six lateral entry seats.

The Department has experienced faculty with postgraduate and doctoral qualifications, actively involved in research and continuous professional development. With world-class infrastructure and modern facilities, it aims to provide quality education that builds a strong foundation for success in the global tech industry.



Department of CSE

The International Conference on Circuit, Power, and Computing Technologies (ICCPCT) is a hallmark academic event hosted by BMCE to foster innovation and interdisciplinary research. While official records of the 2022 edition are limited, it was widely recognized on campus as a dynamic platform for sharing knowledge and showcasing technological progress.

This conference brought together leading academicians, researchers, and industry professionals to explore the evolving intersections between power systems, electronics, and computing technologies. The core themes included renewable energy integration, artificial intelligence in control systems, embedded computing, and smart grid applications. Participants presented original research papers in various parallel sessions, judged by panels of academicians and industry experts. Keynote addresses by guest speakers from national research institutes and international universities added global insight. A particularly impactful session focused on the integration of AI with power distribution networks, drawing attention to the societal relevance of the topics discussed.

Alongside academic sessions, the conference hosted hands-on workshops on design tools like MATLAB and IoT simulation environments. These workshops offered students practical exposure to real-world engineering challenges and design strategies, further enriching their learning experience.

An innovation showcase highlighted student-led projects, many of which addressed real-life challenges using technology. Projects ranged from smart energy meters to Al-driven automation in agriculture, demonstrating both creativity and technical depth. Awards for best papers and innovations celebrated the high-quality contributions of participants.

ICCPCT 2022 reinforced BMCE's commitment to academic excellence and societal development. By promoting collaboration, research, and future-facing dialogue, the conference empowered students and faculty alike to lead technological change with ethical responsibility and vision.

Internships and Industry Exposure: Building Real-World Readiness

- Students' Corner, BMCE Newsletter

College life at Baselios Mathews II College of Engineering (BMCE) is designed to prepare us for more than exams and placements—it's about shaping us into professionals ready to meet the demands of a dynamic, ever-changing world. One of the most impactful bridges between academic learning and real-world application is the opportunity to pursue internships and gain industry exposure during our undergraduate years.

Internships give students the unique chance to apply classroom concepts to practical scenarios. Whether you're coding for a tech startup, shadowing engineers at a manufacturing firm, or assisting with data analytics for a digital marketing company, the hands-on experience is invaluable. It teaches us not just how to work—but how to work well in teams, under deadlines, and with accountability.

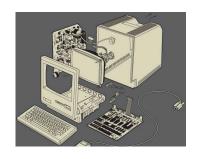
BMCE has been proactive in encouraging students to seek out internships early in their academic journey. Through the support of our Training and Placement Cell, tie-ups with industry partners, and even alumni referrals, students from all departments have managed to secure internships with reputed firms. These experiences often turn into pre-placement offers or help students choose the right career path based on real exposure.

Recently, several students from the ECE and ME departments interned at [Insert Company Name], where they contributed to ongoing research and product development. Simultaneously, CSE students engaged with start-ups in AI and cybersecurity, gaining early insight into high-demand sectors. These internships not only boost our resumes but also help us build critical industry networks.

Beyond internships, industry talks, site visits, and guest lectures hosted at BMCE are helping students stay connected to the professional world. Events like the "Future Skills Workshop" and "Industry Readiness Bootcamp" have featured speakers from major firms who share valuable tips on adapting to workplace expectations and upskilling continuously. Moreover, these interactions foster clarity. It's one thing to study a subject; it's another to see how it's applied in real life. Students often return from internships with a clearer idea of what they want to specialize in—whether it's hardware design, sustainable energy, or full-stack development.

If you haven't considered an internship yet, now is the perfect time. Start small if needed—remote projects, online internships, or even volunteering for tech or community-based tasks. The experience you gain, no matter how modest, shapes your perspective and prepares you for what comes next.

At BMCE, we believe in holistic development—and internships are a vital part of that journey. They are stepping stones that transform us from learners into professionals. So reach out, take initiative, and explore the world beyond the classroom. Your future self will thank you for it.







Tech Snippets!

AI in Healthcare: Transforming the Future of Medicine

Artificial Intelligence (AI) is steadily making its mark on the healthcare industry, unlocking new possibilities in diagnosis, treatment, and patient care. With the ability to analyze vast amounts of medical data quickly and accurately, AI is enhancing decision-making processes and supporting healthcare professionals in delivering more effective care.

One of the most promising areas of AI application is medical imaging. Machine learning algorithms can now detect abnormalities such as tumors and fractures with remarkable precision, assisting radiologists and improving early diagnosis. AI is also playing an important role in drug discovery and development, helping researchers predict the outcomes of new treatments and speeding up clinical trials.

In everyday care settings, AI-powered virtual assistants and chatbots are easing the workload of medical staff by handling routine inquiries, appointment scheduling, and even basic symptom checks. Meanwhile, wearable devices integrated with AI are helping monitor patients' vital signs in real time, enabling quicker response in critical situations.

While challenges such as data privacy and ethical considerations remain, the growing integration of AI into healthcare signals a promising future. It is not about replacing doctors, but rather empowering them with intelligent tools that enhance precision, efficiency, and patient outcomes.

~Ms. Rose Mary Thomas, Asst Prof.

Electric Vehicles: Shaping the Future of Mobility

Electric Vehicles (EVs) are rapidly gaining attention as a sustainable alternative to traditional fuel-powered cars. With rising concerns over climate change, air pollution, and fuel costs, EVs have moved from a niche innovation to a global movement in the making.

In 2022, major car manufacturers began expanding their electric line-ups, and countries around the world increased investments in charging infrastructure and clean energy initiatives. Advances in battery technology also began addressing key concerns like driving range and charging time, making EVs more accessible to the average consumer. EVs offer numerous benefits—lower emissions, reduced maintenance, and quieter operation. But their rise also calls for skilled professionals who understand battery management, electric powertrains, and sustainable automotive systems. For engineering students, this presents exciting opportunities to engage with a rapidly evolving field that blends electronics, software, and environmental engineering.

As the world moves toward cleaner transportation, EVs stand as a symbol of innovation and responsibility—driving us toward a greener tomorrow.

~Mrs. Sandhya S, Asst Prof.