

8th International Conference

ENERGY, CONTROL, COMPUTING AND ELECTRONIC SYSTEMS

ICECCES-2025

Theme of conference: Innovations at the Nexus of Energy, Control, and Intelligent Electronic Systems

3rd-5th December 2025

Department of Electrical and Electronics Engineering, School of Engineering, Mohan Babu University



ABOUT MBU

Mohan Babu University is a State Private University promoted by the Sree Vidyanikethan Educational Trust under the leadership of Dr. M. Mohan Babu, former Rajya Sabha Member, Producer, Cine Artiste, and noted Philanthropist.

The University is located in Tirupati, Chittoor District, Andhra Pradesh, India, and promotes excellence across diverse disciplines — including Computing, Engineering, Pharmacy, Liberal Arts & Sciences, Agriculture, Management, Paramedical, and Healthcare Sciences.

Recognized as one of the best universities in Andhra Pradesh, Mohan Babu University stands tall among India's premier institutions, backed by a series of prestigious rankings and accreditations. It has been placed in the 201–300 band of the NIRF Rankings and the 51–100 band in the NIRF Innovation Rankings. The University has also earned the coveted Diamond Band in the QS I Gauge Rankings, an A+ grade from NAAC, and NBA accreditations, along with a Platinum category distinction in the AICTE-CII survey. Remarkably, it ranked among the Top 20 in the 2023 SII Green Rankings, reflecting its commitment to sustainability.

These distinctions affirm Mohan Babu University's position as a trailblazer in higher education, dedicated to academic excellence, innovation, and environmental stewardship.

With strong partnerships with over 110 multinational recruiters, MBU facilitated an impressive 2,050+ placement offers for its students during 2022–23. Notably, students received lucrative offers, including two placements at INR 60 LPA from Google, one at INR 44 LPA from Amazon, and another from Yugabyte. Additionally, four students were offered INR 29 LPA packages by Amazon — underscoring their exceptional competence and industry readiness.

The University has academic collaborations with several of the world's top 100 universities, such as the University of Wisconsin (USA), Penn State University (USA), and RWTH Aachen (Germany). These partnerships facilitate student exchange and study-abroad programs, enriching the overall educational experience.

Facilities at MBU include a central library housing 142,512 volumes, 21,504 titles, and 8,125 journals. The 100-acre CCTV-secured campus features future-ready laboratories



and 5-star rated hostels, providing an ideal environment for holistic learning. Emphasizing research-driven teaching, MBU spearheads initiatives like the V-Hub Innovation Centre, AICTE-IDEA Lab, and over 30 specialized research laboratories. With 175+ patents and more than 1,200 Scopus/WoS-indexed faculty papers, the University exemplifies a culture of innovation and excellence.

MBU's advanced curriculum, expert mentorship, state-of-the-art infrastructure, and vibrant campus life — including over 65 clubs — nurture innovation, learning, discipline, and leadership. In today's rapidly changing world, only future-ready talent can carry the baton forward; hence, MBU is deeply committed to fostering academic brilliance, discipline, and dynamism.

A student-centric pedagogy, project-based learning, and a design-driven curriculum equip students with strong abilities in problem-solving, design thinking, innovation, and a lifelong passion for learning. The University's focus on innovation and entrepreneurship empowers students to create inventions, launch startups, and develop solutions to global challenges — even before graduation.

Integral to this success story is the dedication of MBU's faculty, the scholarship programs for deserving students, the support of its alumni and industry advisory boards, and the state-of-the-art academic and research facilities that together provide students with a solid foundation for achievement and excellence.

RANKINGS AND ACCREDITATIONS















SII GREEN RANKINGS 2023 Listed in Top 20 Universities of India

DIAMOND BAND MHW RANKINGS 2023



RANKED 3.5 STAR

Boasting a robust placement record, including a remarkable package of Rs. 60 lakh offered by Google, the university also actively mentors other engineering colleges.

To foster Research, Innovation and Entrepreneurship, MBU has the following:

DST-STI Hub worth of

3.61 Crores

AICTE-IDEA Lab worth of

1.1 Crores V-Hub, Innovation Centre Ear project

ABOUT EEE DEPARTMENT

The Department of EEE at MB School of Engineering (Erstwhile Sree Vidyanikethan Engineering College) was established in 1996, initially offering B.Tech (EEE) with 60 seats. Over time, the Department has expanded its intake to 120 seats, including 20% additional seats under the lateral entry scheme. Currently, the department offers three undergraduate programs: B.Tech in Electrical and Electronics Engineering, B.Tech in Electrical and Electronics Engineering, B.Tech in Electrical and Electronics Engineering and Power Systems, and B.Tech in Electrical and ElectronicsEngineering with specialization in Automotive Electronics. It also provides a postgraduate program in Electrical Power System and a Doctoral Program. With the highly qualified faculty, including 17 PhD holders, the Department is well-equipped with advanced laboratories and a dedicated research center called the "Applied Renewable Energy Research Center."

ABOUT THE CONFERENCE

The 8th International Conference on "Innovations at the Nexus of Energy, Control, and Intelligent Electronic Systems" (8th ICECCES 2025) is set to become a premier forum for the global exchange of ideas, breakthroughs, and best practices in the rapidly evolving landscape of energy systems. With the theme "Artificial Intelligence in Next-Generation Power and Energy Storage Systems," the conference recognizes that AI is no longer a futuristic concept but a critical enabler of progress. By convening experts from academia, industry, and government, ICECCES 2025 will provide an environment where knowledge transcends traditional boundaries, inspiring fresh perspectives and collaborative solutions.

As nations worldwide strive to decarbonize their energy infrastructures and transition toward cleaner and more sustainable models, the role of AI technologies has grown indispensable. From machine learning algorithms predicting renewable energy output to



deep learning models enhancing energy storage performance, AI is revolutionizing every layer of the energy value chain. The conference will highlight these transformative capabilities, demonstrating how intelligent systems can improve operational reliability, drive down costs, and support the seamless integration of renewable resources into the grid. A key focus of ICECCES 2025 will be showcasing real-world applications of AI across a spectrum of domains. Sessions will explore smart grids that self-optimize in real time, energy storage systems that predict and prevent failures, demand-response platforms that balance consumption patterns, and intelligent electronic systems that secure infrastructure against cyber threats. By sharing case studies, technical insights, and success stories, the conference aims to inspire participants to reimagine what is possible in the quest for sustainable energy. Beyond knowledge exchange, ICECCES 2025 is committed to cultivating practical skills and fostering meaningful partnerships among stakeholders. The event will offer opportunities for hands-on learning, panel discussions, and networking sessions that connect innovators with potential collaborators, investors, and policymakers. This multidisciplinary approach is essential to accelerating the deployment of AI-powered solutions and bridging the gap between research and large-scale implementation.

Ultimately, ICECCES 2025 aspires to drive tangible impact by shaping strategic frameworks and contributing to international sustainability goals. Through high-quality publications, robust industry-academia cooperation, and the promotion of data-driven decision-making, the conference will play a pivotal role in guiding the global energy sector toward a more intelligent, resilient, and sustainable future.

The objectives of the Conference:

- Harness AI for Sustainable Energy
 To explore and advance the role of Artificial Intelligence in modern power generation and energy storage, driving improvements in efficiency, reliability, and sustainability.
- Integrate Renewable with Intelligence
 To develop adaptive strategies that seamlessly integrate renewable energy sources into power grids while addressing variability and grid stability challenges.
- Innovate Smart Grids and Micro-grids
 To drive the design of next-generation smart grids and micro-grids using AI technologies
 for intelligent monitoring, distribution, and autonomous control.
- Enhance Energy Storage Performance
 To optimize energy storage systems through AI-based predictive maintenance, advanced diagnostics, and precise battery health management.
- Strengthen Cross-Sector Collaboration
 To foster partnerships among researchers, industry leaders, and policymakers that accelerate the practical adoption of AI-powered energy solutions.
- Promote Research and Knowledge Sharing
 To create a dynamic platform for publishing high-quality research, enabling knowledge exchange and inspiring future innovations in intelligent energy systems.

CALL FOR PAPERS

Original research papers are invited in the areas, but not limited to

- AI-Powered Solutions for Next-Generation Power Systems
- Design and Implementation of Advanced Smart Grids and Micro-grids
- Intelligent Energy Storage: Battery Systems and Management

Strategies

- Seamless Integration of Solar, Wind, and Renewable Energy Sources
- Innovations in Power Electronics and High-Performance Electric Drives
- Smart Mobility: Intelligent Transportation and Electrification
- Predictive Maintenance and Fault Diagnostics Enabled by AI
- Deep Learning and Reinforcement Learning Applications in Energy
- IoT-Enabled Embedded Systems for Smart Energy Infrastructure
- Cyber-security Strategies for Al-Driven Power Networks
- Data Analytics for Smart Metering and Sensor Networks
- Advanced Control Systems and Automation in Energy Applications
- High-Performance Computing for Energy Forecasting and Optimization
- Blockchain Innovations for Secure Energy Transactions and Grids
- AI-Enhanced Energy Economics and Policy Development
- Hybrid Energy Storage Architectures and Intelligent Solutions
- Reliability and Electromagnetic Interference Mitigation in Energy

Systems

- Al for Electric Vehicle Infrastructure and Smart Charging Networks
- Digital Twins for Real-Time Power System Optimization
- Human-Machine Interfaces in Intelligent Energy Management
- AI-Driven Load Forecasting and Demand Response Technologies
- Intelligent Protection, Control, and Stability of Power Systems
- Data-Driven Strategies for Grid Restoration and Blackout Prevention

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Registration Fee (inclusive of GST)	Students	Academic/ Research Scholars	Industry
Participants from India	INR 1000	INR 1500	INR 2000
Participants from abroad	USD 50	USD 100	USD 150

All accepted and presented papers shall be published and Indexed in the proceedings with ISBN number / Scopus. Based on the authors request, extended papers will be recommended for possible publication in Scopus Indexed Journals (Article Processing Charges as applicable)

PAYMENT DETAILS

Bank Name:	Union Bank of India
Account No:	154012010000884
Branch:	SVEC, A.Rangampet
IFSC Code:	UBIN0815403

Paper details Submission: https://forms.office.com/r/fu6BHHPKLK

Submit the paper to the mail: icecces@mbu.asia

Paper Submission Format: https://www.ieee.org/content/dam/ieee-org/ieee/web/org/conferences/Conference-template-A4.doc

IMPORTANT DATES

Submission Deadline for paper	05.11.2025
Notification of Acceptance/Rejection of the submitted Paper	10.11.2025
Camera Ready Submission	12.11.2025
Last date for online registration	15.11.2025
Conference Dates	03.12.2025 to 05.12.2025

Mode of Conference: Hybrid (Online & Offline)

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