



JSSATE

BENGALURU

Department of Electronics & communication Engineering

SANCHALANA

E- NEWSLETTER
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VISION

Enable the students to achieve academic excellence at par with premier institutes and to meet the requirements of industry and research in the field of Electronics and Communication Engineering.

MISSION

1. Orient the students to meet global challenges in the field of Electronics and Communication Engineering with state of-the-art facilities and excellent teaching learning process.
2. Impart knowledge in the emerging areas through industry institute-interaction, seminars, workshops and conferences.
3. Provide strong foundation in core subjects to enable the students for continuous learning and research.
4. Facilitate students for good communication, soft skills along with professional ethics.

❖ International Conference: CICC-2025

JSS Academy of Technical Education, Bengaluru, in collaboration with the Indian Institute of Technology (IIT) Guwahati, organized the International Conference on Intelligent Computing and Communication Systems (CICCS-2025) with technical co-sponsorship from the IEEE Bangalore Section. The conference was held from 18th to 20th September 2025 at JSSATE, Bengaluru, Karnataka.

The conference focused on the theme “Leveraging Artificial Intelligence for Sustainable Computing and Communication” and provided an international platform for researchers, academicians, students, and industry professionals to present research findings and exchange ideas in intelligent computing and advanced communication systems. The event fostered academic collaboration, knowledge sharing, and innovation, reinforcing JSSATE’s commitment to excellence in research and emerging technologies.



❖ IC-AISMART 2025 - AICTE Sponsored International Conference on Agrivoltaics Innovations for Smart Farming

The Department of Electronics and Communication Engineering, JSS Academy of Technical Education (JSSATE) successfully organized the AICTE Sponsored International Conference on Agrivoltaics Innovations Focusing on Smart Farming with Renewable Energy, Machine Learning, and Embedded Technologies (IC-AISMART 2025) on 11th December 2025 at Seminar Hall-1, Academic Block A.



The inaugural ceremony commenced at 10:00 AM, marking the beginning of an intellectually enriching platform that brought together academicians, researchers, industry professionals, and students to deliberate on emerging technologies enabling sustainable agriculture and clean energy solutions.

All submissions underwent a rigorous two-stage peer review process, ensuring high standards of quality and relevance. Only a minimal number of papers were desk rejected due to non-compliance with formatting and initial screening requirements.

❖ Conference Highlights

- Total papers received: 440
- International submissions: 3
- Out-of-state submissions: 31
- Papers accepted from JSSATE: 13
- Registered papers (approx.): 140

❖ Significance of the Event

IC-AISMART 2025 provided a valuable platform for knowledge exchange and collaboration in the areas of agrivoltaics, smart farming, renewable energy systems, machine learning, and embedded technologies. The conference significantly contributed to strengthening the research ecosystem and enhancing the academic visibility of the institution.



❖ Funding and Sponsorship

The department has received strong financial support from both government and industry for the conference. A grant amount of ₹3,00,000 from AICTE and an industry Sponsorship of approximately ₹1,15,000. The conference is coordinated by Dr. Mallikarjunaswamy S.

The successful organization of IC-AISMART 2025 reflects the commitment of the Department of ECE, JSSATE, towards promoting interdisciplinary research and innovation aligned with national and global sustainability goals. The enthusiastic participation and quality research outcomes made the conference a memorable and impactful academic event.

❖ NASA International Space App Challenge 2025 – Event

The Department of Electronics & Communication Engineering, JSS Academy of Technical Education, Bengaluru (JSSATEB), in association with NASA and Pravishya Tech, successfully organized the NASA International Space App Challenge–2025 on 26th September 2025. The event saw active participation from 293 students forming 72 teams from various engineering colleges across Karnataka. The inaugural ceremony, held at Seminar Hall–1, began with an invocation song followed by the lighting of the lamp by Mr. Rajashekar H (Revaalo Labs Pvt. Ltd., Bengaluru), Ms. Pooja Tak (Co-Founder, Pravishya Tech & NASA Space Apps Karnataka State Lead), and Dr. Bhimasen Soragaon, Principal, JSSATE Bengaluru.



Lighting of Lamp by the dignitaries

The program included keynote addresses highlighting innovation, technology, startups, and entrepreneurship, followed by mentoring sessions, elevator pitches, and multiple evaluation rounds. Out of 72 teams, 15 teams were shortlisted for the final pitching session, from which three teams emerged as winners based on technical strength and innovation. The First Prize was won by the JSSATE Bengaluru team (₹10,000, Gold Medal), the Second Prize by a joint team from RV College, PES University, JSSATEB, and Christ University (₹7,000, Silver Medal), and the Third Prize by the Dayananda Sagar College of Engineering team (₹3,000, Bronze Medal). The event successfully fostered creativity, teamwork, and problem-solving skills among budding innovators.



Guest of honour Ms. Pooja, NASA Karnataka Tech lead, addressing the participants.



Mentoring session in seminar hall & room no. A219.

❖ Exploring MATLAB Toolboxes – Student Development Programme

- The Department of Electronics & Communication Engineering and the Department of Robotics and Automation jointly organized a two-day Student Development Programme (SDP) titled “Exploring MATLAB Tool Boxes (Image Processing, Signal Processing, Simulink)” in association with CoreEL Technologies, Bengaluru. The programme was conducted on 02/12/2025 from 10:30 AM to 4:45 PM for II-year (III Semester) ECE students.
- The session was delivered by Mr. Avinash V, Application Engineer for MathWorks Products at CoreEL Technologies, Bengaluru. Around 225 students actively participated and benefited from the programme. The SDP emphasized the importance of MATLAB as an industry-relevant skill used worldwide for system design, data analysis, and visualization.

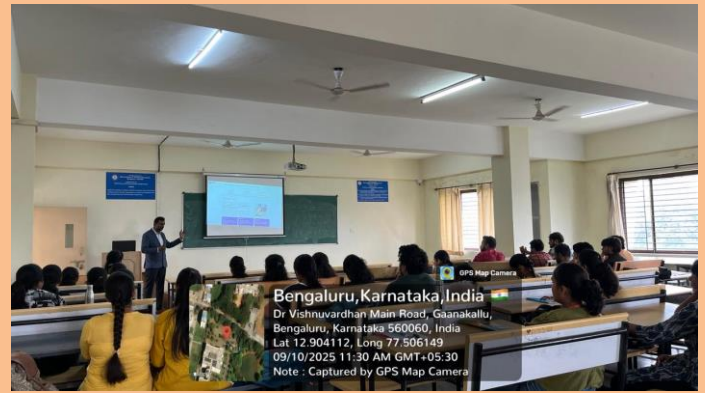


Hands-on session on 2nd December, 2025

- The programme covered key topics including MATLAB fundamentals, scripts and live scripts, 2D and 3D visualization, and hands-on exposure to Image Processing and Signal Processing applications. Sessions included image classification using AI, object detection using YOLOv4, signal generation and preprocessing using MATLAB and Simulink, and live application demonstrations. The SDP successfully enhanced students' practical knowledge and industry readiness in computational and signal processing tools.

❖ Technical Talk on Opportunities in Research and Higher Studies

The Department of Electronics and Communication Engineering organized a technical talk on “Opportunities and Avenues in Research and Higher Studies” on 10th September 2025 in offline mode. The session was delivered by Mr. Abhilash Kaparthy, GEEBE Education Partner, and was coordinated by Dr. Aravind H.S. and Dr. Savitha A.C. The talk was attended by 110 students.



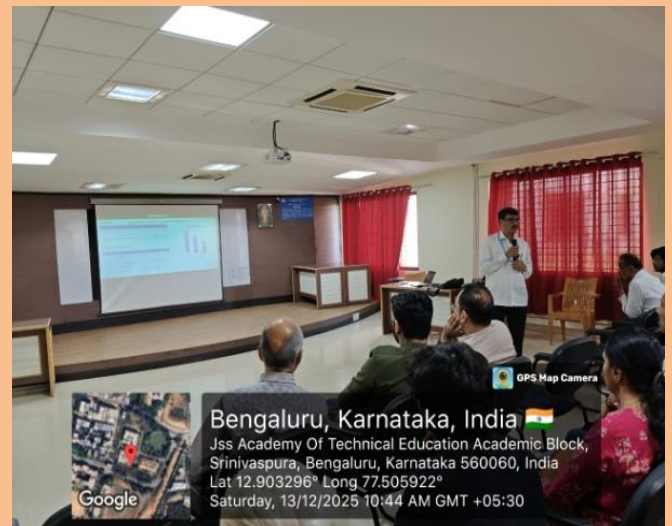
The session emphasized the importance of research, higher education pathways, and potential career opportunities. The resource person provided valuable insights into research-oriented careers and guided students on planning for higher studies, motivating them to explore academic and research prospects

❖ Parent-Teacher Meeting

- The Department conducted a Parent-Teacher Meeting (PTM) on 13th December 2025 at 10:00 AM to review students' academic progress and overall development. Faculty members discussed the Continuous Internal Evaluation (CIE) performance, attendance, and learning outcomes with parents, and briefed them on the academic, co-curricular, and extracurricular activities conducted by the department.



- The meeting also highlighted the department's placement and training initiatives, including aptitude training, technical skill development, internships, and career guidance programs. In addition, the Vision and Mission of the Department, along with the Programme Educational Objectives (PEOs) and Programme Specific Outcomes (PSOs), were presented to create awareness among parents. The interaction strengthened parent-faculty collaboration for the holistic development of students.



❖ Student Industry Visit



Students visited CoreEL Technologies, Bengaluru, on 28 November 2025 as part of an industry exposure program. During the visit, students gained insights into Intellectual Property (IP) core development, FPGA and ASIC design solutions, system design and prototype development, and system-level products for applications in avionics, naval and military communications, satellites, and electronic warfare. The visit also highlighted low-volume manufacturing, system upgrades, and technology training and skill development, providing students with valuable exposure to real-world engineering practices.

❖ Student Publications

Our students have made significant contributions to research and innovation through publications in reputed international journals and conferences, reflecting strong engagement in advanced domains such as hardware security, reversible logic, VLSI architectures, artificial intelligence, and communication systems.

- Mr. Sagar Dev Achar published a journal paper titled *“Lite Hash: Hash Functions for Resource-Constrained Hardware”* in ACM Transactions on Embedded Computing Systems, Vol. 24, Issue 2, Article 28, March 2025, highlighting efficient cryptographic solutions for embedded systems.
- Ms. Haritha D, Ms. Deepika A. J., and Ms. Yashaswini B. M. S. published papers on reversible logic and high-performance arithmetic architectures, including *“Reversible Logic based Kogge–Stone Adder: Implementation and Analysis”* at the 4th International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE 2025) and *“Performance Analysis of Vedic Multiplier using Kogge–Stone Adder and Reversible Logic”* at the International Conference on Recent Advances in Science & Engineering Technology (ICRASET 2025).

- Mr. Gautham Suresh co-authored a high-impact journal article titled “*Approximate CNN Hardware Accelerators for Resource-Constrained Devices*” published in IEEE Access, Vol. 13, 2025 (indexed in Scopus and Web of Science), focusing on efficient AI hardware architectures.
- Mr. Gahan S. S. published a paper titled “*A Robust Deep Learning-Based Modulation Classification Framework for Noisy Communication Channels*” in the International Journal of Intelligent Engineering & Systems, Vol. 18, Issue 8, 2025, demonstrating advanced applications of deep learning in communication systems.

❖ Students Certification Courses

Students of the department have successfully completed **NPTEL online certification courses**, enhancing their technical competence and industry-relevant skills in core areas of electronics and programming.

- **Ms. Shivani Aithal P, Ms. Sindhura K. S., and Ms. Harshita S.** completed the **8-week NPTEL course on “Hardware Modeling Using Verilog”** during **July–September 2025**, strengthening their knowledge in HDL-based digital system design.
- **Ms. Chandushree S. M.** completed the **8-week NPTEL course on “Programming, Data Structures and Algorithms Using Python”** during the same period, gaining strong foundations in algorithmic thinking and Python programming.
- In addition, **Mr. Kushal R. and Ms. Mohanamba H. C.** successfully completed the **NPTEL course on “Digital Circuits”** during **July–October 2025**, enhancing their understanding of core digital electronics concepts.

Editorial Board

Staff Coordinators

- ❖ Dr. S T Veerabhadrappe, HOD
- ❖ Mrs. Sunita Shirahatti, Asst. Prof.
- ❖ Mrs. Asharani, Instructor

Student Coordinator:

- ❖ Ms. Anna Yuktha, 5th Sem 'A' sec
- ❖ Ms. N. Harshini, 5th Sem 'B' sec
- ❖ Mr. Vikas D, 5th Sem 'C' sec
